General

Los Alamos
NATIONAL LABORATORY
EST. 1943

Los Alamos National Laboratory/University of California
Environmental Stewardship (ENV)
Environmental Remediation & Surveillance Program (ERS) MS M992
Los Alamos, New Mexico 87545
(505) 667-0469/FAX (505) 665-4747

RECEIVED
MAY
NMED
Waste Bureau

National Nuclear Security Administration
Los Alamos Site Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
(505) 667-7203/FAX (505) 665-4504

Date: May 27, 2005
Refer To: ER2005-0325

Mr. James Bearzi
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building 1
Santa Fe, NM 87505-6303

SUBJECT: SUBMITTAL OF THE "INTERIM FACILITY-WIDE GROUNDWATER MONITORING PLAN"

Dear Mr. Bearzi:

Enclosed are two hard copies with CDs containing electronic copies of the "Interim Facility-wide Groundwater Monitoring Plan." This document fulfills the requirement in Section IV.A.3.b of the Consent Order to prepare an interim facility-wide groundwater and base-flow monitoring plan for Los Alamos National Laboratory. The plan was prepared in accordance with the format stipulated in the Consent Order and using Table XII-5 as the foundation for monitoring locations.

If you have any questions, please contact Armand Groffman at (505) 667-2682 (groffman@lanl.gov) or Mat Johansen at (505) 665-5046 (mjohansen@doeal.gov).

Sincerely,

David McInroy, Deputy Program Director
Environmental Remediation & Surveillance
Los Alamos National Laboratory

AG/jk

13921

Enclosures: 1) Two hard copies - Interim Facility-wide Groundwater Monitoring Plan (ER2005-0204)
2) Two electronic copies - one in each binder (CDs)

Cy (w/enclosure):
E. Rainey, ENV-ECR, MS M992
A. Groffman, RRES-WQH, MS M992
D. Gregory, DOE LASO, MS A316
M. Johansen, DOE LASO, MS A316
L. King, EPA Region 6
ENV-ERS File, MS M992
RPF, MS M707
S-7, MS F674

Cy:(w/o enclosure):
A. Dorries, ENV-ECR, MS M992
D. McInroy, ENV-ERS, MS M992
J. Dewart, ENV-ERS, MS J978
S. Rae, ENV-WQH, MS K497
J. McCann, ENV-WQH, MS M992
B. Rich, ADO, MS A104
J. Young, NMED-HWB
C. Voorhees, NMED-OB
S. Yanicak, NMED-OB, MS J993
J. Kieling, NMED-HWB
J. Schoeppner, NMED-GWQB
M. Leavitt, NMED-SWQB

CERTIFICATION

CERTIFICATION BY THE ENVIRONMENTAL STEWARDSHIP– ENVIRONMENTAL REMEDIATION & SURVEILLANCE PROGRAM TECHNICAL REPRESENTATIVES

Document Title: **INTERIM FACILITY-WIDE GROUNDWATER MONITORING PLAN**

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Name: _____ Date: 5/26/05

David McInroy, Deputy Project Director
Environmental Remediation & Surveillance Program
Los Alamos National Laboratory

or

_____ Date: _____

Ken Hargis, Division Leader
Environmental Stewardship Division
Los Alamos National Laboratory

_____ Date: _____

David Gregory, Federal Project Director
Environmental Restoration Program
Department of Energy/Los Alamos Site Office

or

_____ Date: _____

John Ordaz,
Assistant Area Manager of Environmental Projects
Department of Energy/Los Alamos Site Office

LIBRARY COPY

LA-UR-05-3443
May 2005
ER2005-0204

Interim Facility-Wide Groundwater Monitoring Plan

Los Alamos
NATIONAL LABORATORY
EST. 1943

LA-UR-05-3443
May 2005
ER2005-0204

Interim Facility-Wide Groundwater Monitoring Plan

Los Alamos
NATIONAL LABORATORY
EST. 1943

Disclaimer

This document contains data on radioactive materials, including source, special nuclear, and by-product material. The management of these materials is regulated under the Atomic Energy Act and is specifically excluded from regulation under the Resource Conservation and Recovery Act and the New Mexico Hazardous Waste Act. These data are provided to the New Mexico Environment Department for informational purposes only.

Prepared by

Environmental Stewardship–Pathways Protection Program

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the University of California for the United States Department of Energy under contract W-7405-ENG-36.

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the use of any apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy.

LA-UR-05-3443
ER2005-0204

Interim Facility-Wide Groundwater Monitoring Plan

May 2005

Responsible project leader:

Printed Name	Signature	Title	Organization	Date
Armand Groffman		Project Team Leader	ENV-WQH	05/26/05

Responsible UC representative:

Printed Name	Signature	Title	Organization	Date
Dave McInroy		Deputy Program Director	ENV-ERS	5/26/05

Responsible DOE representative:

Printed Name	Signature	Title	Organization	Date
David Gregory		Federal Project Director	DOE-LASO	5/27/05

EXECUTIVE SUMMARY

This "Interim Facility-Wide Groundwater Monitoring Plan" fulfills a requirement of the March 1, 2005, Compliance Order on Consent issued by the New Mexico Environment Department. Los Alamos National Laboratory will collect and analyze groundwater and surface water samples at specific locations and for specific constituents in order to fulfill the requirements of the Compliance Order on Consent. Groundwater level data will also be collected because they are critical to understanding groundwater occurrence and movement. Four modes of water will be monitored: base flow, alluvial groundwater, intermediate perched groundwater, and regional aquifer groundwater.

This plan is comprehensive in that it includes ambient monitoring (to detect changes in ambient conditions), regulatory requirements monitoring (to evaluate compliance with regulatory requirements), and remedial monitoring (to evaluate remedy effectiveness). The monitoring is conducted both within and outside of current Laboratory boundaries. Monitoring within current Laboratory boundaries takes place in seven major watersheds or watershed groupings: Los Alamos Canyon/Pueblo Canyon, Sandia Canyon, Mortandad Canyon, Pajarito Canyon, Water Canyon/Cañon de Valle, Ancho/Chaquehui/Frijoles Canyons, and White Rock Canyon. Monitoring outside the Laboratory boundaries is conducted (1) in areas that Laboratory operations have affected in the past (e.g., Guaje Canyon and Rendija Canyon), and (2) in areas that historically have not been affected by Laboratory operations, thereby providing baseline data. To ensure that water leaving the Laboratory does not pose an unacceptable risk, this plan also includes monitoring in areas downgradient of the Laboratory and outside Laboratory boundaries (e.g., the Rio Grande and springs in White Rock Canyon).

Monitoring locations were selected to coincide with locations stipulated in Table XII-5 of the Compliance Order on Consent and for their ability to provide water representative of ambient conditions. The monitoring locations were selected from existing wells that are physically possible to sample and that produce water representative of the in situ conditions.

Monitoring data will be published in routine reports in both electronic and print formats and submitted to the New Mexico Environment Department.

CONTENTS

1.0 INTRODUCTION 1-1
1.1 Purpose 1-2
1.2 Scope 1-2
1.3 Reporting 1-3
1.4 Regulatory Context 1-4
1.4.1 New Mexico Water Quality Control Commission Regulations 1-4
1.4.2 DOE Environmental Protection Programs 1-4
1.4.3 Hazardous Waste Facility Permit 1-4
1.5 Approach to Monitoring Network Design 1-5
1.6 Integration of Groundwater Monitoring at the Laboratory 1-7
1.7 Analytical Methods, Field Methods, and Data Review 1-8
1.8 Sampling Frequency and Schedule 1-8
1.9 Overview of Geology and Hydrogeology 1-9

2.0 LOS ALAMOS CANYON/PUEBLO CANYON WATERSHED 2-1
2.1 Introduction 2-1
2.2 Background 2-1
2.3 Scope of Activities 2-2
2.3.1 Base Flow 2-2
2.3.2 Springs 2-3
2.3.3 Alluvial Groundwater 2-3
2.3.4 Intermediate Perched Groundwater 2-3
2.3.5 Regional Aquifer Groundwater 2-4

3.0 SANDIA CANYON WATERSHED 3-1
3.1 Introduction 3-1
3.2 Background 3-1
3.3 Scope of Activities 3-1
3.3.1 Base Flow 3-1
3.3.2 Alluvial Groundwater 3-1
3.3.3 Intermediate Perched Groundwater 3-1
3.3.4 Regional Aquifer Groundwater 3-2

4.0 MORTANDAD CANYON WATERSHED 4-1
4.1 Introduction 4-1
4.2 Background 4-1
4.3 Scope of Activities 4-1
4.3.1 Base Flow 4-2
4.3.2 Alluvial Groundwater 4-2
4.3.3 Intermediate Perched Groundwater 4-2
4.3.4 Regional Aquifer Groundwater 4-2

5.0 PAJARITO CANYON WATERSHED 5-1
5.1 Introduction 5-1
5.2 Background 5-1
5.3 Scope of Activities 5-1
5.3.1 Base Flow 5-1
5.3.2 Alluvial Groundwater 5-2
5.3.3 Intermediate Perched Groundwater 5-2

5.3.4 Regional Aquifer Groundwater 5-2
6.0 WATER CANYON/CAÑON DE VALLE WATERSHED 6-1
6.1 Introduction 6-1
6.2 Background 6-1
6.3 Scope of Activities 6-1
6.3.1 Base Flow 6-1
6.3.2 Alluvial Groundwater 6-2
6.3.3 Intermediate Perched Groundwater 6-2
6.3.4 Regional Aquifer Groundwater 6-2
6.3.5 Springs 6-3
7.0 ANCHO/CHAQUEHUI/FRIJOLES CANYONS WATERSHEDS 7-1
7.1 Introduction 7-1
7.2 Background 7-1
7.3 Scope of Activities 7-2
8.0 WHITE ROCK CANYON 8-1
8.1 Introduction 8-1
8.2 Background 8-1
8.3 Scope of Activities 8-1
8.3.1 Base Flow 8-1
8.3.2 Springs 8-1
9.0 REFERENCES 9-1

Appendixes

Appendix A Watershed Conceptual Models
Appendix B Screening Tables
Appendix C Methods, Procedures, and investigation-Derived Waste Management
Appendix D Supplemental Information

Figures

Figure 1.2-1 Canyons of Los Alamos National Laboratory and the Pajarito Plateau 1-11
Figure 1.5-1 Overall monitoring plan decision flow 1-12
Figure 1.5-2 Decision flow to develop watershed analyte list 1-13
Figure 1.5-3 Decision flow to develop watershed sampling locations 1-14
Figure 1.5-4 Decision flow to develop watershed monitoring frequency 1-15
Figure 1.5-5 Decision flow to develop watershed groundwater level monitoring 1-16
Figure 1.5-6 Decision flow to develop watershed base flow monitoring 1-17
Figure 1.6-1 Strategy for transition of watershed monitoring criteria 1-18
Figure 1.8-1 Schematic for the 2006 fiscal year (FY06) Interim Plan schedule 1-18
Figure 2.3-1 Los Alamos Canyon and Pueblo Canyon Watershed 2-5

Figure 3.3-1 Sandia Canyon Watershed 3-3
Figure 4.3-1 Mortandad Canyon Watershed 4-3
Figure 5.3-1 Pajarito Canyon Watershed 5-3
Figure 6.3-1 Water Canyon/Cañon de Valle Watershed 6-5
Figure 7.3-1 Ancho Canyon Watershed 7-5
Figure 8.3-1 White Rock Canyon 8-3

Tables

Table 2.3-1 Los Alamos Canyon/Pueblo Canyon Watershed Interim Monitoring Plan 2-7
Table 3.3-1 Sandia Canyon Watershed Interim Monitoring Plan 3-5
Table 4.3-1 Mortandad Canyon Watershed Interim Monitoring Plan 4-5
Table 5.3-1 Pajarito Canyon Watershed Interim Monitoring Plan 5-5
Table 6.3-1 Water Canyon/Cañon de Valle Watershed Interim Monitoring Plan 6-7
Table 7.3-1 Ancho/Chauquehui/Frijoles Watersheds Interim Monitoring Plan 7-7
Table 8.3-1 White Rock Canyon and Rio Grande Watershed Interim Monitoring Plan 8-5

Acronyms and Abbreviations

AOC	area of concern
bgs	below ground surface
Consent Order	Compliance Order on Consent
DDT	dichlorodiphenyltrichloroethane
DOE	U.S. Department of Energy
DOT	New Mexico Department of Transportation
DP	Delta Prime
DRO	diesel range organic
ECR	Environmental Characterization and Remediation Group
ENV	Environmental Stewardship Division
EPA	United States Environmental Protection Agency
ER	Environmental Restoration project
ERS	Environmental Remediation and Surveillance Program
ESP	Environmental Surveillance Program
FFCA	Federal Facility Corrective Action
FY05	fiscal year 2005
FY06	fiscal year 2006
FY07	fiscal year 2007
GRO	gasoline range organic
HE	high explosive
HMX	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (high-melting explosive)
HWP	Hydrogeologic Workplan
IDL	instrument detection limit
IDW	investigation-derived waste
Interim Plan	Interim Facility-Wide Groundwater Monitoring Plan
Laboratory	Los Alamos National Laboratory
LANL	Los Alamos National Laboratory
LACEF	Los Alamos Critical Experiments Facility
LANSCE	Los Alamos Neutron-Scattering Center
LASO	Los Alamos Site Office
LCMS/MS	liquid chromatography-mass spectroscopy/mass spectroscopy
LIR	Laboratory Implementation Requirement
MCL	maximum contaminant level

MDA	material disposal area
MDL	method detection limit
Model SOW	NNSA Service Center's Analytical Management Program's Model Statement of Work
Module VIII	Module VIII of the Laboratory's Hazardous Waste Facility Permit
NMAC	New Mexico Administrative Code
NMED	New Mexico Environmental Department
NNSA	National Nuclear Security Administration
NOI	Notice of Intent to Discharge
NPDES	National Pollutant Discharge Elimination System
ORP	oxygen-reduction potential
OU	operable unit
PCB	polychlorinated biphenyl
PETN	pentaerythritol tetranitrate
PPE	personal protective equipment
PRS	potential release site
QA	quality assurance
QP	quality procedure
RCRA	Resource Conservation and Recovery Act
RDX	hexahydro-1,3,5,trinitro-1,3,5-triazine (research department explosive [cyclonite])
RFI	RCRA facility investigation
RLWTF	Radioactive Liquid Waste Treatment Facility
SOP	standard operating procedure
SOW	statement of work
SR	sampling round
SVOC	semivolatile organic compound
SWMU	solid waste management unit
SWRC	Solid Waste Regulatory Compliance
SWSC	sanitary wastewater systems consolidation
SWWS	sanitary wastewater systems
TA	Technical Area
TDS	total dissolved solids
TKN	total Kjeldahl nitrogen
TNT	2,4,6 trinitrotoluene (dynamite)
TSS	total suspended solids

UC	University of California
USGS	U.S. Geological Survey
USFS	U.S. Forest Service
VOC	volatile organic compound
WCSF	waste stream characterization form
WQCC	Water Quality Control Commission
WQH	Water Quality and Hydrology Group
WWTP	waste water treatment plant

1.0 INTRODUCTION

This is the Interim Facility-Wide Groundwater Monitoring Plan (Interim Plan) for Los Alamos National Laboratory (the Laboratory or LANL). The Interim Plan fulfills the groundwater monitoring requirement IV.A.3.b of the March 1, 2005, Compliance Order on Consent (hereafter, the Consent Order) (NMED 2005, 88207) between the New Mexico Environment Department (NMED) and the U.S. Department of Energy (DOE) and the University of California (UC). Section IV.A.3.b is presented below:

> Within ninety (90) days after the effective date of this Consent Order, the Respondents shall submit to the Department for review and written approval an interim Facility-Wide Groundwater Monitoring Plan (Interim Plan). The Interim Plan, approved pursuant to the procedures in Section III.M of this Consent Order, shall provide for all groundwater and spring monitoring necessary to fulfill the requirements of this Consent Order. The Interim Plan shall state the proposed locations and frequency of groundwater sampling, the proposed parameters for analysis, and the proposed methods for sampling and analysis. The sampling schedule in Table XII-5 shall be used to develop the Interim Plan. Results of previous groundwater monitoring at the Facility may be used as guidance for development of the Interim Plan. All groundwater monitoring and sampling implemented pursuant to this Consent Order shall begin after, and in accordance with, an Interim Plan that has been approved by the Department pursuant to Section III.M. The Interim Plan shall comply with the investigation methods and procedures set forth in Section IX of this Consent Order. The plan shall be prepared in accordance with Section XI.B of this Consent Order. Submittal of the initial eight watershed-specific periodic monitoring reports may be staggered over the first year of groundwater monitoring conducted under this Consent Order. This may be accomplished by submitting two watershed-specific periodic monitoring reports for different watersheds to the Department per quarter starting 180 days after the Department's approval of the Interim Plan.
>
> The Respondents shall revise and update the Interim Plan annually to propose changes to the monitoring plan (e.g., to include newly installed monitoring wells; to remove wells not providing good quality data, if approved by the Department; and to make any other appropriate changes). The Respondents shall submit the revised and updated plan to the Department for approval ninety (90) days after each anniversary of the effective date of this Consent Order.
>
> After completing the installation of all additional monitoring wells in a canyon watershed as described in Section IV.B of this Consent Order, the Respondents shall submit to the Department for review and written approval a watershed-specific long-term groundwater monitoring plan for each watershed. Upon Department approval of a long-term monitoring plan for a specific watershed, the requirements of the long-term monitoring plan shall apply and shall supersede the requirements of the watershed-specific section of the Interim Plan.

The Interim Plan and subsequent long-term monitoring plans will fulfill the groundwater monitoring requirements of the Consent Order.

Groundwater monitoring has been conducted at the Laboratory for over 50 years starting with U.S. Geological Survey (USGS) water supply studies in 1945 and Laboratory groundwater quality monitoring in 1949. The first groundwater monitoring network consisted of water supply wells, several observation wells, and springs. The monitoring network continued to evolve through the years as various

environmental programs installed additional wells, primarily in the shallow alluvial systems, as potential monitoring points.

Between 1997 and 2005 the Laboratory implemented a site-wide hydrogeologic characterization program, described in the Laboratory's "Hydrogeologic Workplan" (HWP) (LANL 1998, 59599). The primary objective of this characterization was to sufficiently refine the understanding of the area's hydrogeologic systems and improve the ability to design and implement an integrated site-wide groundwater monitoring plan. Thirty-two deep wells have been installed, and data collected from these wells provide information about alluvial, intermediate perched, and regional aquifer groundwater.

This Interim Plan is comprehensive and includes ambient monitoring, regulatory requirements monitoring, and monitoring that assesses the effectiveness of remedial actions. The definitions used by the Interim Plan for these monitoring types are modified from the U.S. Environmental Protection Agency's (EPA's) "Guidance for Monitoring at Hazardous Waste Sites: Framework of Monitoring Plan Development and Implementation" (EPA 2003, 88486) and are as follows:

- ambient monitoring—conducted to detect changes in ambient conditions
- constituent monitoring—monitoring of movement of environmental constituents of interest

1.1 Purpose

The Interim Plan primarily addresses ambient monitoring and monitoring of movement of contaminants in support of corrective action activities being conducted at the Laboratory. The Interim Plan will monitor to

- determine the fate and transport of known legacy-waste contaminants,
- detect new releases,
- determine efficacies of remedies, and
- validate proposed corrective measures.

In addition, monitoring produces data that are required to evaluate risk and to assess regulatory compliance. Although the Interim Plan does not address how the data that are collected will be used in those evaluations, the design of the monitoring network is based on conceptual models of potential sources, hydrogeologic pathways, and receptors. The data collected are intended to be useful in risk-based decision making.

1.2 Scope

This plan describes the proposed location of sampling stations, the rationale for monitoring, the frequency of sampling, the measurements taken at each location, and the analyses included in the groundwater monitoring plan. Four modes of water are monitored and are as follows:

- Base flow—persistent surface water that is maintained by precipitation, snowmelt, effluent, and other discharges
- Alluvial groundwater—water within the alluvium in the bottom of the canyons
- Intermediate perched groundwater—localized saturated zones within the vadose zone
- Regional groundwater—deep, laterally continuous groundwater beneath the Pajarito Plateau.

Groundwater will be routinely monitored by collecting samples at wells and springs and by analyzing for specific constituents. Groundwater monitoring refers to gathering data not only for water quality analysis but also for water level measurements. Water level data are critical to understanding groundwater occurrence, movement, and its relationship with recharge and municipal pumping.

Base flow at the Laboratory is divided into three types, or matrices. Each of the three flow types might be collected at a single location within a time span of as little as a week, depending on weather conditions. At times, the flow might represent a combination of these components. The three types are as follows:

- Base flow—persistent, but not necessarily perennial, stream flow. This stream flow is present for periods of weeks or longer. The water source may be effluent discharge, springs, or shallow groundwater that discharges in canyons.
- Snowmelt—flowing water that is present because of melting snow. This type of water often may be present for several weeks or more but in some years may not be present at all.
- Storm runoff—flowing water that is present in response to rainfall. These flow events are generally short-lived, with flows lasting from less than an hour to several days.

Storm runoff and snowmelt will be monitored by the Laboratory under the auspices of a Federal Facility Compliance Agreement, negotiated between UC, DOE, and EPA. Base flow will be monitored as part of the Interim Plan.

Monitoring will occur in areas both within and outside current Laboratory boundaries. Monitoring under the Interim Plan will take place in seven major watersheds or watershed groupings and White Rock Canyon. These are Los Alamos Canyon/Pueblo Canyon, Sandia Canyon, Mortandad Canyon, Pajarito Canyon, Water Canyon/Cañon de Valle, and the combined watersheds of Ancho/Chauquehui/Frijoles Canyons. Monitoring outside the boundaries occurs in areas that Laboratory operations have affected in the past (e.g., Guaje Canyon and Rendija Canyon) or that historically have not been affected by Laboratory operations to provide baseline data. To ensure that water leaving the Laboratory does not pose an unacceptable risk, this plan also includes monitoring in areas outside the Laboratory that may receive discharge from the Laboratory (e.g., the Rio Grande and springs in White Rock Canyon). Figure 1.2-1 is a map of the areas included in this Interim Plan.

This plan discusses groundwater and base flow monitoring from October 2005 through October 2006. The plan will be revised and submitted to NMED annually, based on analysis of the most recent data, additional wells, and other requirements.

1.3 Reporting

The data collected under this Interim Plan will be submitted to NMED in periodic monitoring reports in both electronic and print formats. The reports will be submitted within 120 days after the completion of field work on a watershed basis according to Section IV.A.6 of the Consent Order (NMED 2005, 88207). The monitoring data will be posted to the Internet as data are delivered from the analytical laboratory. Data that are not validated before posting will be marked as "provisional" until validation is completed.

Groundwater sampling and analysis reports will be published semiannually. These reports, organized by watersheds, will present groundwater and base flow data, including both characterization (investigation) data and monitoring data. Reports will include tabular data (including field parameters), a brief discussion of the data, and select data trends.

The groundwater sampling and analysis reports will not replace the annual environmental surveillance reports; rather they will provide input to the groundwater section of the annual environmental surveillance reports.

1.4 Regulatory Context

This Interim Plan fulfills groundwater investigation requirements of the Consent Order as described in the introduction. In addition to the Consent Order, the Laboratory is required to perform groundwater monitoring to satisfy other regulatory requirements. These other requirements are summarized below, including references to documentation of monitoring results. This Interim Plan does not include the activities needed to satisfy these other requirements (unless these other requirements can be satisfied by monitoring performed under the Interim Plan). As described in Section 1.6, the Laboratory has an integrated approach to groundwater monitoring. Activities needed to satisfy these other requirements, therefore, may be conducted in conjunction with monitoring performed under the Interim Plan.

1.4.1 New Mexico Water Quality Control Commission Regulations

A 20.6.2. New Mexico Administrative Code [NMAC] Groundwater Discharge Permit currently exists at the Laboratory for the TA-46 Sanitary Wastewater Systems (SWWS) Plant (plan number DP-857). An application has been submitted for a second discharge permit for the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF). Groundwater monitoring is performed at wells located in Cañada del Buey and Mortandad Canyon under the approved plan (DP-857) and in support of the application (DP-1132), respectively. This monitoring began under DP-857 in 1992 and is expected to continue indefinitely with appropriate modification made as discharge conditions change over time (e.g., monitoring may be moved to Sandia Canyon since the TA-46 SWWS Plant has never discharged into Cañada del Buey). Quarterly reports of monitoring results are submitted to the NMED Groundwater Bureau for both the approved (DP-857) and the pending (DP-1132) plans.

1.4.2 DOE Environmental Protection Programs

Groundwater monitoring has been conducted in compliance with DOE orders related to environmental protection. DOE Order 450.1 requires an environmental management system at DOE facilities to include surveillance groundwater monitoring and reporting. Surveillance monitoring has been performed at the Laboratory since the 1970s under previous orders, and results are documented in annual reports. Currently, the Laboratory conducts groundwater surveillance monitoring from wells located within the Laboratory boundaries and at offsite locations. These wells include alluvial, intermediate perched, and regional aquifer wells. Some of the offsite monitoring is performed under an agreement with Los Alamos County, which owns and operates water supply wells within and near the Laboratory. Additional monitoring is performed under cooperative agreements with the San Ildefonso Pueblo and the City of Santa Fe. Results of surveillance monitoring are reported in annual environmental surveillance reports and are included in the calculation of radionuclide dose exposures found in those reports. These reports contain descriptions of the surveillance monitoring network, key results and trends, and quality assurance.

1.4.3 Hazardous Waste Facility Permit

Several of the waste management units at the Laboratory are regulated units under the Resource Conservation and Recovery Act (RCRA) and subject to groundwater monitoring requirements under 40 CFR 264 Subpart F, as administered through the Laboratory's Hazardous Waste Facility Permit. Under Section IV.A.1 of the Consent Order (NMED 2005, 88207), these requirements will be met through

implementation of the groundwater monitoring requirements of the Consent Order, including implementation of the Interim Plan.

Groundwater monitoring and sampling requirements are also contained in Module VIII of the Laboratory's Hazardous Waste Facility Permit (Module VIII), which was issued by EPA in 1990 (EPA 1990, 01585) and revised in 1994 (EPA 1994, 44146). Section C.1 of Module VIII required the Laboratory to install a total of 14 alluvial wells in Pueblo, Los Alamos, Sandia, Mortandad, Potrillo, Fence, and Water Canyons to determine the extent of downgradient saturation and contamination. In addition, Section C.2 of Module VIII required the Laboratory to continue the groundwater monitoring being conducted by the Environmental Surveillance Program to demonstrate protection of the regional aquifer. The investigation requirements of Module VIII required the Laboratory to conduct a program to characterize the hydrogeologic conditions at the Laboratory (Task III.A.1) and to conduct a groundwater investigation to characterize any plumes of contamination (Task III.C.1). In response to these investigation requirements, the Laboratory developed the Hydrogeologic Workplan (HWP) (LANL 1996, 55430), which was approved by NMED. Under the HWP, the Laboratory installed regional wells and conducted four rounds of sampling following construction of new wells. Results of this sampling were reported in separate geochemistry reports for each well and in quarterly data reports submitted to NMED as required by Module VIII.

Groundwater sampling was also conducted as part of investigation work plans prepared under Module VIII. Alluvial groundwater sampling was conducted under the NMED-approved work plan addendum for the investigation of Los Alamos Canyon and Pueblo Canyon (LANL 2002, 70235). Sampling results were included in the "Los Alamos and Pueblo Canyons Investigation Report" submitted to NMED in April 2004 (LANL 2004, 87390). In addition, groundwater sampling has been conducted as part of the investigation of Solid Waste Management Unit (SWMU) 16-021(c) (260 Outfall), with results reported in the investigation reports for that SMWU (LANL 1998, 59891; LANL 2003, 77965). The groundwater monitoring requirements of Module VIII have now been superseded and replaced by the requirements of the Consent Order, including the implementation of the Interim Plan.

1.5 Approach to Monitoring Network Design

The Consent Order lists sampling locations in Table XII-5 (NMED 2005, 88207). The Interim Plan used Table XII-5 as a basis for development and includes additional locations and suggests replacement-monitoring locations. The Interim Plan will be updated and resubmitted to NMED on an annual basis. This annual update will provide for addition of new wells as they are constructed, removal of old wells as they are decommissioned, and optimization of monitoring locations, frequencies, and analytes based on results of the prior year. The requirement for submittal of the annual updated plans is 90 days after each anniversary of the March 2005 effective date of the Consent Order, or May 31 of each year.

In addition to Consent Order requirements the Interim Plan used EPA guidance provided in "Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation" (EPA 2003, 88486). This guidance outlines a six-step process that covers planning, implementation, and completion of monitoring activities. However, the guidance is for monitoring at sites where remedial action is occurring or has been implemented and is therefore somewhat premature for the status of the corrective action program at the Laboratory. The Interim Plan generally follows the first four steps, which cover development and design. The first three steps involve defining the objective, plan hypothesis, and decision rules for the monitoring. The fourth step focuses on design of the monitoring network.

To address the fourth step, a series of decision flowcharts (see Figures 1.5-1 through 1.5-6) has been developed to show the process by which locations, frequency, measurements, and analysis are determined. The decision flow is then applied to individual watersheds to develop a watershed-specific

monitoring plan. Figure 1.5-1 illustrates the overall decision flow from conceptual model to watershed monitoring plan.

Each decision flow diagram starts with the conceptual model for the watershed. The conceptual model documents the physical and chemical conditions of water (base flow, alluvial, intermediate, and regional aquifer groundwater) and potential contaminant sources in the watershed (Figure 1.5-1). The conceptual model is intended to describe which contaminants exist, how they are distributed, how they could be transported to groundwater, and how they might move in the groundwater. Only by understanding these pathways can monitoring systems be adequately designed. Watershed-specific conceptual models in tabular form are presented in Appendix A.

Figure 1.5-2 shows the decision-flow diagram that is used to develop watershed analyte lists. General water chemistry is included in every analyte list to ensure that unexpected releases, such as spills or broken pipes, can be detected. Changes in general chemical analytes, such as total dissolved solids or major anions and cations, might indicate that a change has occurred that should be investigated.

This analyte decision-flow diagram calls for using the information in the conceptual model to understand the potential contaminants and their characteristics and transport pathways. The next decision involves evaluation of the historical data set to determine how well it represents the water chemistry in terms of number of samples, time period, and analytes. If the historical data set is adequate, a screening step is employed to establish which constituents have been detected in water in the time window of the historical data set. A level of significance is defined when the detection of the constituent at a concentration consistently greater than the appropriate regulatory standards is identified. The constituents that are detected are evaluated for source (e.g., naturally occurring or released from the Laboratory). If the source is evaluated as a potential Laboratory release, the constituent is added to the analyte list for the watershed. The screening criteria in the first Interim Plan are designed to be conservative in order to identify any potential constituent of concern across the facility. In the future, the Interim Plan will incorporate screening against clean-up levels identified in the Consent Order (NMED 2005, 88207) to identify potential monitoring locations.

The next set of decisions in the analyte flow diagram is used to evaluate additional candidates for the analyte list. These decisions look at analytes:

- reported from areas of concern (AOCs) or SWMUs in a watershed
- with detection limits that are near screening levels
- with regulatory monitoring requirements
- from base flow that have not been detected in alluvial groundwater

The final analyte list for each watershed includes some or all of the following:

- general chemical analytes
- analytes for which analysis has not been previously conducted or for which data are insufficient
- analytes detected at concentrations above regulatory standards
- analytes identified by the evaluation of source, detection limit, or other consideration
- analytes recommended for inclusion from a base flow analytical list

Figure 1.5-3 shows the decision process that is applied to select monitoring locations. The goal of this decision process is to select locations that are physically possible to sample and that produce water

representative of the in situ conditions. The monitoring points that are selected are useful for monitoring water quality conditions, for regulatory compliance, and for the efficacy of corrective actions. The sample points that are selected are then evaluated for possible redundancy before the final set of monitoring points is established.

The decision flow shown in Figure 1.5-4 is used to determine the sampling frequency in order to ensure that sampling results will represent variation in water quality and water levels. For sampling points where sufficient data exists to recognize variability or where no systematic variation exists, the sampling frequency is set to represent the complete range of the variation. Where there is inadequate data to recognize variability, seasonal sampling is proposed for shallow groundwater and base flow. Intermediate perched and regional groundwater are not intimately linked to seasonal hydrologic cycles and may be monitored less frequently. The decision flow process for determining water level measurement frequency is shown in Figure 1.5-5. The selected wells or screens in wells in the alluvial, intermediate, and regional groundwater zones are in locations necessary to evaluate and calculate the following:

- water level changes
- groundwater flow rates and direction
- the effects of pumping
- the location and the potential for recharge

Water level measurement frequency for alluvial groundwater zones is determined on a watershed basis, taking into account the degree of connection between base flow and alluvial groundwater. Alluvial wells in watersheds throughout the Pajarito Plateau will be equipped with transducers to aid in understanding the hydrologic system. In addition, many of the regional wells will be equipped with pressure transducers to examine the effect of municipal pumping throughout the year. Figure 1.5-6 illustrates the decision flow to determine base flow sampling location analytes and sampling frequency. The decision points and screening levels are the same as those for groundwater. All analytes identified in the base flow must be included in the alluvial groundwater analyte list. Sampling of alluvial groundwater and base flow will be performed simultaneously during the 21-day watershed sampling period stipulated in the Consent Order (NMED 2005, 88207).

1.6 Integration of Groundwater Monitoring at the Laboratory

All groundwater monitoring is conducted as an integrated activity that uses the same personnel, basic operating procedures, lab analysis contracts, and data-management systems. All groundwater data are available for public viewing on the web regardless of the regulatory authority under which it was gathered. The Interim Plan will incorporate groundwater and surface water monitoring as the watershed status moves from interim monitoring (pre-Canyons characterization mode), to Canyons characterization mode, to post-Canyons characterization monitoring, to the final long-term monitoring mode. Figure 1.6-1 presents the transition of watershed status between 2005 and 2015.

The Interim Plan will be updated annually to incorporate new information collected within a watershed. Locations, analytes, and sampling frequencies will be evaluated and updated appropriately to ensure adequate monitoring and avoid unreasonable budgetary expenditures. Information gained through characterization efforts, aquifer test results, optimization iteration models, and historical water quality data will be used to refine a long-term monitoring plan for each watershed.

1.7 Analytical Methods, Field Methods, and Data Review

Date review process and statistical summaries are described and presented in Appendix B. The analytical methods used for each analyte are listed in Table C-1 in Appendix C. Investigation derived waste generation procedures are described in Appendix C as well as quality procedures followed for measuring water levels and collecting water samples, both listed in Tables C-2 and C-3 (Appendix C).

The data review process consists of compiling the water quality data set, determining detect status, screening the data against applicable standards, and producing summary statistics to support steps listed in the decision-flow diagram in Figure 1.5-2. Water quality data summary statistics and a detailed discussion of the data screening process, from a data quality perspective, are included in Appendix B.

For chemical analysis of water samples, the Laboratory uses commonly accepted analytical methods called for under federal regulations such as the Clean Water Act and approved by EPA (Appendix B). The Environmental Stewardship–Water Quality and Hydrology (ENV-WQH) Group is responsible for acquiring analytical services that support monitoring activities. The ENV-WQH Group Statement of Work (SOW) follows the National Nuclear Security Administration (NNSA) Service Center's Analytical Management Program's Model Statement of Work (Model SOW) for analytical services. The ENV-WQH SOW provides contract laboratories the general quality assurance (QA) guidelines specified in the Model SOW and also includes specific requirements and guidelines for analyzing surface water, groundwater, and sediment samples.

Field methods follow the procedures listed in Tables C-2 and C-3 (in Appendix C). All of the procedures will be available on the Laboratory's external website. Field procedures follow guidelines from USGS water sample collection methods and industrial standards common to environmental sample collection and field measurements.

1.8 Sampling Frequency and Schedule

This section discusses the variability of the natural system across the Pajarito Plateau and the proposed sampling frequency to account for this variability. Although the Consent Order calls for quarterly sampling of all alluvial, intermediate, and regional wells, semiannual sampling will adequately capture annual variability and contaminant transport in base flow and groundwater.

Groundwater and base flow samples collected under the Interim Plan must represent the variability of the hydrology, chemistry, and contaminant concentrations in the watersheds across the Pajarito Plateau. Spring snowmelt and the summer monsoon generate runoff and increased infiltration into the alluvial groundwater. Elevated groundwater levels and persistent surface water as base flow occur during these times. In the fall and early winter, dry conditions predominate and result in a lowering of the water table in alluvial aquifers and diminished base flow. The response of contaminants to the fluctuating water table and base flow is complex and not well understood. Contaminants at some locations have been observed to increase during periods of low water and decrease in response to a rising water table. At other locations the opposite behavior of contaminants has been observed. In order to capture seasonal variability and the response of contaminants to runoff and recharge, alluvial groundwater and base flow will be sampled twice a year; once at high flow, during spring snowmelt or the summer monsoon, and once during the fall/early winter, when the water table is low and base flow is minimal. Full-suite analysis will be performed semiannually at base flow and alluvial wells presented in the watershed tables.

Annual variability in intermediate perched and regional groundwater zones has not been observed. The intermediate perched and regional groundwater zones are hundreds of feet below the surface and, according to historical groundwater measurements, there appears to be no immediate response of either zone to precipitation and runoff. However, groundwater in the intermediate perched and regional zones will be sampled twice annually for one full suite and one target analyte suite as presented in the watershed tables.

The Consent Order (NMED 2005, 88207) calls for sampling the majority of the springs in White Rock Canyon annually. This will be accomplished during a raft trip planned for September/October. Additional springs, including Springs 4, 4a, 4aa, 4b, and 4c, will be sampled more frequently to address the need for more data.

The sampling schedule for the Interim Plan is structured to capture the variability of groundwater, base flow, and contaminant transport with sampling scheduled for the autumn/early winter and spring/summer in each watershed. This is schematically presented in Figure 1.8-1. Each watershed will be sampled within 21 days; groundwater levels will be measured synoptically within 24 hours; and data will be reported to NMED 120 days after the last location has been sampled in each watershed.

1.9 Overview of Geology and Hydrogeology

The Laboratory is situated on the Pajarito Plateau on the eastern flanks of the Jemez Mountains in northern New Mexico. The plateau lies on the western margin of the Española Basin, a geologic feature of the Rio Grande Rift. The surface of the Pajarito Plateau is composed primarily of the eroded top of the Tshirege Member of the Bandelier Tuff, a large-volume, rhyolitic, ash-flow tuff (ignimbrite) erupted from the Valles Caldera of the Jemez volcanic field. A series of generally east-west trending canyons cut into the plateau, forming a number of isolated, finger-like mesas (see Figure 1.2-1).

The simplest hydrologic conceptual model for the Pajarito Plateau includes saturated porous media, with the surface of saturated zone(s) mimicking topography. For example, the regional water table slopes from a high recharge area in the Sierra de los Valles/Jemez Mountains west of the Laboratory downward to the Rio Grande on the east where groundwater discharges. Complicating this simple model, however, are zones of saturation perched above the regional water table.

Groundwater occurrence is generally described in terms of geography. For example, groundwater may be more accessible or plentiful in one area than in another, perhaps as a result of changes in aquifer thickness and sedimentary facies within the aquifer or the hydrogeologic unit. Although groundwater productivity in supply wells varies with the hydrogeologic unit making up the regional aquifer, depth to the water table is primarily the result of topography. The regional zone of saturation is more accessible in the canyons than it is on the mesas because there is less rock to drill through before reaching the regional water table in canyon bottoms.

The following sections address monitoring watershed-by-watershed across the Pajarito Plateau. Watersheds are addressed individually or in some cases by groupings. Chapters include Los Alamos Canyon/Pueblo Canyon, Sandia Canyon, Mortandad Canyon, Pajarito Canyon, Water Canyon/Cañon de Valle, Ancho/Chaquehui/Frijoles Canyons, and White Rock Canyon. Each watershed has a table with locations taken from Table XII-5 of the Consent Order, additional monitor locations, analytes and analytical suites, sampling frequency, and groundwater level/flow measurement frequency. These tables were designed to contain essential information regarding the sampling in each watershed.

This page intentionally left blank.

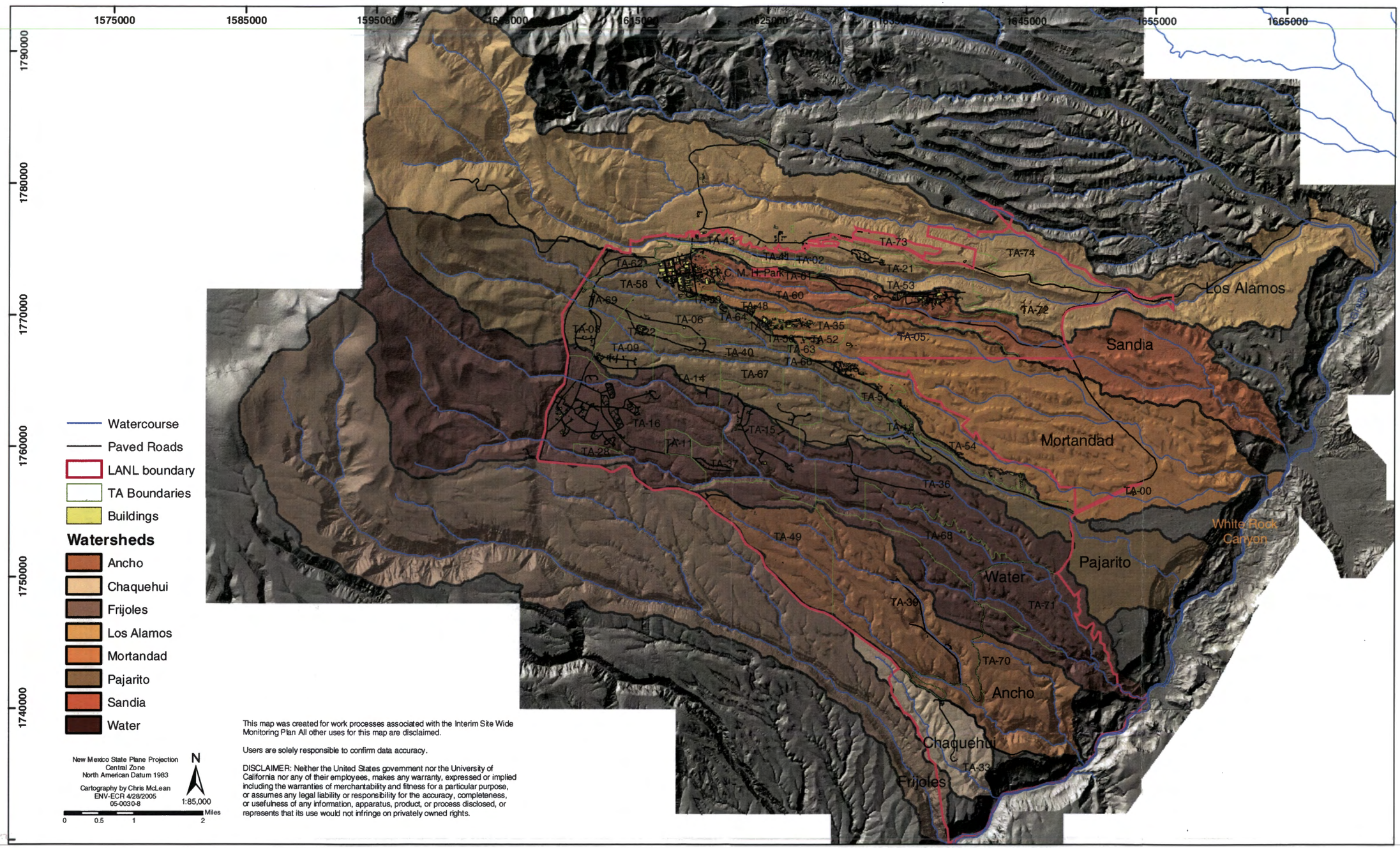


Figure 1.2-1. Canyons of Los Alamos National Laboratory and the Pajarito Plateau

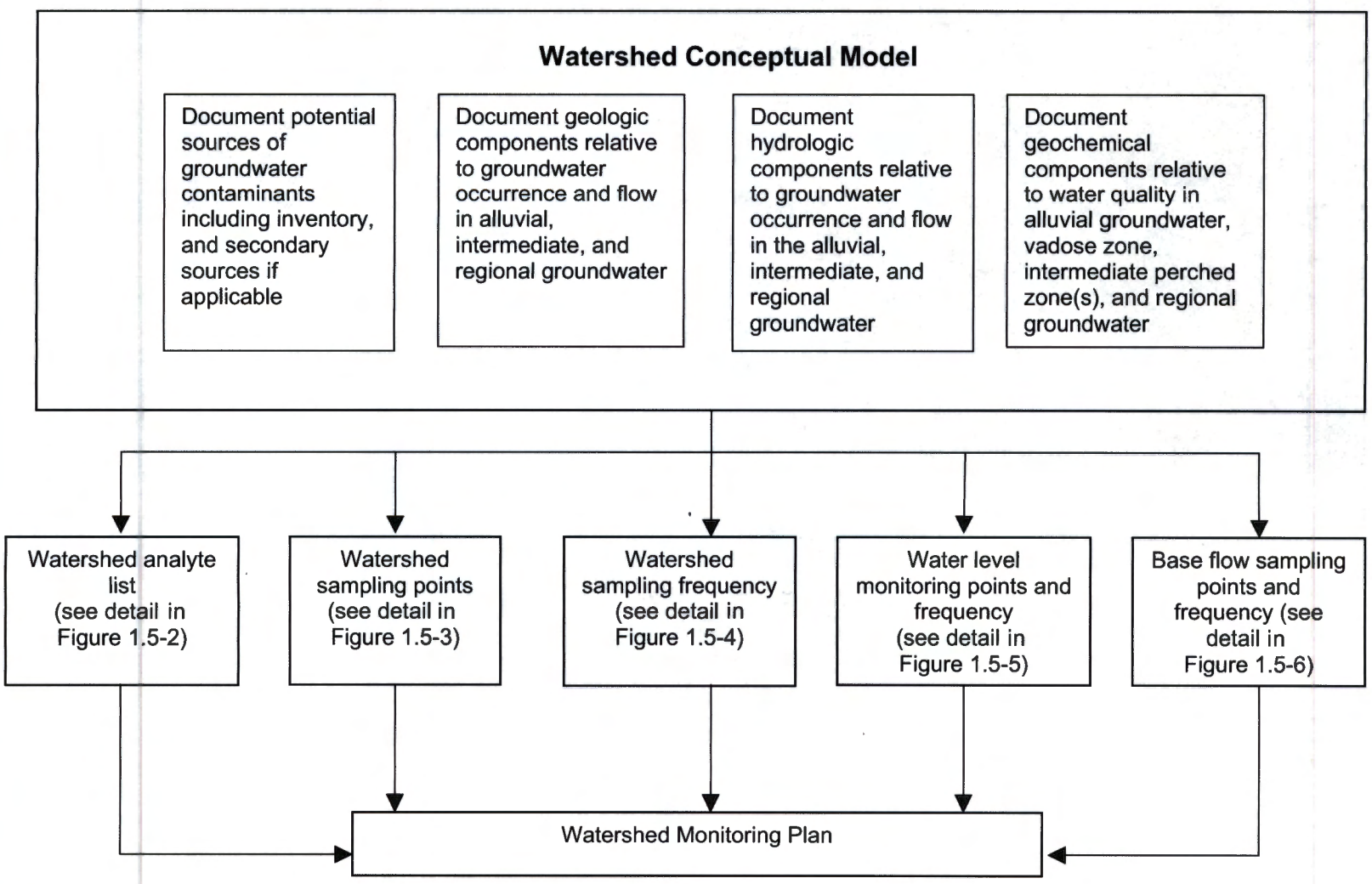


Figure 1.5-1. Overall monitoring plan decision flow

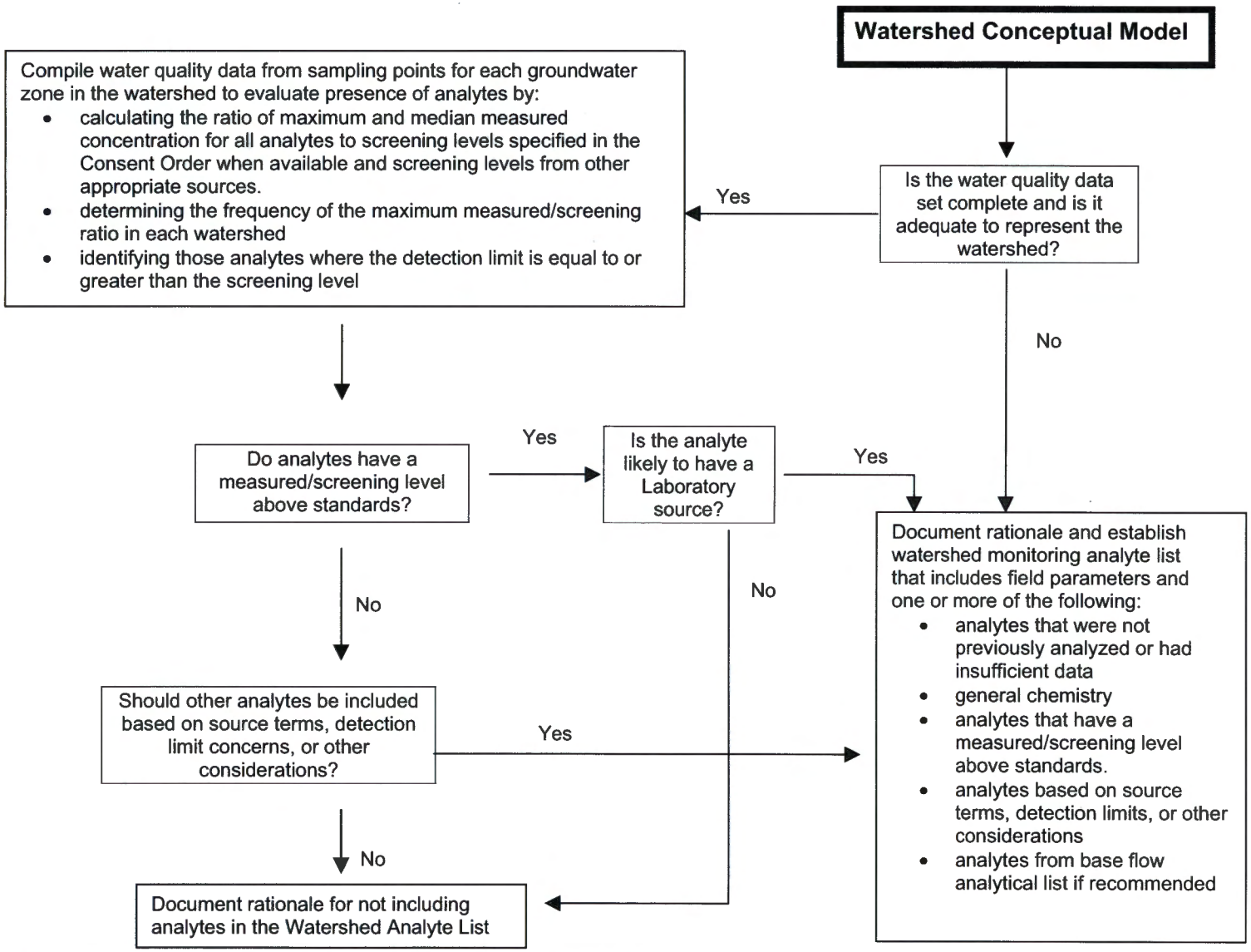


Figure 1.5-2. Decision flow to develop watershed analyte list

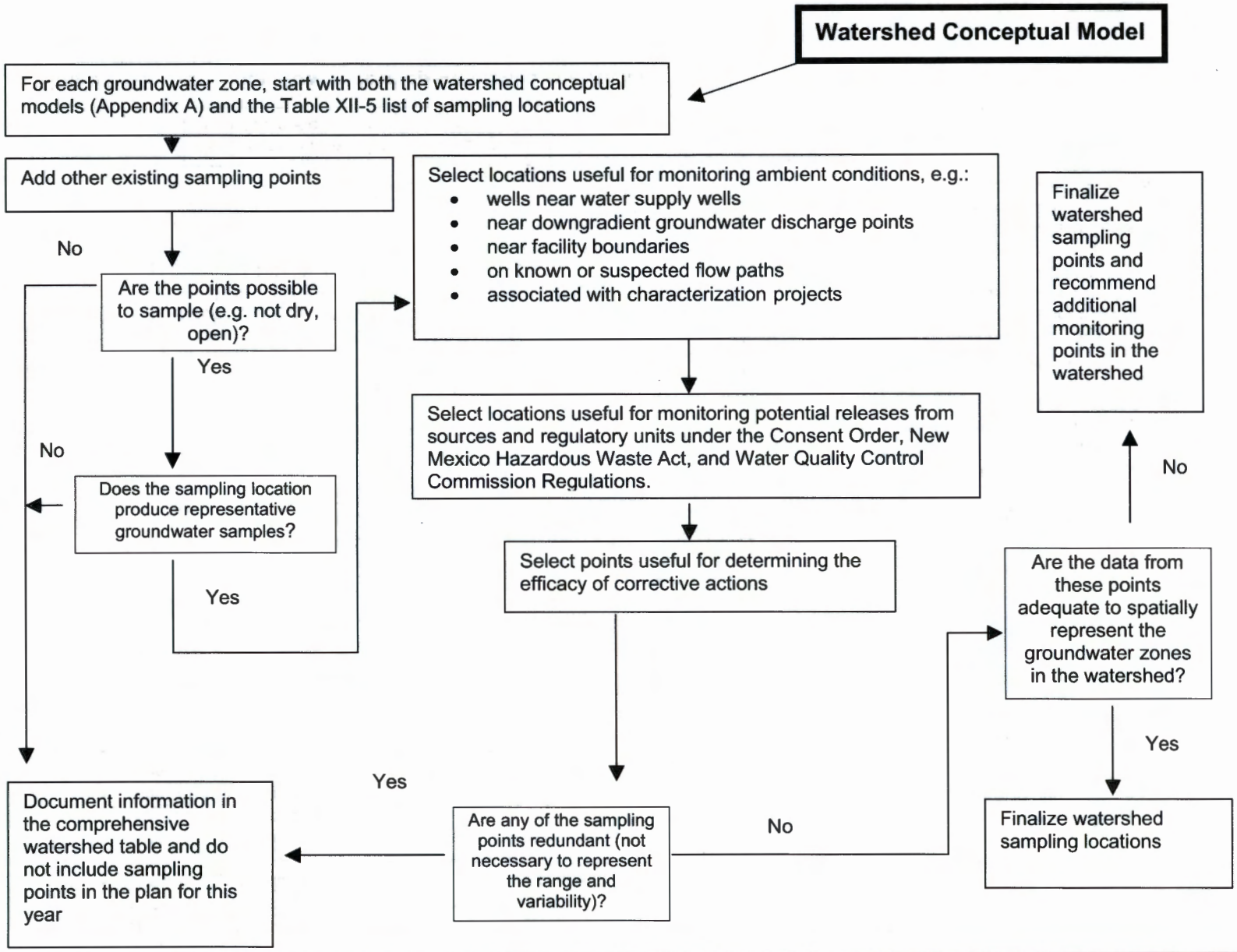


Figure 1.5-3. Decision flow to develop watershed sampling locations

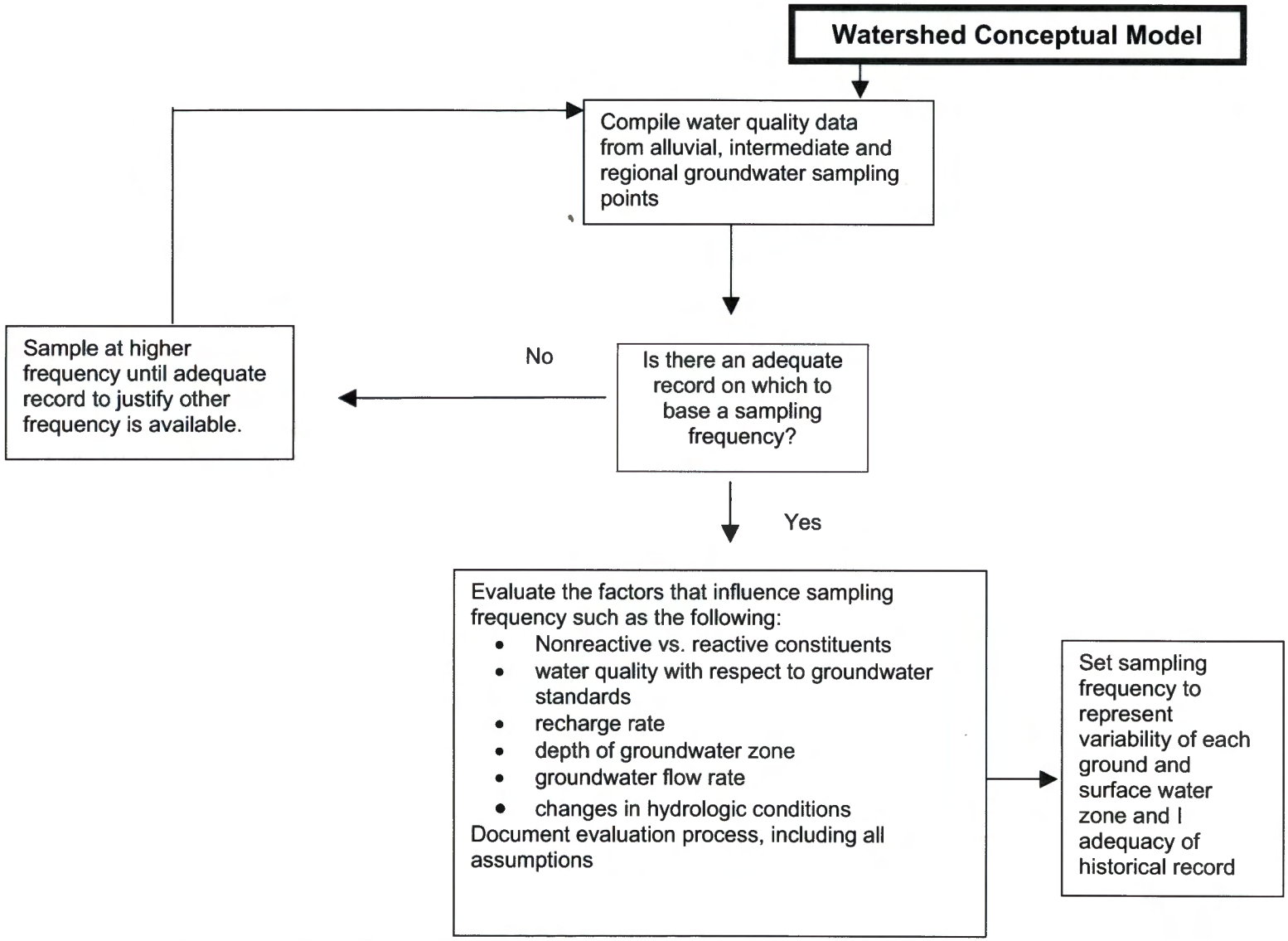


Figure 1.5-4. Decision flow to develop watershed monitoring frequency

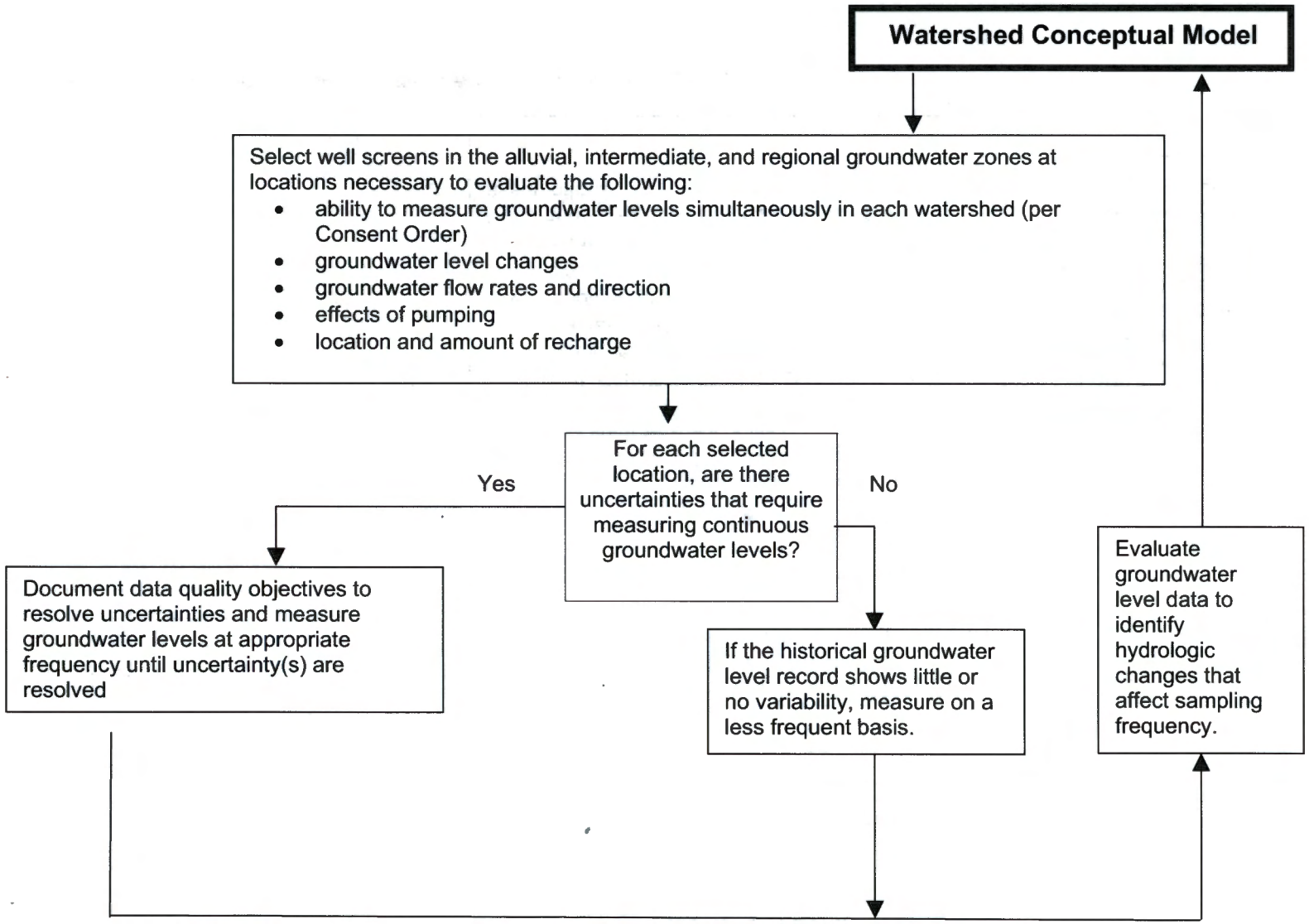


Figure 1.5-5. Decision flow to develop watershed groundwater level monitoring

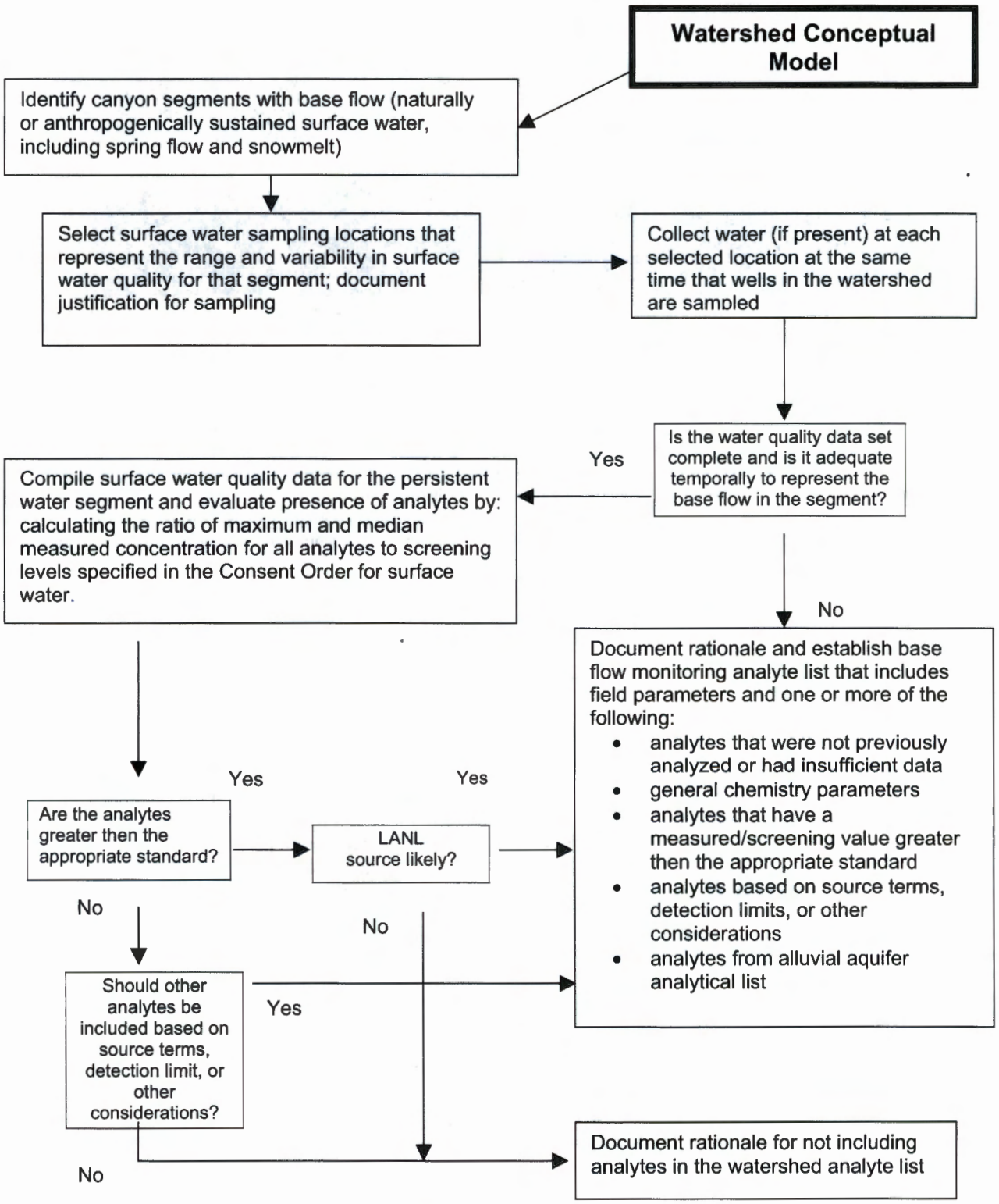


Figure 1.5-6 Decision flow to develop watershed base flow monitoring

	Los Alamos & Pueblo	Mortandad	Pajarito	Sandia	Water & Canyon de Valle	Ancho & Frijoles	Guaje & Bayo
FY06	PCM	CM	CM	PCCM	PCCM	PCCM	PCCM
FY07	LTM	PCM	PCM	CM	PCCM	PCCM	PCCM
FY08	LTM	LTM	LTM	PCM	CM	PCCM	PCCM
FY09	LTM	LTM	LTM	LTM	PCM	CM	CM
FY10	LTM	LTM	LTM	LTM	LTM	PCM	PCM
FY11	LTM	LTM	LTM	LTM	LTM	LTM	LTM
FY12	LTM	LTM	LTM	LTM	LTM	LTM	LTM
FY13	LTM	LTM	LTM	LTM	LTM	LTM	LTM
FY14	LTM	LTM	LTM	LTM	LTM	LTM	LTM
FY15	LTM	LTM	LTM	LTM	LTM	LTM	LTM

Notes:

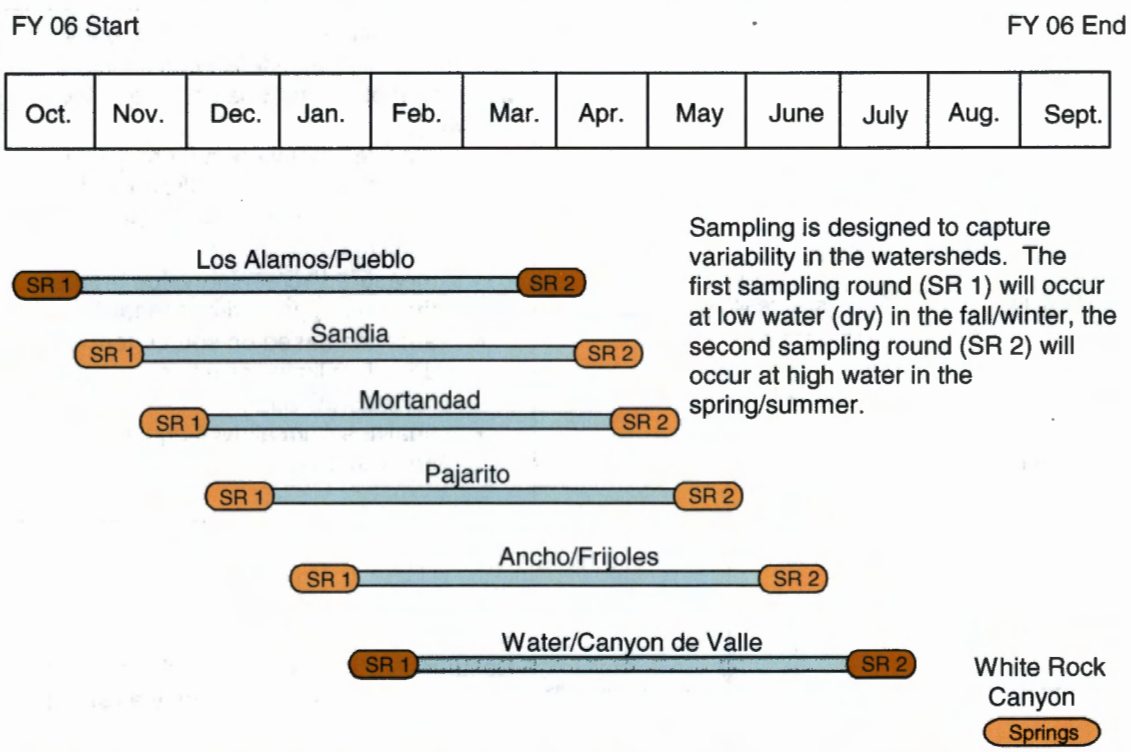
PCCM Pre-Canyons characterization monitoring: Sampling frequency and analyte suite defined by Interim Plan. Assumes monitoring at existing wells and base flow locations.

CM Canyons characterization monitoring: Installation of additional wells, sampling frequency, and analytical suites are determined by an approved Investigation Work Plan. Primary goal of monitoring is for characterization purposes.

PCM Post-Canyons characterization monitoring: Refinement of monitoring to accommodate data needs for corrective action evaluations and addresses data gaps needed for long-term monitoring status.

LTM Long-term monitoring: Continued refinement of monitoring based on trends, modeling, and conceptual site model. Additional long-term groundwater monitoring needs may also result from implementation of corrective measures under the Consent Order.

Figure 1.6-1. Strategy for transition of watershed monitoring criteria



Note that sample events are designed to capture low and high water in the shallow systems of the watersheds. This will account for chemical and hydrologic variability in groundwater.

Figure 1.8-1. Schematic for the 2006 fiscal year (FY06) Interim Plan schedule

2.0 LOS ALAMOS CANYON/PUEBLO CANYON WATERSHED

2.1 Introduction

The Los Alamos Canyon/Pueblo Canyon watersheds are located at the northern end of the Laboratory (Figure 1.2-1). The watershed heads on U.S. Forest Service (USFS) land in the Sierra de los Valles to the west and northwest of the Laboratory. The highest point in the watershed is at the summit of Pajarito Mountain at an elevation of 3182 m (10,441 ft). The watershed extends eastward from the headwaters across the Pajarito Plateau for about 30.4 km (18.9 mi) to its confluence with the Rio Grande at an elevation of 1678 m (5504 ft).

2.2 Background

The Los Alamos Canyon/Pueblo Canyon watershed encompasses approximately 57 sq mi. It includes Los Alamos, Pueblo, Delta Prime (DP), and Acid Canyons. Bayo, Guaje, Rendija, and Barrancas Canyons (collectively known as the North Canyons) are smaller tributary canyons in the watershed. The watershed contains numerous springs, perennial and ephemeral stream segments, and alluvial groundwater. Portions of Los Alamos townsite, Los Alamos County, Santa Fe County, and San Ildefonso Pueblo tribal lands are located within the Los Alamos Canyon/Pueblo Canyon watershed. Laboratory operations have discharged treated and untreated effluent into the watershed since the establishment of the Laboratory in the 1940s up to the present. Runoff from SWMUs and AOCs at former and current Technical Areas (TAs) 00, 01, 02, 03, 19, 21, 31, 41, 43, 53, 72, and 73 have contributed to contaminant releases within the watershed. Metals, perchlorate, nitrates, hydrocarbons, and radionuclides have been detected in groundwater within the watershed. DP Canyon joins Los Alamos Canyon east of TA-21. TA-02, -41, and -43 are located within Los Alamos Canyon south of the Los Alamos townsite. TA-21 and -73, and former TA-01, are located on the mesa north of Los Alamos Canyon. TA-62, -61, -53, and -72 are located south of Los Alamos Canyon.

Pueblo Canyon is located on the north side of the Los Alamos townsite and extends from the Jemez Mountains to its confluence with Los Alamos Canyon approximately 4.5 mi east of the Los Alamos townsite at the intersection of State Highways 502 and 4. TA-72 and -73 and former TA-01 and -45 are located from west to east along the mesa south of Pueblo Canyon. Acid Canyon joins Pueblo Canyon from the south opposite former TA-45. Documented discharges and releases into the watershed were primarily in the form of contaminated wastewater generated during research and manufacturing operations on the surrounding mesas in the vicinity of the Los Alamos townsite. In addition, discharges and releases of contaminants were documented in Los Alamos Canyon resulting from operations conducted at TA-02 and -41. Releases also originate from debris generated during TA-01 demolition activities and deposited on hillsides located above Los Alamos Canyon, opposite the townsite. Laboratory operations that have affected Pueblo Canyon include the release of contaminants to Pueblo Canyon via Acid Canyon from former TA-01 and -45. Historical activities at TA-02, -21, -41, -53 and former TA-01 released contaminants into Los Alamos Canyon and its tributary side canyons (DP Canyon and the undesignated canyon located east of TA-53). Historical Laboratory operations released both hazardous constituents and radionuclides.

Bayo, Guaje, Rendija, and Barrancas Canyons are located north of Laboratory land. The only active TA in the canyons is TA-74, a portion of which is located in Bayo and Barrancas Canyons. The approximately 18 SWMUs and AOCs in these drainages are primarily related to mortar impact areas, firing ranges, and discharge of treated effluent. Surface water flow in upper Guaje Canyon is perennial and extends for about 3 mi. In 1996, two shallow test holes were drilled approximately 3 mi east of the perennial flow between the Los Alamos and Guaje faults. Each borehole penetrated saturation from near ground surface to total depth (23 ft and 103 ft below ground surface [bgs], respectively). Regional aquifer water supply

wells in Guaje Canyon were first installed in the early 1950s. In recent years there have been additional replacement wells drilled. The depths to water at these wells vary depending on their location. Depth to water in the lower portion of the canyon tends to be shallow (100–200 ft bgs), while water levels in the upper portion near the Rendija Canyon confluence have water table depths ranging from 400 to 500 ft bgs. Surface water flow in Rendija and Barrancas Canyons is ephemeral and normally flows only during the summer monsoon season. Contaminant sources are primarily associated with upper Rendija Canyon. The results of surface water sampling conducted in these canyons have periodically detected metals, organics, and radionuclides.

The primary Laboratory activities in these canyons have involved water supply: the Guaje reservoir is no longer operable, and the Guaje well field (now operated by Los Alamos County) currently includes five water supply wells. The wells in this field also extend to lower Rendija Canyon. Rendija Canyon contained a small-arms firing range and several sites used as mortar impact areas. Past Laboratory activities are described in more detail in the "RFI Work Plan for the North Canyons" (LANL 2001, 71060) and the "RFI Work Plan for OU 1071" (LANL 1992, 07667). TA-10 was used as a firing site from 1943 to 1961, for tests with high explosives and radioactive materials. The site included a radiochemistry laboratory. While in operation, the TA-10 sites in Bayo Canyon were investigated for environmental impacts. The site was decontaminated and decommissioned in 1960. TA-10 was the site of an extensive Formerly Utilized Sites Remedial Action Program investigation in 1976 (Mayfield et al. 1979, 11717). In the mid-1990s the site was studied under the "RFI Work Plan for Operable Unit 1079" (LANL 1992, 07668). RCRA facility investigation (RFI) activities included shrapnel removal and investigation, remediation, or deferred action for several potential release sites (PRSs). A second RFI work plan was written in 2001 (LANL 2001, 71060). Only one sampling location, base flow at Guaje Canyon, will be sampled under the Interim Plan. No groundwater or spring locations will be sampled in Guaje, Rendija, or Barrancas Canyon under the Interim Plan.

A work plan for the investigation of Los Alamos Canyon and Pueblo Canyon was approved by NMED in 1997. An addendum to the Los Alamos Canyon and Pueblo Canyon investigation work plan was submitted to and approved by NMED in 2002. In accordance with the approved investigation work plan and addendum, the Laboratory has conducted investigations of contamination in Los Alamos Canyon and Pueblo Canyon. In 2002, the Laboratory conducted an Interim Action in the South Fork of Acid Canyon (a tributary of Pueblo Canyon) in accordance with an Interim Action Plan approved by NMED in 2002.

Table A-1 in Appendix A summarizes the conceptual model for the Los Alamos Canyon/Pueblo Canyon watershed.

2.3 Scope of Activities

2.3.1 Base Flow

Sampling locations, frequency, analytes, and rationale for base flow monitoring are presented in Table 2.3-1. Locations are shown in Figure 2.3-1. Base flow will be collected from Guaje Canyon at one existing monitoring point (E089). Flow in this part of Guaje Canyon is perennial and semiannual sampling is sufficient for establishing background conditions.

Base flow in upper Los Alamos Canyon will be sampled at six existing gaged sites: four in Los Alamos Canyon (E026, E030, E042, and E050) and two in DP Canyon (E038 and E039). Los Alamos Canyon location 026 is west of the Laboratory in a segment with persistent flow and is considered a background location. Sampling points E030 and E042 monitor water quality from former TAs and from DP Canyon. Location E050 is at the Laboratory boundary and monitors the quality of base flow leaving the Laboratory. DP Canyon sampling point E038 is upstream of the TA-21 [O11K] outfall and it is intended to document

the quality of water draining from the Los Alamos townsite into DP Canyon. DP Canyon sampling point (E039) will monitor water quality associated with Reach DP-2, downgradient from the TA-21 (O11K) outfall.

Base flow in Pueblo Canyon will be sampled at four locations. Pueblo above Acid (E055) monitors base flow above Reach AC-3 SW and is important for assessing the impacts of townsite runoff in Pueblo Canyon. Acid above Pueblo (E056) monitors water quality of persistent water at the mouth of Acid Canyon, a location that has historically shown elevated radionuclides. Pueblo 3 is located below the Bayo wastewater treatment plant, and results from this location will allow assessment of downcanyon trends of contaminants originating in Acid Canyon Pueblo above State Highway 502 is a boundary monitoring station and will monitor for potential off site transport of contamination. Base flow sampling station Los Alamos Canyon above Rio (E110) will be used to measure water quality above the confluence of Los Alamos Canyon with the Rio Grande.

Base flow samples will be collected semiannually at all upper Los Alamos Canyon, Pueblo Canyon, and lower Los Alamos Canyon base flow sampling points to capture seasonal variability. Base flow sampling will be performed concurrently with alluvial groundwater sampling to provide a "snapshot" in time for the closely linked systems.

2.3.2 Springs

Sampling locations, frequency, analytes, and rationale for spring monitoring are presented in Table 2.3-1. Locations are shown in Figure 2.1-1.

DP Spring in upper Los Alamos Canyon and Basalt Spring and Los Alamos Spring in lower Los Alamos Canyon will be monitored as part of the Los Alamos Canyon/Pueblo Canyon watershed segment of the Interim Plan. Other spring locations are grouped together in the White Rock Canyon section of this plan.

2.3.3 Alluvial Groundwater

Sampling locations, frequency, analytes, and rationale for alluvial groundwater monitoring are presented in Table 2.3-1. Locations are shown in Figure 2.1-1.

Ten alluvial wells, LAO-B, LAO-0.3, LAO-0.91, LAO-1.6g, LAO-1.8, LAUZ-1, LAO-2, LAO-3a, LAO-4.5c, and LAO-6a, will be monitored in upper Los Alamos Canyon. LAO-B and LAO-C monitor background conditions. In Pueblo Canyon, five alluvial wells will be monitored: PAO-1, PAO-2, PAO-3, PAO-4, and APCO-1. These wells will be used to monitor ambient conditions and evaluate trends from the Cerro Grande fire. Alluvial wells LLAO-1b and LLAO-4 will be used to monitor groundwater below the confluence of Pueblo Canyon and Los Alamos Canyon.

2.3.4 Intermediate Perched Groundwater

Sampling locations, frequency, analytes, and rationale for intermediate perched groundwater monitoring are described in this section and presented in Table 2.3-1. Locations are shown in Figure 2.1-1. Wells LAOi-7 and LADP-5 have not been sited and are not shown on the map.

Sampling of intermediate perched groundwater is to address the ambient monitoring objective in the Los Alamos Canyon/Pueblo Canyon watershed. Three wells in upper Los Alamos Canyon, R-7, LAOI(a)-1.1, and R-9i, are screened in perched intermediate groundwater zones and will be sampled under the Interim Plan. New intermediate wells R-6(i), LADP-3, LADP-5, and LAOI-7 have been, or are, scheduled for installation during fiscal year 2005 (FY05) and will be sampled as soon as operational. In Pueblo Canyon, there are four wells screened in intermediate perched groundwater: R-5, TW-2A, POI-4, and TW-1A.

Intermediate well TW-2a does not produce sufficient groundwater for sampling and is not part of the Interim Plan monitoring well network. TW-1a and TW-2a are scheduled for decommission and will be plugged during FY05. There are no wells screened in intermediate perched water in lower Los Alamos Canyon.

2.3.5 Regional Aquifer Groundwater

Sampling locations, frequency, analytes, and rationale for regional aquifer groundwater monitoring are presented in Table 2.3-1. Locations are shown in Figure 2.1-1.

Regional aquifer sampling in lower Los Alamos Canyon will be accomplished by sampling springs thought to represent the hydrochemical state of regional groundwater, described in Section 8, White Rock Canyon. Sampling of the regional aquifer described in this watershed is primarily to address the ambient monitoring objective. Four wells, R-6, R-7, R-8, and R-9, are screened in the regional aquifer in upper Los Alamos Canyon and are included in the Interim Plan. Additional wells R-3 and R-24 are scheduled for installation during FY05 and are included in the Interim Plan under characterization sampling. Three different wells, R-2, R-4, and R-5, are screened in the regional aquifer in Pueblo Canyon and are included in the Interim Plan. TW-1, TW-2, TW-3, and TW-4 are scheduled for decommission and will be plugged during FY05.

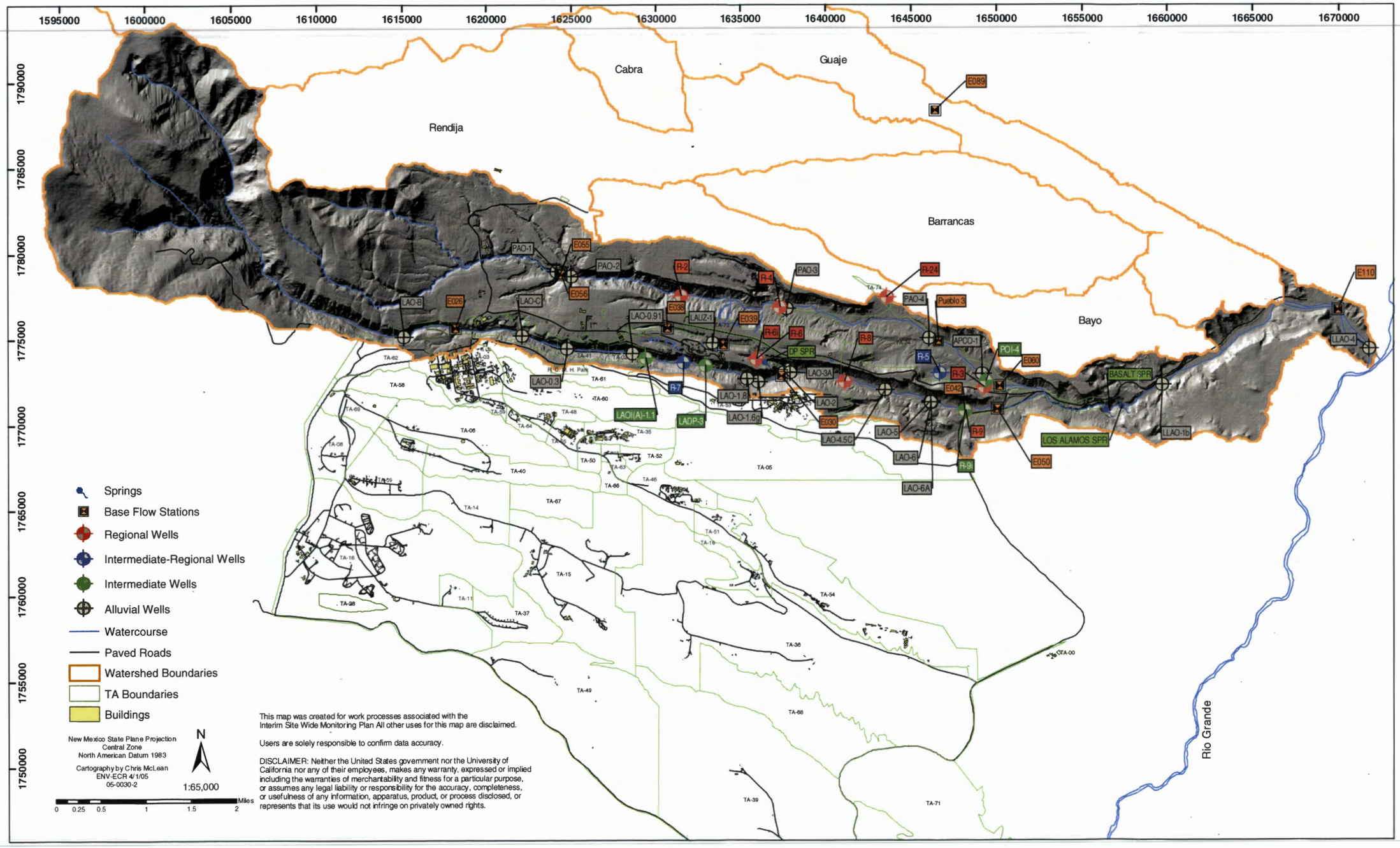


Figure 2.3-1. Los Alamos Canyon and Pueblo Canyon Watershed

This page intentionally left blank.

Table 2.3-1
Los Alamos Canyon/Pueblo Canyon Watershed Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[k]	PCBs[i]	Pesticides[j]	HE
Upper Los Alamos Canyon (includes DP Canyon)[l]													
	Los Alamos below the Ice Rink (E026)	Persistent flow. Monitors background water quality and potential effects of Cerro Grande fire.	Base flow	C	S	S	S	S	S	S	S	S	
	Los Alamos above DP Canyon (E030)	Seasonally intermittent flow. Persistent flow typically only during spring runoff. Monitors potential effects of TA-1 and TAs-2 and -41.	Base flow	C	S	S	S	S	S	S	S	S	
	DP above TA-21 (E038)	Monitors baseline water quality in DP Canyon associated with townsite runoff. Background for DP-reach-2, monitors water quality up gradient from DP-2[21-011(k)]..	Base flow	C	S	S	S	S	S	S	S	S	
	DP below Meadow at TA-21 (E039)	Monitors water quality associated with contaminants in Reach DP-2 [21-011(k)].	Base flow	C	S	S	S	S	S	S	S	S	
	Los Alamos above SR-4 (E042)	Ephemeral. Persistent flow uncommon, typically only during robust spring runoff. Monitors potential affects from DP Canyon and water quality above the low head weir. Data from this location will be used to evaluate weir performance.	Base flow	C	S	S	S	S	S	S	S	S	
	Los Alamos below LA Weir (E050)	Ephemeral. Monitors water quality at Laboratory boundary and influence of low-head weir on surface water quality.	Base flow	C	S	S	S	S	S	S	S	S	
DP Spring	DP Spring	Monitors downstream extent of base flow in DP Canyon. Monitors impact on water quality from secondary contaminant sources in DP sediments.	Alluvial Spring	S	S	S	S	S	S	S	S	S	
LA-5.19[d]		No history of contamination, flow is not consistent seasonally, represents bank storage, may not be representative ..	Alluvial Spring										
LAO-B	LAO-B	Monitors background alluvial groundwater quality, and potential ongoing effects of Cerro Grande fire. Radionuclides included in suite due to fire effect.	Alluvial	C	S	S	S	S	S	S	S	S	
LAO-0.3	LAO-0.3	Monitors baseline water quality downcanyon of townsite runoff, and provides baseline for assessing potential effects of TAs-1, -2, and -41.	Alluvial	C	S	S	S	S	S	S	S	S	
LAO-0.6[d]		LAO-0.3 will be used to monitor the impact of Tas-1, -2, & -41. Locations LAO-0.3 and LAO-0.91 have a historical data foundation and will provide the monitoring network in this reach.	Alluvial			S							

Table 2.3-1 (cont.)

				Analytical Suites [a,b,c]									
Consent Order, Table XII-5	**Interim Monitoring**	**Rationale for Selection of Locations**	**Water Body or Saturated Zone**	**Water Level or Flow[a]**	**Radionuclides[e]**	**Miami 3-H**	**General Inorganics[f]**	**Metals[g]**	**VOCs[h]**	**SVOCs[i]**	**PCBs[j]**	**Pesticides[k]**	**HE**
LAO-0.91	LAO-0.91	Monitors potential impact of TAs-1, -2, and -41, and sediment contamination in up stream reaches. Along with LAO-0.3. LAO-0.91 will provide coverage in this portion of LA Canyon. Long historical record supports choice of LAO-0.91 for ongoing monitoring.	Alluvial										
LAO-1[d]		Redundant with LAO-0.91. No new sources of contamination between LAO-0.91 and LAO-1.2.	Alluvial										
LAO-1.2[d]		Redundant with LAO-0.91. No new sources of contamination between LAO-0.91 and LAO-1.2.	Alluvial										
LAO-1.6g	LAO-1.6g	Monitors distal effects of potential contamination associated with TA-2 and TA-53 outfall.	Alluvial	C	S	S	S	S	S	S	S	S	
LAO-1.8	LAO-1.8	Although LAO-1.8 is not constructed to RCRA standards, LAO-1.8 is important to monitor and differentiate contaminants from TA-53.	Alluvial	C	S	S	S	S	S	S	S	S	
LAUZ-1	LAUZ-1	Monitors groundwater contamination associated w/contaminated sediments in Reach DP-2 [21-011(k)].	Alluvial	C	S	S	S	S	S	S	S	S	
LAUZ-2[d]		Redundant with LAUZ-1. LAUZ-1 shows consistently higher strontium-90 levels then LAUZ-2 and represents a more conservative choice. LAUZ-1 has a long going record of historical water quality data..	Alluvial										
LAO-2	LAO-2	Monitors groundwater discharged from DP Spring and storm runoff from upper DP Canyon.	Alluvial	C	S	S	S	S	S	S	S	S	
LAO-3a	LAO-3a	Monitors effects of mixing of groundwater from Los Alamos and DP Canyons.	Alluvial	C	S	S	S	S	S	S	S	S	
LAO-4.5c	LAO-4.5c	Monitors for indications of downcanyon migration of contamination below Los Alamos/DP Canyon confluence.	Alluvial	C	S	S	S	S	S	S	S	S	
LAO-5, LAO-6, & LAO-6a	LAO-5, LAO-6, & LAO-6a	Monitors contaminant migration from upper canyon and serves as facility boundary monitoring location. One or more of these wells may be dry so they are grouped as one location; sample the well with the most groundwater..	Alluvial	C	S	S	S	S	S	S	S	S	
LAOI(a)-1.1	LAOI(a)-1.1	Analytical suite reflects contaminants in alluvial groundwater. Chemistry suggests fast path recharge from the alluvial system.	Intermediate	C	S	S	S	S	S	S	S	S	
R-7 screen 1	R-7, screen 1	Suite reflects key COPCs in alluvial groundwater in upper LA Canyon. Four rounds of characterization sampling completed with no contaminants detected.	Intermediate	C	S	S	S	S	S	S	S	S	
R-7 screen 2[d]		Dry zone. Screen in this zone does not produce groundwater. No samples were collected during characterization phase sampling.	Intermediate										
LADP-3	LADP-3	Monitoring requested by NMED (03/16/05). This location may change pending review of new monitoring data from intermediate well R-6i in LA Canyon.	Intermediate	C	S	S	S	S	S	S	S	S	
R-9i screen 1	R-9i, screen 1	Molybdenum added to suite as potential tracer from upper Los Alamos Canyon alluvial groundwater.	Intermediate	C	S	S	S	S	S	S	S	S	
R-9i screen 2	R-9i screen 2	This location will be monitored because of the high permeability and proximity to alluvial groundwater recharge. Molybdenum will be added to monitor recharge potential from overlying alluvial system.	Intermediate	C	S	S	S	S	S	S	S	S	
	LADP-5	New well. Characterization sampling, extent of contamination.	Intermediate	C	S	S	S	S	S	S	S	S	
	R-6i	New well. Characterization sampling, extent of contamination.	Intermediate	C	S	S	S	S	S	S	S	S	
	LAOI-7	New well. Characterization sampling, extent of contamination.	Intermediate	C	S	S	S	S	S	S	S	S	
R-7 screen 3	R-7, screen 3	Monitors regional groundwater.	Regional	C	S	S	S	S	S	S	S	S	
	R-6	New well, characterization phase of monitoring as part of this plan.	Regional	C	S	S	S	S		S	S	S	
TW-3[d]		Planned for plugging and abandonment.	Regional										

Table 2.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Analytical Suites [a,b,c]									
				Water Level or Flow[a]	Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
	R-8, screen 1	Monitors regional groundwater. Results show no impact from laboratory activities. Candidate for abbreviated sampling frequency	Regional	C	S	S	S	S	S	S	S	S	
	R-8, screen 2	Monitors regional groundwater. Results show no impact from laboratory activities. Candidate for abbreviated sampling frequency.	Regional	C	S	S	S	S	S	S	S	S	
R-9	R-9	Monitors regional groundwater.	Regional	C	S	S	S	S	S	S	S	S	
Pueblo Canyon (includes Acid Canyon)[l]													
	Guaje above Rendija Canyon (EO89)	Lower extent of perennial flow in Guaje Canyon. No contaminants present from the Laboratory or town site runoff, background base flow location.	Base flow		S	S	S	S	S	S	S	S	
	Pueblo above Acid (E055)	Baseline for Pueblo Canyon. Monitoring for assessing impacts of townsite runoff.	Base flow	C	S	S	S	S	S	S	S	S	
	Acid Above Pueblo (E056)	Monitors persistent surface water at mouth of Acid Canyon. Location historically shows elevated rad concentrations due to contaminated sediments in reach.	Base flow	C	S	S	S	S	S	S	S	S	
	Pueblo 3	Baseline for water quality below Bayo WWTP. Monitors downcanyon trend of contaminants measured at Reach AC-3 SW (Acid Weir).	Base flow	C	S	S	S	S	S	S	S	S	
	Pueblo above SR-502 (E060)	Boundary location. Measure potential impacts from erosion and sediment-bound plutonium transport in lower Pueblo Canyon.	Base flow	C	S	S	S	S	S	S	S	S	
PAO-1	PAO-1	Monitors groundwater immediately above Acid Canyon, the dominant source of contamination in Pueblo Canyon. Also, monitors to evaluate trends in post-Cerro Grande fire perturbations (strontium-90 and plutonium).	Alluvial	C	S	S	S	S		S	S	S	
PAO-2	PAO-2	Monitors groundwater immediately below Acid Canyon, the dominant source of contamination in Pueblo Canyon. Also, monitors to evaluate trends in post-Cerro Grande fire perturbations (strontium-90 and plutonium).	Alluvial	C	S	S	S	S		S	S	S	
PAO-2.5[d]		No new sources of contamination in this portion of the canyon. Redundant with PAO-1, PAO-2, and PAO-3 with respect to water quality. Not necessary to monitor at this time.	Alluvial										
PAO-3	PAO-3	Monitoring at a location approximately midway between PAO-1 and PAO-4 to evaluate trend in post-Cerro Grande fire perturbation in strontium-90 and plutonium concentrations.	Alluvial	C	S	S	S	S		S	S	S	
PAO-4	PAO-4	Monitoring below Bayo WWTP to evaluate influence of persistent saturation. Monitoring to evaluate trend in post-Cerro Grande fire perturbation in strontium-90 and plutonium concentrations.	Alluvial	C	S	S	S	S		S	S	S	
PAO-5s[d]		APCO-1 will represent groundwater chemistry at this location. PAO-5s and PAO-5n aRE very close to APCO-1 and have not yielded significantly different chemistry in the past. APCO-1 also has the longest record of data of the three wells..	Alluvial										
PAO-5n[d]		APCO-1 will represent groundwater chemistry at this location. PAO-5s and PAO-5n aRE very close to APCO-1 and have not yielded significantly different chemistry.in the past. APCO-1 also has the longest record of data of the three wells..	Alluvial										
APCO-1	APCO-1	Monitoring below Bayo WWTP to evaluate influence of persistent saturation and impact of nutrients associated with wastewater discharge. Most down canyon monitoring point in Pueblo Canyon. Longest monitoring record in lower Pueblo Canyon. Collection of additional data will enable analysis of long-term trends in water quality.	Alluvial	C	S	S	S	S		S	S	S	
~~TW-2A[d]~~		~~Well not operable, does not yield representative groundwater. Scheduled for plug and abandonment in the immediate future.~~	~~Intermediate~~										

Table 2.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Analytical Suites [a,b,c]									
				Water Level or Flow[a]	Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
POI-4	POI-4	Analytical suites reflect alluvial groundwater contam inants and potential Cerro Grande fire constituents.	Intermediate	C	S	S	S	S		S	S	S	
TW-1A[d]		Planned for plugging and abandonment.	Intermediate										
R-5, screen 1[d]		Screen dry, no available groundwater.	Intermediate	A									
R-5, screen 2	R-5, screen 2	Monitor for trends in chemistry within intermediate groundwater. Four rounds of characterization sampling has been performed at this well.	Intermediate	C	S	S	S	S	S		S		
TW-4[d]		Planned for plugging and abandonment.	Regional										
	R-2	R-2 is a new well and initial characterization will be part of this plan. Semi annual sampling will occur until four rounds have been collected.	Regional	C	S	S	S	S	S	S	S	S	
TW-2[d]		Well not operable, planned for plugging and abandonment.	Regional										
	R-4	R-4 is a new well and initial characterization will be part of this plan. Semi annual sampling will occur until four rounds have been collected.	Regional	C	S	S	S	S	S	S		S	
R-5, screen 3	R-5, screen 3	Key monitoring point for the regional aquifer in Pueblo Canyon. Four rounds of characterization sampling has occurred at this location.	Regional	C	S	S	S	S	S				
R-5, screen 4	R-5, screen 4	Key monitoring point for the regional aquifer in Pueblo Canyon. Four rounds of characterization sampling has occurred at this location.	Regional	C	S	S	S	S	S				
	R-3	After R-3 is constructed characterization sampling will proceed to determine the extent of contamination.	Regional	C	S	S	S	S	S	S	S	S	
	R-24	New well, characterization sampling, extent of contamination.	Regional	C	S	S	S	S	S	S	S	S	
TW-1[d]		Planned for plugging and abandonment.	Regional										
Lower Los Alamos Canyon[l]													
	Los Alamos above Rio (E110)	Measure water quality at confluence of Los Alamos Canyon and Rio Grande. Regional/local GW mixing.	**Base flow**	C	S	S	S	S	S	S	S	S	
Basalt	Basalt Spring	RCRA operating permit specifies annual sampling and analysis at this location. Geochemically similar to surface water and intermediate-depth water below Pueblo Canyon. Source of water is Bayo POTW.	Intermediate Spring	S	S	S	S	S	S	S	S	S	
Los Alamos	Los Alamos	Basalt Spring. Is thought to represent intermediate groundwater. This location will provide monitoring for the intermediate zone in lower Los Alamos canyon.	Intermediate Spring	S	S	S	S	S	S	S	S	S	
Otowi[d]		Redundant with LA Canyon surface water samples. No information will be gained by sampling this location.	Spring										
LLAO-1b	LLAO-1b	Monitoring upper portion of San Ildefonso Pueblo reach. Water quality is related to Basalt Spring.	Alluvial	C	S	S	S	S	S	S	S	S	
LLAO-3[d]		No new sources of contamination in this portion of the canyon. Redundant with proposed monitoring at LLAO-1b and LLAO-4.	Alluvial										
LLAO-4	LLAO-4	Monitors lower San Ildefonso Pueblo reach near confluence with Rio Grande. Water quality appears to reflect mixing with regional groundwater near the river.	Alluvial	C	S	S	S	S	S	S	S	S	
LLAO-5[d]		Spatially redundant with LLAO-4. Also sees mixing with regional groundwater.	Alluvial										

Table 2.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Analytical Suites [a,b,c]									
				Water Level or Flow[a]	Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
MW-3[d]		Old Hwy Dept wells. No info on well construction, most likely not RCRA constructed wells. Since no new sources of contamination in lower LA Canyon, the San Ildefonso Pueblo reach will be adequately monitored by LLAO-1b and LLAO-4.	Alluvial										
MW-5[d]		Old Hwy Dept wells. No info on well construction, most likely not RCRA constructed wells. Since no new sources of contamination in lower LA Canyon, the San I reach will be adequately monitored by LLAO-1b and LLAO-4.	Alluvial										
MW-6[d]		Old Hwy Dept wells. No info on well construction, most likely not RCRA constructed wells. Since no new sources of contamination in lower LA Canyon, the San I reach will be adequately monitored by LLAO-1b and LLAO-4.	Alluvial										
MW-9[d]		Old Hwy Dept wells. No info on well construction, most likely not RCRA constructed wells. Since no new sources of contamination in lower LA Canyon, the San I reach will be adequately monitored by LLAO-1b and LLAO-4.	Alluvial										

[a] Sampling frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

[b] Semi annual sampling for select intermediate and regional groundwater is defined as one full analyte suite list and one target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), low level tritium, general chemistry, gross alpha, gross beta, strontium-90 and isotopic uranium. Sampling frequency for wells undergoing characterization sampling is generally comprehensive (full suite analysis) for each sampling event.

[c] The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only. Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

[d] Location differs from Table XII-5 due to duplication of wells, scheduled for abandonment, no historical contamination, dry zones, or other reasons. See supplemental appendices (Appendix D) for further explanation.

[e] Rad suite includes gross alpha, gross beta, isotopic uranium, strontium-90, low level tritium.

[f] General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

[g] Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

[h] VOCs will be analyzed by EPA methods 8260B.

[i] PAHs will be analyzed by EPA Method 8310.

[j] PCBs will be analyzed using EPA Method 8082.

[k] Pesticides will be analyzed by EPA Method 8081A.

[l] Select regional wells (R-wells) may contain residual drilling fluids and are included as part of the Interim Plan even though concentration and mobility of specific constituents may be affected.

This page intentionally left blank.

3.0 SANDIA CANYON WATERSHED

3.1 Introduction

Sandia Canyon is located within the central part of the Laboratory (Figure 1.2-1) The canyon heads on Laboratory property within TA-03 at an elevation of approximately 7300 ft and trends east-southeast across the Laboratory, Bandelier National Monument, and San Ildefonso Pueblo. Sandia Canyon empties into the Rio Grande in White Rock Canyon at an elevation of 5450 ft.

3.2 Background

The Sandia Canyon watershed is approximately 5.5 sq mi in area. The head of the canyon is located on the Pajarito Plateau at TA-03. Perennial stream flow and saturated alluvial aquifer conditions occur in the upper and middle portions of the canyon system because of sanitary wastewater and cooling tower discharges to the canyon from operating facilities. A wetland of approximately seven acres has developed as a result of the wastewater and cooling tower discharges. Polychlorinated biphenyls (PCBs) have been detected in sediment samples obtained from the wetland area and mercury has been detected in surface water samples. The only known perennial spring in the watershed (Sandia Spring) is located in lower Sandia Canyon. TAs located in the Sandia Canyon watershed include TA-03, -20, -53, -60, -61, and -72. Approximately 264 SWMUs and AOCs are within these TAs. The types of SWMUs and AOCs vary from industrial outfalls to open-detonation firing sites. Table A-2 in Appendix A summarizes the conceptual model for the Sandia Canyon Watershed.

3.3 Scope of Activities

3.3.1 Base Flow

Sampling locations, frequency, analytes, and rationale for base flow monitoring are presented in Table 3.3-1. Locations are shown in Figure 3.3-1. Base flow sampling stations Sandia Right Fork at Power Plant (E121) and Sandia Below Wetlands (E123) will be sampled as part of the Interim Plan. Both are located in perennial reaches of Sandia Canyon near TA-03. No major contaminant sources below TA-03 exist that likely would impact base flow water quality.

Station E121, located above the aforementioned wetland, was selected to ensure that any errant discharge from the power plant is not masked by the wetland. Station E123 was selected to represent the quality of water discharging from the wetland. Station SCS-2 has a long historical record and will be sampled to assess potential effects from TA-60 and TA-61.

3.3.2 Alluvial Groundwater

Sampling locations, frequency, analytes, and rationale for alluvial groundwater monitoring are presented in Table 3.3-1. Locations are shown in Figure 3.3-1.

There are no wells that consistently yield alluvial groundwater in Sandia Canyon. Locations SCO-1 and SCO-2 will be monitored on a seasonal frequency (spring snowmelt and summer monsoon) for the presence of groundwater. If water is present, the samples collected will undergo full-suite analysis to address the paucity of data from these locations.

3.3.3 Intermediate Perched Groundwater

Sampling locations, frequency, analytes, and rationale for intermediate perched groundwater monitoring are presented in Table 3.3-1. Locations are shown in Figure 3.3-1.

The intermediate depth perched groundwater zone is one of the thickest known at the Laboratory and may have been impacted by Laboratory discharges in Sandia Canyon and adjacent canyons.

Well R-12 is the only monitoring well that accesses intermediate perched groundwater. Of the two intermediate screens, testing shows that the upper screen has higher permeability (Broxton et al. 2001, 71252) and contains the highest tritium activities (Longmire 2002, 72800). The Interim Plan calls for both screens to be monitored.

3.3.4 Regional Aquifer Groundwater

Sampling locations, frequency, analytes, and rationale for regional aquifer groundwater are presented in Table 3.3-1. Locations are shown in Figure 3.3-1.

Depth to the regional aquifer in middle Sandia Canyon is approximately 800 ft. Current water quality of the regional aquifer beneath Sandia Canyon shows little, if any, impacts from Laboratory operations. A review of historical sampling results shows metal concentrations to be greater than screening criteria; however, these appear to be naturally derived (Longmire 2002, 72713; Longmire 2002, 72800).

Regional wells R-11 and R-12 are screened in the regional aquifer in the middle portion of Sandia Canyon and will be monitored as part of the Interim Plan. Regional wells R-10 and R-10a will be installed in lower Sandia Canyon during FY05 and will be sampled under the Interim Plan; these locations are not shown on the map. No wells penetrate the regional aquifer in the upper part of the watershed.

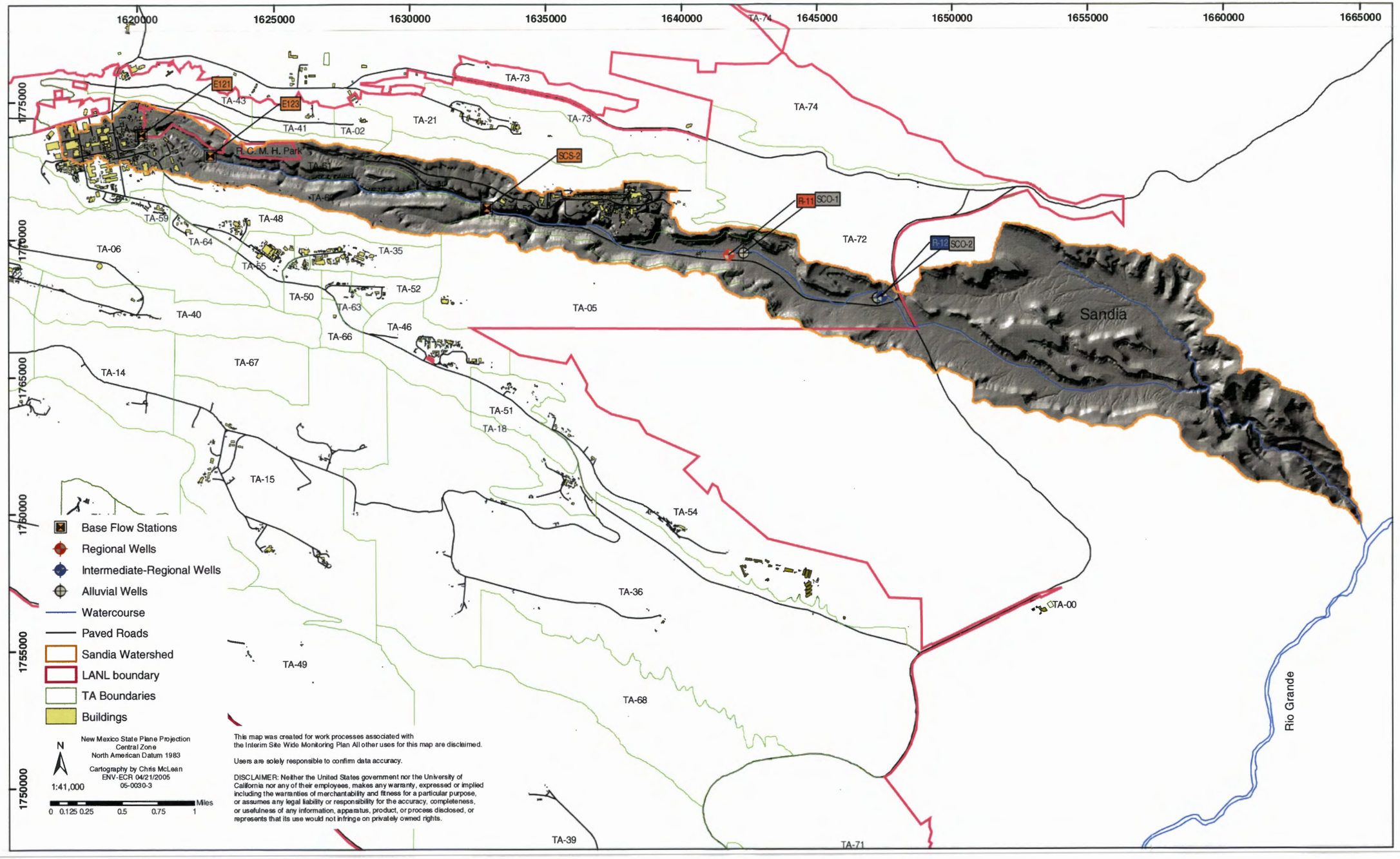


Figure 3.3-1. Sandia Canyon Watershed

This page intentionally left blank.

Table 3.3-1
Sandia Canyon Watershed Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
Sandia Canyon[l]													
	Sandia right fork at Power Plant (E121)	Monitors effluent from power plant, the major tributary to wetland; serves as baseline water quality for wetland.	Base flow	C	S	S	S	S	S	S	S		
	Sandia below Wetlands (E123)	Monitors water quality of flow from wetland. This is the largest Laboratory effluent stream.	Base flow	C	S	S	S	S	S	S	S	S	
	SCS-2	Annual sampling and analysis at this location.	Base flow	A	S	S	S	S	S	S	S	S	
SCO-1	SCO-1	Well dry since installed. Check for water during the wet seasons.	Alluvial	Q	S	S	S	S	S	S	S	S	
SCO-2	SCO-2	Well dry since installed. Check for water during the wet seasons.	Alluvial	Q	S	S	S	S	S	S	S	S	
R-12 screen 1	R-12, screen 1	This is the shallowest and most productive of the intermediate screens. General chemistry showed higher concentrations than lower intermediate screen.	Intermediate	C	S	S	S	S	S	S	S	S	
R-12 screen 2	R-12, screen 2	Water quality of the lower regional groundwater zone in Sandia Canyon.	Intermediate	C	S	S	S	S	S	S	S	S	
	R-10	New well in lower Sandia Canyon, characterization under the Interim Plan, location not finalized on map.	Regional	C	S	S	S	S	S	S	S	S	
	R-10a	New well in lower Sandia Canyon, characterization under the Interim Plan, location not finalized on map.	Regional	C	S	S	S	S	S	S	S	S	
R-11	R-11	Monitors regional aquifer in mid-Sandia Canyon, characterization phase	Regional	C	S	S	S	S	S	S	S	S	
R-12 screen 3	R-12, screen 3	Boundary and sentinel well.	Regional	C	S	S	S	S	S	S	S	A	

[a] Sampling frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

[b] Semi annual sampling for intermediate and regional groundwater is defined as one full analyte suite list and one target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), low level tritium, general chemistry, gross alpha, gross beta, strontium-90 and isotopic uranium. Sampling frequency for wells undergoing characterization sampling is generally comprehensive (full suite analysis) for both sampling events.

[c] The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only. Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

[d] Location differs from Table XII-5 due to duplication of wells, scheduled for abandonment, no historical contamination, dry zones, or other reasons. See supplemental appendices (Appendix D) for further explanation.

[e] Rad suite includes gross alpha, gross beta, isotopic uranium, strontium-90, low level tritium.

[f] General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

[g] Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

[h] VOCs will be analyzed by EPA methods 8260B.

[i] PAHs will be analyzed by EPA Method 8310.

[j] PCBs will be analyzed using EPA Method 8082.

[k] Pesticides will be analyzed by EPA Method 8081A.

[l] Select regional wells (R-wells) may contain residual drilling fluids and are included as part of the Interim Plan even though concentration and mobility of specific constituents may be affected.

This page intentionally left blank.

4.0 MORTANDAD CANYON WATERSHED

4.1 Introduction

Mortandad Canyon is an east-to-southeast trending canyon that heads on the Pajarito Plateau near the main Laboratory complex at TA-03 at an elevation of 7380 ft (Figure 1.2-1). The drainage extends about 9.6 mi from its headwaters to its confluence with the Rio Grande at an elevation of 5440 ft. The canyon crosses San Ildefonso Pueblo land for several miles before joining the Rio Grande (LANL 1997, 56835). Figure 4.3-1 shows the location of the Mortandad Canyon watershed and its tributary canyons.

The primary purpose of monitoring in Mortandad Canyon is to support and supplement characterization of the canyon groundwater system that is being conducted under the Mortandad Canyon groundwater work plan (LANL 2003, 79557). Characterization results are to be reported in the Mortandad Canyon investigation report due in 2006 and groundwater and surface water results will be reported under the Interim Plan. Monitoring purpose and scope will be reassessed in 2006, be based on the need for ongoing support of characterization, and in 2007, based on the results of the investigation report and the determination of whether further corrective action is required under the Consent Order. Monitoring in Mortandad Canyon will be re-evaluated and eventually transition to a long-term monitoring status will occur.

4.2 Background

The Mortandad Canyon watershed is located in the central portion of the Laboratory and covers approximately 10 sq mi. San Ildefonso Pueblo is directly adjacent to a portion of the Laboratory's eastern boundary and includes the eastern end of Mortandad Canyon. The Mortandad Canyon watershed contains several tributary canyons that have received contaminants released during Laboratory operations. The most prominent tributary canyons include Ten Site Canyon, Pratt Canyon, Effluent Canyon, and Cañada del Buey. Although Cañada del Buey is located in the Mortandad Canyon watershed, its characterization is included in the "Work Plan for Sandia Canyon and Cañada del Buey" (LANL 1999, 64617).

Current and former TAs located in the Mortandad Canyon watershed include TA-03, -04, -05, -18, -35, -42, -46, -48, -50, -51, -52, -54, -55, and -59. The primary sources of contamination in this watershed are attributed to historic releases of contaminants from outfalls and spills at TA-35 and TA-50, including the RLWTF at TA-50. RCRA constituents, including metals and volatile organic compounds (VOCs), have historically been released into the canyon. Nitrates, perchlorate, molybdenum, manganese, and radionuclides, which are not addressed under the Consent Order, are some of the contaminants that have been detected in Mortandad Canyon alluvial groundwater. In addition, nitrate, perchlorate, fluoride, and radionuclides were detected in samples of intermediate zone groundwater during the drilling of regional aquifer well R-15 and intermediate well MCOBT-4.4, located east of the confluence of Mortandad and Ten Site Canyons. Perchlorate also was detected in core samples obtained from the vadose zone close to the top of the regional aquifer. The vadose zone represents an important inventory of contaminants in Mortandad Canyon.

Table A-3 in Appendix A summarizes the conceptual model for the Mortandad Canyon watershed.

4.3 Scope of Activities

Mortandad Canyon work plan characterization sampling and analysis activities will comprise the fiscal year 2006 (FY06) monitoring effort under the Interim Plan. The Mortandad Canyon work plan calls for two characterization sampling rounds. However, an additional two sampling rounds will be performed in FY06 in anticipation of additional data needs for corrective measure evaluations and long-term monitoring decisions.

4.3.1 Base Flow

Sampling locations, frequency, analytes, and rationale for base flow monitoring are presented in Table 4.3-1. Locations are shown in Figure 4.3-1.

Surface water in Mortandad Canyon is ephemeral except for two segments that are effluent-dependent. The ephemeral segments flow only in response to precipitation. The ephemeral segment stations are monitored under the Laboratory storm water monitoring plan. Historical Environmental Surveillance Program (ESP) data indicate that persistent surface flow occurs in the effluent-dependent segments at the base flow stations downcanyon of the RLWTF outfall (measured at gage E200) and the Los Alamos County sewage treatment plant outfall (ESP 2000, 68661; ESP 2001, 71301; ESP 2002, 73876). The effluent-dependent segments will be sampled at the current base flow sampling station: Mortandad Canyon at GS-1 (gage E200). Additional base flow stations include E-1FW, E-1W, E-1E, in Effluent Canyon; TS-1W and TS-2E in Ten Site Canyon; and M-1W, M-1E, and M-2E in Mortandad Canyon.

4.3.2 Alluvial Groundwater

Sampling locations, frequency, analytes, and rationale for alluvial groundwater monitoring are presented in Table 4.3-1. Locations are shown in Figure 4.3-1.

Alluvial groundwater locations selected for monitoring under the FY06 Interim Plan include existing wells MCO-0.6, MCO-4B, MCO-5, MCO-6, MCO-7, MT-1, MT-2, MT-3, and MT-4 in Mortandad Canyon and wells CDBO-6 and CBDO-7 in Cañada del Buey. Five new alluvial groundwater wells installed during FY05, MCA-1, MCA-2, MCA-4, MCA-5, and TSCA-6, will be sampled.

In Mortandad Canyon, voluntary monitoring supports the TA-50 RLWTF Groundwater Discharge Plan (DP-1132). The discharge plan is currently under negotiation with the NMED Groundwater Bureau. This Interim Plan will provide data required by the discharge plan when possible.

4.3.3 Intermediate Perched Groundwater

Sampling locations, frequency, analytes, and rationale for intermediate perched groundwater monitoring are presented in Table 4.3-1. Locations are shown in Figure 4.3-1.

One existing well, MCOBT-4.4, and six new wells, MCOI-1, MCOI-4, MCOI-5, MCOI-6, MCOI-8, and MCOI-10, are screened in a perched intermediate groundwater zone. Two new wells, MCOI-1 and MCOI-10, do not produce appreciable water. The remaining wells, with the exception of MCOI-6, recharge very slowly and must be bailed to acquire groundwater samples. These wells will be monitored as part of the Interim Plan.

4.3.4 Regional Aquifer Groundwater

Sampling locations, frequency, analytes, and rationale for regional aquifer groundwater monitoring are presented in Table 4.3-1. Locations are shown in Figure 4.3-1.

Sampling of the regional aquifer described in this watershed is designed primarily to address the characterization effort described in the Mortandad Canyon Groundwater work plan (LANL 2003, 79557).

Regional aquifer wells R-1, R-13, R-14, R-15, R-16, R-21, R-28, R-33, and R-34 in the Mortandad Canyon watershed will be incorporated into the Interim Plan and monitored to support both efforts. Regional groundwater well R-16(R) is scheduled for installation during FY05 and will be sampled under the Interim Plan.

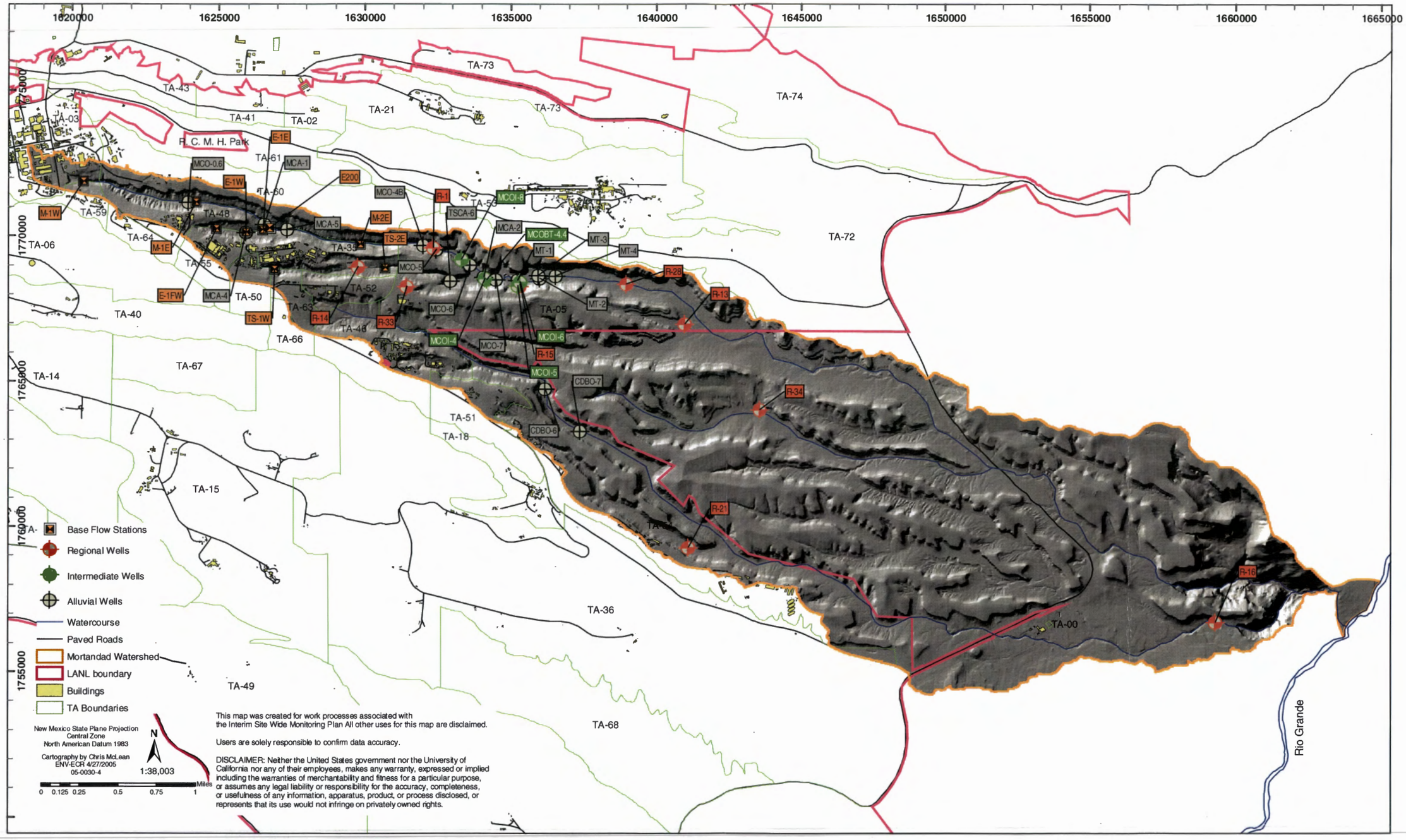


Figure 4.3-1. Mortandad Canyon Watershed

This page intentionally left blank.

Table 4.3-1
Mortandad Canyon Watershed Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
Mortandad Canyon (includes Ten Site Canyon and Cañada del Buey)[l]													
	E-1FW	Baseline for Effluent.	Base flow	S	S	S	S	S	S	S			
	E-1W	Evaluate TA-55 influence and effects of wetland.	Base flow	S	S	S	S	S	S	S			
	E-1E	Sample location as close to Mortandad confluence as possible. Evaluate TA-50 effluent after interaction with canyon sediment.	Base flow	S	S	S	S	S	S	S			
	Mortandad below Effluent Canyon (E200)	Monitors effluent from TA-50 Radioactive Liquid Waste Treatment Facility (RLTWF). RCRA operating permit specifies annual sampling and analysis at this location.	Base flow	C	S		S	S	A	A	A	A	A
	M-1W	M-1W is west end of reach as Mortandad baseline and east end of reach to evaluate potential effects of wetland.	Base flow	S	S	S	S	S	S	S			
	M-1E	Mortandad impacts just before Effluent confluence.	Base flow	S	S	S	S	S	S	S			
	M-2E	Addresses distal end of persistent surface water in watershed. Target west end of reach for more consistent water.	Base flow	S	S	S	S	S	S	S			
	TS-1W	Recommended to address head of Ten Site drainage and potential local impacts from Area C.	Base flow	S	S	S	S	S	S	S			
	TS-2E	Addresses cumulative impacts from TA-35 incl. Pratt Canyon.	Base flow	S	S	S	S	S	S	S			
	MCO-0.6	Uppermost groundwater monitoring point in Mortandad "baseline"	Alluvial	C	S	S	S	S	S	S			
	MCA-1	New well, last upgradient location to capture groundwater chemistry before confluence with Effluent Canyon.	Alluvial	C	S	S	S	S	S	S			
MCO-2[d]		MCO-2 has been replaced by MCA-4 constructed as part of the Mortandad Canyon Characterization effort.	Alluvial										
	MCA-5	New well, replacement for MCO-3. Provides continuity with historical record. First groundwater monitoring point down canyon of TA-50 effluent.	Alluvial	C	S	S	S	S	S	S			

Table 4.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
MCO-3[d]		MCO-3 has been replaced by MCA-5 constructed as part of the Mortandad Canyon Characterization effort. MCO-5 will be the monitoring location in this area	Alluvial										
	MCA-4	New well, replacement for MCO-2. Baseline for TA-50, plus integrates all of upper Effluent Canyon groundwater.	Alluvial	C	S	S	S	S	S	S			
MCO-4B	MCO-4B	Measures down canyon changes in water quality. Provides continuity with historical record. Also baseline for permeable reactive barrier (PRB). Voluntary monitoring in TA-50 discharge plan.	Alluvial	C	S	S	S	S	S	S			
MCO-5	MCO-5	First monitoring point below the permeable reactive barrier. Provides continuity with historical water quality record.	Alluvial	C	S	S	S	S	S	S			
MCO-6 or MCO-6B	MCO-6	Better screen placement/configuration than MCO-6B. This is a monitoring location in the TA-50 discharge plan.	Alluvial	C	S	S	S	S	S	S			
	TSCA-6	Lower Ten Site Canyon, usually dry. Determine if groundwater is present and sample if so.	Alluvial	C	S	S	S	S	S	S			
TSWB-6[d]		Spatially redundant with nearby wells.	Alluvial										
	MCA-2	New well, equivalent to planned MCO-6.8. Located between MCO-6 and MCO-7 near expected down canyon extent of alluvial GW saturation.	Alluvial	C	S	S	S	S	S	S			
MCO-7	MCO-7	Near expected down canyon extent of alluvial saturation. Provides continuity with historical record. Within the TA-50 discharge permit.	Alluvial	C	S	S	S	S	S	S			
	MT-1	Near the most down canyon location expected to have saturation.	Alluvial	C	S	S	S	S	S	S			
MCO-7.5[d]		Spatially redundant with nearby well MT-1.	Alluvial										
MT-4	MT-2, MT-3, or MT-4	Below characterization boreholes B-10, -11, and -12 which were unsaturated. May not have saturation but sample one of the three (MT-2, MT-3, or MT-4) if GW is present	Alluvial	C	S	S	S	S	S	S			
CBDO-1[d]		No water found since installation, no samples have been collected.	Alluvial										
CBDO-2[d]		No water found since installation, no samples have been collected.	Alluvial										
CBDO-3[d]		No water found since installation, no samples have been collected.	Alluvial										
CBDO-4[d]		No water found since installation, no samples have been collected.	Alluvial										
CBDO-5[d]		No water found since installation, no samples have been collected.	Alluvial										
CBDO-6	CBDO-6	Monitoring required in Sanitary Wastewater Systems (SWS) Discharge Permit and TA-54.	Alluvial	C	S		S	S	S	S	S	S	S
CBDO-7	CBDO-7	Monitoring required in Sanitary Wastewater Systems (SWS) Discharge Permit and TA-54.	Alluvial	C	S		S	S	S	S	S	S	S
CBDO-8[d]		No water found since installation, no samples have been collected.	Alluvial										

Table 4.3-1 (cont.)

					Analytical Suites[a,b,c]								
Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
CBDO-9[d]		No water found since installation, no samples have been collected.	Alluvial										
	MCOI-8	New intermediate well, characterization sampling will take place under this plan.	Intermediate	C	S		S	S	S	S			
	MCOI-4	New intermediate well, characterization sampling will take place under this plan.	Intermediate	C	S		S	S	S	S			
MCOBT-4.4	MCOBT-4.4	Replacement well I-4 may be sampled instead.	Intermediate	C	S		S						
	MCOI-5	New intermediate well, characterization sampling will take place under this plan..	Intermediate	C	S		S	S	S	S			
	MCOI-6	New intermediate well, characterization sampling will take place under this plan.	Intermediate	C	S		S	S	S	S			
MCOBT-8.5[d]		MCOBT-8.5 has not produced appreciable water and is scheduled for plugging and abandonment in FY05..	Intermediate										
	R-1	Replaces TW-8. New regional well, characterization sampling will take place under this plan.	Regional	C	S	S	S	S	S	S			
TW-8[d]		Sample replacement well R-1. TW-8 may be abandoned in the future.	Regional										
	R-14, screen 1	Monitors for potential contaminants released into Pratt Canyon and other potential sources of contamination in Ten Site Canyon above the Pratt Canyon confluence.	Regional	C	S	S	S	S	S	S			
	R-14, screen 2	Monitors for potential contaminants released into Pratt Canyon and other potential sources of contamination in Ten Site Canyon above the Pratt Canyon confluence.	Regional	S	S	S	S	S	S	S			
	R-33, screen 1	New regional well, characterization sampling will take place under this plan.	Regional	C	S	S	S	S	S	S			
	R-33, screen 2	New regional well, characterization sampling will take place under this plan.	Regional	C	S	S	S	S	S	S			
R-15	R-15	R-15 has one screen in the regional aquifer. Contaminants detected.	Regional	C	S	S	S	S	S	S			
	R-28	New regional well, characterization sampling.	Regional	C	S	S	S	S	S	S			
	R-13	R-13 has a single screen in the regional aquifer.	Regional	C		S	S						
	R-34	New regional well, characterization sampling.		C	S	S	S	S	S	S	S	S	
	R-16, screen 2	R-16 has three usable screens in the regional aquifer. Annual analysis of stable isotopes will also be done.	Regional	C	S		S	S	S	S			
	R-16, screen 3	R-16 has three usable screens in the regional aquifer. Annual analysis of stable isotopes will also be done.	Regional	C	S		S	S	S	S			
	R-16, screen 4	R-16 has three usable screens in the regional aquifer. Annual analysis of stable isotopes will also be done.	Regional	S	S		S	S	S	S			
	R-16(R)	New intermediate well, characterization sampling will take place under this plan..	Regional	C	S	S	S	S	S	S	S	S	

Table 4.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
	R-21, screen 1	R-21 has one screen in the regional aquifer. Quarterly monitoring for .TA-54.	Regional	C	Q	Q	Q	Q	Q	Q	Q	Q	Q

[a] Sampling frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

[b] Quarterly sampling for intermediate, and regional groundwater in the vicinity of Area G is defined as alternate full analyte suite list and alternate target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), low level tritium, general chemistry, gross alpha, gross beta, strontium-90 and isotopic uranium. Sampling frequency for wells undergoing characterization sampling (the majority of locations in this section) is generally comprehensive (full suite analysis) for both sampling events.

[c] The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

[d] Location differs from Table XII-5 due to duplication of wells, scheduled for abandonment, no historical contamination, dry zones, or other reasons. See supplemental appendices (Appendix D) for further explanation.

[e] Rad suite includes gross alpha, gross beta, isotopic uranium, strontium-90, low level tritium.

[f] General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

[g] Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

[h] VOCs will be analyzed by EPA methods 8260B.

[i] PAHs will be analyzed by EPA Method 8310.

[j] PCBs will be analyzed using EPA Method 8082.

[k] Pesticides will be analyzed by EPA Method 8081A.

[l] Select regional wells (R-wells) may contain residual drilling fluids and are included as part of the Interim Plan even though concentration and mobility of specific constituents may be affected.

5.0 PAJARITO CANYON WATERSHED

5.1 Introduction

Pajarito Canyon is located on the Pajarito Plateau in the central part of the Laboratory (Figure 1.2-1). The canyon heads in the Santa Fe National Forest approximately 4.6 km (2.9 mi) west of the Laboratory boundary at an elevation of approximately 10,434 ft (3180 m) and trends east-southeast across the Laboratory and Los Alamos County. It empties into the Rio Grande in White Rock Canyon at an elevation of 5422 ft (1653 m). The primary Laboratory use of the Pajarito Canyon watershed has been as the canyon-bottom location for the Los Alamos Critical Experiments Laboratory (LACEF) at TA-18 and for mesa-top surface and subsurface material disposal areas (MDAs) F and Q at TA-06, M at TA-09, and G, H, J, and L at TA-54. A detailed description and data summary for Pajarito Canyon potential contaminants is contained within the work plan for Pajarito Canyon (LANL, 1998, 58820).

5.2 Background

The Pajarito Canyon watershed is located in the central portion of the Laboratory and is approximately 13 sq mi in area. Laboratory-related contamination has been detected in Pajarito Canyon water samples obtained from perennial and ephemeral streams, alluvial groundwater systems, and springs supplied by intermediate zone groundwater from the Bandelier Tuff. The TAs located within this watershed include TA-03, -06, -07, -08, -09, -14, -15, -18, -22, -23, -27, -36, -40, -46, -50, -54, -55, -58, -59, -64, -65, -66, -67, and -69. The contaminant release history from approximately 379 SWMUs and AOCs includes releases from outfalls, septic systems, spills, open detonations from firing sites, and MDAs. The Pajarito Canyon conceptual model is summarized in Table A-4 in Appendix A.

5.3 Scope of Activities

The approved monitoring scope described in the Pajarito Canyon Work Plan has been used to determine sampling locations, frequencies and analytes for the FY06 Interim Plan. The Pajarito Canyon Work Plan calls for two characterization sampling rounds. However, an additional two sampling rounds will be performed in FY07 in anticipation of additional data needs for corrective measure evaluations and long-term monitoring decisions. In addition, intermediate and regional groundwater surrounding Area G will be monitored quarterly throughout the year.

5.3.1 Base Flow

Sampling locations, frequency, analytes, and rationale for base flow monitoring are presented in Table 5.3-1. Locations are shown in Figure 5.3-1.

Base flow in perennial and intermittent portions of Pajarito Canyon, Twomile Canyon, and Threemile Canyon will be monitored seasonally. Six sampling locations, Pajarito 0.5 mi above SR 501 (PBF-B) Pajarito below E242.5 (PBF-1), base flow in Twomile Canyon (PBF-2), base flow at stations E244 (PBF-3) and E243 (PBF-4), and base flow below TA-18 (PBF-5), will be included in the FY06 Interim Plan. These locations were selected based on proximity to (1) potential contaminant release sites; (2) gaging stations where long-term base flow patterns and water quality data can be compared; and (3) canyon segments lacking gaging stations, but where perennial or intermittent (>20 days/yr) flow is expected.

Stream gages located in drainages on the south side of TA-54 were also considered for monitoring. However, because these drainages are ephemeral and flow only in response to precipitation, they will be sampled under the Laboratory Federal Facility Corrective Action (FFCA) storm water monitoring plan.

5.3.2 Alluvial Groundwater

Sampling locations, frequency, analytes, and rationale for alluvial groundwater monitoring are presented in Table 5.3-1. Locations are shown in Figure 5.3-1.

The alluvial groundwater monitoring locations include alluvial wells 18-MW-8, 18-MW-18, PCO-2, and PCO-3 in Pajarito Canyon and 18-BG-4 in Threemile Canyon. Thirteen new alluvial wells, PCAO-B, PCAO-2, PCAO-3, PCAO-4, PCAO-5, PCAO-6, PCAO-7a, PCAO-7b, PCAO-7c, 3MAO-1, 3MAO-2, TMO-1, and PCAO-8, are scheduled for installation in FY05. These locations were selected for monitoring alluvial water upgradient and downgradient of TA-18 and TA-54 and to replace old wells that are poor producers.

There are no wells located west of 18-BG-1 for monitoring alluvial groundwater in upper Pajarito Canyon or in Twomile Canyon.

5.3.3 Intermediate Perched Groundwater

Sampling locations, frequency, analytes, and rationale for intermediate perched groundwater monitoring are presented in Table 5.3-1. Locations, excluding R-17(i), are shown in Figure 5.3-1.

R-19 and 03-MW-1 are the only wells available for monitoring water quality data of intermediate perched groundwater in the Pajarito Canyon watershed. Well 03-MW-1, which is completed at a depth of 28 ft in a thin saturated zone within the upper Tshirege Member, will be plugged and abandoned. Three new intermediate wells, 03-MW-2, 03-MW-3, and 03-MW-4, are scheduled for installation in the same general area. Two intermediate wells, R-17i and R-23i, will be screened in the intermediate perched groundwater if sufficient groundwater is encountered.

Because four rounds of characterization sampling in R-19 detected negligible Laboratory impacts on the perched groundwater, screen 2 will be sampled to detect changes in water quality. Shallow groundwater in well 03-MW-1 is impacted by parking lot contamination.

5.3.4 Regional Aquifer Groundwater

Sampling locations, frequency, analytes, and rationale for regional aquifer groundwater monitoring are presented in Table 5.3-1. Locations are shown in Figure 5.3-1.

Five wells penetrating the regional aquifer in the Pajarito Canyon watershed will be monitored: R-19, R-20, R-22, R-23, and R-32. R-19 is downgradient of firing sites in TA-15, -36, -40, and -67. R-22 and R-23 are downgradient and R-20 is crossgradient of Laboratory waste disposal facilities at TA-54. Regional groundwater wells R-17 and R-18 are scheduled for installation in FY05 and will be sampled under the Interim Plan. Regional wells R-20, R-22, R-23, and R-32 will be sampled more frequently to collect additional data for the upcoming Area G corrective measure evaluation.

5.3.5 Springs

Sampling locations, frequency, analytes, and rationale for springs monitoring are presented in Table 5.3-1. Locations are shown in Figure 5.3-1.

Ten spring locations, PC-Spring, Homestead Spring, Starmer Spring, Anderson Spring, Keiling Spring, Charlie Spring, Bulldog Spring, TW-1.72 Spring, Threemile Spring, and TA-18 Spring, are included in the FY06 Interim Plan. These springs will be monitored for ambient objectives and for the presence of contaminants.

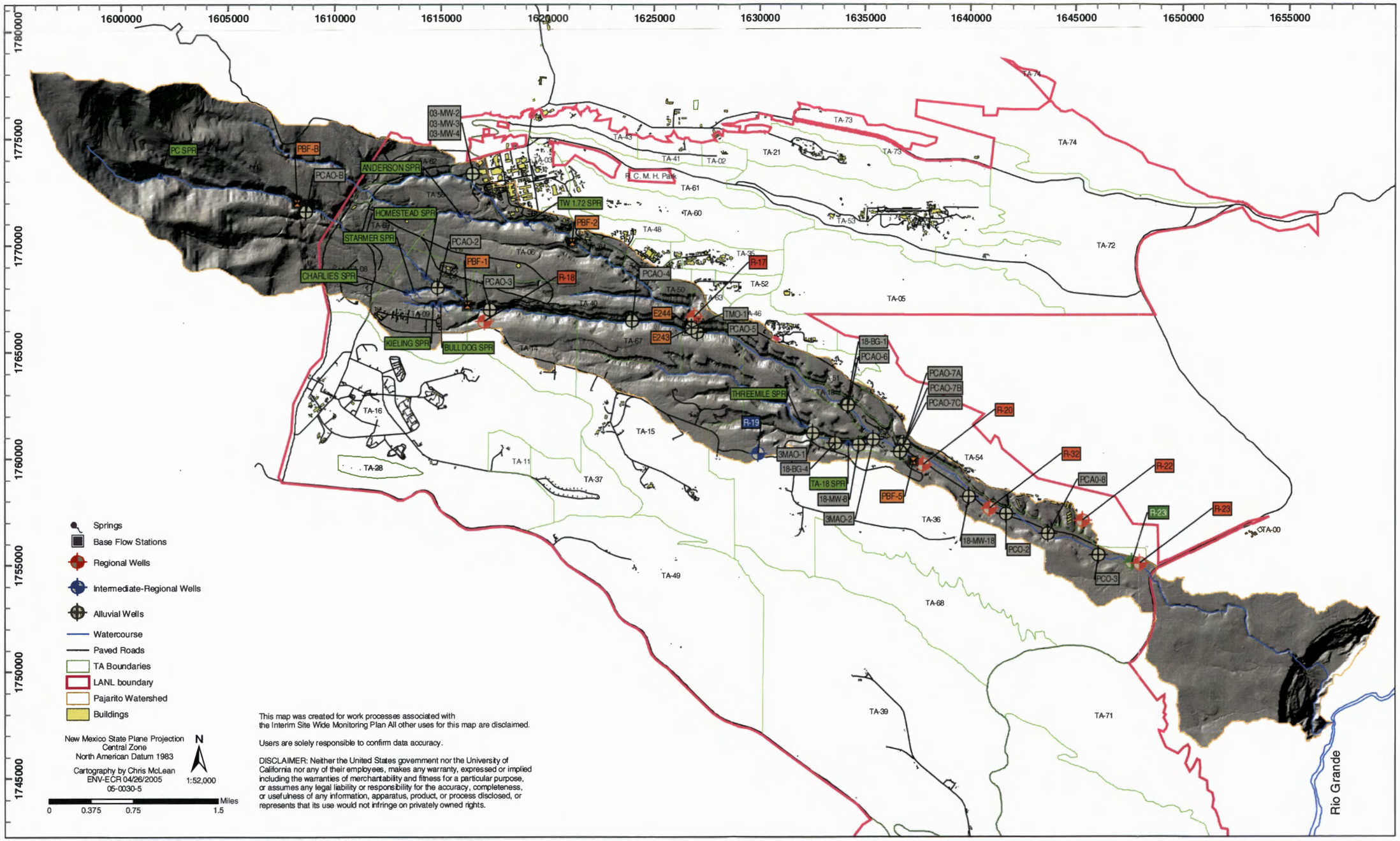


Figure 5.3-1. Pajarito Canyon Watershed

This page intentionally left blank.

Table 5.3-1
Pajarito Canyon Watershed Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites and Frequency[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
Pajarito Canyon (includes Two Mile and Three Mile Canyons)[l]													
	PBF-B	Pajarito Background Surface Water. Background location located approx. 0.5 miles above State Road 502. Selected to provide a basis for comparison to data from downstream locations.	Base Flow	S	S		S	S	S	S			S
	PBF-1	Surface Water in Pajarito Canyon below the confluences of South and North Anchor East Basin (below E242.5). Location selected to monitor potential cumulative impacts of PRSs in Anchor East basin.	Base Flow	S	S		S	S	S	S			S
	PBF-2	Surface Water in Twomile Canyon below TA-59. Location selected to monitor potential cumulative impacts of PRSs in upper Twomile basin.	Base Flow	S	S		S	S	S	S			S
	E244 (PBF-3)	Surface water base flow collected at gage station E244. Location selected to monitor potential cumulative impacts from upper Pajarito basin	Base Flow	C	S		S	S	S	S			S
	E243 (PBF-4)	Surface water baseflow collected at gage station E243. Location selected to monitor potential cumulative impacts from upper Twomile basin.	Base Flow	C	S		S	S	S	S			S
	PBF-5	Surface water in Pajarito below TA-18. Location selected to monitor below TA-18 at road crossing near R-20.	Base Flow	S	S		S	S	S	S			S
PC	PC Spring	Probably regional groundwater. Provides background water quality.	Spring	S	S		S	S	S	S			S
Homestead	Homestead Spring	Likely spring with largest discharge. Downgradient of TA-9 (MDA M).	Spring	S	S		S	S	S	S			S
Starmer	Starmer Spring	Speculated to be intermediate water in Bandelier Tuff. Provides baseline water quality upgradient of HE facilities.	Spring	S	S		S	S	S	S			S
	Anderson	Located in Twomile Canyon downgradient of TA-68 and above potential sources of contamination in TA-3.	Spring	S	S		S	S	S	S			S
Keiling	Keiling Spring	Spring with history of HE contamination. Downgradient of TA-9.	Spring	S	S		S	S	S	S			S
Charlie	Charlie	Monitors potential contamination from TA-08 area.		S	S		S	S	S	S			S
Bulldog	Bulldog Spring	Spring with history of HE contamination. Downgradient of TA-9.	Spring	S	S		S	S	S	S			S
	TW-1.72 Spring	In Twomile Canyon, downgradient of TA-3 facilities.	Spring	S	S		S	S	S	S			S
Threemile A	Threemile Spring	In Threemile Canyon, upgradient of TA-18 and downgradient of TA-15 firing site facilities.	Spring	S	S		S	S	S	S			S
Threemile B[d]		Same spring as Three Mile B.	Spring										
TA-18	TA-18 Spring	In Threemile Canyon, upgradient of TA-18 and downgradient of TA-16 firing site facilities.	Spring	S	S		S	S	S	S			S

Table 5.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
18-BG-1[d]		New well (PCAO-6) will be installed near BG-1. Better of two wells will be used for monitoring.	Alluvial										
18-BG-4[d]		New well (3MAO-1) will be installed near 18-BG-4. Better of two wells will be used for monitoring.	Alluvial										
18-MW-4[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-4 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-5[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-5 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-7[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-7 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-9[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-9 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-10[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-10 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-11[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-11 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-12[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-12 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-16[d]		Suite of characterization wells from NMED-approved Pajarito Canyon work plan will supersede XII-5. 18-MW-16 not included due to spatial redundancy with other proposed wells.	Alluvial										
18-MW-8	18-MW-8	In Three Mile Canyon downgradient of Critical Assembly Building in TA-18	Alluvial	C	S		S	S	S	S	S	S	S
18-MW-17[d]		Not necessary to monitoring because of spatial redundancy with new PCAO-7(a,b,c)-series wells.	Alluvial	C	S		S	S	S	S	S	S	S
18-MW-18	18-MW-18	In Pajarito Canyon downgradient of TA-18. Sporadic hits of VOCs and SVOCs in historic data.	Alluvial	C	S		S	S	S	S	S	S	S
PCO-1[d]		Not necessary to monitoring because of spatial redundancy with new PCAO-7(a,b,c)-series wells.	Alluvial	C	S		S	S	S	S	S	S	S
PCO-2	PCO-2		Alluvial	C	S		S	S	S	S	S	S	S
PCO-3	PCO-3		Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-B	Background location west of State Road 4 (new well).	Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-2	New well located in Pajarito Canyon below the confluence of Starmer's Gulch. Monitors potential impacts of group of PRSs in the upper basin.	Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-3	New well located in Pajarito Canyon below the confluence of South Anchor East Basin. Monitors potential impacts of group of PRSs in the upper basin (mostly within TA-08).	Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-4	New well located in Pajarito Canyon approx. 800 meters above confluence with Twomile Canyon. Monitors potential impacts from PRSs in TA-40.	Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-5	New well in Pajarito Canyon located just below the confluence of Twomile Canyon. Also located above the flood retention structure.	Alluvial	C	S		S	S	S	S	S	S	S
	18-BG-1/PCAO-6	Either use BG-1 or new well PCAO-6 to characterize baseline relative to TA-18, New well PCAO-6 will be installed a little east of BG-1.	Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-7a, 7b, 7c	Transect of wells to characterize potential impacts from TA-18. The wells will be installed in a transect to capture potential variability in saturation or water quality.	Alluvial	C	S		S	S	S	S	S	S	S

Table 5.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
	3MAO-1/18-BG-4	Either use existing BG-4 or new installation. New well 3MAO-1 will be located just east of confluence with South Fork Three Mile Canyon. Either characterizes cumulative potential impacts of PRSs in Three Mile Canyon and is baseline relative to TA-18.	Alluvial	C	S		S	S	S	S	S	S	S
	3MAO-2	Location is within TA-18 at mouth of Three Mile Canyon. Characterizes potential impacts of TA-18 PRSs that are located within Three Mile Canyon.	Alluvial	C	S		S	S	S	S	S	S	S
	TMO-1	New well at mouth of Two Mile Canyon. Characterizes cumulative potential impacts of PRSs throughout Twomile Basin.	Alluvial	C	S		S	S	S	S	S	S	S
	PCAO-8	New well located near PCTH-5 (between PCO-2 and PCO-3). Characterizes potential impacts from runoff associated with TA-54.	Alluvial	C	S		S	S	S	S	S	S	S
	03-MW-2	Proposed well. Near TA-3, SM-30. Thin zone of saturation expected, extent of contamination (VOCs, mercury, tritium).	Intermediate	Q	Q		Q	Q	Q	Q			
	03-MW-3	Proposed well. Near TA-3, SM-30. Thin zone of saturation expected, extent of contamination (VOCs, mercury, tritium).	Intermediate	Q	Q		Q	Q	Q	Q			
	03-MW-4	Proposed well. Near TA-3, SM-30. Thin zone of saturation expected, extent of contamination (VOCs, mercury, tritium).	Intermediate	Q	Q		Q	Q	Q	Q			
R-19 screen 1	R-19, screen 1	Dry.	Intermediate	S									
R-19 screen 2	R-19, screen 2		Intermediate	C	A		A	A					A
	R-23i	Characterization sampling under the Interim Plan.	Intermediate	C	S	S	S	S	S	S	S	S	S
	R-17i	R-17i is contingent on the hydrologic conditions found in the R-17 regional well.	Intermediate	C	S	S	S	S	S	S	S	S	S
	R-17, Screen 1	To be drilled in CY05. Characterization sampling to be conducted under this plan.	Regional	C	S	S	S	S	S	S	S	S	S
	R-17, Screen 2	To be drilled in CY05. Characterization sampling to be conducted under this plan.	Regional	C	S	S	S	S	S	S	S	S	S
	R-18	New well, characterization sampling planned under the Interim Plan.	Regional	C	S	S	S	S	S	S	S	S	S
R-19 screen 3	R-19, screen 3	Screen 3 is at the top of the regional aquifer. Previous sampling did not detect contaminants above screening level.	Regional	C	S	S	S	S	S	S			A
R-19 screen 4	R-19, screen 4	Screen 4 is 230 ft below the top of the regional aquifer. Previous sampling did not detect contaminants above screening level.	Regional	C	S	S	S	S	S	S			A
R-19 screen 5	R-19 screen 5	Previous sampling did not detect contaminants above screening level.	Regional	S	S	S	S	S	S				S
R-19 screen 6	R-19 screen 6	Previous sampling did not detect contaminants above screening level.	Regional	S	S	S	S	S	S				S
R-19 screen 7	R-19 screen 7	Screen 7 is 650 ft below the top of the regional aquifer. Previous sampling did not detect contaminants above screening level.	Regional	S	S		S	S	S				S
	R-20, screen 1	In Pajarito Canyon downgradient of TA-18 and possibly downgradient of MDA-L. Initial characterization sampling has not been conducted. TA-54 regulatory.	Regional	C	S	Q	Q	S	Q	Q	A	A	S
	R-20, screen 2	In Pajarito Canyon downgradient of TA-18 and possibly downgradient of MDA-L. Initial characterization sampling has not been conducted. TA-54 regulatory.	Regional	C	S	Q	Q	S	Q	Q	A	A	S
	R-20, screen 3	In Pajarito Canyon downgradient of TA-18 and possibly downgradient of MDA-L. Initial characterization sampling has not been conducted. TA-54 regulatory.	Regional	C	S	Q	Q	S	Q	Q	A	A	S

Table 5.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
R-22 screen 1	R-22, screen 1	Monitoring required for Area G approval authorization. Screen 1 is at the top of the regional aquifer. Tritium detected in 4 rounds of characterization sampling. MDA G regulatory.	Regional	C	S	Q	Q	S	Q	S	S	S	
R-22 screen 2	R-22, screen 2	Monitoring required for Area G approval authorization. Screen 2 is 64 ft below the top of the regional aquifer. No contaminants detected in 4 rounds of characterization sampling. MDA G regulatory.	Regional	C	S	Q	Q	S	Q	S	S	S	
R-22 screen 3	R-22, screen 3	Monitoring required for Area G approval authorization. Screen 3 is 390 ft below the top of the regional aquifer. Technetium detected in one out of four rounds of characterization sampling. MDA G regulatory.	Regional	C	S	S	S	S	S	S	S	S	
R-22 screen 4	R-22, screen 4	Monitoring required for Area G approval authorization. Screen 4 is 495 ft below the top of the regional aquifer. No contaminants detected in four rounds of characterization sampling. MDA G regulatory.	Regional	C	S	S	S	S	S	S	S	S	
R-22 screen 5	R-22 screen 5	Downgradient of MDA G, occasional tritium detects, water quality influenced by residual drilling fluids.	Regional	C	S	S	S	S	S	S	S	S	
	R-23, screen 1	In Pajarito Canyon downgradient of MDA-G. Characterization sampling has been completed.	Regional	C	S	Q	Q	S	Q	S	S	S	
	R-32, screen 1	In Pajarito Canyon downgradient of MDA-L and upgradient of MDA-G. Screen 1 is at the top of regional aquifer. Characterization sampling has been completed.	Regional	C	S	Q	Q	S	Q	S	S	S	
	R-32, screen 2	Port designed for pressure measurements only. Not able to collect sample.	Regional	C	S	Q	Q	S	Q	S	S	S	
	R-32, screen 3	Screen 3 is 200 ft below the top of regional aquifer. Characterization sampling has been completed.	Regional	C	S	Q	Q	S	Q	S	S	S	

[a] Sampling frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

[b] Quarterly sampling for select intermediate, and regional groundwater in the vicinity of Area G is defined as alternate full analyte suite list and target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), low level tritium, general chemistry, VOCs (full suite), HE (full suite, gross alpha, gross beta, and isotopic uranium. Sampling frequency for wells undergoing characterization sampling is generally comprehensive (full suite analysis) for both sampling rounds.

[c] The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

[d] Location differs from Table XII-5 due to duplication of wells, scheduled for abandonment, no historical contamination, dry zone, or other reasons. See supplemental appendices (Appendix D) for further explanation.

[e] Rad suite includes gross alpha, gross beta, isotopic uranium, strontium-90, low level tritium.

[f] General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

[g] Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

[h] VOCs will be analyzed by EPA methods 8260B.

[i] PAHs will be analyzed by EPA Method 8310.

[j] PCBs will be analyzed using EPA Method 8082.

[k] Pesticides will be analyzed by EPA Method 8081A.

[l] Select regional wells (R-wells) may contain residual drilling fluids and are included as part of the Interim Plan even though concentration and mobility of specific constituents may be affected.

6.0 WATER CANYON/CAÑON DE VALLE WATERSHED

6.1 Introduction

The headwaters of the Water Canyon/Cañon de Valle watershed occur along the eastern flank of the Jemez Mountains, near the western margin of the Pajarito Plateau (Figure 1.2-1). The discharge point of the watershed is at the Rio Grande on the eastern edge of the Plateau. The major canyons in the watershed include Water Canyon, Cañon de Valle, Potrillo Canyon, and Fence Canyon. There are also numerous smaller canyons and arroyos.

6.2 Background

The Water Canyon/Cañon de Valle watershed is located in the southern portion of the Laboratory and encompasses an area of approximately 19 sq mi. Cañon de Valle, located on the western portion of the Pajarito Plateau, is the main tributary to Water Canyon. The heads of both canyons are located in the Sierra de Los Valles. The watershed includes numerous springs, ephemeral and perennial surface water flow, and alluvial groundwater systems. Tributaries that may contribute contamination to Water Canyon include Indio, Fence, and Potrillo Canyons which join Water Canyon on the eastern side of the Laboratory. The TAs located within this watershed include TA-09, -11, -14, -15, -16, -28, -36, -37, -39, -49, -67, -68, -70, and -71. This portion of the Laboratory has been used for weapons testing, explosives testing, and explosives production and has received effluent from outfalls containing explosive compounds, metals, and VOCs. Storm water runoff from firing sites, open burn/open detonation units, surface disposal sites, and other SWMUs and AOCs may have contributed to the contamination detected within the watershed. The contaminants detected in soil, rock, and sediment samples obtained from various locations within the watershed during previous investigations include barium and other RCRA metals, explosive compounds, VOCs, and radionuclides, which are not addressed under the Consent Order. Contaminants detected in groundwater samples obtained from wells located within the watershed include barium, explosive compounds and their associated degradation products, and VOCs.

Because the Water Canyon/Cañon de Valle watershed is so extensive, and potential sources of contaminants change across the Pajarito Plateau, the watershed conceptual model (Table A-5 in Appendix A) is described in three sections: (1) Upper Water Canyon & Cañon de Valle; (2) Middle Water Canyon (near TA-49); and (3) Lower Water, Fence, and Potrillo Canyons.

6.3 Scope of Activities

6.3.1 Base Flow

Sampling locations, frequency, analytes, and rationale for base flow monitoring are presented in Table 6.3-1. Locations are shown in Figure 6.3-1.

Base flow in perennial and intermittent portions of Water Canyon, Cañon de Valle, and Potrillo Canyon will be monitored seasonally twice a year to capture flow variability. The sampling locations selected, Water below SR 501 (E252), Cañon de Valle below MDA-P (E256), and Water at Beta, are from an existing network of gaging stations where long-term base flow patterns indicate perennial or intermittent (>20 days/year) flow. The seasonally based sampling will provide water quality and water level data associated with high water (spring and late summer) and low water (fall and winter) conditions. Base flow sampling will be coordinated with sampling of the alluvial wells.

6.3.2 Alluvial Groundwater

Sampling locations, frequency, analytes, and rationale for alluvial groundwater monitoring are presented in Table 6.3-1. Locations are shown in Figure 6.3-1.

The alluvial groundwater monitoring locations are situated in Water Canyon and Cañon de Valle. Five alluvial wells in Cañon de Valle (16-2655, 16-2656, 16-2657, 16-2658, and 16-2659) in the upper portion of the watershed were selected for monitoring alluvial water where high explosives (HE) and barium have been identified. In addition, three alluvial wells in Martin Canyon (16-6293, 16-6294, and 16-6295) have been selected to monitor HE and barium contamination in that canyon. Three alluvial wells in lower Water Canyon (WCO-1, WCO-2, and WCO-3) and one in Fence Canyon (FCO-1) will be checked and sampled if they produce sufficient water. None of the wells in Potrillo Canyon are suitable for monitoring alluvial groundwater.

Ongoing groundwater level monitoring in upper Cañon de Valle alluvial wells shows a seasonal relationship between groundwater levels and precipitation and runoff. The sampling frequency has been evaluated and the alluvial wells will be sampled twice a year on a seasonal basis to address the annual variability of groundwater consistent with other alluvial wells across the Pajarito Plateau. The seasonally based sampling, in conjunction with base flow sampling, will provide water quality and water level data associated with the expected high water (spring snowmelt) and low water (fall/early winter base flow) conditions. Water quality will be measured seasonally for some analytes, and annually for other analytes. Barium and high explosives are the main analytes of concern in alluvial groundwater.

Pressure transducers with integrated data loggers are in place to collect continuous water level data from the alluvial wells with the exception of those in lower Water and Fence Canyons.

6.3.3 Intermediate Perched Groundwater

Sampling locations, frequency, analytes, and rationale for intermediate perched groundwater monitoring are presented in Table 6.3-1. Locations are shown in Figure 6.3-1.

There are five wells, CdV-16-1(i), CdV-16-2(i), R-25, CdV-37-2, and CdV-15-3, in the upper Water Canyon watershed that are completed to access intermediate perched groundwater. These wells were originally sited to characterize an area where effluent containing HE has been discharged into the canyons. The perched zones in CdV-15-3 and CdV-37-2 are currently dry and do not contain HE. CdV-R-37-2 screen 1 and CdV-R-15-3 screens 1, 2, and 3 have been dry since drilling. If pressure measurements suggest that groundwater is present, samples will be collected. Intermediate wells CdV-16-1(i) and CdV-16-2(i) are new wells and will undergo characterization sampling. CdV-16-2(i) has not yielded enough water for sampling and may have to be replaced. Contaminants have been observed in intermediate perched groundwater at R-25 and this zone will be monitored as recommended by the R-25 evaluation report, pending approval from NMED.

6.3.4 Regional Aquifer Groundwater

Sampling locations, frequency, analytes, and rationale for regional aquifer groundwater are presented in Table 6.3-1. Locations are shown in Figure 6.3-1.

Wells that are screened in the regional aquifer in the Water Canyon/Cañon de Valle watershed include CdV-37-2, CdV-15-3, R-25, R-26, and R-27. An additional well, R-18, is scheduled to be installed in the upper watershed and will be sampled as soon as it is constructed and developed. With the exception of R-27, a new well sited in mid-Water Canyon, there are no wells that penetrate the regional aquifer in the middle and lower portion of the watershed. All wells that are screened will be monitored.

6.3.5 Springs

Sampling locations, frequency, analytes, and rationale for springs monitoring are presented in Table 6.3-1. Locations are shown in Figure 6.3-1.

Nine springs and seeps are present in the Water Canyon/Cañon de Valle watershed. Eight of the springs, Cañon de Valle headwaters, Peter Seep, SWSC, Burning Ground, Fishladder Seep, Hollow, Martin, and Water Canyon Gallery, are located in the upper portion of the watershed. The last spring, Water Canyon at Beta, is located in Water Canyon above TA-49. Because of their proximity to PRSs and the presence of HE and barium contamination, Burning Ground spring, Peter Seep, Fishladder Seep, SWSC spring, and Martin spring have been selected for monitoring. Hollow spring was not selected for monitoring because of irregular and small discharge volumes. Water Canyon Gallery and CdV Headquarters were selected as background spring locations.

Because of HE and barium contamination, the springs and seeps within and downgradient from the TA-16 area will be sampled twice a year on a seasonal basis. Springs upgradient of TA-16 will also be sampled on a semiannual basis. Water quality will be measured seasonally for some analytes, and annually for other analytes.

This page intentionally left blank.

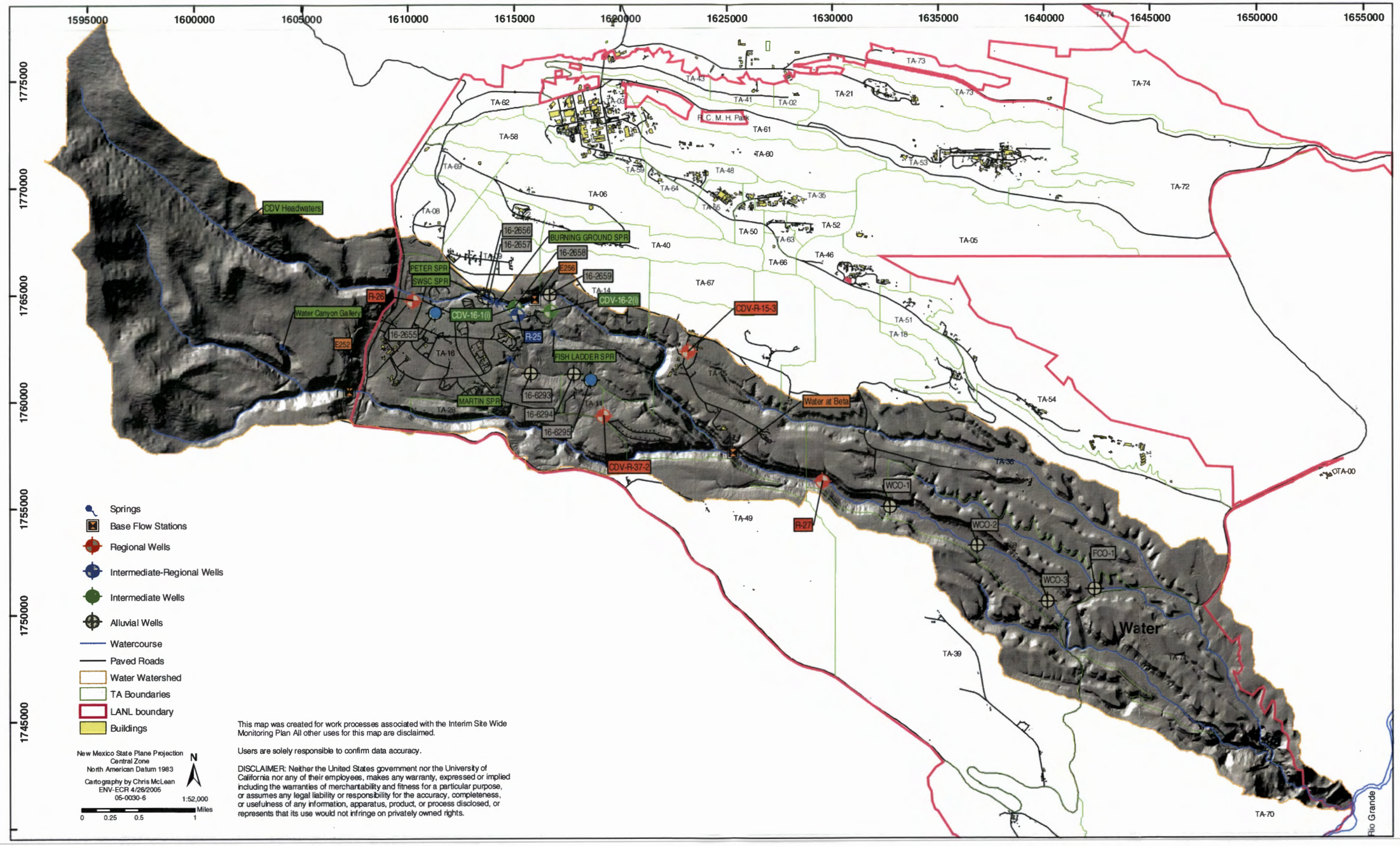


Figure 6.3-1. Water Canyon/Cañon de Valle Watershed

This page intentionally left blank.

Table 6.3-1
Water Canyon/Cañon de Valle Watershed Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
Water Canyon (includes Cañon del Valle, Potrillo, and Fence canyons)[l]													
	Water below SR-501 (E252)	Background location for water quality.	Base flow	C	A	A	S	S	S				A
	Cañon de Valle below MDA P (E256).	Extent of contamination.	Base flow	S	A	A	S	S	S				S
	Water at Beta. Ambient, RCRA permit.		Base flow	S	A	A	S	S	S				S
	CDV Headwaters	Provides background groundwater quality.	Spring	S	A	A	S	S	S				S
Water Canyon Gallery	Water Canyon Gallery	Background location.	Spring	S	A	A	S	S	S				S
Peter Seep	Peter Seep	Extent of contamination.	Spring	S	A	A	S	S	S				S
SWSC	SWSC Spring	Extent of contamination.	Spring	C	A	A	S	S	S				S
Burning Ground	Burning Ground Spring	Extent of contamination.	Spring	C	A	A	S	S	S				S
Fish Ladder	Fish Ladder Seep	Extent of contamination.	Spring	C	A	A	S	S	S				S
Martin	Martin Spring	Extent of contamination.	Spring	C	A	A	S	S	S				S
16-2655	16-2655	Extent of contamination.	Alluvial	C	A	A	S	S	S				S
16-2656	16-2656	Extent of contamination.	Alluvial	C	A	A	S	S	S				S
16-2657	16-2657	Extent of contamination.	Alluvial	C	A	A	S	S	S				S

Table 6.3-1 (cont.)

					Analytical Suites[a,b,c]								
Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
16-2658	16-2658	Extent of contamination.	Alluvial	C	A	A	S	S	S	A			S
16-2659	16-2659	Extent of contamination.	Alluvial	C	A	A	S	S	S	A			S
	16-6293	Extent of contamination.	Alluvial	C	A	A	S	S	S	A			S
	16-6294	Extent of contamination.	Alluvial	C	A	A	S	S	S	A			S
	16-6295	Extent of contamination.	Alluvial	C	A	A	S	S	S	A			S
WCO-1	WCO-1	Well dry since installed. Check for water during the wet seasons.	Alluvial	Q	A	A	S	S	S	A			A
WCO-2	WCO-2	Well dry since installed (except for 2005). Check for water during the wet seasons.	Alluvial	Q	A	A	S	S	S	A			A
WCO-3	WCO-3	Well dry since installed. Check for water during the wet seasons.	Alluvial	Q	A	A	S	S	S	A			A
Beta[d]		Open hole with no evidence of water.	Alluvial			A							
FCO-1	FCO-1	Well dry since installed. Check for water during the wet seasons and sample if sufficient water is present.	Alluvial	Q	A	A	S	S	S	A			A
	R-25, screen 1	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Intermediate	C	A	S	S	S	S				S
	R-25, screen 2	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Intermediate	C	S	S	S	S	S				S
CdV-37-2 screen 1[d]		Dry, no groundwater.	Intermediate	A									
	CdV-16-1(i), screen 1	R-CdV-16-1(i) is undergoing characterization sampling for extent of contamination.	Intermediate	S	S	S	S	S	S	S	S	S	S
	CdV-16-2(i), screen 1	Dry, check for groundwater. This well will be replaced and monitoring will commence upon completion in a viable intermediate groundwater zone with adequate yield to sample.	Intermediate	S	S	S	S	S	S	S	S	S	S
	CdV-16-2(i), screen 2	Dry, check for groundwater. This well will be replaced and monitoring will commence upon completion in a viable intermediate groundwater zone with adequate yield to sample.	Intermediate	S	S	S	S	S	S	S	S	S	S
CdV-15-3 screen 1[d]		Dry, no groundwater.	Intermediate	S									
CdV-15-3 screen 2[d]		Dry, no groundwater.	Intermediate	S									
CdV-15-3 screen 3[d]		Dry, no groundwater.	Intermediate	S									
	R-26, screen 1	Characterization sampling will be performed under the Interim Plan.	Regional	C	S	S	S	S	S	S	S	S	S
	R-26, screen 2	Characterization under the Interim Plan. Port is clogged with drilling fluids, inoperable as of April 2005. May not be able to sample due to clogged port.	Regional	C	S	S	S	S	S	S	S	S	S

Table 6.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
	R-25, screen 4	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Regional	C	S	S	S	S	S				S
	R-25, screen 5	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Regional	C	S	S	S	S	S				S
	R-25, screen 6	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Regional	C	S	S	S	S	S				S
	R-25, screen 7	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Regional	C	S	S	S	S	S				S
	R-25, screen 8	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Regional	C	S	S	S	S	S				S
	R-25, screen 9	Sampling will cover both the recommendations of the R-25 evaluation report pending approval by the NMED and continued monitoring for contamination in the watershed.	Regional	C	S	S	S	S	S				S
	R-27	New well; characterization sampling will take place.	Regional	C	S	S	S	S	S	S	S	S	S
CdV-37-2 screen 2	CdV-37-2	Extent of contamination.	Regional	C	S		S	S	S	A			S
CdV-37-2 screen 3	CdV-37-2 screen 3	Extent of contamination.	Regional	C	S		S	S	S	A			S
CdV-37-2 screen 4	CdV-37-2 screen 4	Extent of contamination.	Regional	C	S		S	S	S	A			S
CdV-15-3 screen 4	CdV-15-3	Extent of contamination.	Regional	C	S		S		S	A			S
CdV-15-3 screen 5	CdV-15-3 screen 5	Extent of contamination.	Regional	C	S		S		S	A			S
CdV-15-3 screen 6	CdV-15-3 screen 6	Extent of contamination.	Regional	C	S		S		S	A			S

[a] Sampling/measurement frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

[b] Semi annual sampling for select intermediate, and regional groundwater is defined as one full analyte suite list and one target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), general chemistry, gross alpha, gross bets, isotopic uranium, VOCs (full suite), and HE (full suite). Sampling frequency for wells undergoing characterization sampling is generally comprehensive (full suite analysis) for both sampling rounds.

[c] The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

[d] Location differs from Table XII-5 due to duplication of wells, scheduled for abandonment, no historical contamination, dry zones, or other reasons. See supplemental appendices (Appendix D) for further explanation.

[e] Rad suite includes gross alpha, gross beta, isotopic uranium, low level tritium.

[f] General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

[g] Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

[h] VOCs will be analyzed by EPA methods 8260B.

[i] PAHs will be analyzed by EPA Method 8310.

[j] PCBs will be analyzed using EPA Method 8082.

[k] Pesticides will be analyzed by EPA Method 8081A.

[l] Select regional wells (R-wells) may contain residual drilling fluids and are included as part of the Interim Plan even though concentration and mobility of specific constituents may be affected.

This page intentionally left blank.

7.0 ANCHO/CHAQUEHUI/FRIJOLES CANYONS WATERSHEDS

7.1 Introduction

Ancho Canyon

Ancho Canyon is located in the southeastern part of the Laboratory (Figure 1.2-1). TA-33, located south of Ancho Canyon on a mesa near the Rio Grande, was used as a firing site and for tritium operations. PRSs include landfills, septic systems, and burn areas. TA-39 is located on the floor of middle Ancho Canyon, and it was used for open-air testing of high explosives. PRSs in this TA include five firing sites, a number of landfills, and septic systems. More detailed information about the operational history and the PRSs can be found in the "RFI Work Plans for Operable Unit 1122" (LANL 1992, 07671) and the "RFI Work Plan for Operable Unit 1132" (LANL 1993, 15316).

TA-49 is lcoated on a mesa in the upper part of the Ancho Canyon drainage and part of the area may drain into Water Canyon. TA-49 was used for underground hydronuclear testing in the early 1960s. The testing consisted of criticality, equation-of-state, and calibration experiments involving special nuclear materials. The testing produced large inventories of radioactive and hazardous materials, such as isotopes of uranium and plutonium, lead, and beryllium; explosives such as 2,4,6-trinitrotaluene (TNT), hexahydro-1,3,5-trinitro-1,3,5-triazine (research department explosive, or RDX), and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (high-melting explosive, or HMX); and barium nitrate. Much of this material remains in shafts on the mesa top. Further information about activities and PRSs at TA-49 can be found in Purtymun and Stoker (1987, 06688) and the "RFI Work Plan for Operable Unit 1144" (LANL 1992, 07670). The RFI work plan also describes the planned investigations that focus on identifying and quantifying migration of contaminants from the shafts.

Chaquehui Canyon

Chaquehui Canyon is situated south of the mesa occupied by TA-33.

Frijoles Canyon

Frijoles Canyon lies on USFS and National Park Service lands south of the Laboratory. The canyon lies adjacent to the Laboratory boundary near the Rio Grande, but is separated from TA-33 by Chaquehui Canyon. Sampling locations are shown on the White Rock Canyon location map (Figure 8.3-1).

The primary purpose of 2005 interim monitoring in Ancho/Chaquehui/Frijoles Canyon is to provide information in advance of the detailed characterization to be conducted in the 2009–2010 time frame. Characterization results are to be reported in the Ancho, Chaquehui, Indio Canyons investigation report due in 2011 under the Consent Order (NMED 2005, 88207). Monitoring purpose and scope will be reassessed in 2009 based on the need for support of the detailed characterization work scheduled in 2009 and 2010. Thereafter, monitoring will be refocused based on the results of the investigation report and the determination of whether further corrective action is required under the Consent Order.

7.2 Background

Ancho Canyon is located in the southern portion of the Laboratory and is approximately 7 sq mi in area. The Ancho Canyon watershed is located entirely within TA-33, -39, -49, and -70 and contains approximately 33 SWMUs and AOCs. Contaminants that have been detected in sediments, surface water, or shallow groundwater during previous investigations conducted in the watershed include mercury and other metals, explosive compounds, organic constituents, and radionuclides, which are not addressed under the Consent Order.

The Chaquehui Canyon watershed is located in the southeast portion of the Laboratory at TA-33. There are approximately 61 SWMUs and AOCs in the watershed that vary from inactive industrial outfalls to MDAs. Surface water flow is ephemeral; however, two springs are present along the south-facing wall of the main drainage. Contaminants above background levels have been detected in historical samples of sediments and surface water obtained in the canyon.

Indio Canyon, a south-entering sub-basin to Water Canyon, originates on Laboratory property and extends for about 3 mi to its confluence with Water Canyon. The drainage basin is located in TA-39. Contaminants above background levels have been detected in sediments and surface water samples obtained from the canyon.

Potrillo and Fence Canyons are part of the Water Canyon/Cañon de Valle watershed. The confluence of these two canyons is near State Highway 4. TA-15, -36, -68, and -71 are located within these canyons. There are approximately 53 SWMUs and AOCs within the watershed. The SWMUs and AOCs vary from inactive septic tanks to open-detonation firing sites. Contaminants above background levels have been detected in sediments and surface water samples obtained from the canyons.

7.3 Scope of Activities

Ancho Canyon

Monitoring locations in Ancho Canyon are situated near or downstream from areas of past Laboratory weapons-testing activities. Most locations in Ancho Canyon sample the regional aquifer, where flow rates are low and regional groundwater is isolated from surficial activities. Three decades of water quality records from wells in this area (DT-5A, DT-9, and DT-10), and recent data from R-31, show no substantial changes in ambient water chemistry or the presence of Laboratory contaminants. The analyte list for the watershed is based on historical data. Where water is present, the Ancho Canyon watershed has a water quality data set sufficiently large to adequately represent the watershed. The analytes selected for monitoring are chosen based on possible source terms from the Laboratory and the need to conduct annual monitoring for a broad range of analytes in preparation for future characterization activities.

Base Flow

Sampling locations, frequency, analytes, and rationale for base flow monitoring are presented in Table 7.3-1. Locations are shown in Figure 7.3-1.

Base flow will be collected from Ancho Canyon at one existing monitoring point, Ancho at the Rio Grande. This sampling is described in Section 8, White Rock Canyon.

Alluvial Groundwater

No alluvial groundwater sampling locations are present in the Ancho Canyon area.

Intermediate Perched Groundwater

The upper screen of R-31 (screen-1) was set in an intermediate perched zone that has since yielded no water. Therefore, no intermediate perched groundwater sampling points will be sampled in the Ancho Canyon area.

Regional Aquifer Groundwater

Sampling locations, frequency, analytes, and rationale for regional aquifer groundwater monitoring are presented in Table 7.3-1. Locations are shown in Figure 7.3-1.

Because flow in the regional aquifer occurs at a sufficiently slow rate, annual sampling will capture any water quality changes. Years of monitoring data from these wells indicate little significant variation in water quality over time. Regional wells DT-5A, DT-9, DT-10, and R-31will be sampled under the Interim Plan.

Springs

Sampling for springs in the Ancho Canyon area is discussed in Section 8, White Rock Canyon.

Chaquehui Canyon

There are no base flow or groundwater sampling locations within Chaquehui Canyon. The sampling of White Rock Springs is described in Section 8, White Rock Canyon.

Frijoles Canyon

Locations in Frijoles Canyon are for the most part remote from potential contaminant sources and serve as boundary or water supply monitoring points. Sampling locations in Frijoles Canyon are for base flow only with no groundwater locations included in the Interim Plan. The three-decade water quality record for base flow in this area shows no substantial changes or Laboratory contaminants that would indicate a need for more frequent sampling.

Water quality monitoring over several decades in the Frijoles Canyon watershed shows no impact exceeding screening criteria from Laboratory sources. The analytes selected for monitoring are chosen based on possible source terms from the Laboratory and there is no need to conduct annual monitoring for a broad range of analytes.

Base Flow

Sampling locations, frequency, analytes, and rationale for regional base flow monitoring are presented in Table 7.3-1. Locations are shown in Figure 8.3-1.

The stream in Frijoles Canyon serves as a boundary monitoring point for the Laboratory. Annual or semiannual monitoring maintains a record of any impact the Laboratory might have on water quality in Bandelier National Monument.

Base flow in Frijoles Canyon is not near any potential Laboratory sources of contaminants. Flow in Frijoles Canyon is perennial. Base flow will be monitored semiannually at the gaging station Rio de los Frijoles at Bandelier (E350) and annually in the stream just above the Rio Grande.

This page intentionally left blank.

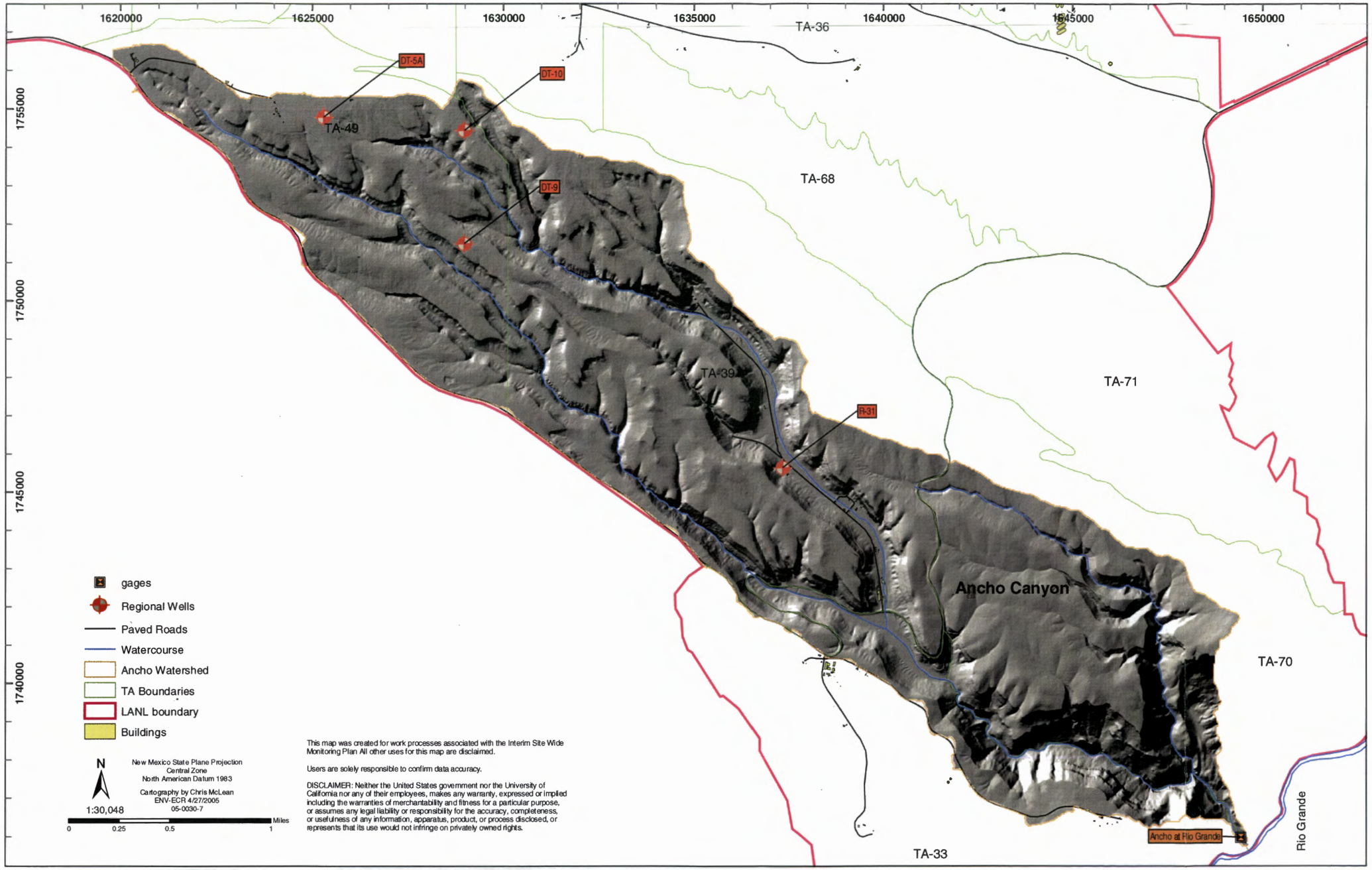


Figure 7.3-1. Ancho Canyon Watershed

Table 7.3-1
Ancho/Chauquehui/Frijoles Watersheds Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
Ancho Canyon[l]													
	Ancho at Rio Grande	RCRA operating permit specifies annual sampling and analysis at this location. Ancho Spring must be sampled as base flow for safety reasons.	Base flow	A	A		A	A	A	A	A	A	A
R-31 screen 1[d]		Dry.	Intermediate	S									
DT-5A	Test Well DT-5A	Monitors regional aquifer near TA-49.	Regional	C	A		A	A	T	A	T	T	A
DT-9	Test Well DT-9	Monitors regional aquifer near TA-50.	Regional	C	A		A	A	T	A	T	T	A
DT-10	Test Well DT-10	Monitors regional aquifer near TA-51.	Regional	C	A		A	A	T	A	T	T	A
R-31 screen 2	R-31, screen 2	Screen 2 is at the top of the regional aquifer, monitors regional aquifer near TA-39. Characterization phase.	Regional	C	A		A	A	T	A	T	T	A
R-31 screen 3	R-31, screen 3	Screen 3 is 150 ft below the top of the regional aquifer, monitors regional aquifer near TA-39. Characterization phase.	Regional	C	A		A	A	T	A	T	T	A
R-31 screen 4	R-31, screen 4	Screen 4 is 310 ft below the top of the regional aquifer, monitors regional aquifer near TA-39. Characterization phase.	Regional	C	A		A	A	T	A	T	T	A
R-31 screen 5	R-31, screen 5	Screen 5 is 580 ft below the top of the regional aquifer, monitors regional aquifer near TA-39. Characterization phase.	Regional	C	A		A	A	T	A	T	T	A
Frijoles Canyon													
	Rio de los Frijoles at Bandelier (E350)	RCRA operating permit specifies annual sampling and analysis at this location.	Base flow	A	A		A	A	A	A	A	A	A
	Frijoles at Rio Grande	Perimeter station for LANL	Base flow	A	A		A	A	A	A	A	A	A

[a] Sampling frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

[b] Semi annual sampling for intermediate, and regional groundwater is defined as one full analyte suite list and one target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), general chemistry, VOCs (full suite), HE (full suite), gross alpha, gross beta, and isotopic uranium. Sampling frequency for wells undergoing characterization sampling is generally comprehensive (full suite analysis) for both sampling rounds.

[c] The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

[d] Location differs from Table XII-5 due to duplication of wells, scheduled for abandonment, no historical contamination, or other reasons. See supplemental appendices (Appendix D) for further explanation.

[e] Rad suite includes gross alpha, gross beta, isotopic uranium, low level tritium.

[f] General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

[g] Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

[h] VOCs will be analyzed by EPA methods 8260B.

[i] PAHs will be analyzed by EPA Method 8310.

[j] PCBs will be analyzed using EPA Method 8082.

[k] Pesticides will be analyzed by EPA Method 8081A.

[l] Select regional wells (R-wells) may contain residual drilling fluids and are included as part of the Interim Plan even though concentration and mobility of specific constituents may be affected.

This page intentionally left blank.

This page intentionally left blank.

8.0 WHITE ROCK CANYON

8.1 Introduction

The White Rock Canyon springs are located along the Rio Grande at the eastern border of the Laboratory and on Los Alamos County and San Ildefonso Pueblo lands (Figure 1.2-1). The springs serve as Laboratory-boundary monitoring points to detect possible discharge of contaminated groundwater from beneath the Laboratory into the Rio Grande.

8.2 Background

In the southern portion of the canyon, TA-33, a site where tritium operations formerly occurred, borders the Rio Grande. The "RFI Work Plan for OU 1122" (LANL 1992, 07671) describes environmental concerns at TA-33. To the north of TA-33 lies TA-70, a buffer area where no Laboratory activities have occurred. Adjoining TA-70 to the north is land of Los Alamos County, mainly low- to moderate-density residential areas in White Rock. A municipal sanitary treatment plant discharges effluent into Mortandad Canyon just above the river at the northern county boundary. San Ildefonso Pueblo property borders Los Alamos County on the north; this land is undeveloped. San Ildefonso Pueblo operates numerous water supply wells on both sides of the Rio Grande, and the City of Santa Fe operates the Buckman well field on the east side of the Rio Grande across from White Rock. Table A-6 in Appendix A summarizes the conceptual model for the White Rock Canyon watershed.

8.3 Scope of Activities

Locations in White Rock Canyon are for the most part remote from potential contaminant sources and serve as boundary monitoring points. Most locations in White Rock Canyon sample the regional aquifer, where flow rates are low and little variation occurs beyond cyclical annual changes. In addition, the three-decade water quality record for many springs shows no substantial changes that would indicate a need for more frequent sampling. Figure 8.3-1 shows the White Rock Canyon watershed, the Laboratory boundary, and sampling locations.

Water quality monitoring over several decades in the White Rock Canyon watershed shows no impact from Laboratory sources. The analytes selected for monitoring are chosen based on possible source terms from Laboratory activities and the need to conduct annual monitoring for a broad range of analytes. Only springs and base flow locations will be monitored in White Rock Canyon. No groundwater locations will be monitored under the Interim Plan. Spring locations and sampling frequencies will be reassessed using results from the 2005 age-dating study.

8.3.1 Base Flow

No base flow sampling has been identified in this section. Only spring locations will be sampled in the White Rock Canyon portion of the Interim Plan.

8.3.2 Springs

Sampling locations, frequency, analytes, and rationale for springs are presented in Table 8.3-1. Locations are shown in Figure 8.3-1.

The Rio Grande is the major discharge point for the regional aquifer. White Rock Canyon springs serve as Laboratory boundary monitoring points to detect possible discharge of contaminated groundwater from beneath the Laboratory into the Rio Grande. Because of low flow rates in the regional aquifer and generally a long distance from most Laboratory facilities, rapid variations in water quality are unlikely and

annual monitoring will sufficiently capture changes. Water quality may change more rapidly as a result of impacts of surface contamination surrounding the springs, but these effects are not in the Interim Plan's monitoring scope. Spring sampling will be done annually.

Monitoring springs for general chemistry, radionuclides, and metals provides a basic suite to detect Laboratory impacts. Springs near and south of Pajarito Canyon will be monitored for high explosives, as they could be affected by activities in the Laboratory's high explosives experimental areas. All springs will be monitored every three years for other organic compounds, although none have been detected so far in spring samples.

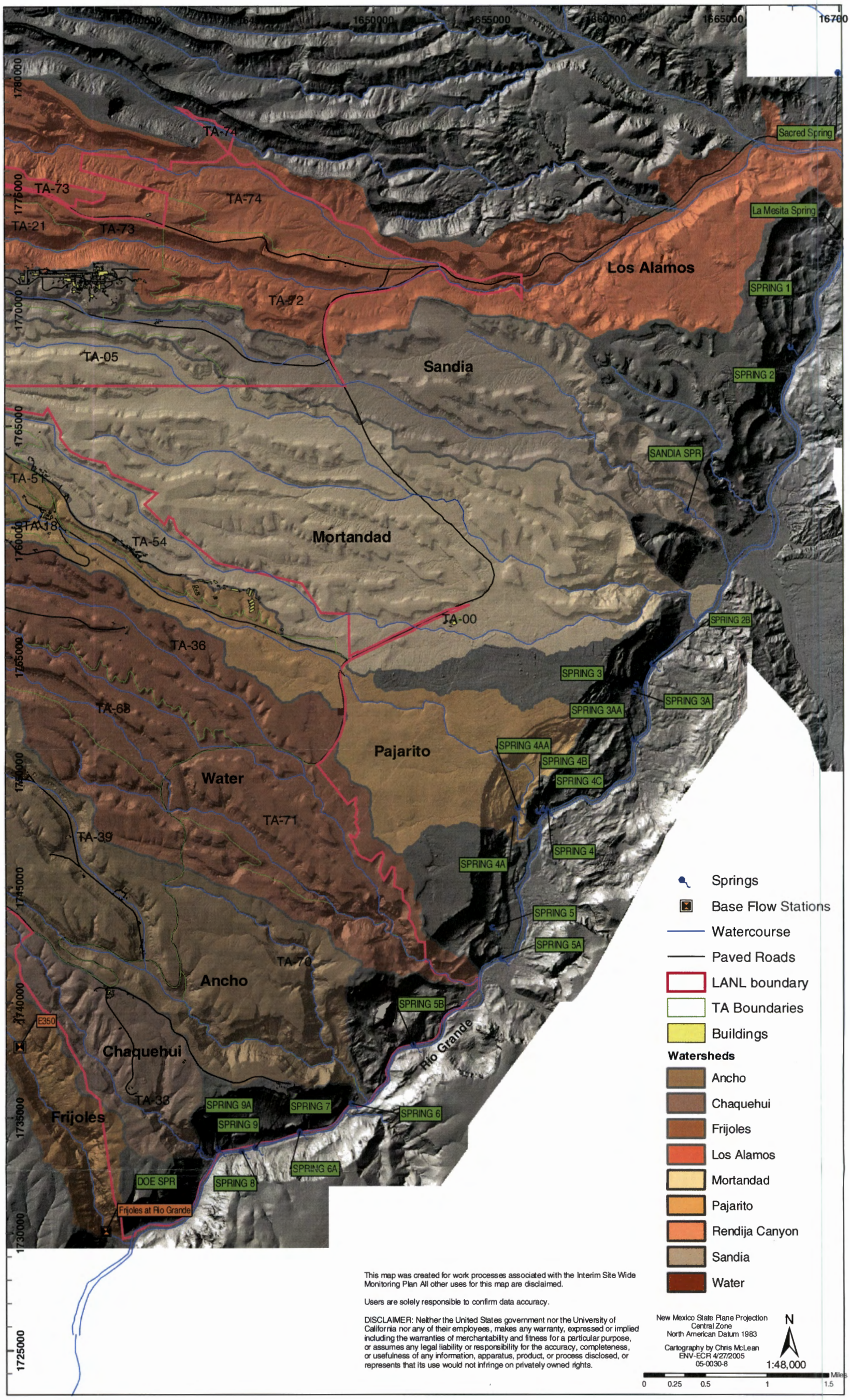


Figure 8.3-1. White Rock Canyon

This page intentionally left blank.

Table 8.3-1
White Rock Canyon and Rio Grande Watershed Interim Monitoring Plan

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
White Rock Canyon and Rio Grande													
Sandia	Sandia Spring	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	
Spring 3	Spring 3	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	
Spring 3A	Spring 3A	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	
	Spring 3AA	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	
Spring 4	Spring 4	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	S	S	S	S	S	A	A	T	T	T
Spring 4B	Spring 4B	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	S	S	S	S	S	A	A	T	T	T
Spring 4C	Spring 4C	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	S	S	S	S	S	A	A	T	T	T
Spring 4A	Spring 4A	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	S	S	S	S	S	A	A	T	T	T
Spring 4AA	Spring 4AA	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	S	S	S	S	S	A	A	T	T	T
Spring 5	Spring 5	White Rock Canyon spring group I, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Ancho[d]		Have identified new spring in the immediate vicinity..	Spring			S							
Spring 5A	Spring 5A	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
	Spring 5B	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Spring 6	Spring 6	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Spring 6A	Spring 6A	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Spring 7	Spring 7	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Spring 8	Spring 8	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Spring 9	Spring 9	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A
Spring 9A	Spring 9A	White Rock Canyon spring group II, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	A

Table 8.3-1 (cont.)

Consent Order, Table XII-5	Interim Monitoring	Rationale for Selection of Locations	Water Body or Saturated Zone	Water Level or Flow[a]	Analytical Suites[a,b,c]								
					Radionuclides[e]	Miami 3-H	General Inorganics[f]	Metals[g]	VOCs[h]	SVOCs[i]	PCBs[j]	Pesticides[k]	HE
Spring 1	Spring 1	White Rock Canyon spring group III, monitors regional aquifer downgradient from LANL.	Spring	A	A	S	A	A	A	A	T	T	
Spring 2	Spring 2	White Rock Canyon spring group III, monitors regional aquifer downgradient from LANL.	Spring	A	A		A	A	A	A	T	T	
La Mesita	La Mesita Spring	White Rock Canyon spring group IV, monitors regional aquifer downgradient from LANL.	Spring	A	A		A	A	A	A	T	T	
	Spring 2B	White Rock Canyon spring group IV, monitors regional aquifer downgradient from LANL.	Spring	A	A		A	A	A	A	T	T	
Spring 10		Adjacent to Rio, too little flow to sample.	Spring										
Sacred	Sacred Spring	Offsite spring, monitors regional aquifer downgradient from LANL.	Spring	A	A		A	A	A	A	T	T	

a Sampling frequency: C = continuous; M= monthly; Q= quarterly (4times/year at set time periods); S= semiannual; A = annual; B = biennial sampling, T = triennial sampling.

b Semi annual sampling for springs groundwater is defined as one full analyte suite list and one target analyte list that includes the following: perchlorate, nitrate+nitrite (as nitrogen), low level tritium, general chemistry, gross alpha, gross beta, and isotopic uranium.

c The field preparation for all samples is non-filtered and filtered for samples to be analyzed for general inorganics (excluding anions), and metals. Anions and perchlorate samples will be filtered only Samples for radionuclide analysis will be filtered and non-filtered for all water media (tritium is non filtered only); non-filtered for all other samples including organics. Field parameters pH, turbidity, specific conductance, dissolved oxygen, and temperature will be measured for all samples; ORP will be measured if a flow through cell is used for parameter measurement.

d Location differs from Table XII-5 due to duplication of locations, scheduled for abandonment, no historical contamination, have low flow, are dry, or other reasons. See supplemental appendices (Appendix D) for further explanation.

e Rad suite includes gross alpha, gross beta, isotopic uranium, low level tritium.

f General inorganic analytes include major ions, TDS, trace metals-trace elements; trace anions, silica, nitrogen species, TKN, low-level perchlorate (by LCMS/MS), total organic carbon; and TSS in base flow samples.

g Metals analysis includes the 23 TAL metals, plus total cyanide and molybdenum where specified. Analyses of trace elements and metals will be the same as in the Environmental Surveillance Program (2001 and past years) plus additional analytes.

h VOCs will be analyzed by EPA methods 8260B.

i PAHs will be analyzed by EPA Method 8310.

j PCBs will be analyzed using EPA Method 8082.

k Pesticides will be analyzed by EPA Method 8081A.

9.0 REFERENCES

The following list includes all documents cited in this plan. Parenthetical information following each reference provides the author, publication date, and ER ID number. This information is also included in text citations. ER ID numbers are assigned by the ENV-ERS Program Records Processing Facility (RPF) and are used to locate the document at the RPF.

Broxton, D., R. Warren, D. Vaniman, B. Newman, A. Crowder, M. Everett, R. Gilkeson, P. Longmire, J. Marin, W. Stone, S. McLin, and D. Rogers, May 2001. "Characterization Well R-12 Completion Report," Los Alamos National Laboratory report LA-13822-MS, Los Alamos, New Mexico. (Broxton et al. 2001, 71252)

EPA (U.S. Environmental Protection Agency), April 10, 1990. Module VIII of RCRA Permit No. NM0890010515, EPA Region VI, issued to Los Alamos National Laboratory, Los Alamos, New Mexico, effective May 23, 1990, EPA Region VI, Hazardous Waste Management Division, Dallas, Texas. (EPA 1990, 01585)

EPA (U.S. Environmental Protection Agency), April 19, 1994. Module VIII of RCRA Permit No. NM0890010515, EPA Region VI, new requirements issued to Los Alamos National Laboratory, Los Alamos, New Mexico, effective May 19, 1994, EPA Region VI, Hazardous Waste Management Division, Dallas, Texas. (EPA 1994, 44146)

EPA (U.S. Environmental Protection Agency), May 2003. "Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation," OSWER Directive No. 9355.4-28. (EPA 2003, 88486)

ESP (Environmental Surveillance Program), December 2000. "Environmental Surveillance at Los Alamos during 1999," Los Alamos National Laboratory document LA-13775-ENV, Los Alamos, New Mexico. (ESP 2000, 68661)

ESP (Environmental Surveillance Program), October 2001. "Environmental Surveillance at Los Alamos during 2000," Los Alamos National Laboratory report LA-13861-ENV, Los Alamos, New Mexico. (ESP 2001, 71301)

ESP (Environmental Surveillance Program), December 2002. "Environmental Surveillance at Los Alamos during 2001," Los Alamos National Laboratory report LA-13979-ENV, Los Alamos, New Mexico. (ESP 2002, 73876)

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1071," Los Alamos National Laboratory document LA-UR-92-810, Los Alamos, New Mexico. (LANL 1992, 07667)

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1144," Los Alamos National Laboratory document LA-UR-92-900, Los Alamos, New Mexico. (LANL 1992, 07670)

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1079," Los Alamos National Laboratory document LA-UR-92-850, Los Alamos, New Mexico. (LANL 1992, 07668)

LANL (Los Alamos National Laboratory), 1992. "RFI Work Plan for Operable Unit 1122," Los Alamos National Laboratory document LA-UR-92-925, Los Alamos, New Mexico. (LANL 1992, 07671)

LANL (Los Alamos National Laboratory), 1993. "RFI Work Plan for Operable Unit 1132," Los Alamos National Laboratory document LA-UR-93-768, Los Alamos, New Mexico. (LANL 1993, 15316)

LANL (Los Alamos National Laboratory), 1996. "Los Alamos National Laboratory Hydrogeologic Work Plan," Los Alamos National Laboratory document, Los Alamos, New Mexico. (LANL 1996, 55430)

LANL (Los Alamos National Laboratory), September 1997. "Work Plan for Mortandad Canyon," Los Alamos National Laboratory document LA-UR-97-3291, Los Alamos, New Mexico. (LANL 1997, 56835)

LANL (Los Alamos National Laboratory), May 22, 1998. "Hydrogeologic Workplan," Los Alamos National Laboratory document, Los Alamos, New Mexico. (LANL 1998, 59599)

LANL (Los Alamos National Laboratory), 1998. "RFI Report for Potential Release Site 16-021(c)," Vol. 1, Los Alamos National Laboratory document LA-UR-98-4101, Los Alamos, New Mexico. (LANL 1998, 59891)

LANL (Los Alamos National Laboratory), September 1998. "Work Plan for Pajarito Canyon," Los Alamos National Laboratory document LA-UR-98-2550, Los Alamos, New Mexico. (LANL 1998, 58820)

LANL (Los Alamos National Laboratory), September 1999. "Work Plan for Sandia Canyon and Cañada del Buey," Los Alamos National Laboratory document LA-UR-99-3610, Los Alamos, New Mexico. (LANL 1999, 64617)

LANL (Los Alamos National Laboratory), September 2001. "RFI Work Plan for the North Canyons," Los Alamos National Laboratory document LA-UR- 01-1316, Los Alamos, New Mexico. (LANL 2001, 71060)

LANL (Los Alamos National Laboratory), 2002. "Los Alamos and Pueblo Canyons Work Plan Addendum: Surface Water and Alluvial Groundwater Sampling and Analysis Plan," Los Alamos National Laboratory document LA-UR-02-759, Los Alamos, New Mexico. (LANL 2002, 70235)

LANL (Los Alamos National Laboratory), August 2003. "Mortandad Canyon Groundwater Work Plan," Los Alamos National Laboratory document LA-UR-03-6221, Los Alamos, New Mexico. (LANL 2003, 79557)

LANL (Los Alamos National Laboratory), September 2003. "Phase III RFI Report for Solid Waste Management Unit 16-021(c)-99," Los Alamos National Laboratory document LA-UR-03-5248, Los Alamos, New Mexico. (LANL 2003, 77965)

LANL (Los Alamos National Laboratory), 2004. "Los Alamos/Pueblo Canyons Investigation Report," Los Alamos National Laboratory document LA-UR-042714, Los Alamos, New Mexico (LANL 2004, 87390)

Longmire, P., 2002. "Characterization Wells R-9 and R-9i Geochemistry Report," Los Alamos National Laboratory report LA-13927-MS, Los Alamos, New Mexico. (Longmire 2002, 72713)

Longmire, P., June 2002. "Characterization Well R-12 Geochemistry Report," Los Alamos National Laboratory report LA-13952-MS, Los Alamos, New Mexico. (Longmire 2002, 72800)

Mayfield, D., 1979. "Formerly Utilized MED/AEC Sites Remedial Action Program: Radiological Survey of the Bayo Canyon, Los Alamos, New Mexico," U.S. Department of Energy document DOE/EV-0005/15. (Mayfield et al. 1979, 11717)

NMED (New Mexico Environment Department), March 2005. "Compliance Order on Consent between NMED, the US Department of Energy, and the Regents of the University of California," Santa Fe, New Mexico. (NMED 2005, 88207)

Purtymun, W.D., and Stoker, A., 1987. "Environmental Status of Technical Area 49, Los Alamos National Laboratory, Los Alamos, New Mexico," Los Alamos National Laboratory report LA-11135-MS, Los Alamos, New Mexico. (Purtymun and Stoker 1987, 06688)

Appendix A

Watershed Conceptual Models

Appendix A
List of Tables

Table A-1 Los Alamos Canyon and Pueblo Canyon Watershed Conceptual Model A-1
Table A-2 Sandia Canyon Watershed Conceptual Model A-11
Table A-3 Mortandad Canyon Watershed Conceptual Model A-13
Table A-4 Pajarito Canyon Watershed Conceptual Model A-15
Table A-5 Water Canyon Watershed Conceptual Model A-21
Table A-6 White Rock Canyon Watershed Conceptual Model A-24
Table A-7 Guaje Canyon Watershed Conceptual Model A-26
Table A-8 Bayo Canyon Watershed Conceptual Model A-28
Table A-9 Ancho Canyon Watershed Conceptual Model A-29
Table A-10 Chaquehui Canyon Watershed Conceptual Model A-31
Table A-11 Frijoles Canyon Watershed Conceptual Model A-33

Table A-1
Los Alamos Canyon and Pueblo Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
Surface Water	Flow	Perennial flow originates from springs and interflow through hillslope soils in the upper watershed. The downcanyon extent of perennial flow is variable, but generally terminates in the upper portions of Los Alamos Canyon west of TA-41. The magnitude of snowmelt runoff is the predominant factor affecting the duration and extent of surface water flow. The remainder of upper Los Alamos Canyon down to its confluence with Pueblo Canyon has intermittent surface water flow. Segments that have persistent flow for most of the year or during periods of extended snowmelt runoff sometimes exhibit interrupted flow. DP Canyon is ephemeral, although some persistent surface water is sometimes observed in small, shallow bedrock pools, generally less than a few meters across, which are filled by runoff originating in the southeastern portion of the Los Alamos townsite. Flow sometimes exists for very short distances in Reach DP-2 because of discharge of groundwater stored within alluvium, and immediately above, in Reach DP-4, where groundwater discharges at DP Spring.	Surface water flow in upper Pueblo and Acid Canyons is generally ephemeral with runoff events caused by summer storms. Locally persistent surface water flow in the upper canyon is associated with townsite runoff and snowmelt runoff. Gage data (E055) are available for 2002 and 2003, showing that surface water rarely flows through the length of upper Pueblo Canyon; only 14 days of this flow occurred in 2002. In the South Fork of Acid Canyon, the channel is bedrock dominated, and storm water runoff and periodic releases of water from the Walkup Center swimming facility result in small pools of water that persist for several weeks or even months in narrow and confined and/or shaded canyon areas. In lower Pueblo Canyon, effluent-dependent flow is present for about 3 km in lower Pueblo Canyon from the discharge from the Los Alamos County Wastewater Treatment Plant (WWTP). The flow extends to the confluence with Los Alamos Canyon. In water year 2002, gaging station E060 below the WWTP measured 357 days of flow (Shaull et al. 2002, 85499).	Surface water flow in lower Los Alamos Canyon is from Basalt Spring and a lesser amount from LA Spring. The flow from Basalt Spring and the downcanyon extent of surface water flow depends on the amount of water that is discharged from the WWTP. At times of high discharge, flow can be continuous for approximately 7.5 km to the confluence with the Rio Grande. During periods of low discharge, flow may only extend from 1 to 3 km. Within approximately 1–2 km of the confluence with the Rio Grande, surface water flow is common and believed to be related to discharge of deep groundwater to the surface.

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
Surface Water (cont.)	Quality	Key contaminants that exceed regulatory standards or risk levels in upper Los Alamos Canyon surface water include nitrate, polycyclic aromatic hydrocarbons (PAHs), strontium-90, and plutonium-239/240. The plutonium-239 is related to outfalls (likely Hillsides 137 and 138) in former TA-01. Strontium-90 originated from the outfall at TA-21, which ceased operation in 1986. PAHs may come from automobile exhaust and other urban combustion sources.	Key contaminants that exceed regulatory standards or risk levels in Acid Canyon surface water include PAHs (e.g., benzo_a_pyrene, dibenz_a_h_anthracene), and radionuclides (plutonium-239/240 and strontium-90). The PAHs are believed to be associated with runoff from developed areas within the Los Alamos townsite. The radionuclides were detected in bedrock pools in the South Fork of Acid Canyon and are consistent with contaminants found in sediment within the canyon from historical releases from TA-45. The radionuclide contamination generally does not extend beyond the Acid/Pueblo Canyon confluence in detectable concentrations, with the exception of plutonium-239/240 in unfiltered samples. Surface water in Pueblo Canyon above the confluence with Acid Canyon also has PAHs that are considered to have a source in townsite runoff. Surface water in Pueblo Canyon below the confluence with Acid Canyon shows organic contaminants (PAHs) that are both likely from townsite, national forest, or Cerro Grande fire sources. Radionuclides include plutonium-239/240.	Key contaminants that exceed regulatory standards or risk levels in surface water and springs in lower Los Alamos Canyon include PAHs (benzo_k_fluoranthene), and, only from unfiltered surface water, strontium-90. Strontium-90 could be from either Los Alamos Canyon or Pueblo Canyon, but based on estimated inventories of strontium-90, it is most likely associated with Los Alamos Canyon, specifically Solid Waste Management Unit (SWMU) 21-011(k).

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
Surface Water (cont.)	Quality (cont.)	Key contaminants in DP Canyon surface water and springs include strontium-90. The radionuclides are contaminants only for the unfiltered samples indicating the potential that the detections are related to the presence of suspended sediment in the samples. DP Spring consistently shows elevated strontium-90 concentrations related to surface water and alluvial groundwater discharge from Reach DP-2 where strontium-90 is present throughout the sediment due to historical releases from SWMU 21-011(k).		
Springs	Flow	Discharge at DP Spring is highly variable, generally ranging from 0 to less than 1 gal./min, and has been observed to respond rapidly to storm water runoff from upper DP Canyon. Surface water flow generally extends for less than 50 ft downcanyon from the point where spring flow joins the stream channel.	There are no springs in Pueblo Canyon.	Basalt Spring is recharged by water from the WWTP in Pueblo Canyon. It has variable estimated discharge rates ranging from 1 to 10 gal./min. LA Spring discharges along the south slope of the canyon approximately 300 m downstream of Basalt Spring.
	Quality	Strontium-90 and gross beta are present above applicable standards.		Nitrate is occasionally present above regulatory standards.

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
Alluvial Groundwater	Extent/Hydrology	Alluvial saturation extends from west of the Laboratory boundary downcanyon for variable distances. During dry years, and especially during years with limited spring snowmelt runoff, saturation may not extend to LAO-4c. Alluvial monitoring wells as far down upper Los Alamos Canyon as LAO-4.5c had water for sampling for the first three of four RFI sampling rounds conducted in 2001 and 2002. LAO-6a, the most downcanyon alluvial monitoring well in upper Los Alamos Canyon, only had water sufficient for sampling during the round of sampling conducted in the spring of 2001. Monitoring well LAO-B, located on U.S. Forest Service (USFS) land approximately 0.7 km west of the Laboratory boundary, shows very consistent water levels throughout the year with little interannual variability.	Alluvial groundwater occurs in two distinct modes. Wells located upcanyon of the WWTP show groundwater level variations closely tied to precipitation and associated flood events and to winter and spring snowmelt. The extent of saturation is seasonally variable, but often extends downcanyon to the portion of the canyon where effluent from the Bayo WWTP is discharged into the canyon. Below the WWTP, saturated conditions occur year-round, but the degree of saturation is variable because of changes in runoff and the volume of effluent released throughout the year. The variation in water level elevations downcanyon of the WWTP is controlled primarily by seasonal routing of effluent for uses such as irrigation for the municipal golf course.	Groundwater saturation in most of lower Los Alamos Canyon down to the area around LLAO-4 is related to infiltration of surface water discharged from Basalt Spring, which is hydrologically linked to surface water discharged from the Bayo WWTP into Pueblo Canyon (LANL 1995, 50290). Groundwater levels in the upper portion of lower Los Alamos Canyon are highly variable and are related to seasonal variations in discharge rates from the WWTP and to floods from upper Los Alamos and Pueblo Canyons. In the lowermost portion of lower Los Alamos Canyon, the water level record from LLAO-5 shows relatively constant saturation with much less variability than is exhibited in the upper portions of lower Los Alamos Canyon. The geochemistry of groundwater from LLAO-5 indicates that alluvial groundwater in the lower-most portion of the watershed represents mixing of waters from Los Alamos Canyon and regional groundwater discharging to the Rio Grande.

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
	Extent/Hydrology (cont.)	Further downcanyon, alluvial groundwater levels show rapid response to heavy precipitation in the summer and fall. Water levels also rise in response to late winter and early spring snow melt runoff. This recharge mechanism is not entirely due to infiltration from the stream bed, but may also be related to underflow within the alluvium. In DP Canyon, two separate alluvial saturated zones exist; one in Reach DP-2 and the other in Reach DP-4. In general, groundwater level variations in DP Canyon are directly related to runoff generated in the Los Alamos townsite throughout the year. Alluvial groundwater monitoring wells in Reach DP-2 consistently show some amount of saturation. The second saturated zone is separated from Reach DP-2 by a bedrock-dominated portion of the canyon. Intermittent flow from DP Spring recharges the alluvium in Reach DP-4. This alluvial groundwater is a component of the groundwater observed in well LAO-2 at the confluence of DP and Los Alamos Canyons. Contaminants unique to the portion of upper Los Alamos Canyon above the confluence with DP Canyon (e.g., molybdenum) are detected in LAO-2, indicating that mixing of groundwater from distinct sources occurs in this area.		
	Depth/Thickness			

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
	Quality	Key contaminants that exceed regulatory standards or risk levels detected in alluvial groundwater above the confluence with DP Canyon include molybdenum, gross beta, and strontium-90. Molybdenum is related to discharge from National Pollutant Discharge Elimination System (NPDES)-permitted outfalls from TA-53 where sodium molybdate was used as a water treatment chemical in cooling towers (ESP 2002, 73876). The use of molybdate has been discontinued. The strontium-90 is related to contamination in a septic leach field east of the Omega West Reactor at TA-02. Below the confluence with DP Canyon the contaminants include strontium-90. Concentrations of strontium-90 in Los Alamos Canyon initially increase below the confluence with DP Canyon indicating that in DP Canyon SWMU 21-011(k) is a more significant source of strontium-90 than is TA-02.	The key contaminants that exceed regulatory standards or risk levels in Pueblo Canyon alluvial groundwater include nitrate from the WWTP.	No contaminants exceed regulatory standards or risk levels.
	Quality (cont.)	Key alluvial groundwater contaminants in DP Canyon include strontium-90 from SWMU 21-011(k). Strontium-90 has been present in DP Canyon alluvial groundwater for years and concentrations do not show significant decline.		

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
Intermediate Groundwater	Extent/Hydrology	Intermediate depth perched groundwater beneath Los Alamos Canyon has variable depth and lithology of the saturated zones. Intermediate depth groundwater was encountered near the top of the Puye Formation (below the Guaje Pumice Bed) at approximately 680 ft bgs in R-7 in the Guaje Pumice Bed, at 325 ft in LADP-3, and at 295 ft in LAOI(A)-1.1. Deeper saturation was also encountered at about 317 ft in the Puye Formation in borehole LAOI(A)-1.1 within the Guaje Pumice Bed. Intermediate depth perched groundwater was also encountered during drilling of supply well O-4 near the confluence with DP Canyon (Stoker et al. 1992, 58718). Zones of intermediate depth perched groundwater occur within Cerros del Rio Basalts at approximately 179 ft and 264 ft at well R-9i in the lower portion of upper Los Alamos Canyon.	Intermediate depth groundwater occurs beneath Pueblo Canyon. At Test Well 2A, in the middle portion of Pueblo Canyon, the perched groundwater occurs within the Puye Formation at a depth of approximately 120 ft bgs. In lower Pueblo Canyon, in TW-1A and POI-4 perched groundwater was encountered within Cerros del Rio basalts at a depth of about 188 ft bgs. This intermediate perched zone may be one source of water contributing to the flow from Basalt Spring in Los Alamos Canyon.	.
	Depth/Thickness			
	Quality	No contaminants exceed regulatory standards or risk levels.	No contaminants exceed regulatory standards or risk levels.	
Regional Aquifer	Depth/Hydrology	Depth to the regional aquifer in upper Los Alamos Canyon is about 900 ft bgs in the Puye Formation at R-7 in the upper portion of the canyon and 688 ft bgs in Santa Fe Group basalts at R-9 in the lower portion of upper Los Alamos Canyon (LANL 2002, 72717, LANL 2000, 71250).	Depth to the regional aquifer is known from several locations in Pueblo Canyon and ranges from approximately 890 ft bgs at R-2 in upper Pueblo Canyon to approximately 650 ft bgs at TW-1 in lower Pueblo Canyon. Historical data indicates that recharge pathways between alluvial groundwater and deeper zones of saturation exist beneath Pueblo Canyon. A discussion of the data is presented below.	Discussions of regional groundwater beneath lower Los Alamos Canyon are presented in a section of the monitoring plan that addresses San Ildefonso Pueblo and White Rock Canyon.
	Quality	No contaminants exceed regulatory standards or risk levels.	No contaminants exceed regulatory standards or risk levels.	
Contaminants	Potential Sources	TA-01, TA-02, TA-41, TA-21	TA-00, TA-01 and TA-45	

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
	Type	TA-01 Hillsides 137, 138, and 140 received discharges from septic tank outfalls from 1943 until the late 1950s. Radionuclides are the primary contaminants at these hillside sites, although some metals contamination is also present. TA-02 housed a series of research nuclear reactors, including the Omega West Reactor, which was a source of tritium releases into alluvial groundwater. Other SWMUs at TA-02 include leach fields for water boiler reactors. Cesium-137 and strontium-90 are the primary contaminants associated with the leach fields, and strontium-90 has historically been detected in alluvial groundwater monitoring wells downcanyon of the site. TA-41 was used for weapons development and long-term studies of weapon subsystems. The primary contaminant sources are a septic system and a sewage treatment plant. Initial data from these SWMUs indicate radionuclides at levels above background, but characterization of TA-41 is incomplete. TA-21 was the site of a plutonium processing plant and polonium and tritium research laboratories. Outfalls were the primary source of radionuclide contaminants in DP and upper Los Alamos Canyons. Radionuclides, particularly cesium-137 and strontium-90, are the primary contaminants discharged from this outfall.		

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
	Type (cont.)	TA-53 includes a proton accelerator and associated experimental and support buildings used for research with subatomic particles; it is the current site of the Los Alamos Neutron Science Center (LANSCE) (LANL 1994, 34756). The accelerator became fully operational in 1974. Occasional releases occurred from three surface impoundments at the east end of TA-53, referred to as consolidated unit 53-002(a)-99. These releases have contributed contamination to an unnamed tributary drainage to Los Alamos Canyon. The impoundments received sanitary, radioactive, and industrial wastewater from various TA-53 buildings as well as septic tank sludge from other Laboratory buildings. The northern impoundments were active from the early 1970s until 1993. The southern impoundment was active from 1985 until 1998. Inorganic chemicals, organic chemicals, and radionuclide contaminants have been identified at the impoundments and in the drainage (LANL 1998, 58841; LANL 2004).		

Table A-1 (continued)

Conceptual Model Element	Characteristic	Upper Los Alamos Canyon (including DP Canyon)	Pueblo Canyon (including Acid Canyon)	Lower Los Alamos Canyon
	Type (cont.)	SWMU 21-018(a), Material Disposal Area (MDA) V received liquid waste effluent from laundry operations and includes three absorption beds on the south side of DP Mesa that sometimes overflowed into Los Alamos Canyon (LANL 1991, 07529; LANL 1996, 54969). Sediment sampling in 1946 documented that plutonium from this source was entering the main channel in Los Alamos Canyon (Kingsley 1947, 04186). Additional outfalls that discharged off the south rim of DP Mesa include those from SWMUs 21-023(c), 21-024(b), 21-024(c), 21-024(i), and 21-027(a) (LANL 1991, 07529; LANL 1995, 52350). SWMU 21-029, the DP Tank Farm, was a fuel distribution station with above ground and underground fuel tanks from 1946 to 1985. Diesel range organic (DRO) and gasoline range organic (GRO) hydrocarbon contamination was identified at two areas of bedrock seeps in the DP Canyon channel and observed to periodically form a sheen in surface water adjacent to the site. (LANL 1996, 52270; LANL 2001, 71303; LANL 2001, 73436). The other MDAs at TA-21 are not considered to contribute important releases into the canyons.	Septic tank outfall occurred on the south rim of Acid Canyon in the 1940s and contained plutonium-239/240 and PCBs. Former Pueblo Canyon WWTP operated from 1951 until 1991. Sludge from the Pueblo Canyon WWTP contained metals at levels above background. Former Central WWTP operated from 1947 until 1961. Metals and organic chemicals, including mercury and dichlorodiphenyl-trichloroethane (DDT), were contaminants identified at the outfalls. Outfalls from former TA-01 and former TA-45 were the most significant sources of radionuclide and other contamination in Acid and Pueblo Canyons. TA-45 was the site of the first radioactive liquid waste treatment facility (RLWTF). TA-01 outfalls into Acid Canyon were not treated. Plutonium-239/240 is the primary contaminant, although other radionuclides, metals, and some organic chemicals are also present	

Table A-2
Sandia Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Upper Sandia Canyon (from TA-03 to bottom of State Highway 4 hill, west TA-53)	Middle Sandia Canyon (bottom of Truck Route hill to State Highway 4)	Lower Sandia Canyon (State Highway 4 to Rio Grande)
Surface Water	Flow	Flow is mainly from effluent discharges (about 330,000 gal./day). Flow is perennial for 2 to 2.5 mi from TA-03 (gage E123) to the western edge of TA-53. Intermittent for short reach near bottom of Truck Route hill and stream flow loss pronounced.	Ephemeral at gage stations E124 and E125.	Lower Sandia Canyon is ephemeral except for an intermittent reach of a few hundred yards supported by Sandia Spring approximately 0.5 mile from the Rio Grande.
	Quality	Nitrate is the only contaminant that has occasionally exceeded regulatory standards or risk levels. Water quality mostly reflects sewage effluent.		
Springs	Name	There are no springs in this reach.	There are no springs in this reach.	Sandia Spring discharges ~1gal./min approximately 0.5 miles from Rio Grande.
	Quality			No contaminants exceed regulatory standards or risk levels. Contaminant levels at detection or background levels.
Alluvial Groundwater	Extent	Not known. No wells in this reach. Likely present in reach because of effluent discharges.	Absent in eastern portion of reach. Test drilling in western portion suggests saturation in canyon south of LANSCE, but no wells tap saturation.	Not known; likely dry except below Sandia Spring.
	Depth/Thickness			
	Quality			

Table A-2 (cont.)

Conceptual Model Element	Characteristic	Upper Sandia Canyon (from TA-03 to bottom of Truck Route hill, west TA-53)	Middle Sandia Canyon (bottom of Truck Route hill to SR-4)	Lower Sandia Canyon (SR-4 to Rio Grande)
Intermediate Groundwater	Extent/Hydrology	No information available. Some intermediate water likely to be present beneath stream channel because of perennial flow conditions.	Lateral extent not certain, however R-12 and PM-1 encountered thick perched zone. This zone not encountered in PM-3 or R-11. Test drilling suggests limited saturation in Cerro Toledo south of LANSCE at 30 to 60 ft depth.	Penetrated in canyon at R-12, PM-1, PM-3, and R-11.
	Depth/Thickness		Zone in R-12 from 443 to 519 ft depth. Water level stabilized at 424 ft.	
	Quality		No contaminants exceed regulatory standards or risk levels.	
Regional Aquifer	Depth/Hydrology	No regional aquifer wells in this reach of canyon.	Penetrated by four wells in this reach: R-12, PM-1, PM-3, and R-11. Encountered at 805 ft in R-12. Higher static water level in PM-1 suggests upward flow near State Highway 4. Large-scale pumping at PM-1 and PM-3 may pull water in from adjacent canyons: Los Alamos or Mortandad.	No regional aquifer wells in this reach of canyon.
	Quality		No contaminants exceed regulatory standards or risk levels. Little, if any, impacts from LANL indicated.	
Contaminants	Potential Sources	TA-03 and former TA-20.	TAs-53, -60, -61, and -72, Los Alamos Canyon, Mortandad Canyon	No known surface sources.
	Type	Nitrate, perchlorate, chromium, copper, polychlorinated biphenyls (PCBs) in sediments, high explosives (??) from former TA-20	Tritium, nitrate, perchlorate, isotopes of uranium and plutonium, lead in surface soils.	

Table A-3
Mortandad Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	**Flow**	Mortandad Canyon and its tributaries are ephemeral. With the exception of gaging station E200, which measures flow created by discharge of treated effluent from the TA-50 RLWTF, all other gaging stations measured flow only in response to precipitation. In the period 1995–2002, gage E200 measured flow 64% of the year, where the other gages (E202, E203, E204) measured no flow. Operating NPDES-permitted outfalls associated with Mortandad Canyon include 051 associated with the TA-50 RLWTF; 03A-021 associated with the CMR Laboratory at TA-03; 03A-022 associated with the Sigma Building at TA-03; 03A-045 associated with the Rad Chem Laboratory at TA-48; 03A-160 associated with Antares Target Hall at TA-35; 03A-181 associated with a utility building at TA-55; and 04A-166 associated with water supply well Pajarito Mesa #5. Cañada del Buey within the Laboratory boundary is ephemeral in character, based on flow data from three gages; E218, E230, and E225. In the period from 1995 to 2002, the number of days of flow per year ranged from 38 at the gage near TA-46 to zero near MDA G. Cañada del Buey east of the Laboratory has effluent-supported flow from the Los Alamos County sewage treatment plant in White Rock, which discharges into Cañada del Buey about 2 mi upstream of its confluence with Mortandad Canyon, and results in effluent-supported surface flow that regularly extends to the Rio Grande. Operational NPDES-permitted outfalls associated with Cañada del Buey include 13S associated with the TA-46 Sanitary Wastewater Systems Consolidation (SWSC) Plant (effluent is sampled at 13S but not discharged; all SWSC effluent is routed to TA-03) and 04A-118 associated with water supply well Pajarito Mesa #4.
	Quality	Contaminants that exceed regulatory standards or risk levels include americum-241, plutonium-238, plutonium-239/240, strontium-90, fluorine, nitrate, and perchorate. Effluent releases have had a major impact on water quality.
	Name	No springs are present in the Mortandad Canyon.
	Quality	Not applicable

Table A-3 (cont.)

Conceptual Model Element	Characteristic	Description
Alluvial Groundwater	**Extent**	Based on water levels observed in Mortandad Canyon alluvial wells, a saturated zone in the alluvium extends downstream from the TA-50 RLWTF outfall for approximately 2.2 mi. The easternmost extent of saturation in the alluvium is estimated near wells MCO-8 and MCO-8.2. In Cañada del Buey, nine alluvial wells were installed, but only two occasionally contain groundwater.

Table A-3 (cont.)

Conceptual Model Element	Characteristic	Description
	Depth/Thickness	The saturated portion of the Mortandad Canyon alluvium is generally less than 10 ft thick and there is considerable variation in saturated thickness depending on the amount of precipitation and runoff in any particular year. Groundwater flow velocity in the alluvium varies from about 60 ft/day in the upper canyon to about 7 ft/day in the lower canyon and has been estimated to be 30 to 40 ft/day between MCO-5 and MCO-8.2.
	Quality	Contaminants that exceed regulatory standards or risk levels include americum-241, gross alpha, gross beta, plutonium-238, plutonium-239/240, strontium-90, H-3, fluorine, nitrate, and perchlorate. Effluent releases have had a major impact on water quality.
Intermediate Groundwater	**Extent/Hydrology**	Perched groundwater was encountered during drilling of R-15 and MCOBT-4.4 in two different stratigraphic levels within the Cerros del Rio basalt. The lateral extent of these intermediate depth perched zones is unknown.
	Depth/Thickness	At MCOBT-4.4, a single screen set in a perched zone within the upper Puye Formation/Cerros del Rio basalt at a depth of 524 ft below ground surface (bgs). In R-15, perched groundwater was encountered at a depth of 646 ft bgs in the lower portion of the Cerros del Rio basalt.
	Quality	Contaminants that exceed regulatory standards or risk levels include nitrate and perchlorate. Water quality shows the impact of effluent releases.
Regional Aquifer	**Depth/Hydrology**	The regional water table occurs within the Puye Formation in the Mortandad Canyon watershed. In Ten Site Canyon, approximately 3700 ft west of the confluence with Mortandad Canyon, the regional aquifer was encountered at a depth of 1182 ft in well R-14. In Test Well 8, located in Mortandad Canyon approximately 1300 ft west of the confluence with Ten Site Canyon, the regional aquifer occurs at a depth of 994 ft. The regional aquifer was encountered at a depth of 964 ft in R-15, located in Mortandad Canyon approximately 2000 ft east of the confluence with Ten Site Canyon. In well R-13, located approximately 5800 ft east-southeast of R-15, the regional aquifer was encountered at a depth of 833 ft. Flow in the regional aquifer is generally west to east with some deviation due to pumping the Pajarito Mesa well field. However, the flow tends to come back toward the east due to pumping of other wells. Average flow velocity for the regional aquifer in the vicinity of Mortandad Canyon is estimated to be about 95 ft/yr.
	Quality	Wells R-13 and R-14 have not shown contamination in the regional aquifer during drilling and/or subsequent characterization sampling. Contaminants that exceed regulatory standards or risk levels include perchlorate in well R-15.
Contaminants	**Potential Sources**	A description of potential release sites (PRSs) in the Mortandad watershed is provided in Work Plan for Mortandad Canyon. The canyon passes through or is adjacent to current Laboratory Technical Areas (TAs) 03, 05, 35, 46, 48, 50, 51, 52, 54, 55, 59, 60, and 63. PRSs in Cañada del Buey are provided in the "Work Plan for Sandia Canyon and Cañada del Buey." Cañada del Buey has been a buffer zone for surface and subsurface material disposal areas at TA-54 and for effluent disposal, mostly from former TA-04. It also received discharges from TA-46, -51, and -52. Outfall discharges into Mortandad Canyon are described in the "Work Plan for Mortandad Canyon." Mortandad Canyon and its tributaries have received effluent from the Laboratory since the early 1950s. Outfall discharges into the Cañada del Buey drainage are described in the Work Plan for Sandia Canyon and Cañada del Buey. Cañada del Buey received effluent from the Laboratory from the 1950s to the 1990s.

Table A-3 (cont.)

Conceptual Model Element	Characteristic	Description
	Type	TA-03 activities include administrative offices and support facilities plus various division laboratories and technical shops. TA-05 contains some physical support facilities, tests wells, and environmental monitoring and buffer areas. TA-35 activities include research laboratories for nuclear safeguards research and development, reactor safety, laser fusion, optical sciences, pulsed-power systems, high energy physics, tritium fabrication, metallurgy, ceramic technology, and chemical plating. TA-46 activities include research laboratories for applied photochemistry and organic and materials chemistry plus environmental management operations and the Sanitary Wastewater System Facility. TA-48 activities include research on nuclear and radiochemistry, geochemistry, biochemistry, and actinide chemistry. TA-50 activities include management and processing of industrial liquid and radioactive liquid wastes and it houses the RLWTF. TA-51 activities include environmental research and experimental studies for radioactive waste storage. TA-52 activities include research on nuclear reactor performance and safety. TA-54 activities include radioactive solid and hazardous chemical waste management and disposal operations. TA-55 activities include plutonium processing and research on plutonium metallurgy. TA-59 activities include occupational health and safety management, environmental management, and emergency management. TA-60 contains physical support and infrastructure facilities including the Test Fabrication Facility and Rack Assembly and the Alignment Complex. TA-63 contains physical support facilities and activities include environmental and waste management functions and facilities. The effluent discharged from TA-03, TA-35, TA-48, and TA-50 has contained a variety of contaminants, including nitrate, perchlorate, tritium, cesium-137, strontium-90, americium-241, and several isotopes of uranium and plutonium.

Table A-4
Pajarito Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Pajarito Canyon	Twomile Canyon	Threemile Canyon
Surface Water	Flow	Surface water occurs in Pajarito Canyon mostly as intermittent flow. Short reaches of perennial flow occur downstream of spring discharges in Starmers Gulch and below the 4-series springs in White Rock Canyon. Surface water flow is ephemeral in central Pajarito Canyon between the confluences with Twomile and Threemile Canyons. Flow is also ephemeral through White Rock.	Flow is ephemeral west of TA-03 and is possibly intermittent from TA-03 to the confluence with Pajarito Canyon.	Threemile Canyon is ephemeral except for a possibly intermittent reach supported by springs above the confluence of Threemile and Pajarito Canyons.

Conceptual Model Element	Characteristic	Pajarito Canyon	Twomile Canyon	Threemile Canyon
	Quality	Contaminants that exceed regulatory standards or risk levels include RDX and possibly mercury and nitrate.	There are no surface water chemistry results for Twomile Canyon except for a small tributary below building SM-30 in TA-03. Samples from the tributary show elevated mercury in unfiltered samples.	Contaminants that exceed regulatory standards or risk levels include RDX .
Springs	Name	In the western portion of Pajarito Canyon, springs issue from canyon slopes above the alluvium. The probable source of these springs is the upper part of the Tshirege Member of the Bandelier Tuff. Typical discharge rates are approximately 1 to 15 gal./min. Springs include PC, Homestead, Upper Starmer, Charlies, Garvey, Perkins, Starmer, and Josie Springs, Keiling and Bulldog Springs.	Springs issue from the canyon floor of upper Twomile Canyon in TA-03 and 58. These springs include Hanlon, Anderson, SM-30, SM-30A, and TW-1.72 Springs.	There are two springs on the floor of Threemile Canyon. These springs include Threemile and TA-18 Springs.
	Quality	Contaminants that exceed regulatory standards or risk levels include RDX and perchlorate, which have been detected in spring water at TA-08 and TA-09.	There are no screening data for springs in Twomile Canyon.	No contaminants exceed regulatory standards or risk levels.

Table A-4 (cont.)

Conceptual Model Element	Characteristic	Pajarito Canyon	Twomile Canyon	Threemile Canyon
Alluvial Groundwater	Extent	There are no alluvial wells in western Pajarito Canyon, so information about the nature and extent of alluvial groundwater is limited. Most likely, infiltration of surface water creates a saturated zone where alluvium is present from the Pajarito fault zone across the Laboratory to White Rock. Alluvial wells have been installed between TA-18 and State Highway 4. These wells demonstrate the presence of alluvial groundwater in this part of Pajarito Canyon. The drilling of seven test holes in 1985 showed that the saturation in lower Pajarito Canyon does not extend laterally under Mesita del Buey near MDAs G and L (Devaurs 1985, 7416; Devaurs 1985, 07415). Three of the alluvial test holes were completed as groundwater monitoring wells (PCO-1, -2, and -3). An additional 20 alluvial wells were installed between 1990 and 1998 by the Environmental Restoration Project as part of the RCRA facility investigation (RFI) for TA-18.	There are no alluvial wells in Twomile Canyon and the extent of alluvial groundwater, if present, is unknown.	Alluvial groundwater has been documented in lower Threemile Canyon at 18-BG-1 and 18-MW-8.
	Depth/Thickness	Wells PCO-1, -2, and -3 are probably representative of alluvial groundwater between TA-18 and State Highway 4. When installed, depth to water was 1.3 ft in PCO-1, 6.3 ft in PCO-2, and 3.1 ft in PCO-3 (Purtymun 1995, 45344). Assuming continuous saturation in the alluvium, the saturated thickness is about 9.7 ft in PCO-1, 2.7 ft in PCO-2, and 8.9 ft in PCO-3. The saturated thickness varies seasonally, with no water present in dry years.	No Data.	In well 18-BG-4, the water level was 2.5 ft bgs.
	Quality	Contaminants that exceed regulatory standards or risk levels include hexahydro-1,3,5,trinitro-1,3,5-triazine (RDX) and possibly beryllium, lead, and plutonium-239/240.	No Data.	No contaminants exceed regulatory standards or risk levels.

Table A-4 (cont.)

Conceptual Model Element	Characteristic	Pajarito Canyon	Twomile Canyon	Threemile Canyon
Intermediate Groundwater	Extent/Hydrology	Intermediate perched water is likely to occur beneath Pajarito Canyon, but knowledge of its extent and quality is incomplete. Perched water was indicated during the drilling of PM-2 and SHB-4 in the vicinity of TA-18. At PM-2, a "show of water at 335 ft" was noted in the Otowi Member of the Bandelier Tuff during the cable-tool drilling (Cooper et al. 1965, 8582). In SHB-4, the core tube and core from the top of the Otowi Member from about 125 ft to 145 ft came out of the hole wet (Gardner et al. 1993, 12582). Test Holes 5 and 6 were drilled in 1950 to detect perched groundwater in Pajarito Canyon south of TA-54. Test Hole 5 was drilled through the Bandelier Tuff and into basalts at a total depth of 263 ft. Test Hole 6 was also drilled through the tuff and into basalts to a total depth of 300 ft (Griggs 1955, 08795). These dry test holes indicate that perched water does not occur in the upper part of the vadose zone in this part of the canyon. Between 2000 and 2002 regional wells R-20, R-22, R-23, and R-32 were installed in lower Pajarito Canyon. Perched intermediate water was not identified during the drilling of wells R-20, R-22, and R-32. However, at R-23, near the eastern Laboratory boundary, there were indications that perched intermediate water may be present in Cerros del Rio basalt. However, R-23 is only screened in the regional aquifer.	Well 03-MW-1 is a 28-ft-deep mesa top well that samples shallow intermediate perched water near building SM-30 at TA-03. A thin zone of saturation occurs in tuffs of the upper Tshirege Member.	Characterization well R-19, located on the mesa south of Threemile Canyon, had indications of possible perched water at depths of 834 to 840 ft and 894 to 912 ft (Broxton et al. 2001, 71253). Both zones were screened in the completed well, but only the 894 to 912 ft interval (screen 2) in the Puye Formation yields water.
	Depth/Thickness	See above	Depth to water in well 03-MW-1 is 20 ft.	See above

Table A-4 (cont.)

Conceptual Model Element	Characteristic	Pajarito Canyon	Twomile Canyon	Threemile Canyon
	Quality	No Data.	Characterization sampling for 03-MW-1 found elevated concentrations of mercury, tritium, and volatile organic compounds (VOCs). A Groundwater Investigation Work Plan is being prepared to determine the extent of this perched zone.	No contaminants exceed regulatory standards or risk levels. Samples from well R-19 indicate there are impacts to the intermediate perched water from Laboratory operations.
Regional Aquifer	Depth/Hydrology	Based on Laboratory water level maps, the general direction of groundwater flow in the regional aquifer is east to southeast in the vicinity of Pajarito Canyon. Depth to the regional aquifer is known in Pajarito Canyon at supply well PM-2 and in characterization wells R-20, -22, -23, and -32. The nonpumping water level for PM-2 in 2001 was at a depth of 855 ft. In 2002, the top of the regional water table was at a depth of 826 ft in R-20, 890 ft in R-22, 828 ft in R-23, and 776 ft in R-32. R-23 is completed with a single well screen, R-20 and R-32 have three well screens, and R-22 has five well screens. The upper portion of the regional aquifer probably discharges at Spring 4A in White Rock Canyon.	There are no regional aquifer wells associated with Twomile Canyon.	Well R-19 is located on the mesa south of Threemile Canyon. It is downgradient from firing site IJ in TA-36 and is upgradient of TA-18. In addition to two screens in the vadose zone (described above), R-19 has five screens in the regional aquifer.
	Quality	No contaminants exceed regulatory standards or risk levels. Water quality of the regional aquifer beneath eastern Pajarito Canyon shows little, if any, impacts from LANL operations. Sampling at R-22 above background tritium in several screens. Routine surveillance sampling of PM-2 shows the groundwater meets regulatory standards.	No data.	No contaminants exceed regulatory standards or risk levels. Sampling at R-19 indicates no impacts to the regional groundwater from Laboratory operations.
Contaminants	Potential Sources	TAs -08, -09, -15, -22, -36, -36, -40, and -54	TAs -03, -06, -40, -48, -55, -59, -64, and -69	TAs -15, -18, and -36
	Type	Metals, radionuclides, high explosives, VOCs, and anions	mercury, tritium, and VOCs	HE, VOCs

Table A-5
Water Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Upper Water Canyon & Cañon de Valle	Middle Water Canyon	Lower Water, Fence, and Potrillo Canyons
Surface Water	Flow	*Water Canyon*: Perennial from State Highway 501 to the eastern edge of TA-28. Intermittent surface water occurs in upper Water Canyon (gage E252) primarily in the spring. *Cañon de Valle:* Perennial from Peter Seep to gage E256. Intermittent surface water exists from natural and anthropogenic sources to gage E262.	Ephemeral at gage station E265.2.	Lower Water Canyon is ephemeral, except for a perennial reach supported by Spring 5AA near the confluence of Water and Potrillo canyons. Potrillo Canyon and Fence Canyon are entirely ephemeral.
	Quality	*Cañon de Valle*: Concentrations of barium (2–3 ppm) and the high explosive RDX (>100 ppb), trinitrotoluene[2,4,6-], perchlorate, and possibly mercury exceed regulatory standards or risk levels.	Surface water chemistry results show contaminant levels at detection or background levels.	No contaminants exceed regulatory standards or risk levels. Uranium is significantly greater than background in surface water (11.9 ppb) near the firing sites, yet no significant elevation in concentrations at State Highway 4.
Springs	Flow	Armistead Spring and American Spring, west of LANL, and SWSC, Burning Ground, Martin, and the Hollow (on LANL property) and others in the upper reaches of Cañon de Valle	There are no springs in the vicinity of TA-49, except for the seep near the Beta hole.	Spring 5AA in lower Water Canyon. No springs in Potrillo Canyon or in Fence Canyon.
	Quality	Contaminants that exceed regulatory standards or risk levels include RDX, barium, dichloroethane[1,2-], tetrachloroethene, trichloroethene, perchlorate, and possibly mercury.		

Conceptual Model Element	Characteristic	Upper Water Canyon & Cañon de Valle	Middle Water Canyon	Lower Water, Fence, and Potrillo Canyons
Alluvial Groundwater	Extent/Hydrology	*Water Canyon*: Some alluvial groundwater may be present near the headwaters. Because of the limited addition of water, lack of springs and seeps, and rare discharge from tributary canyons, the occurrence and duration of alluvial groundwater likely decreases downcanyon. *Cañon de Valle*: Alluvial groundwater system near SWSC and Burning Ground Springs is perennial. Alluvial water in Martin Canyon and the Fishladder drainage is intermittent.	Alluvial groundwater is in WCM-1 and WCM-2, but no water is present in WCO-1, WCO-2, and WCO-3, though water was found in WCO-2 in 2005. In most years, the downstream extent of alluvial groundwater may be between the WCM-2 and WCO-1.	*Potrillo*: one known occurrence of alluvial groundwater in Potrillo Canyon in moisture access hole POTM-2. Several other boreholes have been drilled near this area to define the extent of the groundwater found in POTM-2 but all are dry. *Fence:* No occurrences of alluvial groundwater have been documented for Fence Canyon. However, only one well was installed, well FCO-1, located near State Highway 4. Based on physiography, no alluvial water is expected.

Table A-5 (cont.)

Conceptual Model Element	Characteristic	Upper Water Canyon & Cañon de Valle	Middle Water Canyon	Lower Water, Fence, and Potrillo Canyons
	Depth/Thickness	Alluvium is typically less than10 ft thick, however, saturation does extend into the tuff		
	Quality	*Cañon de Valle* : Barium, RDX, dinitrobenzene[1,3-], trinitrotoluene[2,4,6-], perchlorate, and possibly lead exceed regulatory standards or risk levels.		
Intermediate Groundwater	Extent/Hydrology	Lateral extent of the deep perched zone has not been determined, however in R-25 and SHB-3 a thick perched zone was encountered. Shallower, disconnected, and transient zones of perched saturation have been identified elsewhere within the TA-16 mesa.	No perched water was encountered in any of the holes and all holes have remained dry with the exception of core hole CH-2. DT-5, DT-5P, and four core holes (CH-1, CH-2, CH-3, and CH-4) were drilled to depths of 300 to 500 ft at the main experimental area and more than 50 experimental holes were drilled as deep as 142 ft in Areas 1, 2, 2A, 2B, 3, and 4 from 1959 to 1961. CH-2 may have an undetected natural perched zone; however, this seems unlikely because this recharge pathway apparently developed more than a decade after the hole was completed.	*Water*: None found in the two existing CDV wells (CDV-R-15 and CDV-R-37). *Potrillo and Fence*: The presence of perched water can not be determined from available data.

Table A-5 (cont.)

Conceptual Model Element	Characteristic	Upper Water Canyon & Cañon de Valle	Middle Water Canyon	Lower Water, Fence, and Potrillo Canyons
	Depth/Thickness	R-25: 711-1132 ft		
	Quality	RDX, trinitrotoluene[2,4,6-], trichloroethene, and possibly lead exceed regulatory standards or risk levels.		
Regional Aquifer	Depth/Hydrology	R-25 encountered the regional aquifer at 1286 ft.		Water supply well PM-2: 730 ft below the bottom of Potrillo Canyon and 620 ft below the bottom of Fence Canyon.
	Quality	RDX is the only contaminant exceeding regulatory standards or risk levels that was detected, although this may have been from cross contamination from the perched zone above. HE concentrations are decreasing in the regional aquifer with time, while they are remaining relatively constant in the perched zone.		
Contaminants	Potential Sources	TAs -08, -09, -11, -14, -15, and -16	TA-49	TAs -14, -15, -36
	Type	HE, barium, solvents	Isotopes of uranium and plutonium, lead, beryllium, and explosives such as TNT, RDX, HMX, and barium nitrate	Nitrated organic compounds such as TNT, nitrocellulose, trinitramines, and pentaerythritol tetranitrate (PETN). Metals may also be associated with the explosives (uranium, barium, beryllium, lithium hydride, lead, mercury, copper, and zinc). Soils in several of these operational areas have high levels of uranium contamination.

Table A-6
White Rock Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	Flow	Flow from regional aquifer springs supports perennial surface water flow in several canyons just above where they reach the Rio Grande: Sandia, Pajarito, Ancho, and Chaquehui Canyons. Except for Sandia Canyon, these flows reach the Rio Grande. A municipal sanitary treatment plant discharges effluent into Mortandad Canyon just above the river at the northern county boundary.
	Quality	Barium is the only constituent that has been detected above regulatory standards or risk levels in surface water (in 2 of 28 samples). Water quality of the other streams is mainly determined by the chemistry of their contributing springs (summarized in the regional aquifer description below). The discharge from the municipal sanitary treatment plant is the primary surface water source and has a strong impact on the chemistry of the water that enters the Rio Grande from Mortandad Canyon, leading to higher total dissolved solids (TDS), nitrate, chloride, sulfate, and some metals.
Springs	Name	Springs near the Rio Grande represent natural discharge from the regional aquifer. Regional aquifer springs are present just above the Rio Grande in Sandia, Pajarito, Ancho, and Chaquehui canyons. Los Alamos Canyon and Water Canyon do not have significant springs in their lower reaches. A small seep (Otowi Spring) emerges along the Rio Grande bank south of Los Alamos Canyon. A small seep (Spring 5AA) issues from the Totavi Lentil in lower Water Canyon, but seldom has sufficient water for sampling. Springs discharge from two geologic units: the Tesuque Formation and the Totavi Lentil (the lower part of the Puye Formation). The Tesuque Formation consists of sandstones, siltstones, and interbedded basalts. The Totavi Lentil is a channel-fill deposit made up of grain sizes ranging from gravel to boulders. Purtymun divided the springs into four groups based on geologic unit and chemistry. Group I springs discharge from the Totavi Lentil on the west side of the river. Water is dominated by calcium bicarbonate with sulfate and chloride of about 4 mg/L and TDS averages 163 mg/L. These springs follow the outcrop of the Totavi Lentil, increasing their elevation above the river in a downstream direction. These higher elevation springs generally occur on the flanks of or in the bottom of canyons where erosion has exposed the Totavi Lentil. Group II springs discharge from coarse-grained Tesuque Formation sediments on both sides of the river. These springs have sodium bicarbonate water with about 3 mg/L of sulfate and chloride, and TDS averages 183 mg/L. Group III springs discharge from fine-grained Tesuque Formation sediments on the west side of the river. These springs also have sodium bicarbonate water with about 10 mg/L of sulfate, 3 mg/L of chloride and TDS averages 215 mg/L. Group IV springs discharge from fine-grained Tesuque Formation sediments on the east side of the river near faults and basalt flows. These springs have varied chemistry with higher TDS than the other springs, of 270 to 500 mg/L. Most of the springs discharge close to the elevation of the Rio Grande, though some springs discharge at elevations several tens of feet above the Rio Grande. There are different hypotheses about the meaning of the elevation of springs above the river. One hypothesis is the elevations could reflect channeling of discharge from the regional aquifer along the higher-permeability Totavi Lentil, combined with the increase in elevation of the water table with distance west of the river. Another hypothesis of spring occurrence is that the elevation of springs above the river could reflect local variations in permeability and geology related to numerous landslides along the canyon walls. A third hypothesis is that the elevation of some springs above the river indicates that they discharge from perched groundwater located above the regional aquifer.

Table A-6 (cont.)

Conceptual Model Element	Characteristic	Description
	Quality	The U.S. Geological Survey and the Laboratory have monitored chemistry of the White Rock Springs since the 1960s; the springs show no clear impact of Laboratory contamination. One sample of 67 from all springs (and 1 of 8 from this spring) showed RDX, trinitrotoluene[2,4,6-], and HMX above regulatory standards or risk levels.
Alluvial Groundwater	Extent	Alluvial groundwater is not present in the White Rock Canyon area. However, household wells in Los Alamos Canyon (Halladay and Otowi) and household wells nearer the Rio Grande probably draw their water from Santa Fe Group sediments but may draw water in part from alluvium in these drainages.
	Depth/Thickness	Not applicable.
	Quality	Not applicable
Intermediate Groundwater	Extent/Hydrology	Perched intermediate groundwater may not be present in the White Rock Canyon area. However, an alternative hypothesis about White Rock Canyon spring origin is that the elevation of some springs above the river indicates that they discharge from perched groundwater located above the regional aquifer.
	Depth/Thickness	Not applicable.
	Quality	Not applicable.
Regional Aquifer	Depth/Hydrology	The Rio Grande is the major groundwater discharge point for the regional aquifer underlying the Pajarito Plateau. The river gains flow through White Rock Canyon (Purtymun 1995, 45344) indicating that the local water table lies above the river. The Buckman well field lies adjacent to the Rio Grande on the east bank and includes eight pumping wells. These wells draw their water from Santa Fe Group sediments. Water in these wells is quite old, having passed through the deeper portion of the basin fill sediments where it acquired a higher load of dissolved solutes. San Ildefonso Pueblo draws water from more than 10 community and household wells located on both sides of the Rio Grande. Little information on depth or geology for these wells is available. Many of these wells probably draw their water from Santa Fe Group sediments. At least two of the San Ildefonso wells are uncapped artesian wells.
	Quality	Except for naturally occurring constituents, no constituents exceed regulatory standards or risk levels. Some Buckman wells have exceptionally high uranium (up to 230 ppm, compared to the new EPA MCL of 30 ppm). Such naturally occurring uranium is common in the Pojoaque and Tesuque area. The Buckman wells also have high sodium, alkalinity, and total dissolved solids. San Ildefonso Pueblo household wells also produce older water from deep within the basin, and have high sodium, chloride, alkalinity, and TDS, as well as uranium, arsenic, and boron.
Contaminants	Potential Sources	TA-33 borders the Rio Grande, a site where tritium activities formerly occurred. The low- to moderate-density residential area of White Rock borders the Rio Grande to the north of the Laboratory boundary in White Rock Canyon. A municipal sanitary treatment plant discharges effluent into Mortandad Canyon just above the river at the northern county boundary.

Table A-6 (cont.)

Conceptual Model Element	Characteristic	Description
	Type	TA-33 was used as a firing site and for production of tritium. PRSs include landfills, septic systems, and burn areas It is situated on a mesa top and is being investigated by the Environmental Restoration (ER) Project as Operable Unit (OU) 1122. If contaminants are released from TA-33, they may impact Ancho Canyon, Chaquehui Canyon, or the Rio Grande. The discharge from the municipal treatment plant is the primary surface water source and has a strong impact on the chemistry of the water that enters the Rio Grande from Mortandad Canyon, leading to higher TDS, nitrate, chloride, sulfate, and some metals.

Table A-7
Guaje Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	Flow	Guaje Canyon heads in the Sierra de los Valles and is part of the Los Alamos Canyon watershed. Guaje Canyon contains an interrupted stream with a perennial reach extending from springs located upstream of Guaje Reservoir to some distance downstream of the reservoir. An intermittent reach extends farther downstream to the confluence with lower Los Alamos Canyon. Snowmelt runoff does not reach the Rio Grande. Guaje Canyon crosses San Ildefonso Pueblo land and continues to its confluence with lower Los Alamos Canyon approximately a mile west of the Rio Grande. Rendija Canyon heads on the flanks of the Sierra de los Valles and contains an ephemeral stream. Barrancas Canyon heads on the Pajarito Plateau and has intermittent and ephemeral flow. No springs have been found in any of these canyons. Base flow has been monitored at the station Guaje Canyon located below the reservoir for several decades. Gaging stations in these canyons include Guaje above Rendija, Rendija above Guaje, and Guaje at SR-502. For many gages, flow information is not available. These gages do not yet have an established rating curve.
	Quality	No constituents exceed regulatory standards or risk levels.
Springs	Name	none
	Quality	N/A
Alluvial Groundwater	Extent	Only two alluvial wells have been installed in Guaje Canyon to investigate the presence of alluvial groundwater. These wells were completed in the perennial reach of the canyon and alluvial groundwater was encountered near the stream level. For Rendija and Barrancas Canyons, no alluvial wells have been installed and no alluvial groundwater is known.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable

Conceptual Model Element	Characteristic	Description
Intermediate Groundwater	Extent/ Hydrology	No intermediate groundwater wells have been installed and no groundwater is known to exist in these canyons. Drilling of the water supply wells in Rendija and Guaje canyons has not found any intermediate groundwater.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.

Table A-7 (continued)

Conceptual Model Element	Characteristic	Description
Regional Aquifer	Depth/ Hydrology	The regional aquifer occurs in the Puye Formation and the Santa Fe Group near Guaje Canyon. The regional aquifer probably includes rocks of the Tschicoma Formation in the western part of the canyons. The regional aquifer supplies water to the wells of the Guaje well field. Groundwater flow in the regional aquifer is from the northwest, so no Laboratory contaminant sources are located upgradient of Guaje Canyon sites. The aquifer lies at depths of about 230 to 570 ft in the Guaje well field.
	Quality	No constituents exceed regulatory standards or risk levels except for high levels of naturally occurring arsenic up to 40 µg/L in older, now-abandoned wells. The EPA maximum contaminant level (MCL) for arsenic is 10 µg/L.
Contaminants	Potential Sources	These canyons are north of the Laboratory and likely not affected by contamination. However, Rendija Canyon contained a small arms firing range and several sites used as mortar impact areas.
	Type	Metals, high explosives (HE)

Table A-8
Bayo Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	Flow	Bayo Canyon is part of the Los Alamos Canyon watershed. Bayo Canyon heads on the Pajarito Plateau on land owned by Los Alamos County and extends across the northeast portion of the Laboratory (TA-74), crosses San Ildefonso Pueblo land to the east, and terminates at its confluence with lower Los Alamos Canyon near Totavi. Surface water flow in Bayo Canyon is ephemeral and intermittent and there are no springs in the vicinity. Stream loss caused by infiltration into the underlying alluvium and evapotranspiration typically prevents surface flow from discharging to Los Alamos Canyon. The only gaging station in Bayo Canyon is Bayo below TA-10.
	Quality	None.
Springs	Name	None.
	Quality	N/A
Alluvial Groundwater	Extent	No alluvial groundwater was encountered during drilling of about 90 boreholes at the TA-10 site in upper Bayo Canyon.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable
Intermediate Groundwater	Extent/ Hydrology	None known.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.
Regional Aquifer	Depth/ Hydrology	The regional aquifer occurs in the Puye Formation and the Santa Fe Group in the vicinity of Bayo Canyon. The regional aquifer probably includes rocks of the Tschicoma Formation in the western part of the canyons. The regional aquifer supplies water to the wells of the Guaje well field. The aquifer lies at depths of about 230 to 570 ft in the Guaje well field.
	Quality	No constituents exceed regulatory standards or risk levels except for high levels of naturally occurring arsenic up to 40 µg/L in older, now-abandoned wells.
Contaminants	Potential Sources	Former radiochemistry laboratory and firing sites at Bayo Canyon Site, TA-10
	Type	Strontium-90 and other constituents

Table A-9
Ancho Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	Flow	Ancho Canyon heads on the Pajarito Plateau and for the most part has ephemeral flow. The canyon has two main branches, the northern one known as North Ancho Canyon. Gaging stations include Ancho above north fork Ancho, Ancho north fork below SR-4, and Ancho below SR-4. These stations have shown little flow. The average discharge for Ancho below SR-4 from seven years of record is 0.005 cfs or 3.6 ac-ft/yr. No other information on surface water quality or flows is available. The only perennial section of the canyon is near the Rio Grande.
	Quality	No constituents exceed regulatory standards or risk levels
Springs	Name	Beginning less than a mile above the Rio Grande, Ancho Canyon is perennial, with flow fed by Ancho Spring, a regional aquifer spring.
	Quality	N/A
Alluvial Groundwater	Extent	Little is known about the presence of alluvial groundwater in Ancho Canyon. Ancho Canyon contains thick alluvium that could host perched groundwater, and three boreholes (ASC-15, ASC-16, and ASC-18) drilled by the ER Project encountered 4 ft to 9 ft of saturation in alluvium below MDA Y. Several boreholes drilled downgradient of MDA Y encountered no alluvial groundwater, suggesting the occurrence of alluvial groundwater in this area is limited in extent.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.
Intermediate Groundwater	Extent/ Hydrology	No intermediate perched zones have been found beneath Ancho Canyon, although further borehole information may change this. ER borehole DMB-1, drilled between Building 69 and the administrative area at TA-39, penetrated 119 ft of Bandelier Tuff and 5 ft of Cerros del Rio basalts. No intermediate-depth perched water was encountered in this hole, but clay-lined fractures and vesicles in the basalt suggest that periodic passage of groundwater through these rocks may occur. A test hole (TH-7) drilled 10 ft into basalts in Ancho Canyon below State Highway 4 was dry. The hole was drilled in 1950 and has since been plugged. R-31 was drilled in TA-39 in the north fork of Ancho Canyon. A screen was placed from 439 to 454 ft at a possible perched zone, based on water seen in a borehole video. The zone has been dry since and no water samples have been collected from it.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.

Table A-9 (continued)

Conceptual Model Element	Characteristic	Description
Regional Aquifer	Depth/ Hydrology	Groundwater flow in the regional aquifer beneath Ancho Canyon is to the east and southeast, towards the Rio Grande. The regional aquifer lies at about 1000 to 1170 ft beneath the mesa at TA-49, and is within the Cerros del Rio basalt, the underlying Puye Fanglomerate, "Totavi" gravels, and possibly the Santa Fe Group. Regional aquifer characterization well R-31 in TA-39 found the regional aquifer at about 530 ft within the Cerros del Rio basalt, the underlying Puye Fanglomerate, and "Totavi" gravels. Postdrilling water quality sampling has not been completed at this well.
	Quality	No constituents exceed regulatory standards or risk levels. Three regional aquifer wells at TA-49 have been sampled since the 1960s to monitor for effects of testing at that site. In general no effects have been found. High metal concentrations (lead, zinc, iron, manganese) in samples are related to metal well casing and fittings. Occasional detections of organic compounds are not supported by follow up sampling. Analysis of water at Ancho Spring by the Environmental Surveillance Program indicates occasional presence of explosives and trace levels of depleted uranium. Because the spring issues from the canyon floor, it is uncertain whether these contaminants are being transported by groundwater or if they are being mobilized from sediments in the canyon. Ancho Spring is downgradient of explosives testing sites. Spring sampling is covered in a separate part of the monitoring plan.
Contaminants	Potential Sources	Firing sites and underground testing sites at TA-49 and TA-39.
	Type	HE, radionuclides, metals.
	Quality	N/A
	Quality	N/A
	Depth/ Thickness	Not applicable.
	Quality	Not applicable
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.

Table A-10 Chaquehui Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	Flow	Chaquehui Canyon heads on the Pajarito Plateau and contains an ephemeral stream in its upper portion. About 0.5 mi above the Rio Grande, Doe Spring, a regional aquifer spring, maintains a short perennial reach. Farther down the drainage, Springs 9 and 9A maintain perennial flow that extends 0.25 mi to the Rio Grande. Gaging stations in Chaquehui Canyon include Chaquehui at TA-33 and Chaquehui tributary at TA-33. No flow data were available in 2002. The gaging stations have insufficient data to establish flow-rating curves.
	Quality	No constituents exceed regulatory standards or risk levels.
Springs	Name	Springs issue from basalts near the Rio Grande in the area of Chaquehui Canyon (Springs 8A, 9, 9A, 9B, and Doe). These springs are located 130–200 ft above the Rio Grande, and they may represent discharge points for intermediate depth perched water bodies. Alternatively, these springs may represent discharge from the regional aquifer in White Rock Canyon. Spring sampling is covered in the White Rock Canyon spring portion of the Interim Plan.
	Quality	No particular contamination has been found in these springs. Spring sampling is covered in the White Rock Canyon spring portion of this plan.
Alluvial Groundwater	Extent	Little is known about the presence of alluvial groundwater in Chaquehui Canyon. Much of Chaquehui Canyon is unlikely to contain perched alluvial groundwater because most of its course forms a steep narrow drainage through basalts that are swept free of alluvium by runoff. Purtymun reported that there was water perched locally in the alluvium but provided no basis for this statement. Purtymun probably refers to alluvium downstream of Doe Spring and Springs 9 and 9A.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable
Intermediate Groundwater	Extent/ Hydrology	No intermediate groundwater is known in Chaquehui Canyon; however there has been no drilling in the area.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.

Table A-10 (continued)

Conceptual Model Element	Characteristic	Description
Regional Aquifer	Depth/ Hydrology	Characterization well R-31 in TA-39 (Ancho Canyon) found the regional aquifer at about 530 ft within the Cerros del Rio basalt, the underlying Puye Fanglomerate, and "Totavi" gravels.
	Quality	Post-drilling water quality sampling has not been completed at R-31.

Table A-10 (continued)

Conceptual Model Element	Characteristic	Description
Contaminants	Potential Sources	TA-33 was used as a firing site and for production of tritium. PRSs include landfills, septic systems, and burn areas.
	Type	Tritium

Table A-11
Frijoles Canyon Watershed Conceptual Model

Conceptual Model Element	Characteristic	Description
Surface Water	Flow	Frijoles Canyon lies south of Laboratory land and heads within the Sierra de los Valles. Rito de los Frijoles is a perennial stream that originates in the upper canyon and extends to the Rio Grande. The stream originates from springs in upper Frijoles Canyon. A gaging station in Frijoles Canyon is Rito de los Frijoles at Bandelier. In 2002 there were 365 days with flow, a total volume of 439 acre-feet, and a maximum flow of 19 cfs.
	Quality	No constituents exceed regulatory standards or risk levels. The Laboratory has monitored surface water quality at two locations for several decades, one near the Bandelier National Monument headquarters, and one just above the Rio Grande. In general, sampling shows no Laboratory-derived contamination in Rito de los Frijoles. The National Park Service has monitored surface water quality extensively in Frijoles Canyon. Fecal coliform count and other constituents related to septic systems are a major issue in surface water quality. Some hints of HE compounds were found in samples in upper Frijoles Canyon in the late 1990s but these results have not been repeated.
Springs	Name	One regional aquifer spring, Spring 10, discharges at the edge of the Rio Grande south of Frijoles stream. The spring has a very low discharge and is difficult to sample separately from river water.
	Quality	Spring 10 chemistry has not shown any LANL impact. No constituents exceed regulatory standards or risk levels
Alluvial Groundwater	Extent	No wells have been drilled into the alluvium in Frijoles Canyon. Purtymun and Adams note that the alluvium is probably thin, on the order of 6 m or less. The presence of perennial surface flow suggests a large extent of alluvial saturation.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.
Intermediate Groundwater	Extent/ Hydrology	No intermediate groundwater is known to exist in the area of Frijoles Canyon, however no wells have been drilled.
	Depth/ Thickness	Not applicable.
	Quality	Not applicable.

Table A-11 (continued)

Conceptual Model Element	Characteristic	Description
Regional Aquifer	Depth/Hydrology	No regional aquifer wells are located in Bandelier National Monument. The nearest wells are in Ancho Canyon and are described in that part of the plan.
	Quality	No regional aquifer wells are located in Bandelier National Monument. The nearest wells are in Ancho Canyon and are described in that part of the plan.
Contaminants	Potential Sources	Septic systems at Bandelier National Monument
	Type	Fecal coliform.

REFERENCES

The following list includes all documents cited in this plan. Parenthetical information following each reference provides the author, publication date, and ER ID number. This information is also included in text citations. ER ID numbers are assigned by the ENV-ERS Program Records Processing Facility (RPF) and are used to locate the document at the RPF.

Broxton, D., R. Warren, D. Vaniman, B. Newman, A. Crowder, M. Everett, R. Gilkeson, P. Longmire, J. Marin, W. Stone, S. McLin, and D. Rogers, May 2001. "Characterization Well R-12 Completion Report," Los Alamos National Laboratory report LA-13822-MS, Los Alamos, New Mexico. (Broxton et al. 2001, 71252)

Cooper, J. B, W. D. Purtymun, and C. E. John, 1965. "Records of Water-Supply Wells Guaje Canyon 6, Pajarito Mesa 1, and Pajarito Mesa 2, Los Alamos, New Mexico," Los Alamos National Laboratory report, Los Alamos, New Mexico. (Cooper et al. 1965, 08582)

Devaurs, M., 1985. "Core Analysis and Observation Well Data from Mesita del Buey Waste Disposal Areas and in Adjacent Canyons," Los Alamos National Laboratory document LA-UR-85-4003, Los Alamos, New Mexico. (Devaurs 1985, 07416)

Devaurs, M., 1985. "Hydrogeologic Characteristics of the Alluvial Aquifers in Mortandad, Canada de Buey and Pajarito Canyons," Los Alamos National Laboratory document LA-UR-85-4002, Los Alamos, New Mexico. (Devaurs 1985, 07415)

Devaurs, M., and W. D. Purtymun, 1985. "Hydrologic Characteristics of the Alluvial Aquifers in Mortandad, Canada del Buey and Pajarito Canyons," Los Alamos National Laboratory document LA-UR-85-4002, Los Alamos, New Mexico. (Devaurs and Purtymun 1985, 07415)

ESP (Environmental Surveillance Program), December 2002. "Environmental Surveillance at Los Alamos during 2001," Los Alamos National Laboratory report LA-13979-ENV, Los Alamos, New Mexico. (ESP 2002, 73876)

Gardner, J. N., T. Koble, and S. Chang, 1993. "Geology, Drilling, and Some Hydrologic Aspects of Seismic Hazards Program Core Holes, Los Alamos National Laboratory, New Mexico," Los Alamos National Laboratory report LA-12460-MS, Los Alamos, New Mexico. (Gardner et al. 1993, 12582)

Griggs, R. L., 1955. "Geology and Ground Water Resources of the Los Alamos Area, New Mexico," Los Alamos Scientific Laboratory report. (Griggs 1955, 08795)

Kingsley, W. H., 1947. "Survey of Los Alamos and Pueblo Canyon for Radioactive Contamination and Radioassay Tests Run on Sewer-Water Samples and Soil Samples Taken from Los Alamos and Pueblo Canyons," Los Alamos Scientific Laboratory report, Los Alamos, New Mexico. (Kingsley 1947, 04186)

LANL (Los Alamos National Laboratory), 1991. "TA-21 Operable Unit 1106 RFI Work Plan for Environmental Restoration," Los Alamos National Laboratory document LA-UR-91-962, Vol. II, Los Alamos, New Mexico. (LANL 1991, 07529)

LANL (Los Alamos National Laboratory), 1994. "RFI Work Plan for Operable Unit 1100," Los Alamos National Laboratory document LA-UR-94-1097, Los Alamos, New Mexico. (LANL 1994, 34756)

LANL (Los Alamos National Laboratory), 1995. "Phase Report Addendum 1B and 1C Operable Unit 1106 RCRA Facility Investigation," Los Alamos National Laboratory document LA-UR-94-4360, Los Alamos, New Mexico. (LANL 1995, 52350)

LANL (Los Alamos National Laboratory), 1995. "Task/Site Work Plan for Operable Unit 1049, Los Alamos Canyon and Pueblo Canyon," Los Alamos National Laboratory document LA-UR-95-2053, Los Alamos, New Mexico. (LANL 1995, 50290)

LANL (Los Alamos National Laboratory), 1996. "RFI Report for Potential Release Sites in TA-21 21-018(a) Material Disposal Area V (Located in Former Operable Unit 1106) Field Unit 1," Los Alamos National Laboratory document LA-UR-96-2735, Los Alamos, New Mexico. (LANL 1996, 54969)

LANL (Los Alamos National Laboratory), 1996. "SDA-3, Borehole 21-1917, T.D.=7.5 Feet," Los Alamos National Laboratory photograph (Polaroid), Los Alamos, New Mexico. (LANL 1996, 52770)

LANL (Los Alamos National Laboratory), 1998. "RFI Work Plan and SAP for Potential Release Sites 53-002(a), 53-002(b), and Associated Piping and Drainages at TA-53," Los Alamos National Laboratory document LA-UR-98-2547, Los Alamos, New Mexico. (LANL 1998, 58841)

LANL (Los Alamos National Laboratory), 2000. "Characterization Well R-9 Completion Report," Los Alamos National Laboratory report LA-13742-MS, Los Alamos, New Mexico. (LANL 2000, 71250 [cross reference 66599])

LANL (Los Alamos National Laboratory), 2001. "LANL ER Phase II RFI Report for Potential Relase Site 21-029, DP Tank Farm," Los Alamos National Laboratory document LA-UR-01-5254, Los Alamos, New Mexico. (LANL 2001, 71303 [cross reference 0720])

LANL (Los Alamos National Laboratory), 2001. "Response to Request for Supplemental Information for the Phase II RFI Report for Potential Release Site 21-029, DP Tank Farm, Los Alamos National Laboratory," Los Alamos National Laboratory document LA-UR-01-6737, Los Alamos, New Mexico. (LANL 2001, 73436)

LANL (Los Alamos National Laboratory), 2002. "Characterization Well R-7 Completion Report," Los Alamos National Laboratory report LA-13932-MS, Los Alamos, New Mexico. (LANL 2002, 72717)

Purtymun, W. D., 1995. "Geologic and Hydrologic Records of Observation Wells, Test Holes, Test Wells, Supply Wells, Springs, and Surface Water Stations in the Los Alamos Area," Los Alamos National Laboratory report LA-12883-MS, Los Alamos, New Mexico. (LANL 1995, 45344)

Shaull, D. A., D. Ortiz, M. R. Alexander, and R. P. Romer, 2002. "Surface Water Data at Los Alamos National Laboratory 2001 Water Year," Los Alamos National Laboratory report LA-13905-PR, Los Alamos, New Mexico. (LANL 2002, 85499)

Stoker, A. K., S. McLin, and W. D. Purtymun, 1992. "Water Supply at Los Alamos during 1989," Los Alamos National Laboratory report LA-12276-PR, Los Alamos, New Mexico. (Stoker et al. 1992, 58718)

Appendix B

Screening Tables

B-1.0 DATA REVIEW AND SCREENING PROCESS

The data review process consisted of compiling the water quality data set, determining the detect status, screening the data against applicable standards, and producing summary statistics to support steps listed in the decision-flow.

The water quality data set is comprised of records originating in the Environmental Stewardship (ENV) Division data bases. The records with sampling dates no earlier than January 1, 1995, were selected. Quality control samples including blanks, spikes, field duplicates, and laboratory replicates were removed and the original customer sample was selected. When there were multiple results for an analyte from a single sampling event (time and location) because of multiple analytical chemistry methods, the result from the preferred (most sensitive) method was selected. Examples of selected methods include ICPMS or GFAA over ICPES for metals frequently observed at low concentrations, alpha spectrometry over gamma spectrometry for uranium-235 and americium-241, and high explosives by HEXP specific method over the general SVOA method. Remaining multiple results for an analyte at a single sampling event were combined. The average of the detected results was used, if any detects were available, and the average of the reported detection limits was used, if no detects were available.

The detection status for an analytical result was established using the combined set of validation qualifiers and reason codes assigned during data validation and the qualifier from the analytical laboratory. Select data from the 1990s do not have validation qualifiers and the inclusion of Laboratory Qualifiers and the Symbol (<) field in the database has changed over time. When available, a lab qualifier containing "U" was used to indicate a nondetect. In addition, quantification checks that follow the primary steps used in data validation were used to assign detection status. For radionuclide data, the result was considered not detected if it was smaller than the lab reported minimum detectable activity or if it was smaller than three times the result uncertainty (3-sigma rule). Results from any suite that were less than the method detection limit (MDL) or the instrument detection limit (IDL) were classified as nondetect.

Data results were screened against the smallest applicable regulatory standard or risk-based value. The standards apply to data depending on the type of field preparation applied during collection (filtered or nonfiltered) and the mode of the water (groundwater or persistent surface water). Each combination of water mode/field preparation is referred to as a screening category. Springs are appropriate to be screened as both groundwater and surface water, so the smallest applicable standard from either mode was used. Table B-1 contains the list of the regulatory standards considered for the various water samples by screening category.

A screen against regulatory standards is performed separately on each screening category from the combined set of samples for an individual watershed. The results of the screening process include the following information for each analyte: the total number of samples for the analyte; the numbers and rates (fractions) of detects and nondetects; the range of reported detection limits; the count of detection limits greater than the standard; the minimum, maximum, average and median (50th percentile) detected concentration; and the ratio of the maximum (and median) detected concentration to the regulatory standard.

B-2.0 DATA QUALITY CONSIDERATIONS

Review of the compiled set of data has identified a number of problems that potentially impact the results of the screening process and data summary. The data quality problems fall into one of three categories: incorrect reporting in the data base, analytical errors by the laboratory, and naturally occurring analytes failing a screen.

It is noted that an unknown but sizeable fraction of the inorganic data that was reported as "not detected" by the analytical laboratory was incorrectly reported as detected in the database. An example of reporting error is mercury results from the years of 1995 through 1999. There are many exceedences of the screen but examination of the results originating from the databases during the noted timeframe reveal that a large fraction of those results are listed as "0.2". For these results, the "<" Symbol was not included in the database and the "0.2" is the detection limit. Similar reporting errors have been identified for antimony, beryllium, and thallium in 1998 samples and for cyanide in samples from 1997 through 1999. Reporting errors are suspected for cadmium in 1995. These reporting errors have not been addressed in the compiled database used for screening. As a result, the screening process is expected to overestimate the number of exceedences for the above analytes.

A different type of reporting error temporarily impacted screening of nitrate data. All results included in the data base(s) under the analyte name of "Nitrate" are actually "Nitrate, reported as Nitrogen." This nitrate result form follows from analytical laboratory standard analysis and reporting protocols and has been confirmed by the sample management office. Incorrectly separating nitrate results into two categories had called into question the standards for comparison. Currently all nitrate results in the compiled database are reported in the correct form and screened against the appropriate standard.

Many of the 1999 strontium-90 results for water samples were not valid due to analytical laboratory method issues. These 1999 strontium-90 were removed from the compiled database prior to screening. Analytical errors are suspected in the case of cobalt-60 detections during September 1998. The only detections from one or more watersheds that exceed the screen originate from a single laboratory for samples analyzed within a few weeks of each other, and not during other time periods. Perchlorate results from some years suffer from false positives due to analytical issues. A partial solution based on agreement with the New Mexico Environment Department is to classify all perchlorate results prior to the implementation of the liquid chromatography mass spectroscopy-mass spectroscopy method that are less than 4 µg/L as nondetects. This solution assumes a sensitive analytical method was used and this was frequently not the case. Analytical issues for analytes other than 1999 strontium-90 have not been addressed in the compiled database.

Data issues associated with analytes that are presumed to be naturally occurring but fail the screen will be addressed on a watershed basis.

Table B-1
Explanation of Headers for Screening Tables B-3 through B-255

Alluvial Ground Water Samples
All results are reported in Units=ug/L to match the listed standards

Decision Flow Item	Header	Definition
General terminolgy	WGA=media code for Alluvial Groundwater (Wells)	
codes for Field Prep	WGI=media code for Intermediate Groundwater (Wells)	
	WGR=media code for Regional Groundwater (Wells)	
	WGS=media code for Springs Groundwater	
	WS=media code for Surface Water (Base Flow)	
	F=filtered; UF=unfiltered	
Decision Flow Detail	Summary by Sample	summary of all samples of the listed media and field preparation from the watershed
	n	number of samples
	ND	number of nondetects
	ND/n	rate (fraction) of nondetects
	D	number of detects
Rectangle 3rd bullet	D/n	detection rate
	Min.	minimum detected concentration
Rectangle 2nd bullet	Median	median detected concentration
left top diamond	Max.	maximum detected concentration
Rectangle 1st bullet	DL>Std	count of sample nondetects with reported values above the Standard
Rectangle 1st bullet	D>Std	count of detected concentrations above the Standard
	Median/Std	ratio of Median detected concentration to screening level (Std)
	Max/Std	ratio of Maximum detected concentration to screening level (Std)
	Screening Levels	
	Std	screening level (Standard, or risk-based value); more details in sheet called "diagram std choices in screen"
	Std.Type	source of screening level, where:
		Abbreviations listed on following sheet
		Only standards highlighted in yellow or brown are used
		For the EPA Region 6 Tap Water standards, the cancer endpoint standards are adjusted to 10-5 risk.
		In the primary screen, the minimum between all applicable yellow and brown standards (for the listed media and field prep) is selected as the Std.
	(Second Screen)	A second screen is run on the subset of the analytes which have different screening levels when the "unofficial" (brown highlighted values) are excluded.
	(How indicated)	These reruns are indicated with the Analyte name ending in "Re".
	Summary by Location	summary of Alluvial sampling locations from the watershed
	n	number of locations (Wells) sampled
	DL>Std	number of locations with one or more nondetects reported at values above the Standard

Table B-2
Standards Used for Screening Surface Water and Groundwater

Type	Group	Source	Abbrev	Standard	Potentially applicable to: Persistent Surface water (WS, WGS) Filtered	Persistent Surface water (WS, WGS) Non-filtered	Groundwater (WGA,WGI,WGR,WGS) Filtered	Groundwater (WGA,WGI,WGR,WGS) Non-filtered
Standard	WQCC	NMAC 20.6.4	WQCC-1	irrigation, F				
Standard	WQCC	NMAC 20.6.4	WQCC -2	fish (Aquatic Life) - acute, F	x			
Standard	WQCC	NMAC 20.6.4	WQCC-3	fish (Aquatic Life)- acute, NF		x		
Standard	WQCC	NMAC 20.6.4	WQCC-4	livestock, F	x			
Standard	WQCC	NMAC 20.6.4	WQCC-5	livestock, NF		x		
Standard	WQCC	NMAC 20.6.4	WQCC-6	fish (Aquatic Life)- chronic, F	x			
Standard	WQCC	NMAC 20.6.4	WQCC-7	fish - (Aquatic Life) chronic, NF		x		
Standard	WQCC	NMAC 20.6.4	WQCC-8	wildlife chronic, NF		x		
Standard	WQCC	NMAC 20.6.4	WQCC-9	human health, inorganics	x			
Standard	WQCC	NMAC 20.6.4	WQCC-9	human health, organics	x	x		
Standard	WQCC	NMAC 20.6.4	WQCC-10	domestic water supply				
Standard	WQCC	NMAC 20.6.2	WQCC-11	GW human health			x	x
Standard	WQCC	NMAC 20.6.2	WQCC-12	GW other stds for domestic water			x	x
Standard	WQCC	NMAC 20.6.2	WQCC-13	GW irrigation use				
Standard	EPA	CFR 264.94	EPA-1	RCRA MCLs			x	x
Standard	EPA	www	EPA-2	SDWA MCLs, MCLGs			x	x
Standard	EPA	www	EPA-3	EPA Secondary Standard				
Standard	EPA	www		Fish consumption + Water				
Standard	EPA	www		Fish consumption				
Risk-human	DOE	Order 5400.5	DOE	DOE DCGs	x	x	x	x
Risk-human	EPA Reg 6	www	EPA-4	EPA Region 6 Tap Water	x	x	x	x
Risk-eco	LANL	Ecorisk DB v1.5	LANL	Final Water ESL				

Notes:
* Fish-acute & Fish-chronic have recently been broadened to "Aquatic Life" standards. Decisions to use depend on advise from reg compliance. Will Screen with & without these.
RCRA MCLs not in compliance order but are applicable. Check to see which, if any, analytes effected. Will Screen with & without these.
The EPA Region VI Tap Water values for Cancer Endpoint have been adjusted from 10-6 to 10-5 risk level.
Region VI Tap Water values are used for an analyte in the absence of other applicable standards for that analyte.
1) WGS (Springs) is functionally the same as WS from an exposure standpoint. WGS is screened as both WG & WS.
2) WGA is sampled everywhere it emerges, so no need to use WGA as surrogate for WS.
3) WT samples are not included
4) Water screen steps --
a) Assemble list of analytes by field preparation (F, NF) and by media code (WS, WGS, WGA, WGR, WGI)
b) Compare to the minimum standards that applies for the field preparation & media code (EPA Region VI Tap Water values in the absence of other standards).
SDWA=Safe Drinking Water Act

Table B-3
Filtered Inorganics of Los Alamos/Pueblo Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	194	118	0.608	76	0.392	19.7	305.5	3700	0	0	0.008	0.100	37000	EPA-4	32	0
Antimony	METALS	187	175	0.936	12	0.064	0.334	3	4	27	0	0.500	0.667	6	EPA-2	32	16
Arsenic	METALS	191	131	0.686	60	0.314	0.2	4.795	11	3	3	0.480	1.100	10	EPA-2	32	1
Barium	METALS	197	15	0.076	182	0.924	0.1	56.75	372	0	0	0.057	0.372	1000	WQCC-11	32	0
Beryllium	METALS	188	157	0.835	31	0.165	0.01	0.09	30	19	3	0.023	7.500	4	EPA-2	32	0
Boron	METALS	111	42	0.378	69	0.622	8.39	57.6	500	0	0	0.017	0.152	3300	EPA-4	31	0
Cadmium	METALS	188	180	0.957	8	0.043	0.03	2.7	7	27	2	0.540	1.400	5	EPA-2	32	7
Chromium	METALS	190	138	0.726	52	0.274	0.36	1.62	5300	0	2	0.032	106.0	50	WQCC-11	32	0
Cobalt	METALS	189	152	0.804	37	0.196	0.02	2.4	19								
Copper	METALS	189	137	0.725	52	0.275	0.4	2.28	90.3	0	0	0.002	0.090	1000	WQCC-12	32	0
Cyanide (Total)	CN	51	50	0.980	1	0.020	14.7	14.7	14.7	0	0	0.074	0.074	200	WQCC-11	26	0
Iron	METALS	196	95	0.485	101	0.515	8.2	180	5850	0	13	0.180	5.850	1000	WQCC-12	32	0
Lead	METALS	188	160	0.851	28	0.149	0.05	0.423	61	9	1	0.028	4.067	15	EPA-2	32	9
Lithium	METALS	43	19	0.442	24	0.558	4	20.35	74	0	0	0.028	0.101	730	EPA-4	22	0
Manganese	METALS	198	83	0.419	115	0.581	0.16	40	4000	0	40	0.200	20.000	200	WQCC-12	32	0
Mercury	METALS	166	137	0.825	29	0.175	0.049	0.2	0.331	0	0	0.100	0.166	2	WQCC-11	31	0
Molybdenum	METALS	130	63	0.485	67	0.515	0.742	21.7	2470	1	23	0.121	13.720	180	EPA-4	31	1
Nickel	METALS	186	127	0.683	59	0.317	0.46	2.8	20	0	0	0.028	0.200	100	EPA-2	32	0
Selenium	METALS	164	147	0.896	17	0.104	0.2	2	4.3	0	0	0.200	0.430	10	EPA-1	31	0
SeleniumRe	METALS	164	147	0.896	17	0.104	0.2	2	4.3	0	0	0.040	0.086	50	WQCC-11	31	0
Silver	METALS	188	169	0.899	19	0.101	0.02	0.61	25.6	3	0	0.012	0.512	50	WQCC-11	32	3
Strontium	METALS	80	1	0.013	79	0.988	51.1	110	554	0	0	0.005	0.025	22000	EPA-4	26	0
Thallium	METALS	183	146	0.798	37	0.202	0.02	2.1	5.6	99	19	1.050	2.8	2	EPA-2	32	29
Tin	METALS	61	57	0.934	4	0.066	30	46	73	0	0	0.002	0.003	22000	EPA-4	16	0
Titanium	METALS	10	7	0.700	3	0.300	0.14	0.2	11.2								
Uranium	URANIUM	118	44	0.373	74	0.627	1.12E-05	0.315	10.9	0	0	0.011	0.363	30	EPA-2	30	0
Vanadium	METALS	186	85	0.457	101	0.543	0.39	2.4	10	0	0	0.009	0.038	260	EPA-4	32	0
Zinc	METALS	187	120	0.642	67	0.358	0.63	6.9	130	0	0	0.001	0.013	10000	WQCC-12	32	0

Table B-4
Filtered Radionuclides of Los Alamos/Pueblo Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	128	113	0.883	15	0.117	0.021	0.053	0.465	2	0	0.04417	0.3875	1.2	DOE	30	2
Cesium-137	rad	112	112	1	0	0				0	0			120	DOE	30	0
Cobalt-60	rad	106	106	1	0	0				0	0			100	EPA-2	30	0
Gross alpha	rad	59	48	0.814	11	0.186	1.070	3.03	32	0	1	0.202	2.133	15	EPA-2	28	0
Gross beta	rad	58	15	0.259	43	0.741	3.670	8.63	5820	5	8	0.173	116.4	50	EPA-2	28	4
Gross gamma	rad	14	11	0.786	3	0.214	141.800	216	334								
Plutonium-238	rad	143	141	0.986	2	0.014	0.024	0.065	0.105	0	0	0.040	0.066	1.6	DOE	30	0
Plutonium-239	rad	143	121	0.846	22	0.154	0.034	0.101	0.41	0	0	0.084	0.342	1.2	DOE	30	0
Radium-226	rad	6	5	0.833	1	0.167	0.390	0.39	0.39								
Strontium-90	rad	181	116	0.641	65	0.359	0.119	26.3	309.5	5	40	3.288	38.69	8	EPA-2	40	4
Technetium-99	rad	9	7	0.778	2	0.222	26.100	30.45	34.8	0	0	0.008	0.009	4000	DOE	9	0
Thorium-228	rad	10	10	1	0	0											
Thorium-230	rad	17	13	0.765	4	0.235	0.210	0.220	0.230								
Thorium-232	rad	10	10	1	0	0											
Tritium	rad	44	42	0.955	2	0.04545	85	237.5	390	0	0	0.012	0.020	20000	EPA-2	20	0
Uranium-234	rad	120	49	0.408	71	0.5917	0.039	0.294	5.25	0	0	0.015	0.263	20	DOE	29	0
Uranium-235	rad	121	109	0.901	12	0.09917	0.03	0.054	0.199	0	0	0.002	0.008	24	DOE	29	0
Uranium-238	rad	121	67	0.554	54	0.4463	0.031	0.194	3.64	0	0	0.008	0.1517	24	DOE	29	0

Table B-5
Filtered Organics of Los Alamos/Pueblo Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	2	0	0	2	1	22	29	36	0	2	4.833	6	6	EPA-2	2	0
Diesel Range Organics	DRO	2	2	1	0	0											
Acenaphthene	PAH	2	2	1	0	0				0	0			370	EPA-4	2	0
Acenaphthylene	PAH	2	2	1	0	0				0	0			370	EPA-4	2	0
Anthracene	PAH	2	2	1	0	0				0	0			1800	EPA-4	2	0
Benzo(a)anthracene	PAH	2	2	1	0	0				2	0			0.92	EPA-4	2	2
Benzo(a)pyrene	PAH	2	2	1	0	0				2	0			0.2	EPA-2	2	2
Benzo(b)fluoranthene	PAH	2	2	1	0	0				2	0			0.92	EPA-4	2	2
Benzo(g,h,i)perylene	PAH	2	2	1	0	0				0	0			180	EPA-4	2	0
Benzo(k)fluoranthene	PAH	2	2	1	0	0				2	0			9.2	EPA-4	2	2
Chrysene	PAH	2	2	1	0	0				0	0			92	EPA-4	2	0
Dibenz(a,h)anthracene	PAH	2	2	1	0	0				2	0			0.09	EPA-4	2	2
Fluoranthene	PAH	2	2	1	0	0				0	0			1500	EPA-4	2	0
Fluorene	PAH	2	2	1	0	0				0	0			240	EPA-4	2	0
Indeno(1,2,3-cd)pyrene	PAH	2	2	1	0	0				2	0			0.92	EPA-4	2	2
Naphthalene	PAH	2	2	1	0	0				0	0			30	WQCC-11	2	0
Phenanthrene	PAH	2	2	1	0	0				0	0			1800	EPA-4	2	0
Pyrene	PAH	2	2	1	0	0				0	0			180	EPA-4	2	0
Aroclor-1016	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1221	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1232	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1242	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1248	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1254	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	2
Aroclor-1260	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	2
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Azobenzene	SVOC	2	2	1	0	0				2	0			6.1	EPA-4	2	2
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	2	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	2	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	2	2
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			7300	EPA-4	2	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	2	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	2	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	2	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			1.5	EPA-4	2	2
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2

Table B-5 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	2	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	2	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	2	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	2	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0											
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	2	0
Dinitrotoluene[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	2	0
Dinitrotoluene[2,6-]	SVOC	2	2	1	0	0				0	0			37	EPA-4	2	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	2	0
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			1	EPA-2	2	2
Hexachlorobutadiene	SVOC	2	2	1	0	0				2	0			7.3	EPA-4	2	2
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	2	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	2	0
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	2	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				0	0			30	WQCC-11	2	0
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	2	0
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	2	2
Nitroaniline[3-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	2	2
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	2	2
Nitrobenzene	SVOC	2	2	1	0	0				2	0			3.4	EPA-4	2	2
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	2	2
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	2	2
Nitrosodiphenylamine[N-]	SVOC	2	2	1	0	0				0	0			140	EPA-4	2	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	2	2	1	0	0											
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	2	2
Phenol	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Dichlorobenzene[1,2-]	VOC	2	2	1	0	0				0	0			600	EPA-2	2	0
Dichlorobenzene[1,3-]	VOC	2	2	1	0	0				0	0			18	EPA-4	2	0
Dichlorobenzene[1,4-]	VOC	2	2	1	0	0				0	0			75	EPA-2	2	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	2	0

Table B-6
Filtered Miscellaneous Constituents Los Alamos/Pueblo Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	192	1	0.0052	191	0.995	6800	22000	110000								
Hardness	GENINORG	35	0	0	35	1	35500	67600	130600								
Magnesium	GENINORG	191	15	0.079	176	0.922	2000	5200	10500								
Potassium	GENINORG	189	9	0.048	180	0.952	1300	5575	17700								
Sodium	GENINORG	191	1	0.005	190	0.995	6200	37000	140000								
Humic, Hydrophilic Acids	HUMIC_ACID	37	0	0	37	1	100	1500	3500								
Humic, Hydrophilic Bases	HUMIC_ACID	38	12	0.316	26	0.684	100	200	800								
Humic, Hydrophilic Neutrals	HUMIC_ACID	37	10	0.270	27	0.730	100	200	1800								
Humic, Hydrophilic Total	HUMIC_ACID	38	0	0	38	1	200	1800	4600								
Humic, Hydrophobic Acids	HUMIC_ACID	38	1	0.026	37	0.974	100	1100	3600								
Humic, Hydrophobic Bases	HUMIC_ACID	38	35	0.921	3	0.079	100	100	200								
Humic, Hydrophobic Neutrals	HUMIC_ACID	38	0	0	38	1	100	700	3100								
Humic, Hydrophobic Total	HUMIC_ACID	38	0	0	38	1	600	1800	5400								
Dissolved Organic Carbon	WATER_QUAL	117	1	0.009	116	0.992	1100	4950	16000								
pH	WATER_QUAL	67	0	0	67	1	5.585	7	7.7								
Specific Conductance	WATER_QUAL	67	0	0	67	1	179	280	604								
Total Dissolved Solids	WATER_QUAL	91	0	0	91	1	113000	217000	623000	0	0	0.217	0.623	1000000	WQCC-12	23	0
Total Suspended Solids	WATER_QUAL	27	7	0.259	20	0.741	1000	6000	800000								

Table B-7
Nonfiltered Inorganics of Los Alamos/Pueblo Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	212	61	0.288	151	0.712	0.565	456	70000	0	2	0.012	1.892	37000	EPA-4	33	0
Antimony	METALS	207	195	0.942	12	0.058	0.325	3	4	21	0	0.500	0.667	6	EPA-2	33	14
Arsenic	METALS	217	143	0.659	74	0.341	0.3	4.975	13	0	4	0.498	1.3	10	EPA-2	33	0
Barium	METALS	212	12	0.057	200	0.943	19	60	2900	0	1	0.060	2.9	1000	WQCC-11	33	0
Beryllium	METALS	219	177	0.808	42	0.192	0.010	0.1205	16	20	1	0.030	4	4	EPA-2	33	0
Boron	METALS	126	47	0.373	79	0.627	5.670	44.2	396	0	0	0.013	0.12	3300	EPA-4	32	0
Cadmium	METALS	209	196	0.938	13	0.062	0.040	0.31	36	38	5	0.062	7.2	5	EPA-2	33	9
Chromium	METALS	219	142	0.648	77	0.352	0.260	2.1	7700	0	2	0.042	154	50	WQCC-11	33	0
Cobalt	METALS	210	156	0.743	54	0.257	0.020	2.21	32								
Copper	METALS	217	155	0.714	62	0.286	0.450	3.45	146	0	0	0.003	0.146	1000	WQCC-12	33	0
Cyanide (Total)	CN	124	104	0.839	20	0.161	0.010	10	60	0	0	0.05	0.3	200	WQCC-11	29	0
Cyanide, Amenable	CN	25	25	1	0	0				0	0			200	EPA-2	16	0
Iron	METALS	212	56	0.264	156	0.736	9.83	391.5	36000	0	41	0.392	36	1000	WQCC-12	33	0
Lead	METALS	218	177	0.812	41	0.188	0.04	0.85	77	14	4	0.057	5.133	15	EPA-2	33	9
Lithium	METALS	42	19	0.452	23	0.548	3	20.8	130	0	0	0.028	0.178	730	EPA-4	22	0
Manganese	METALS	212	52	0.245	160	0.755	0.140	31.8	13000	0	57	0.159	65	200	WQCC-12	33	0
Mercury	METALS	216	162	0.750	54	0.250	0.100	0.2	0.444	0	0	0.1	0.222	2	WQCC-11	33	0
Molybdenum	METALS	160	83	0.519	77	0.481	0.211	56	2488	0	30	0.311	13.82	180	EPA-4	33	0
Nickel	METALS	209	139	0.665	70	0.335	0.440	2.82	202	0	2	0.028	2.02	100	EPA-2	33	0
Selenium	METALS	220	196	0.891	24	0.109	0.340	2.25	4	1	0	0.225	0.4	10	EPA-1	33	1
SeleniumRe	METALS	220	196	0.891	24	0.109	0.340	2.25	4	0	0	0.045	0.08	50	WQCC-11	33	0
Silver	METALS	210	182	0.867	28	0.133	0.020	0.78	17.8	3	0	0.016	0.356	50	WQCC-11	33	3
Strontium	METALS	101	2	0.020	99	0.980	52.2	111	656	0	0	0.005	0.030	22000	EPA-4	25	0
Thallium	METALS	202	171	0.847	31	0.154	0.033	2.1	5.6	110	16	1.05	2.8	2	EPA-2	33	29
Tin	METALS	85	78	0.918	7	0.082	30	34.7	70	0	0	0.002	0.003	22000	EPA-4	13	0
Titanium	METALS	8	5	0.625	3	0.375	0.2	0.29	52.1								
Uranium	URANIUM	161	46	0.286	115	0.714	3.39E-06	0.28	15.42	0	0	0.009	0.514	30	EPA-2	32	0
Vanadium	METALS	209	94	0.450	115	0.550	0.39	3.3	58	0	0	0.013	0.223	260	EPA-4	33	0
Zinc	METALS	209	125	0.598	84	0.402	0.1	12.2	270	0	0	0.001	0.027	10000	WQCC-12	33	0

Table B-8
Nonfiltered Radionuclides of Los Alamos/Pueblo Watershed Alluvial Groundwater

Unfiltered WGA Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	183	151	0.8251	32	0.1749	0.0155	0.05765	1.43	6	1	0.048	1.192	1.2	DOE	32	2
Cesium-137	rad	178	178	1	0	0				0	0			120	DOE	32	0
Cobalt-60	rad	158	150	0.949	8	0.051	13.4	30.5	62.2	0	0	0.305	0.622	100	EPA-2	32	0
Gross alpha	rad	92	86	0.935	6	0.065	1.72	3.85	74.1	1	1	0.257	4.940	15	EPA-2	23	1
Gross beta	rad	91	36	0.396	55	0.604	3.19	11.85	99	5	15	0.237	1.980	50	EPA-2	22	2
Gross gamma	rad	47	42	0.894	5	0.106	181	283	639								
Plutonium-238	rad	194	185	0.954	9	0.046	0.010	0.076	0.154	0	0	0.048	0.096	1.6	DOE	32	0
Plutonium-239	rad	194	148	0.763	46	0.237	0.013	0.120	1.24	0	1	0.100	1.033	1.2	DOE	32	0
Radium-223	rad	2	2	1	0	0											
Radium-224	rad	2	2	1	0	0											
Radium-226	rad	11	7	0.636	4	0.364	0.27	0.288	0.37								
Strontium-90	rad	202	126	0.624	76	0.376	0.135	7.69	184.8	6	38	0.961	23.100	8	EPA-2	32	3
Technetium-99	rad	69	65	0.942	4	0.058	3.4	21.6	47.3	0	0	0.005	0.012	4000	DOE	25	0
Thorium-228	rad	13	12	0.923	1	0.077	0.047	0.047	0.047								
Thorium-230	rad	19	9	0.474	10	0.526	0.030	0.18	0.28								
Thorium-232	rad	13	12	0.923	1	0.077	0.022	0.022	0.022								
Tritium	rad	168	132	0.786	36	0.214	12.13	75.1	549.2	0	0	0.004	0.027	20000	EPA-2	31	0
Uranium-234	rad	122	36	0.295	86	0.705	0.021	0.226	5.3	0	0	0.011	0.265	20	DOE	28	0
Uranium-235	rad	122	108	0.885	14	0.115	0.009	0.061	0.225	0	0	0.003	0.009	24	DOE	28	0
Uranium-238	rad	122	51	0.418	71	0.582	0.029	0.143	3.44	0	0	0.006	0.143	24	DOE	28	0

Table B-9
Nonfiltered Organics of Los Alamos/Pueblo Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	2	1	0.5	1	0.5	1.02E-05	1.02E-05	1.02E-05								
Heptachlorodibenzodioxins (Total)	DIOXIN_FURAN	2	1	0.5	1	0.5	1.58E-05	1.58E-05	1.58E-05								
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	2	1	0.5	1	0.5	1.20E-05	1.20E-05	1.20E-05								
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	2	1	0.5	1	0.5	1.10E-05	1.10E-05	1.10E-05								
Methylene Chloride	VOC	119	97	0.8151	22	0.185	0.860	1.650	38.000	73	5	0.33	7.6	5	EPA-2	28	6
DDT[4,4'-]	PEST	76	63	0.8289	13	0.171	0.007	0.011	0.024	0	0	0.0055	0.012	2	EPA-4	25	0
Bis(2-ethylhexyl)phthalate	SVOC	127	108	0.8504	19	0.150	0.170	2.2	8	79	1	0.3667	1.333	6	EPA-2	28	23
Diesel Range Organics	DRO	9	8	0.8889	1	0.111	82	82	82								
Acetone	VOC	108	96	0.8889	12	0.111	2	6.8	30	0	0	0.011	0.049	610	EPA-4	28	0
Toluene	VOC	122	117	0.959	5	0.041	0.1	0.63	1.2	0	0	0.001	0.002	750	WQCC-11	28	0
DDD[4,4'-]	PEST	76	73	0.9605	3	0.039	0.008	0.008	0.019	0	0	0.003	0.007	2.8	EPA-4	25	0
DDE[4,4'-]	PEST	76	73	0.9605	3	0.039	0.007	0.007	0.010	0	0	0.004	0.005	2	EPA-4	25	0
Di-n-butylphthalate	SVOC	129	124	0.9612	5	0.039	1	2.4	11	0	0	0.001	0.003	3700	EPA-4	28	0
Xylene[1,3-]+Xylene[1,4-]	VOC	39	38	0.9744	1	0.026	0.720	0.720	0.720	0	0	0.001	0.001	620	WQCC-11	17	0
Benzene	VOC	122	120	0.9836	2	0.016	0.450	1.925	3.400	77	0	0.385	0.680	5	EPA-2	28	0
Benzo(k)fluoranthene	PAH	129	127	0.9845	2	0.016	0.031	0.037	0.044	79	0	0.004	0.005	9.2	EPA-4	27	25
Butylbenzylphthalate	SVOC	129	127	0.9845	2	0.016	7	7	7	0	0	0.001	0.001	7300	EPA-4	28	0
Xylene[1,2-]	VOC	69	68	0.9855	1	0.014	0.320	0.320	0.320	0	0	0.000	0.000	1400	EPA-4	20	0
Dieldrin	PEST	76	75	0.9868	1	0.013	0.005	0.005	0.005	50	0	0.129	0.129	0.04	EPA-4	25	22
Xylene (Total)	VOC	89	88	0.9888	1	0.011	1	1	1	0	0	0.002	0.002	620	WQCC-11	28	0
Trimethylbenzene[1,2,4-]	VOC	98	97	0.9898	1	0.010	0.3	0.3	0.3	0	0	0.025	0.025	12	EPA-4	25	0
Butanone[2-]	VOC	113	112	0.9912	1	0.009	13	13	13	0	0	0.007	0.007	1900	EPA-4	28	0
Carbon Disulfide	VOC	113	112	0.9912	1	0.009	1.2	1.2	1.2	0	0	0.001	0.001	1000	EPA-4	28	0
Methyl-2-pentanone[4-]	VOC	113	112	0.9912	1	0.009	6.9	6.9	6.9	0	0	0.043	0.043	160	EPA-4	28	0
Chloromethane	VOC	122	121	0.9918	1	0.008	1.8	1.8	1.8	0	0	0.120	0.120	15	EPA-4	28	0
Ethylbenzene	VOC	122	121	0.9918	1	0.008	0.19	0.19	0.19	0	0	0.000	0.000	700	EPA-2	28	0
Trichloroethane[1,1,1-]	VOC	122	121	0.9918	1	0.008	20	20	20	0	0	0.333	0.333	60	WQCC-11	28	0
Trichloroethene	VOC	122	121	0.9918	1	0.008	1.7	1.7	1.7	77	0	0.340	0.340	5	EPA-2	28	0
Dichlorobenzene[1,4-]	VOC	129	128	0.9922	1	0.008	0.410	0.410	0.410	0	0	0.005	0.005	75	EPA-2	28	0
Acenaphthene	PAH	130	129	0.9923	1	0.008	0.076	0.076	0.076	0	0	0.000	0.000	370	EPA-4	28	0
Dibenz(a,h)anthracene	PAH	130	129	0.9923	1	0.008	0.024	0.024	0.024	104	0	0.255	0.255	0.09	EPA-4	28	28
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	DIOXIN_FURAN	2	2	1	0	0											
Heptachlorodibenzofurans (Total)	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzodioxins (Total)	DIOXIN_FURAN	2	2	1	0	0				0	0			0.00011	EPA-4	2	0
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzofuran[1,2,3,6,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzofuran[1,2,3,7,8,9-]	DIOXIN_FURAN	2	2	1	0	0											
Hexachlorodibenzofuran[2,3,4,6,7,8-]	DIOXIN_FURAN	2	2	1	0	0											

Table B-9 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexachlorodibenzofurans (Total)	DIOXIN_FURAN	2	2	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Pentachlorodibenzodioxins (Total)	DIOXIN_FURAN	2	2	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Pentachlorodibenzofuran[2,3,4,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Pentachlorodibenzofurans (Total)	DIOXIN_FURAN	2	2	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	2	2	1	0	0				0	0			3.00E-05	EPA-2	2	0
Tetrachlorodibenzodioxins (Total)	DIOXIN_FURAN	2	2	1	0	0											
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	2	2	1	0	0											
Tetrachlorodibenzofurans (Total)	DIOXIN_FURAN	2	2	1	0	0											
Acenaphthylene	PAH	130	130	1	0	0				0	0			370	EPA-4	28	0
Anthracene	PAH	130	130	1	0	0				0	0			1800	EPA-4	28	0
Benzo(a)anthracene	PAH	130	130	1	0	0				95	0			0.92	EPA-4	28	28
Benzo(a)pyrene	PAH	130	130	1	0	0				95	0			0.2	EPA-2	28	28
Benzo(b)fluoranthene	PAH	130	130	1	0	0				95	0			0.92	EPA-4	28	28
Benzo(g,h,i)perylene	PAH	130	130	1	0	0				0	0			180	EPA-4	28	0
Chrysene	PAH	130	130	1	0	0				0	0			92	EPA-4	28	0
Fluoranthene	PAH	130	130	1	0	0				0	0			1500	EPA-4	28	0
Fluorene	PAH	130	130	1	0	0				0	0			240	EPA-4	28	0
Indeno(1,2,3-cd)pyrene	PAH	130	130	1	0	0				95	0			0.92	EPA-4	28	28
Naphthalene	PAH	135	135	1	0	0				0	0			30	WQCC-11	28	0
Phenanthrene	PAH	130	130	1	0	0				0	0			1800	EPA-4	28	0
Pyrene	PAH	130	130	1	0	0				0	0			180	EPA-4	28	0
Aroclor-1016	PCB	112	112	1	0	0				58	0			0.5	EPA-2	27	22
Aroclor-1221	PCB	112	112	1	0	0				58	0			0.5	EPA-2	27	22
Aroclor-1232	PCB	112	112	1	0	0				58	0			0.5	EPA-2	27	22
Aroclor-1242	PCB	118	118	1	0	0				64	0			0.5	EPA-2	28	25
Aroclor-1248	PCB	112	112	1	0	0				58	0			0.5	EPA-2	27	22
Aroclor-1254	PCB	118	118	1	0	0				64	0			0.5	EPA-2	28	25
Aroclor-1260	PCB	118	118	1	0	0				64	0			0.5	EPA-2	28	25
Aroclor-1262	PCB	25	25	1	0	0				11	0			0.5	EPA-2	9	1
Aldrin	PEST	76	76	1	0	0				38	0			0.04	EPA-4	25	22
BHC[alpha-]	PEST	76	76	1	0	0				0	0			0.11	EPA-4	25	0
BHC[beta-]	PEST	76	76	1	0	0				0	0			0.37	EPA-4	25	0
BHC[delta-]	PEST	76	76	1	0	0											
BHC[gamma-]	PEST	76	76	1	0	0				0	0			0.2	EPA-2	25	0
Chlordane[alpha-]	PEST	76	76	1	0	0				0	0			2	EPA-2	25	0
Chlordane[gamma-]	PEST	76	76	1	0	0				0	0			2	EPA-2	25	0
Endosulfan I	PEST	76	76	1	0	0				0	0			220	EPA-4	25	0
Endosulfan II	PEST	76	76	1	0	0				0	0			220	EPA-4	25	0
Endosulfan Sulfate	PEST	76	76	1	0	0				0	0			220	EPA-4	25	0
Endrin	PEST	76	76	1	0	0				0	0			0.2	EPA-1	25	0

Table B-9 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Endrin KetoneRe	PEST	76	76	1	0	0				0	0			2	EPA-2	25	0
Endrin Aldehyde	PEST	76	76	1	0	0				0	0			0.2	EPA-1	25	0
Endrin AldehydeRe	PEST	76	76	1	0	0				0	0			2	EPA-2	25	0
Endrin Ketone	PEST	76	76	1	0	0				0	0			0.2	EPA-1	25	0
EndrinRe	PEST	76	76	1	0	0				0	0			2	EPA-2	25	0
Heptachlor	PEST	76	76	1	0	0				0	0			0.4	EPA-2	25	0
Heptachlor Epoxide	PEST	76	76	1	0	0				0	0			0.2	EPA-2	25	0
Methoxychlor[4,4'-]	PEST	76	76	1	0	0				0	0			40	EPA-2	25	0
Toxaphene (Technical Grade)	PEST	76	76	1	0	0				38	0			3	EPA-2	25	22
Aniline	SVOC	115	115	1	0	0				0	0			120	EPA-4	26	0
Azobenzene	SVOC	102	102	1	0	0				87	0			6.1	EPA-4	26	26
Benzidine	SVOC	81	81	1	0	0				81	0			0.0029	EPA-4	22	22
Benzoic Acid	SVOC	117	117	1	0	0				0	0			150000	EPA-4	26	0
Benzyl Alcohol	SVOC	118	118	1	0	0				0	0			11000	EPA-4	26	0
Bis(2-chloroethoxy)methane	SVOC	129	129	1	0	0											
Bis(2-chloroethyl)ether	SVOC	129	129	1	0	0				129	0			0.10	EPA-4	28	28
Bromophenyl-phenylether[4-]	SVOC	129	129	1	0	0											
Carbazole	SVOC	48	48	1	0	0				0	0			34	EPA-4	21	0
Chlordane (Technical Grade)	SVOC	1	1	1	0	0											
Chloro-3-methylphenol[4-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	28
Chloroaniline[4-]	SVOC	129	129	1	0	0				0	0			150	EPA-4	28	0
Chloronaphthalene[2-]	SVOC	129	129	1	0	0				0	0			490	EPA-4	28	0
Chlorophenol[2-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	27
Chlorophenyl-phenyl[4-] Ether	SVOC	129	129	1	0	0											
Dibenzofuran	SVOC	129	129	1	0	0				11	0			24	EPA-4	28	6
Dichlorobenzidine[3,3'-]	SVOC	129	129	1	0	0				120	0			1.5	EPA-4	28	28
Dichlorophenol[2,4-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	27
Diethylphthalate	SVOC	129	129	1	0	0				0	0			29000	EPA-4	28	0
Dimethyl Phthalate	SVOC	128	128	1	0	0				0	0			370000	EPA-4	28	0
Dimethylphenol[2,4-]	SVOC	129	129	1	0	0				0	0			730	EPA-4	28	0
Dinitro-2-methylphenol[4,6-]	SVOC	129	129	1	0	0											
Dinitrophenol[2,4-]	SVOC	129	129	1	0	0				0	0			73	EPA-4	28	0
Dinitrotoluene[2,4-]	SVOC	129	129	1	0	0				0	0			73	EPA-4	28	0
Dinitrotoluene[2,6-]	SVOC	129	129	1	0	0				0	0			37	EPA-4	28	0
Di-n-octylphthalate	SVOC	129	129	1	0	0				0	0			730	EPA-4	28	0
Diphenylamine	SVOC	27	27	1	0	0				0	0			910	EPA-4	17	0
Diphenylhydrazine[1,2-]	SVOC	13	13	1	0	0											
Hexachlorobenzene	SVOC	129	129	1	0	0				129	0			1	EPA-2	28	28
Hexachlorobutadiene	SVOC	132	132	1	0	0				63	0			7.3	EPA-4	28	23
Hexachlorocyclopentadiene	SVOC	129	129	1	0	0				0	0			50	EPA-2	28	0
Hexachloroethane	SVOC	129	129	1	0	0				0	0			37	EPA-4	28	0
Isophorone	SVOC	129	129	1	0	0				0	0			710	EPA-4	28	0

Table B-9 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Methylnaphthalene[2-]	SVOC	129	129	1	0	0				0	0			30	WQCC-11	28	0
Methylphenol[2-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	27
Methylphenol[4-]	SVOC	126	126	1	0	0				0	0			180	EPA-4	28	0
Methylpyridine[2-]	SVOC	15	15	1	0	0											
Nitroaniline[2-]	SVOC	129	129	1	0	0				120	0			2.2	EPA-4	28	28
Nitroaniline[3-]	SVOC	129	129	1	0	0				120	0			2.2	EPA-4	28	28
Nitroaniline[4-]	SVOC	129	129	1	0	0				120	0			2.2	EPA-4	28	28
Nitrobenzene	SVOC	129	129	1	0	0				120	0			3.4	EPA-4	28	28
Nitrophenol[2-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	27
Nitrophenol[4-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	28
Nitrosodimethylamine[N-]	SVOC	115	115	1	0	0				115	0			0.013	EPA-4	26	26
Nitroso-di-n-propylamine[N-]	SVOC	129	129	1	0	0				129	0			0.10	EPA-4	28	28
Nitrosodiphenylamine[N-]	SVOC	99	99	1	0	0				0	0			140	EPA-4	28	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	99	99	1	0	0											
Pentachlorophenol	SVOC	129	129	1	0	0				129	0			1	EPA-2	28	28
Phenol	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	27
Pyridine	SVOC	84	84	1	0	0				0	0			37	EPA-4	21	0
Trichlorophenol[2,4,5-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	28
Trichlorophenol[2,4,6-]	SVOC	129	129	1	0	0				120	0			5	WQCC-12	28	27
Acrolein	VOC	4	4	1	0	0											
Acrylonitrile	VOC	4	4	1	0	0											
Bromobenzene	VOC	98	98	1	0	0				0	0			23	EPA-4	25	0
Bromochloromethane	VOC	106	106	1	0	0				71	0			5	EPA-2	28	0
Bromodichloromethane	VOC	122	122	1	0	0				0	0			100	EPA-2	28	0
Bromoform	VOC	122	122	1	0	0				0	0			100	EPA-2	28	0
Bromomethane	VOC	122	122	1	0	0				78	0			8.7	EPA-4	28	25
Butylbenzene[n-]	VOC	98	98	1	0	0				0	0			61	EPA-4	25	0
Butylbenzene[sec-]	VOC	98	98	1	0	0				0	0			61	EPA-4	25	0
Butylbenzene[tert-]	VOC	98	98	1	0	0				0	0			61	EPA-4	25	0
Carbon Tetrachloride	VOC	122	122	1	0	0				78	0			5	EPA-2	28	0
Chlorobenzene	VOC	122	122	1	0	0				0	0			100	EPA-2	28	0
Chlorodibromomethane	VOC	121	121	1	0	0				0	0			100	EPA-2	28	0
Chloroethane	VOC	122	122	1	0	0				0	0			39	EPA-4	28	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	114	114	1	0	0				0	0			100	WQCC-11	28	0
Chlorotoluene[2-]	VOC	98	98	1	0	0				0	0			120	EPA-4	25	0
Chlorotoluene[4-]	VOC	98	98	1	0	0				0	0			120	EPA-4	25	0
Dibromo-3-Chloropropane[1,2-]	VOC	108	108	1	0	0											
Dibromoethane[1,2-]	VOC	108	108	1	0	0				94	0			0.05	EPA-2	28	28
Dibromomethane	VOC	98	98	1	0	0				0	0			61	EPA-4	25	0
Dichlorobenzene[1,2-]	VOC	129	129	1	0	0				0	0			600	EPA-2	28	0
Dichlorobenzene[1,3-]	VOC	129	129	1	0	0				0	0			18	EPA-4	28	0

Table B-9 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorodifluoromethane	VOC	103	103	1	0	0				0	0			390	EPA-4	25	0
Dichloroethane[1,1-]	VOC	122	122	1	0	0				0	0			25	WQCC-11	28	0
Dichloroethane[1,2-]	VOC	122	122	1	0	0				78	0			5	EPA-2	28	0
Dichloroethene[1,1-]	VOC	122	122	1	0	0				78	0			5	WQCC-11	28	0
Dichloroethene[cis/trans-1,2-]	VOC	16	16	1	0	0											
Dichloroethene[cis-1,2-]	VOC	93	93	1	0	0				0	0			70	EPA-2	28	0
Dichloroethene[trans-1,2-]	VOC	115	115	1	0	0				0	0			100	EPA-2	28	0
Dichloropropane[1,2-]	VOC	122	122	1	0	0				78	0			5	EPA-2	28	0
Dichloropropane[1,3-]	VOC	98	98	1	0	0				71	0			5	EPA-2	25	0
Dichloropropane[2,2-]	VOC	95	95	1	0	0				68	0			5	EPA-2	25	0
Dichloropropene[1,1-]	VOC	98	98	1	0	0				71	0			4	EPA-4	25	25
Dichloropropene[cis-1,3-]	VOC	122	122	1	0	0				78	0			4	EPA-4	28	25
Dichloropropene[trans-1,3-]	VOC	113	113	1	0	0				69	0			4	EPA-4	28	25
Hexanone[2-]	VOC	113	113	1	0	0				0	0			1900	EPA-4	28	0
Iodomethane	VOC	98	98	1	0	0				0	0			8.7	EPA-4	25	0
Isopropylbenzene	VOC	98	98	1	0	0				0	0			660	EPA-4	25	0
Isopropyltoluene[4-]	VOC	98	98	1	0	0				0	0			660	EPA-4	25	0
Propylbenzene[1-]	VOC	98	98	1	0	0				0	0			61	EPA-4	25	0
Styrene	VOC	113	113	1	0	0				0	0			100	EPA-2	28	0
Tetrachloroethane[1,1,1,2-]	VOC	100	100	1	0	0				73	0			4.3	EPA-4	25	25
Tetrachloroethane[1,1,2,2-]	VOC	120	120	1	0	0				0	0			10	WQCC-11	28	0
Tetrachloroethene	VOC	122	122	1	0	0				78	0			5	EPA-2	28	0
Trichloro-1,2,2-trifluoroethane	VOC	75	75	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	55	55	1	0	0				0	0			70	EPA-2	21	0
Trichlorobenzene[1,2,4-]	VOC	132	132	1	0	0				0	0			70	EPA-2	28	0
Trichloroethane[1,1,2-]	VOC	122	122	1	0	0				78	0			5	EPA-2	28	0
Trichlorofluoromethane	VOC	112	112	1	0	0				0	0			1300	EPA-4	25	0
Trichloropropane[1,2,3-]	VOC	98	98	1	0	0				98	0			0.016	EPA-4	25	25
Trichlorotrifluoroethane	VOC	16	16	1	0	0											
Trimethylbenzene[1,3,5-]	VOC	98	98	1	0	0				0	0			12	EPA-4	25	0
Vinyl Chloride	VOC	122	122	1	0	0				113	0			1	WQCC-11	28	27
Xylene[1,3-]	VOC	2	2	1	0	0											

Table B-10
Nonfiltered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	91	70	0.769	21	0.231	58	294	1480								
Chlorate	ANION	28	22	0.786	6	0.214	845	1870	3180								
Chloride	ANION	236	1	0.004	235	0.996	3410	39500	270000	0	1	0.158	1.08	250000	WQCC-12	30	0
Fluoride	ANION	228	20	0.088	208	0.912	72	484.5	1600	0	2	0.3028	1	1600	WQCC-11	32	0
Nitrate	ANION	208	30	0.144	178	0.856	10	470	34700	0	4	0.047	3.47	10000	EPA-4	31	0
Nitrite	ANION	28	17	0.607	11	0.393	40	189	3990	0	2	0.189	3.99	1000	EPA-4	15	0
Oxalate	ANION	19	19	1	0	0											
Perchlorate	ANION	129	124	0.961	5	0.0388	4.52	6.18	15.3	103	5	1.67	4.135	3.7	EPA-4	27	26
Sulfate	ANION	262	10	0.038	252	0.9618	1000	11000	250000	0	0	0.01833	0.4167	600000	WQCC-12	32	0
Calcium	GENINORG	183	1	0.005	182	0.9945	7440	22000	110000								
Hardness	GENINORG	28	0	0	28	1	31500	54450	120000								
Magnesium	GENINORG	184	15	0.0815	169	0.919	2130	5400	14200								
Potassium	GENINORG	183	9	0.0492	174	0.951	1657	5580	21000								
Sodium	GENINORG	183	0	0	183	1	6900	35900	140000								
Deuterium Ratio	STABLE_ISOTOPES	2	0	0	2	1	-76.33	-75.17	-74								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-10.97	-10.58	-10.2								
pH	WATER_QUAL	38	0	0	38	1	6.3	7.1	8								
Specific Conductance	WATER_QUAL	30	0	0	30	1	114	264.5	556								
Suspended Sediment Concentration	WATER_QUAL	3	1	0.333	2	0.667	755	3542	6330								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	218000	218000	218000	0	0	0.218	0.218	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	90	8	0.0889	82	0.9111	3	3420	60730								
Total Suspended Solids	WATER_QUAL	63	24	0.381	39	0.619	889	5000	420000								

Table B-11
Filtered Inorganics of Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	19	14	0.7368	5	0.2632	31.8	61.5	1200	0	0	0.001662	0.03243	37000	EPA-4	7	0
Antimony	METALS	19	15	0.7895	4	0.2105	0.215	0.2695	3.8	3	0	0.04492	0.6333	6	EPA-2	7	3
Arsenic	METALS	19	16	0.8421	3	0.1579	2.7	3.9	7	2	0	0.39	0.7	10	EPA-2	7	0
Barium	METALS	19	3	0.1579	16	0.8421	10.5	64	204	0	0	0.064	0.204	1000	WQCC-11	7	0
Beryllium	METALS	19	14	0.7368	5	0.2632	0.011	0.015	0.138	3	0	0.00375	0.0345	4	EPA-2	7	2
Boron	METALS	19	11	0.5789	8	0.4211	7.9	23	186	0	0	0.00697	0.05636	3300	EPA-4	7	0
Cadmium	METALS	19	18	0.9474	1	0.05263	0.221	0.221	0.221	3	0	0.0442	0.0442	5	EPA-2	7	0
Chromium	METALS	19	8	0.4211	11	0.5789	0.4	1.82	10	0	0	0.0364	0.2	50	WQCC-11	7	0
Cobalt	METALS	19	13	0.6842	6	0.3158	1.3	2.15	5.2								
Copper	METALS	19	11	0.5789	8	0.4211	1.03	4.5	20	0	0	0.0045	0.02	1000	WQCC-12	7	0
Cyanide (Total)	CN	3	2	0.6667	1	0.3333	4.5	4.5	4.5	0	0	0.0225	0.0225	200	WQCC-11	2	0
Iron	METALS	20	7	0.35	13	0.65	11	966	2700	0	5	0.966	2.7	1000	WQCC-12	8	0
Lead	METALS	20	14	0.7	6	0.3	0.037	1.368	18	0	1	0.0912	1.2	15	EPA-2	8	0
Lithium	METALS	4	2	0.5	2	0.5	9.8	10.15	10.5	0	0	0.0139	0.01438	730	EPA-4	4	0
Manganese	METALS	20	1	0.05	19	0.95	2.8	130	1000	0	9	0.65	5	200	WQCC-12	8	0
Mercury	METALS	19	17	0.8947	2	0.1053	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	7	0
Molybdenum	METALS	17	5	0.2941	12	0.7059	1.65	11.85	21	0	0	0.06583	0.1167	180	EPA-4	7	0
Nickel	METALS	19	8	0.4211	11	0.5789	1.7	28	140	0	3	0.28	1.4	100	EPA-2	7	0
Selenium	METALS	19	18	0.9474	1	0.05263	3.72	3.72	3.72	0	0	0.372	0.372	10	EPA-1	7	0
SeleniumRe	METALS	19	18	0.9474	1	0.05263	3.72	3.72	3.72	0	0	0.0744	0.0744	50	WQCC-11	7	0
Silver	METALS	19	19	1	0	0				0	0			50	WQCC-11	7	0
Strontium	METALS	16	0	0	16	1	37.8	87.5	345	0	0	0.003977	0.01568	22000	EPA-4	6	0
Thallium	METALS	19	12	0.6316	7	0.3684	0.103	0.273	0.731	4	0	0.1365	0.3655	2	EPA-2	7	3
Tin	METALS	2	2	1	0	0				0	0			22000	EPA-4	2	0
Titanium	METALS	2	1	0.5	1	0.5	2.6	2.6	2.6								
Uranium	URANIUM	17	10	0.5882	7	0.4118	0.308	1.7	3.3	0	0	0.05667	0.11	30	EPA-2	5	0
Vanadium	METALS	19	11	0.5789	8	0.4211	0.39	0.55	8.51	0	0	0.002115	0.03273	260	EPA-4	7	0
Zinc	METALS	19	7	0.3684	12	0.6316	4	19.65	560	0	0	0.001965	0.056	10000	WQCC-12	7	0

Table B-12
Filtered Radionuclides Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	15	12	0.8	3	0.2	0.032	0.0376	0.049	2	0	0.03133	0.04083	1.2	DOE	5	2
Cesium-137	rad	15	15	1	0	0				0	0			120	DOE	7	0
Cobalt-60	rad	13	12	0.9231	1	0.07692	40.9	40.9	40.9	0	0	0.409	0.409	100	EPA-2	5	0
Gross alpha	rad	11	8	0.7273	3	0.2727	3.67	4.13	6.32	0	0	0.2753	0.4213	15	EPA-2	6	0
Gross beta	rad	11	3	0.2727	8	0.7273	3.2	6.5	12.95	0	0	0.13	0.259	50	EPA-2	6	0
Gross gamma	rad	3	1	0.3333	2	0.6667	21	90	159								
Plutonium-238	rad	18	18	1	0	0				0	0			1.6	DOE	8	0
Plutonium-239	rad	18	18	1	0	0				0	0			1.2	DOE	8	0
Strontium-90	rad	21	21	1	0	0				0	0			8	EPA-2	8	0
Technetium-99	rad	2	2	1	0	0				0	0			4000	DOE	2	0
Thorium-228	rad	4	4	1	0	0											
Thorium-230	rad	4	3	0.75	1	0.25	0.184	0.184	0.184								
Thorium-232	rad	4	4	1	0	0											
Tritium	rad	5	5	1	0	0				0	0			20000	EPA-2	4	0
Uranium-234	rad	17	5	0.2941	12	0.7059	0.0191	0.187	3.35	0	0	0.00935	0.1675	20	DOE	6	0
Uranium-235	rad	16	15	0.9375	1	0.0625	0.0396	0.0396	0.0396	0	0	0.00165	0.00165	24	DOE	5	0
Uranium-238	rad	17	9	0.5294	8	0.4706	0.021	0.224	1.57	0	0	0.009333	0.06542	24	DOE	6	0

Table B-13
Filtered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	19	0	0	19	1	5000	14400	45050								
Magnesium	GENINORG	19	0	0	19	1	1000	4500	11600								
Potassium	GENINORG	19	0	0	19	1	3000	3900	8085								
Sodium	GENINORG	19	0	0	19	1	5700	14000	34700								
Humic, Hydrophilic Acids	HUMIC_ACID	8	1	0.125	7	0.875	300	500	2800								
Humic, Hydrophilic Bases	HUMIC_ACID	8	5	0.625	3	0.375	100	200	600								
Humic, Hydrophilic Neutrals	HUMIC_ACID	8	1	0.125	7	0.875	100	300	800								
Humic, Hydrophilic Total	HUMIC_ACID	8	0	0	8	1	400	850	3700								
Humic, Hydrophobic Acids	HUMIC_ACID	8	1	0.125	7	0.875	100	500	1600								
Humic, Hydrophobic Bases	HUMIC_ACID	8	8	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	8	0	0	8	1	400	850	1900								
Humic, Hydrophobic Total	HUMIC_ACID	8	0	0	8	1	500	1450	3500								
Dissolved Organic Carbon	WATER_QUAL	8	0	0	8	1	1000	2250	7200								
pH	WATER_QUAL	14	0	0	14	1	6	7	8								
Specific Conductance	WATER_QUAL	19	0	0	19	1	95	269	477								
Total Dissolved Solids	WATER_QUAL	17	0	0	17	1	140000	219000	480000	0	0	0.219	0.48	1000000	WQCC-12	5	0
Total Organic Carbon	WATER_QUAL	3	0	0	3	1	310	670	850								
Total Suspended Solids	WATER_QUAL	6	0	0	6	1	2000	24500	800000								

Table B-14
Nonfiltered Inorganics of Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	31	24	0.7742	7	0.2258	17.8	71	4400	0	0	0.001919	0.1189	37000	EPA-4	7	0
Antimony	METALS	30	25	0.8333	5	0.1667	0.16	3	3.7	2	0	0.5	0.6167	6	EPA-2	7	1
Arsenic	METALS	31	25	0.8065	6	0.1935	2.6	2.9	7.5	0	0	0.29	0.75	10	EPA-2	7	0
Barium	METALS	31	1	0.03226	30	0.9677	2	64.5	213	0	0	0.0645	0.213	1000	WQCC-11	7	0
Beryllium	METALS	31	25	0.8065	6	0.1935	0.007	0.259	3	1	0	0.06475	0.75	4	EPA-2	7	0
Boron	METALS	31	13	0.4194	18	0.5806	2.6	119.5	211	0	0	0.03621	0.06394	3300	EPA-4	7	0
Cadmium	METALS	30	25	0.8333	5	0.1667	0.05	0.188	7	6	1	0.0376	1.4	5	EPA-2	7	2
Chromium	METALS	31	19	0.6129	12	0.3871	0.36	3.86	48.8	0	0	0.0772	0.976	50	WQCC-11	7	0
Cobalt	METALS	30	22	0.7333	8	0.2667	0.83	3.25	9.27								
Copper	METALS	31	22	0.7097	9	0.2903	1.23	5.2	73	0	0	0.0052	0.073	1000	WQCC-12	7	0
Cyanide (Total)	CN	30	25	0.8333	5	0.1667	3	10	10	0	0	0.05	0.05	200	WQCC-11	7	0
Iron	METALS	31	4	0.129	27	0.871	11	1100	32500	0	14	1.1	32.5	1000	WQCC-12	7	0
Lead	METALS	31	18	0.5806	13	0.4194	0.21	5	91	0	4	0.3333	6.067	15	EPA-2	7	0
Lithium	METALS	4	1	0.25	3	0.75	10.4	13	35	0	0	0.01781	0.04795	730	EPA-4	4	0
Manganese	METALS	31	2	0.06452	29	0.9355	1.6	130	1000	0	13	0.65	5	200	WQCC-12	7	0
Mercury	METALS	32	26	0.8125	6	0.1875	0.1	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	7	0
Molybdenum	METALS	30	16	0.5333	14	0.4667	1.9	11.45	22	0	0	0.06361	0.1222	180	EPA-4	7	0
Nickel	METALS	30	15	0.5	15	0.5	2.3	26.3	140	1	3	0.263	1.4	100	EPA-2	7	1
Selenium	METALS	32	29	0.9062	3	0.09375	2	3.52	5.52	0	0	0.352	0.552	10	EPA-1	7	0
Silver	METALS	30	29	0.9667	1	0.03333	10	10	10	0	0	0.2	0.2	50	WQCC-11	7	0
Strontium	METALS	28	0	0	28	1	11	101.5	341	0	0	0.004614	0.0155	22000	EPA-4	7	0
Thallium	METALS	29	18	0.6207	11	0.3793	0.08	0.445	3	8	2	0.2225	1.5	2	EPA-2	7	3
Tin	METALS	14	14	1	0	0				0	0			22000	EPA-4	4	0
Titanium	METALS	3	3	1	0	0											
Uranium	URANIUM	26	15	0.5769	11	0.4231	0.11	0.56	3.3	0	0	0.01867	0.11	30	EPA-2	7	0
Vanadium	METALS	30	21	0.7	9	0.3	0.49	0.764	11	0	0	0.002938	0.04231	260	EPA-4	7	0
Zinc	METALS	30	8	0.2667	22	0.7333	5.21	84.5	20800	0	1	0.00845	2.08	10000	WQCC-12	7	0
SeleniumRe	METALS	32	29	0.9062	3	0.09375	2	3.52	5.52	0	0	0.0704	0.1104	50	WQCC-11	7	0

Table B-15
Nonfiltered Radionuclides of Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample											Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	24	22	0.9167	2	0.08333	0.062	0.0635	0.065	2	0.05292	0.05417	1.2	DOE	7	2
Cesium-137	rad	23	22	0.9565	1	0.04348	6.58	6.58	6.58	0	0.05483	0.05483	120	DOE	7	0
Cobalt-60	rad	19	17	0.8947	2	0.1053	26.5	32.1	37.7	0	0.321	0.377	100	EPA-2	7	0
Gross alpha	rad	26	23	0.8846	3	0.1154	0.664	1.61	4.5	0	0.1073	0.3	15	EPA-2	6	0
Gross alpha/beta	rad	2	2	1	0	0										
Gross beta	rad	28	11	0.3929	17	0.6071	2	4.11	12.6	0	0.0822	0.252	50	EPA-2	6	0
Gross gamma	rad	15	9	0.6	6	0.4	123	184.5	306							
Plutonium-238	rad	24	24	1	0	0				0			1.6	DOE	7	0
Plutonium-239	rad	24	23	0.9583	1	0.04167	0.0216	0.0216	0.0216	0	0.018	0.018	1.2	DOE	7	0
Radium-226	rad	2	2	1	0	0										
Strontium-90	rad	23	23	1	0	0				0			8	EPA-2	7	0
Technetium-99	rad	6	6	1	0	0				0			4000	DOE	3	0
Thorium-228	rad	4	3	0.75	1	0.25	0.0376	0.0376	0.0376							
Thorium-230	rad	4	1	0.25	3	0.75	0.0215	0.0455	0.13							
Thorium-232	rad	4	3	0.75	1	0.25	0.0065	0.0065	0.0065							
Tritium	rad	32	20	0.625	12	0.375	2.554	140.1	1110	0	0.007005	0.0555	20000	EPA-2	7	0
Uranium-234	rad	15	3	0.2	12	0.8	0.0463	0.46	2.49	0	0.023	0.1245	20	DOE	6	0
Uranium-235	rad	15	12	0.8	3	0.2	0.0545	0.0574	0.109	0	0.002392	0.004542	24	DOE	6	0
Uranium-238	rad	15	6	0.4	9	0.6	0.0528	0.688	1.54	0	0.02867	0.06417	24	DOE	6	0

Table B-16
Nonfiltered Organics of Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample											Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	13	11	0.8462	2	0.1538	4.6	11.65	18.7	10	1.942	3.117	6	EPA-2	6	5
Acetone	VOC	15	13	0.8667	2	0.1333	8	10.5	13	0	0.01721	0.02131	610	EPA-4	6	0
Amino-2,6-dinitrotoluene[4-]	HEXP	16	14	0.875	2	0.125	2.3	2.45	2.6							
Methylene Chloride	VOC	16	14	0.875	2	0.125	0.73	2.565	4.4	9	0.513	0.88	5	EPA-2	7	0
Aldrin	PEST	9	8	0.8889	1	0.1111	0.0056	0.0056	0.0056	5	0.14	0.14	0.04	EPA-4	4	3
BHC[alpha-]	PEST	9	8	0.8889	1	0.1111	0.0056	0.0056	0.0056	1	0.05091	0.05091	0.11	EPA-4	4	1
BHC[beta-]	PEST	9	8	0.8889	1	0.1111	0.0091	0.0091	0.0091	1	0.02459	0.02459	0.37	EPA-4	4	1
BHC[delta-]	PEST	9	8	0.8889	1	0.1111	0.0058	0.0058	0.0058							
BHC[gamma-]	PEST	9	8	0.8889	1	0.1111	0.0055	0.0055	0.0055	1	0.0275	0.0275	0.2	EPA-2	4	1
Chlordane[alpha-]	PEST	9	8	0.8889	1	0.1111	0.0067	0.0067	0.0067	1	0.00335	0.00335	2	EPA-2	4	1
Chlordane[gamma-]	PEST	9	8	0.8889	1	0.1111	0.0063	0.0063	0.0063	1	0.00315	0.00315	2	EPA-2	4	1
DDD[4,4'-]	PEST	9	8	0.8889	1	0.1111	0.018	0.018	0.018	1	0.006429	0.006429	2.8	EPA-4	4	1
DDE[4,4'-]	PEST	9	8	0.8889	1	0.1111	0.017	0.017	0.017	1	0.0085	0.0085	2	EPA-4	4	1
DDT[4,4'-]	PEST	9	8	0.8889	1	0.1111	0.02	0.02	0.02	1	0.01	0.01	2	EPA-4	4	1
Dieldrin	PEST	9	8	0.8889	1	0.1111	0.013	0.013	0.013	6	0.3095	0.3095	0.042	EPA-4	4	3
Endosulfan I	PEST	9	8	0.8889	1	0.1111	0.0053	0.0053	0.0053	0	2.41E-05	2.41E-05	220	EPA-4	4	0
Endosulfan II	PEST	9	8	0.8889	1	0.1111	0.0088	0.0088	0.0088	0	4.00E-05	4.00E-05	220	EPA-4	4	0
Endrin	PEST	9	8	0.8889	1	0.1111	0.017	0.017	0.017	1	0.085	0.085	0.2	EPA-1	4	1
EndrinRe	PEST	9	8	0.8889	1	0.1111	0.017	0.017	0.017	1	0.0085	0.0085	2	EPA-2	4	1
Endrin Ketone	PEST	9	8	0.8889	1	0.1111	0.0091	0.0091	0.0091	1	0.0455	0.0455	0.2	EPA-1	4	1
Endrin KetoneRe	PEST	9	8	0.8889	1	0.1111	0.0091	0.0091	0.0091	1	0.00455	0.00455	2	EPA-2	4	1
Heptachlor	PEST	9	8	0.8889	1	0.1111	0.0066	0.0066	0.0066	1	0.0165	0.0165	0.4	EPA-2	4	1
Heptachlor Epoxide	PEST	9	8	0.8889	1	0.1111	0.0056	0.0056	0.0056	1	0.028	0.028	0.2	EPA-2	4	1
Di-n-octylphthalate	SVOC	15	14	0.9333	1	0.06667	2	2	2	0	0.00274	0.00274	730	EPA-4	7	0
Hexachlorobutadiene	SVOC	15	14	0.9333	1	0.06667	4	4	4	5	0.5479	0.5479	7.3	EPA-4	7	4
Chloromethane	VOC	15	14	0.9333	1	0.06667	0.84	0.84	0.84	0	0.056	0.056	15	EPA-4	6	0
Amino-4,6-dinitrotoluene[2-]	HEXP	16	15	0.9375	1	0.0625	0.15	0.15	0.15							
Nitrotoluene[3-]	HEXP	16	15	0.9375	1	0.0625	0.15	0.15	0.15	0	0.002466	0.002466	60.83333333	EPA-4	4	0
RDX	HEXP	16	15	0.9375	1	0.0625	0.49	0.49	0.49	5	0.8017	0.8017	0.611195767	EPA-4	4	3
Tetryl	HEXP	16	15	0.9375	1	0.0625	2.3	2.3	2.3	0	0.006301	0.006301	365	EPA-4	4	0
Toluene	VOC	16	15	0.9375	1	0.0625	0.18	0.18	0.18	0	0.00024	0.00024	750	WQCC-11	7	0
Dinitrotoluene[2,4-]	SVOC	21	20	0.9524	1	0.04762	0.5	0.5	0.5	0	0.006849	0.006849	73	EPA-4	7	0
Dinitrobenzene[1,3-]	HEXP	16	16	1	0	0				0			3.65	EPA-4	4	0
DNX	HEXP	1	1	1	0	0										
HMX	HEXP	16	16	1	0	0				0			1825	EPA-4	4	0
MNX	HEXP	1	1	1	0	0										
Nitrotoluene[2-]	HEXP	16	16	1	0	0										
Nitrotoluene[4-]	HEXP	16	16	1	0	0				0			60.83333333	EPA-4	4	0
TNX	HEXP	1	1	1	0	0										
Trinitrobenzene[1,3,5-]	HEXP	15	15	1	0	0				0			1095	EPA-4	4	0
Trinitrotoluene[2,4,6-]	HEXP	16	16	1	0	0				0			18.25	EPA-4	4	0
Acenaphthene	PAH	15	15	1	0	0				0			370	EPA-4	7	0
Acenaphthylene	PAH	15	15	1	0	0				0			370	EPA-4	7	0

Table B-16 (continued)

Unfiltered WGI Samples		Summary by Sample											Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Anthracene	PAH	15	15	1	0	0				0			1800	EPA-4	7	0
Benzo(a)anthracene	PAH	15	15	1	0	0				15			0.92	EPA-4	7	7
Benzo(a)pyrene	PAH	15	15	1	0	0				15			0.2	EPA-2	7	7
Benzo(b)fluoranthene	PAH	15	15	1	0	0				15			0.92	EPA-4	7	7
Benzo(g,h,i)perylene	PAH	15	15	1	0	0				0			180	EPA-4	7	0
Benzo(k)fluoranthene	PAH	15	15	1	0	0				9			9.2	EPA-4	7	6
Chrysene	PAH	15	15	1	0	0				0			92	EPA-4	7	0
Dibenz(a,h)anthracene	PAH	15	15	1	0	0				15			0.092	EPA-4	7	7
Fluoranthene	PAH	15	15	1	0	0				0			1500	EPA-4	7	0
Fluorene	PAH	15	15	1	0	0				0			240	EPA-4	7	0
Indeno(1,2,3-cd)pyrene	PAH	15	15	1	0	0				15			0.92	EPA-4	7	7
Naphthalene	PAH	15	15	1	0	0				0			30	WQCC-11	7	0
Phenanthrene	PAH	15	15	1	0	0				0			1800	EPA-4	7	0
Pyrene	PAH	15	15	1	0	0				0			180	EPA-4	7	0
Aroclor-1016	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1221	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1232	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1242	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1248	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1254	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1260	PCB	15	15	1	0	0				8			0.5	EPA-2	7	4
Aroclor-1262	PCB	4	4	1	0	0				2			0.5	EPA-2	3	1
Endosulfan Sulfate	PEST	9	9	1	0	0				0			220	EPA-4	4	0
Endrin Aldehyde	PEST	9	9	1	0	0				1			0.2	EPA-1	4	1
Endrin AldehydeRe	PEST	9	9	1	0	0				1			2	EPA-2	4	1
Methoxychlor[4,4'-]	PEST	9	9	1	0	0				1			40	EPA-2	4	1
Toxaphene (Technical Grade)	PEST	9	9	1	0	0				5			3	EPA-2	4	3
Aniline	SVOC	14	14	1	0	0				0			120	EPA-4	6	0
Azobenzene	SVOC	11	11	1	0	0				10			6.1	EPA-4	6	6
Benzidine	SVOC	10	10	1	0	0				10			0.0029	EPA-4	6	6
Benzoic Acid	SVOC	14	14	1	0	0				0			150000	EPA-4	6	0
Benzyl Alcohol	SVOC	14	14	1	0	0				0			11000	EPA-4	6	0
Bis(2-chloroethoxy)methane	SVOC	15	15	1	0	0										
Bis(2-chloroethyl)ether	SVOC	15	15	1	0	0				15			0.098	EPA-4	7	7
Bromophenyl-phenylether[4-]	SVOC	15	15	1	0	0										
Butylbenzylphthalate	SVOC	15	15	1	0	0				0			7300	EPA-4	7	0
Carbazole	SVOC	7	7	1	0	0				0			34	EPA-4	4	0
Chloro-3-methylphenol[4-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Chloroaniline[4-]	SVOC	15	15	1	0	0				0			150	EPA-4	7	0
Chloronaphthalene[2-]	SVOC	15	15	1	0	0				0			490	EPA-4	7	0
Chlorophenol[2-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Chlorophenyl-phenyl[4-] Ether	SVOC	15	15	1	0	0										
Dibenzofuran	SVOC	15	15	1	0	0				0			24	EPA-4	7	0

Table B-16 (continued)

Unfiltered WGI Samples		Summary by Sample											Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzidine[3,3'-]	SVOC	15	15	1	0	0				15			1.5	EPA-4	7	7
Dichlorophenol[2,4-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Diethylphthalate	SVOC	15	15	1	0	0				0			29000	EPA-4	7	0
Dimethyl Phthalate	SVOC	15	15	1	0	0				0			370000	EPA-4	7	0
Dimethylphenol[2,4-]	SVOC	15	15	1	0	0				0			730	EPA-4	7	0
Di-n-butylphthalate	SVOC	15	15	1	0	0				0			3700	EPA-4	7	0
Dinitro-2-methylphenol[4,6-]	SVOC	15	15	1	0	0										
Dinitrophenol[2,4-]	SVOC	15	15	1	0	0				1			73	EPA-4	7	1
Dinitrotoluene[2,6-]	SVOC	21	21	1	0	0				0			37	EPA-4	7	0
Diphenylamine	SVOC	3	3	1	0	0				0			910	EPA-4	3	0
Diphenylhydrazine[1,2-]	SVOC	2	2	1	0	0										
Hexachlorobenzene	SVOC	15	15	1	0	0				15			1	EPA-2	7	7
Hexachlorocyclopentadiene	SVOC	15	15	1	0	0				0			50	EPA-2	7	0
Hexachloroethane	SVOC	15	15	1	0	0				0			37	EPA-4	7	0
Isophorone	SVOC	15	15	1	0	0				0			710	EPA-4	7	0
Methylnaphthalene[2-]	SVOC	15	15	1	0	0				0			30	WQCC-11	7	0
Methylphenol[2-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Methylphenol[4-]	SVOC	15	15	1	0	0				0			180	EPA-4	7	0
Methylpyridine[2-]	SVOC	4	4	1	0	0										
Nitroaniline[2-]	SVOC	15	15	1	0	0				15			2.2	EPA-4	7	7
Nitroaniline[3-]	SVOC	15	15	1	0	0				15			2.2	EPA-4	7	7
Nitroaniline[4-]	SVOC	15	15	1	0	0				15			2.2	EPA-4	7	7
Nitrobenzene	SVOC	21	21	1	0	0				5			3.4	EPA-4	7	5
Nitrophenol[2-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Nitrophenol[4-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Nitrosodimethylamine[N-]	SVOC	15	15	1	0	0				15			0.013	EPA-4	7	7
Nitroso-di-n-propylamine[N-]	SVOC	15	15	1	0	0				15			0.096	EPA-4	7	7
Nitrosodiphenylamine[N-]	SVOC	12	12	1	0	0				0			140	EPA-4	7	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	12	12	1	0	0										
Pentachlorophenol	SVOC	15	15	1	0	0				15			1	EPA-2	7	7
Phenol	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Pyridine	SVOC	14	14	1	0	0				0			37	EPA-4	6	0
Trichlorophenol[2,4,5-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Trichlorophenol[2,4,6-]	SVOC	15	15	1	0	0				15			5	WQCC-12	7	7
Acrylonitrile	VOC	2	2	1	0	0										
Benzene	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Bromobenzene	VOC	14	14	1	0	0				0			23	EPA-4	5	0
Bromochloromethane	VOC	14	14	1	0	0				8			5	EPA-2	5	0
Bromodichloromethane	VOC	15	15	1	0	0				0			100	EPA-2	6	0
Bromoform	VOC	15	15	1	0	0				0			100	EPA-2	6	0
Bromomethane	VOC	15	15	1	0	0				9			8.7	EPA-4	6	6
Butanone[2-]	VOC	15	15	1	0	0				0			1900	EPA-4	6	0
Butylbenzene[n-]	VOC	14	14	1	0	0				0			61	EPA-4	5	0

Table B-16 (continued)

Unfiltered WGI Samples		Summary by Sample											Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Butylbenzene[sec-]	VOC	14	14	1	0	0				0			61	EPA-4	5	0
Butylbenzene[tert-]	VOC	14	14	1	0	0				0			61	EPA-4	5	0
Carbon Disulfide	VOC	15	15	1	0	0				0			1000	EPA-4	6	0
Carbon Tetrachloride	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Chlorobenzene	VOC	15	15	1	0	0				0			100	EPA-2	6	0
Chlorodibromomethane	VOC	15	15	1	0	0				0			100	EPA-2	6	0
Chloroethane	VOC	15	15	1	0	0				0			39	EPA-4	6	0
Chloroform	VOC	14	14	1	0	0				0			100	WQCC-11	5	0
Chlorotoluene[2-]	VOC	14	14	1	0	0				0			120	EPA-4	5	0
Chlorotoluene[4-]	VOC	14	14	1	0	0				0			120	EPA-4	5	0
Dibromo-3-Chloropropane[1,2-]	VOC	13	13	1	0	0										
Dibromoethane[1,2-]	VOC	14	14	1	0	0				14			0.05	EPA-2	5	5
Dibromomethane	VOC	14	14	1	0	0				0			61	EPA-4	5	0
Dichlorobenzene[1,2-]	VOC	15	15	1	0	0				0			600	EPA-2	6	0
Dichlorobenzene[1,3-]	VOC	15	15	1	0	0				1			18	EPA-4	6	1
Dichlorobenzene[1,4-]	VOC	15	15	1	0	0				0			75	EPA-2	6	0
Dichlorodifluoromethane	VOC	14	14	1	0	0				0			390	EPA-4	5	0
Dichloroethane[1,1-]	VOC	15	15	1	0	0				0			25	WQCC-11	6	0
Dichloroethane[1,2-]	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Dichloroethene[1,1-]	VOC	15	15	1	0	0				9			5	WQCC-11	6	0
Dichloroethene[cis/trans-1,2-]	VOC	4	4	1	0	0										
Dichloroethene[cis-1,2-]	VOC	10	10	1	0	0				0			70	EPA-2	3	0
Dichloroethene[trans-1,2-]	VOC	15	15	1	0	0				0			100	EPA-2	6	0
Dichloropropane[1,2-]	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Dichloropropane[1,3-]	VOC	14	14	1	0	0				8			5	EPA-2	5	0
Dichloropropane[2,2-]	VOC	14	14	1	0	0				8			5	EPA-2	5	0
Dichloropropene[1,1-]	VOC	14	14	1	0	0				8			4	EPA-4	5	5
Dichloropropene[cis-1,3-]	VOC	15	15	1	0	0				9			4	EPA-4	6	6
Dichloropropene[trans-1,3-]	VOC	13	13	1	0	0				7			4	EPA-4	5	4
Ethylbenzene	VOC	15	15	1	0	0				0			700	EPA-2	6	0
Hexanone[2-]	VOC	15	15	1	0	0				0			1900	EPA-4	6	0
Iodomethane	VOC	14	14	1	0	0				0			8.7	EPA-4	5	0
Isopropylbenzene	VOC	14	14	1	0	0				0			660	EPA-4	5	0
Isopropyltoluene[4-]	VOC	14	14	1	0	0				0			660	EPA-4	5	0
Methyl-2-pentanone[4-]	VOC	15	15	1	0	0				0			160	EPA-4	6	0
Propylbenzene[1-]	VOC	14	14	1	0	0				0			61	EPA-4	5	0
Styrene	VOC	15	15	1	0	0				0			100	EPA-2	6	0
Tetrachloroethane[1,1,1,2-]	VOC	15	15	1	0	0				9			4.3	EPA-4	6	6
Tetrachloroethane[1,1,2,2-]	VOC	14	14	1	0	0				0			10	WQCC-11	5	0
Tetrachloroethene	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Trichloro-1,2,2-trifluoroethane	VOC	10	10	1	0	0										
Trichlorobenzene[1,2,3-]	VOC	8	8	1	0	0				0			70	EPA-2	5	0
Trichlorobenzene[1,2,4-]	VOC	15	15	1	0	0				0			70	EPA-2	7	0

Table B-16 (continued)

Unfiltered WGI Samples		Summary by Sample											Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloroethane[1,1,1-]	VOC	15	15	1	0	0				0			60	WQCC-11	6	0
Trichloroethane[1,1,2-]	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Trichloroethene	VOC	15	15	1	0	0				9			5	EPA-2	6	0
Trichlorofluoromethane	VOC	14	14	1	0	0				0			1300	EPA-4	5	0
Trichloropropane[1,2,3-]	VOC	14	14	1	0	0				14			0.016	EPA-4	5	5
Trichlorotrifluoroethane	VOC	2	2	1	0	0										
Trimethylbenzene[1,2,4-]	VOC	14	14	1	0	0				0			12	EPA-4	5	0
Trimethylbenzene[1,3,5-]	VOC	14	14	1	0	0				0			12	EPA-4	5	0
Vinyl acetate	VOC	1	1	1	0	0										
Vinyl Chloride	VOC	15	15	1	0	0				15			1	WQCC-11	6	6
Xylene (Total)	VOC	11	11	1	0	0				0			620	WQCC-11	5	0
Xylene[1,2-]	VOC	13	13	1	0	0				0			1400	EPA-4	5	0
Xylene[1,3-]+Xylene[1,4-]	VOC	7	7	1	0	0				0			620	WQCC-11	4	0

Table B-17
Nonfiltered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	22	18	0.8182	4	0.1818	15.1	140.8	195								
Chlorate	ANION	6	6	1	0	0											
Chloride	ANION	37	0	0	37	1	998	26000	69900	0	0	0.104	0.2796	250000	WQCC-12	9	0
Fluoride	ANION	40	3	0.075	37	0.925	76	298.5	1250	0	0	0.1866	0.7812	1600	WQCC-11	9	0
Nitrate	ANION	44	15	0.3409	29	0.6591	10	1000	7700	0	0	0.1	0.77	10000	EPA-4	8	0
Oxalate	ANION	6	6	1	0	0											
Perchlorate	ANION	22	21	0.9545	1	0.04545	4.28	4.28	4.28	2	1	1.157	1.157	3.7	EPA-4	6	1
Sulfate	ANION	41	2	0.04878	39	0.9512	1800	9600	24800	0	0	0.016	0.04133	600000	WQCC-12	9	0
Calcium	GENINORG	30	0	0	30	1	2100	17500	45400								
Hardness	GENINORG	13	0	0	13	1	6900	77600	151000								
Magnesium	GENINORG	29	0	0	29	1	400	5162	11600								
Potassium	GENINORG	29	1	0.03448	28	0.9655	1600	3735	8145								
Sodium	GENINORG	29	0	0	29	1	1100	17900	49400								
Deuterium Ratio	STABLE_ISOTOPES	13	0	0	13	1	-84	-78	-72								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	3	0	0	3	1	-2.6	1.7	3.3								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	13	0	0	13	1	-11.5	-11.1	-10								
pH	WATER_QUAL	14	0	0	14	1	5.65	7.925	8.8								
Specific Conductance	WATER_QUAL	14	0	0	14	1	152	339	474								
Suspended Sediment Concentration	WATER_QUAL	3	2	0.6667	1	0.3333	1050	1050	1050								
Total Dissolved Solids	WATER_QUAL	4	0	0	4	1	132000	253500	355000	0	0	0.2535	0.355	1000000	WQCC-12	2	0
Total Organic Carbon	WATER_QUAL	15	1	0.06667	14	0.9333	237	2595	4600								
Total Suspended Solids	WATER_QUAL	10	4	0.4	6	0.6	500	8900	45000								

Table B-18
Filtered Inorganics of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	17	16	0.9412	1	0.05882	53	53	53	0	0	0.001432	0.001432	37000	EPA-4	6	0
Antimony	METALS	17	15	0.8824	2	0.1176	3	3	3	5	0	0.5	0.5	6	EPA-2	6	1
Arsenic	METALS	17	8	0.4706	9	0.5294	2.2	5.79	8.9	0	0	0.579	0.89	10	EPA-2	6	0
Barium	METALS	17	2	0.1176	15	0.8824	2.7	140	545	0	0	0.14	0.545	1000	WQCC-11	6	0
Beryllium	METALS	17	11	0.6471	6	0.3529	0.011	0.0405	3	0	0	0.01012	0.75	4	EPA-2	6	0
Boron	METALS	17	2	0.1176	15	0.8824	4.51	56	93.7	0	0	0.01697	0.02839	3300	EPA-4	6	0
Cadmium	METALS	17	16	0.9412	1	0.05882	0.143	0.143	0.143	2	0	0.0286	0.0286	5	EPA-2	6	2
Chromium	METALS	17	6	0.3529	11	0.6471	1.1	5.93	11.2	0	0	0.1186	0.224	50	WQCC-11	6	0
Cobalt	METALS	17	11	0.6471	6	0.3529	0.52	4.555	14								
Copper	METALS	17	16	0.9412	1	0.05882	0.88	0.88	0.88	0	0	0.00088	0.00088	1000	WQCC-12	6	0
Cyanide (Total)	CN	5	5	1	0	0				0	0			200	WQCC-11	1	0
Iron	METALS	18	4	0.2222	14	0.7778	28.8	83.05	17000	0	5	0.08305	17	1000	WQCC-12	7	0
Lead	METALS	18	13	0.7222	5	0.2778	1.4	2.2	13	0	0	0.1467	0.8667	15	EPA-2	7	0
Manganese	METALS	18	2	0.1111	16	0.8889	1.24	75.5	3400	0	5	0.3775	17	200	WQCC-12	7	0
Mercury	METALS	15	15	1	0	0				0	0			2	WQCC-11	4	0
Molybdenum	METALS	12	7	0.5833	5	0.4167	2.57	15.5	31	0	0	0.08611	0.1722	180	EPA-4	5	0
Nickel	METALS	17	8	0.4706	9	0.5294	0.95	5.7	210	0	2	0.057	2.1	100	EPA-2	6	0
Selenium	METALS	15	15	1	0	0				5	0			10	EPA-1	4	1
SeleniumRe	METALS	15	15	1	0	0				0	0			50	WQCC-11	4	0
Silver	METALS	17	15	0.8824	2	0.1176	10	10	10	0	0	0.2	0.2	50	WQCC-11	6	0
Strontium	METALS	12	0	0	12	1	91.6	160	911	0	0	0.007273	0.04141	22000	EPA-4	5	0
Thallium	METALS	17	9	0.5294	8	0.4706	0.204	0.583	3	0	2	0.2915	1.5	2	EPA-2	6	0
Tin	METALS	2	2	1	0	0				0	0			22000	EPA-4	2	0
Titanium	METALS	5	2	0.4	3	0.6	4.1	4.1	4.5								
Uranium	URANIUM	15	10	0.6667	5	0.3333	1.72	1.79	1.94	5	0	0.05967	0.06467	30	EPA-2	4	1
Vanadium	METALS	17	6	0.3529	11	0.6471	6.9	14	31.6	0	0	0.05385	0.1215	260	EPA-4	6	0
Zinc	METALS	17	5	0.2941	12	0.7059	6.45	26.9	320	0	0	0.00269	0.032	10000	WQCC-12	6	0

Table B-19
Filtered Radionuclides of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	9	8	0.8889	1	0.1111	0.0221	0.0221	0.0221	0	0	0.01842	0.01842	1.2	DOE	3	0
Cesium-137	rad	7	7	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	7	7	1	0	0				0	0			100	EPA-2	3	0
Gross alpha	rad	7	5	0.7143	2	0.2857	1.8	3.98	6.16	0	0	0.2653	0.4107	15	EPA-2	5	0
Gross beta	rad	7	1	0.1429	6	0.8571	2.9	4.4	6.3	0	0	0.088	0.126	50	EPA-2	5	0
Gross gamma	rad	2	0	0	2	1	132	140.5	149								
Plutonium-238	rad	11	11	1	0	0				0	0			1.6	DOE	5	0
Plutonium-239	rad	10	10	1	0	0				0	0			1.2	DOE	5	0
Strontium-90	rad	17	16	0.9412	1	0.05882	7.16	7.16	7.16	0	0	0.895	0.895	8	EPA-2	7	0
Tritium	rad	9	8	0.8889	1	0.1111	3.8	3.8	3.8	0	0	0.00019	0.00019	20000	EPA-2	4	0
Uranium-234	rad	12	4	0.3333	8	0.6667	0.0602	1.065	1.31	0	0	0.05325	0.0655	20	DOE	6	0
Uranium-235	rad	12	10	0.8333	2	0.1667	0.0397	0.04435	0.049	0	0	0.001848	0.002042	24	DOE	6	0
Uranium-238	rad	12	6	0.5	6	0.5	0.0956	0.595	0.68	0	0	0.02479	0.02833	24	DOE	6	0

Table B-20
Filtered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	18	0	0	18	1	2000	20640	71970								
Hardness	GENINORG	7	0	0	7	1	5200	5600	202000								
Magnesium	GENINORG	18	6	0.3333	12	0.6667	777	5350	5900								
Potassium	GENINORG	12	0	0	12	1	2158	3550	5530								
Sodium	GENINORG	18	0	0	18	1	9400	18050	150000								
Humic, Hydrophilic Acids	HUMIC_ACID	5	0	0	5	1	400	1400	2300								
Humic, Hydrophilic Bases	HUMIC_ACID	9	2	0.2222	7	0.7778	100	133.3	1100								
Humic, Hydrophilic Neutrals	HUMIC_ACID	5	0	0	5	1	100	200	1900								
Humic, Hydrophilic Total	HUMIC_ACID	9	0	0	9	1	400	1000	4100								
Humic, Hydrophobic Acids	HUMIC_ACID	9	3	0.3333	6	0.6667	100	650	2500								
Humic, Hydrophobic Bases	HUMIC_ACID	9	5	0.5556	4	0.4444	0	100	200								
Humic, Hydrophobic Neutrals	HUMIC_ACID	9	0	0	9	1	300	800	1600								
Humic, Hydrophobic Total	HUMIC_ACID	9	0	0	9	1	400	1200	4200								
Deuterium Ratio	STABLE_ISOTOPES	5	0	0	5	1	-49.65	-48.65	-48.5								
Dissolved Organic Carbon	WATER_QUAL	9	0	0	9	1	900	2900	8300								
pH	WATER_QUAL	30	0	0	30	1	5.8	8	9								
Specific Conductance	WATER_QUAL	27	0	0	27	1	85	161	608								
Total Dissolved Solids	WATER_QUAL	66	0	0	66	1	48000	173000	8637000	0	1	0.173	8.637	1000000	WQCC-12	14	0
Total Organic Carbon	WATER_QUAL	2	0	0	2	1	360	515	670								
Total Suspended Solids	WATER_QUAL	11	6	0.5455	5	0.4545	2000	6000	14000								
Turbidity	WATER_QUAL	5	0	0	5	1	0.17	0.23	0.51								

Table B-21
Nonfiltered Inorganics of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	75	52	0.693	23	0.3067	22.1	146	202000	0	1	0.003946	5.459	37000	EPA-4	16	0
Antimony	METALS	76	55	0.724	21	0.2763	0.1	3	9	6	3	0.5	1.5	6	EPA-2	16	4
Arsenic	METALS	77	54	0.701	23	0.2987	2	5.25	820	0	6	0.525	82	10	EPA-2	16	0
Barium	METALS	78	2	0.026	76	0.9744	3	59.05	3610	0	1	0.05905	3.61	1000	WQCC-11	16	0
Beryllium	METALS	77	64	0.831	13	0.1688	0.01	3	25	0	1	0.75	6.25	4	EPA-2	16	0
Boron	METALS	75	19	0.253	56	0.7467	5.24	61	4390	0	1	0.01848	1.33	3300	EPA-4	16	0
Cadmium	METALS	76	69	0.908	7	0.09211	0.07	4	200	25	3	0.8	40	5	EPA-2	16	10
Chromium	METALS	77	47	0.61	30	0.3896	2	11.5	310	0	1	0.23	6.2	50	WQCC-11	16	0
Cobalt	METALS	74	60	0.811	14	0.1892	0.69	7.065	220								
Copper	METALS	74	38	0.514	36	0.4865	1.1	14.8	700	0	0	0.0148	0.7	1000	WQCC-12	16	0
Cyanide (Total)	CN	83	57	0.687	26	0.321	1	10	1710	0	1	0.05	8.55	200	WQCC-11	15	0
Iron	METALS	76	6	0.079	70	0.9211	11.8	897.5	5440000	0	33	0.8975	5440	1000	WQCC-12	16	0
Lead	METALS	76	40	0.526	36	0.4737	0.26	26.2	820	7	22	1.747	54.67	15	EPA-2	16	5
Lithium	METALS	10	0	0	10	1	20	29	330	0	0	0.03973	0.4521	730	EPA-4	10	0
Manganese	METALS	75	11	0.147	64	0.8533	2	51.32	32900	0	13	0.2566	164.5	200	WQCC-12	16	0
Mercury	METALS	75	52	0.693	23	0.3067	0.1	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	16	0
Molybdenum	METALS	75	61	0.813	14	0.1867	3.05	12.9	39	0	0	0.07167	0.2167	180	EPA-4	16	0
Nickel	METALS	76	60	0.79	16	0.2105	1.4	18	550	0	3	0.18	5.5	100	EPA-2	16	0
Selenium	METALS	75	62	0.827	13	0.1733	2	5	14	2	3	0.5	1.4	10	EPA-1	16	0
SeleniumRe	METALS	75	62	0.827	13	0.1733	2	5	14	0	0	0.1	0.28	50	WQCC-11	16	0
Silver	METALS	74	61	0.824	13	0.1757	0.69	10	105.3	0	1	0.2	2.106	50	WQCC-11	16	0
Strontium	METALS	74	0	0	74	1	10	97.5	1640	0	0	0.004432	0.07455	22000	EPA-4	16	0
Thallium	METALS	72	56	0.778	16	0.2222	0.02	3	10	36	9	1.5	5	2	EPA-2	16	10
Tin	METALS	64	63	0.984	1	0.01562	53.2	53.2	53.2	0	0	0.002418	0.002418	22000	EPA-4	14	0
Titanium	METALS	5	5	1	0	0											
Uranium	URANIUM	64	13	0.203	51	0.7969	0.11	1.401	14.55	0	0	0.0467	0.485	30	EPA-2	16	0
Vanadium	METALS	74	35	0.473	39	0.527	0.5	14	2190	0	1	0.05385	8.423	260	EPA-4	16	0
Zinc	METALS	74	14	0.189	60	0.8108	6.58	261.1	275000	0	1	0.02611	27.5	10000	WQCC-12	16	0

Table B-22
Nonfiltered Radionuclides of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	81	74	0.9136	7	0.08642	0.0221	0.0482	0.521	0	0	0.04017	0.4342	1.2	DOE	16	0
Cesium-137	rad	80	80	1	0	0				0	0			120	DOE	16	0
Cobalt-60	rad	52	42	0.8077	10	0.1923	5.52	21.8	93	0	0	0.218	0.93	100	EPA-2	13	0
Gross alpha	rad	84	73	0.869	11	0.131	0.774	2.53	5.53	0	0	0.1687	0.3687	15	EPA-2	16	0
Gross alpha/beta	rad	2	1	0.5	1	0.5	2.32	2.32	2.32								
Gross beta	rad	86	52	0.6047	34	0.3953	1.47	4.03	7.89	0	0	0.0806	0.1578	50	EPA-2	16	0
Gross gamma	rad	35	28	0.8	7	0.2	67	192	271.6								
Plutonium-238	rad	83	78	0.9398	5	0.06024	0.0165	0.0936	0.305	0	0	0.0585	0.1906	1.6	DOE	16	0
Plutonium-239	rad	83	79	0.9518	4	0.04819	0.00914	0.2099	0.744	0	0	0.1749	0.62	1.2	DOE	16	0
Radium-226	rad	3	2	0.6667	1	0.3333	0.4	0.4	0.4								
Strontium-90	rad	119	119	1	0	0				0	0			8	EPA-2	15	0
Technetium-99	rad	3	3	1	0	0				0	0			4000	DOE	1	0
Thorium-228	rad	5	4	0.8	1	0.2	0.0432	0.0432	0.0432								
Thorium-230	rad	5	1	0.2	4	0.8	0.0158	0.0452	0.0668								
Thorium-232	rad	5	4	0.8	1	0.2	0.00645	0.00645	0.00645								
Tritium	rad	105	97	0.9238	8	0.07619	1.341	8.633	749	0	0	0.0004317	0.03745	20000	EPA-2	16	0
Uranium-234	rad	30	4	0.1333	26	0.8667	0.0352	0.629	2.24	0	0	0.03145	0.112	20	DOE	11	0
Uranium-235	rad	30	22	0.7333	8	0.2667	0.0271	0.0577	0.1	0	0	0.002404	0.004167	24	DOE	11	0
Uranium-238	rad	30	5	0.1667	25	0.8333	0.0201	0.329	1.25	0	0	0.01371	0.05208	24	DOE	11	0

Table B-23
Nonfiltered Organics of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
DDT[4,4'-]	PEST	8	6	0.75	2	0.25	0.0077	0.01085	0.014	0	0	0.005425	0.007	2	EPA-4	4	0
Acetone	VOC	21	17	0.8095	4	0.1905	5.6	28	51	0	0	0.0459	0.08361	610	EPA-4	9	0
Methylphenol[4-]	SVOC	18	15	0.8333	3	0.1667	1.2	1.8	58	0	0	0.01	0.3222	180	EPA-4	11	0
Isopropylbenzene	VOC	19	16	0.8421	3	0.1579	0.41	0.55	0.94	0	0	0.0008333	0.001424	660	EPA-4	10	0
Toluene	VOC	23	20	0.8696	3	0.1304	1.1	2.5	12	0	0	0.003333	0.016	750	WQCC-11	10	0
Diesel Range Organics	DRO	19	17	0.8947	2	0.1053	34	55	76								
Aroclor-1260	PCB	19	17	0.8947	2	0.1053	0.53	0.65	0.77	12	2	1.3	1.54	0.5	EPA-2	10	6
Benzoic Acid	SVOC	20	18	0.9	2	0.1	9	11	13	0	0	7.33E-05	8.67E-05	150000	EPA-4	10	0
Trichloroethane[1,1,1-]	VOC	23	21	0.913	2	0.08696	1.2	12.1	23	0	0	0.2017	0.3833	60	WQCC-11	10	0
Benzene	VOC	24	22	0.9167	2	0.08333	0.3	1.1	1.9	16	0	0.22	0.38	5	EPA-2	11	0
Nitrosodiphenylamine[N-]	SVOC	15	14	0.9333	1	0.06667	9.6	9.6	9.6	0	0	0.06857	0.06857	140	EPA-4	9	0
Bis(2-ethylhexyl)phthalate	SVOC	18	17	0.9444	1	0.05556	1.4	1.4	1.4	13	0	0.2333	0.2333	6	EPA-2	11	9
Phenol	SVOC	20	19	0.95	1	0.05	11	11	11	19	1	2.2	2.2	5	WQCC-12	10	10
Dichlorobenzene[1,4-]	VOC	22	21	0.9545	1	0.04545	0.27	0.27	0.27	0	0	0.0036	0.0036	75	EPA-2	10	0
Methylene Chloride	VOC	23	22	0.9565	1	0.04348	17	17	17	17	1	3.4	3.4	5	EPA-2	10	1
Nitrotoluene[4-]	HEXP	35	34	0.9714	1	0.02857	0.18	0.18	0.18	0	0	0.002959	0.002959	60.83	EPA-4	8	0
D[2,4-]	HERB	1	1	1	0	0											
TP[2,4,5-]	HERB	1	1	1	0	0											
Amino-2,6-dinitrotoluene[4-]	HEXP	35	35	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	35	35	1	0	0											
Dinitrobenzene[1,3-]	HEXP	35	35	1	0	0				0	0			3.65	EPA-4	8	0
DNX	HEXP	1	1	1	0	0											
HMX	HEXP	35	35	1	0	0				0	0			1825	EPA-4	8	0
MNX	HEXP	1	1	1	0	0											
Nitrotoluene[2-]	HEXP	35	35	1	0	0											
Nitrotoluene[3-]	HEXP	35	35	1	0	0				0	0			60.83	EPA-4	8	0
RDX	HEXP	35	35	1	0	0				16	0			0.61	EPA-4	8	7
Tetryl	HEXP	35	35	1	0	0				0	0			365	EPA-4	8	0
TNX	HEXP	1	1	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	26	26	1	0	0				0	0			1095	EPA-4	8	0
Trinitrotoluene[2,4,6-]	HEXP	35	35	1	0	0				0	0			18.25	EPA-4	8	0
Aroclor-1016	PCB	15	15	1	0	0				10	0			0.5	EPA-2	8	5
Aroclor-1221	PCB	15	15	1	0	0				10	0			0.5	EPA-2	8	5
Aroclor-1232	PCB	15	15	1	0	0				10	0			0.5	EPA-2	8	5
Aroclor-1242	PCB	19	19	1	0	0				14	0			0.5	EPA-2	10	7
Aroclor-1248	PCB	15	15	1	0	0				10	0			0.5	EPA-2	8	5
Aroclor-1254	PCB	19	19	1	0	0				14	0			0.5	EPA-2	10	7
Aroclor-1262	PCB	6	6	1	0	0				3	0			0.5	EPA-2	6	0
Aldrin	PEST	7	7	1	0	0				4	0			0.04	EPA-4	3	2
BHC[alpha-]	PEST	7	7	1	0	0				0	0			0.11	EPA-4	3	0
BHC[beta-]	PEST	7	7	1	0	0				0	0			0.37	EPA-4	3	0
BHC[delta-]	PEST	7	7	1	0	0											
BHC[gamma-]	PEST	7	7	1	0	0				0	0			0.2	EPA-2	3	0
Chlordane(alpha/gamma)	PEST	1	1	1	0	0											

Table B-23 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chlordane[alpha-]	PEST	6	6	1	0	0				0	0			2	EPA-2	2	0
Chlordane[gamma-]	PEST	6	6	1	0	0				0	0			2	EPA-2	2	0
DDD[4,4'-]	PEST	7	7	1	0	0				0	0			2.8	EPA-4	3	0
DDE[4,4'-]	PEST	7	7	1	0	0				0	0			2	EPA-4	3	0
Dieldrin	PEST	7	7	1	0	0				6	0			0.042	EPA-4	3	2
Endosulfan I	PEST	7	7	1	0	0				0	0			220	EPA-4	3	0
Endosulfan II	PEST	7	7	1	0	0				0	0			220	EPA-4	3	0
Endosulfan Sulfate	PEST	7	7	1	0	0				0	0			220	EPA-4	3	0
Endrin	PEST	7	7	1	0	0				0	0			0.2	EPA-1	3	0
EndrinRe	PEST	7	7	1	0	0				0	0			2	EPA-2	3	0
Endrin Aldehyde	PEST	7	7	1	0	0				0	0			0.2	EPA-1	3	0
Endrin AldehydeRe	PEST	7	7	1	0	0				0	0			2	EPA-2	3	0
Endrin Ketone	PEST	6	6	1	0	0				0	0			0.2	EPA-1	2	0
Endrin KetoneRe	PEST	6	6	1	0	0				0	0			2	EPA-2	2	0
Heptachlor	PEST	7	7	1	0	0				0	0			0.4	EPA-2	3	0
Heptachlor Epoxide	PEST	7	7	1	0	0				0	0			0.2	EPA-2	3	0
Methoxychlor[4,4'-]	PEST	7	7	1	0	0				0	0			40	EPA-2	3	0
Toxaphene (Technical Grade)	PEST	7	7	1	0	0				4	0			3	EPA-2	3	2
Acenaphthene	SVOC	20	20	1	0	0				0	0			370	EPA-4	10	0
Acenaphthylene	SVOC	20	20	1	0	0				0	0			370	EPA-4	10	0
Aniline	SVOC	17	17	1	0	0				0	0			120	EPA-4	10	0
Anthracene	SVOC	20	20	1	0	0				0	0			1800	EPA-4	10	0
Azobenzene	SVOC	12	12	1	0	0				11	0			6.1	EPA-4	9	9
Benzidine	SVOC	15	15	1	0	0				15	0			0.0029	EPA-4	10	10
Benzo(a)anthracene	SVOC	20	20	1	0	0				20	0			0.92	EPA-4	10	10
Benzo(a)pyrene	SVOC	20	20	1	0	0				20	0			0.2	EPA-2	10	10
Benzo(b)fluoranthene	SVOC	20	20	1	0	0				20	0			0.92	EPA-4	10	10
Benzo(g,h,i)perylene	SVOC	20	20	1	0	0				0	0			180	EPA-4	10	0
Benzo(k)fluoranthene	SVOC	20	20	1	0	0				14	0			9.2	EPA-4	10	9
Benzyl Alcohol	SVOC	20	20	1	0	0				0	0			11000	EPA-4	10	0
Bis(2-chloroethoxy)methane	SVOC	20	20	1	0	0											
Bis(2-chloroethyl)ether	SVOC	20	20	1	0	0				20	0			0.098	EPA-4	10	10
Bromophenyl-phenylether[4-]	SVOC	20	20	1	0	0											
Butylbenzylphthalate	SVOC	20	20	1	0	0				0	0			7300	EPA-4	10	0
Carbazole	SVOC	4	4	1	0	0				0	0			34	EPA-4	2	0
Chloro-3-methylphenol[4-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Chloroaniline[4-]	SVOC	20	20	1	0	0				0	0			150	EPA-4	10	0
Chloronaphthalene[2-]	SVOC	20	20	1	0	0				0	0			490	EPA-4	10	0
Chlorophenol[2-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Chlorophenyl-phenyl[4-] Ether	SVOC	20	20	1	0	0											
Chrysene	SVOC	20	20	1	0	0				0	0			92	EPA-4	10	0
Dibenz(a,h)anthracene	SVOC	20	20	1	0	0				20	0			0.092	EPA-4	10	10
Dibenzofuran	SVOC	20	20	1	0	0				0	0			24	EPA-4	10	0
Dichlorobenzidine[3,3'-]	SVOC	20	20	1	0	0				20	0			1.5	EPA-4	10	10

Table B-23 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorophenol[2,4-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Diethylphthalate	SVOC	20	20	1	0	0				0	0			29000	EPA-4	10	0
Dimethyl Phthalate	SVOC	20	20	1	0	0				0	0			370000	EPA-4	10	0
Dimethylphenol[2,4-]	SVOC	20	20	1	0	0				0	0			730	EPA-4	10	0
Di-n-butylphthalate	SVOC	20	20	1	0	0				0	0			3700	EPA-4	10	0
Dinitro-2-methylphenol[4,6-]	SVOC	20	20	1	0	0											
Dinitrophenol[2,4-]	SVOC	20	20	1	0	0				0	0			73	EPA-4	10	0
Dinitrotoluene[2,4-]	SVOC	46	46	1	0	0				0	0			73	EPA-4	12	0
Dinitrotoluene[2,6-]	SVOC	46	46	1	0	0				0	0			37	EPA-4	12	0
Di-n-octylphthalate	SVOC	20	20	1	0	0				0	0			730	EPA-4	10	0
Diphenylamine	SVOC	5	5	1	0	0				0	0			910	EPA-4	4	0
Diphenylhydrazine[1,2-]	SVOC	5	5	1	0	0											
Fluoranthene	SVOC	20	20	1	0	0				0	0			1500	EPA-4	10	0
Fluorene	SVOC	20	20	1	0	0				0	0			240	EPA-4	10	0
Hexachlorobenzene	SVOC	20	20	1	0	0				20	0			1	EPA-2	10	10
Hexachlorobutadiene	SVOC	21	21	1	0	0				12	0			7.3	EPA-4	10	8
Hexachlorocyclopentadiene	SVOC	20	20	1	0	0				0	0			50	EPA-2	10	0
Hexachloroethane	SVOC	20	20	1	0	0				0	0			37	EPA-4	10	0
Indeno(1,2,3-cd)pyrene	SVOC	20	20	1	0	0				20	0			0.92	EPA-4	10	10
Isophorone	SVOC	20	20	1	0	0				0	0			710	EPA-4	10	0
Methylnaphthalene[2-]	SVOC	20	20	1	0	0				0	0			30	WQCC-11	10	0
Methylphenol[2-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Methylpyridine[2-]	SVOC	11	11	1	0	0											
Naphthalene	SVOC	21	21	1	0	0				0	0			30	WQCC-11	10	0
Nitroaniline[2-]	SVOC	20	20	1	0	0				20	0			2.2	EPA-4	10	10
Nitroaniline[3-]	SVOC	20	20	1	0	0				20	0			2.2	EPA-4	10	10
Nitroaniline[4-]	SVOC	20	20	1	0	0				20	0			2.2	EPA-4	10	10
Nitrobenzene	SVOC	46	46	1	0	0				11	0			3.4	EPA-4	12	9
Nitrophenol[2-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Nitrophenol[4-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Nitrosodimethylamine[N-]	SVOC	17	17	1	0	0				17	0			0.013	EPA-4	10	10
Nitroso-di-n-propylamine[N-]	SVOC	20	20	1	0	0				20	0			0.096	EPA-4	10	10
Oxybis(1-chloropropane)[2,2'-]	SVOC	13	13	1	0	0											
Pentachlorophenol	SVOC	20	20	1	0	0				20	0			1	EPA-2	10	10
Phenanthrene	SVOC	20	20	1	0	0				0	0			1800	EPA-4	10	0
Pyrene	SVOC	20	20	1	0	0				0	0			180	EPA-4	10	0
Pyridine	SVOC	17	17	1	0	0				0	0			37	EPA-4	10	0
Trichlorophenol[2,4,5-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Trichlorophenol[2,4,6-]	SVOC	20	20	1	0	0				20	0			5	WQCC-12	10	10
Acrolein	VOC	4	4	1	0	0											
Acrylonitrile	VOC	4	4	1	0	0											
Bromobenzene	VOC	19	19	1	0	0				0	0			23	EPA-4	10	0
Bromochloromethane	VOC	19	19	1	0	0				13	0			5	EPA-2	10	0
Bromodichloromethane	VOC	23	23	1	0	0				0	0			100	EPA-2	10	0

Table B-23 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromoform	VOC	23	23	1	0	0				0	0			100	EPA-2	10	0
Bromomethane	VOC	23	23	1	0	0				17	0			8.7	EPA-4	10	9
Butanone[2-]	VOC	23	23	1	0	0				0	0			1900	EPA-4	10	0
Butylbenzene[n-]	VOC	19	19	1	0	0				0	0			61	EPA-4	10	0
Butylbenzene[sec-]	VOC	19	19	1	0	0				0	0			61	EPA-4	10	0
Butylbenzene[tert-]	VOC	19	19	1	0	0				0	0			61	EPA-4	10	0
Carbon Disulfide	VOC	23	23	1	0	0				0	0			1000	EPA-4	10	0
Carbon Tetrachloride	VOC	23	23	1	0	0				17	0			5	EPA-2	10	0
Chlorobenzene	VOC	23	23	1	0	0				0	0			100	EPA-2	10	0
Chlorodibromomethane	VOC	23	23	1	0	0				0	0			100	EPA-2	10	0
Chloroethane	VOC	20	20	1	0	0				0	0			39	EPA-4	9	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	20	20	1	0	0				0	0			100	WQCC-11	10	0
Chloromethane	VOC	23	23	1	0	0				0	0			15	EPA-4	10	0
Chlorotoluene[2-]	VOC	19	19	1	0	0				0	0			120	EPA-4	10	0
Chlorotoluene[4-]	VOC	19	19	1	0	0				0	0			120	EPA-4	10	0
Dibromo-3-Chloropropane[1,2-]	VOC	19	19	1	0	0											
Dibromoethane[1,2-]	VOC	19	19	1	0	0				19	0			0.05	EPA-2	10	10
Dibromomethane	VOC	19	19	1	0	0				0	0			61	EPA-4	10	0
Dichlorobenzene[1,2-]	VOC	22	22	1	0	0				0	0			600	EPA-2	10	0
Dichlorobenzene[1,3-]	VOC	22	22	1	0	0				0	0			18	EPA-4	10	0
Dichlorodifluoromethane	VOC	23	23	1	0	0				0	0			390	EPA-4	10	0
Dichloroethane[1,1-]	VOC	23	23	1	0	0				0	0			25	WQCC-11	10	0
Dichloroethane[1,2-]	VOC	23	23	1	0	0				17	0			5	EPA-2	10	0
Dichloroethene[1,1-]	VOC	23	23	1	0	0				17	0			5	WQCC-11	10	0
Dichloroethene[cis/trans-1,2-]	VOC	7	7	1	0	0											
Dichloroethene[cis-1,2-]	VOC	12	12	1	0	0				0	0			70	EPA-2	6	0
Dichloroethene[trans-1,2-]	VOC	19	19	1	0	0				0	0			100	EPA-2	10	0
Dichloropropane[1,2-]	VOC	23	23	1	0	0				17	0			5	EPA-2	10	0
Dichloropropane[1,3-]	VOC	19	19	1	0	0				13	0			5	EPA-2	10	0
Dichloropropane[2,2-]	VOC	19	19	1	0	0				13	0			5	EPA-2	10	0
Dichloropropene[1,1-]	VOC	19	19	1	0	0				13	0			4	EPA-4	10	9
Dichloropropene[cis-1,3-]	VOC	23	23	1	0	0				17	0			4	EPA-4	10	9
Dichloropropene[trans-1,3-]	VOC	20	20	1	0	0				14	0			4	EPA-4	10	9
Ethylbenzene	VOC	23	23	1	0	0				0	0			700	EPA-2	10	0
Hexanone[2-]	VOC	23	23	1	0	0				0	0			1900	EPA-4	10	0
Iodomethane	VOC	19	19	1	0	0				0	0			8.7	EPA-4	10	0
Isopropyltoluene[4-]	VOC	19	19	1	0	0				0	0			660	EPA-4	10	0
Methyl-2-pentanone[4-]	VOC	23	23	1	0	0				0	0			160	EPA-4	10	0
Propylbenzene[1-]	VOC	19	19	1	0	0				0	0			61	EPA-4	10	0
Styrene	VOC	23	23	1	0	0				0	0			100	EPA-2	10	0
Tetrachloroethane[1,1,1,2-]	VOC	19	19	1	0	0				13	0			4.3	EPA-4	10	9
Tetrachloroethane[1,1,2,2-]	VOC	23	23	1	0	0				0	0			10	WQCC-11	10	0
Tetrachloroethene	VOC	23	23	1	0	0				17	0			5	EPA-2	10	0

Table B-23 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloro-1,2,2-trifluoroethane	VOC	9	9	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	8	8	1	0	0				0	0			70	EPA-2	5	0
Trichlorobenzene[1,2,4-]	VOC	21	21	1	0	0				0	0			70	EPA-2	10	0
Trichloroethane[1,1,2-]	VOC	23	23	1	0	0				17	0			5	EPA-2	10	0
Trichloroethene	VOC	23	23	1	0	0				17	0			5	EPA-2	10	0
Trichlorofluoromethane	VOC	23	23	1	0	0				0	0			1300	EPA-4	10	0
Trichloropropane[1,2,3-]	VOC	19	19	1	0	0				19	0			0.016	EPA-4	10	10
Trichlorotrifluoroethane	VOC	3	3	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	19	19	1	0	0				0	0			12	EPA-4	10	0
Trimethylbenzene[1,3,5-]	VOC	19	19	1	0	0				0	0			12	EPA-4	10	0
Vinyl Chloride	VOC	23	23	1	0	0				23	0			1	WQCC-11	10	9
Xylene (Total)	VOC	17	17	1	0	0				0	0			620	WQCC-11	9	0
Xylene[1,2-]	VOC	14	14	1	0	0				0	0			1400	EPA-4	8	0
Xylene[1,3-]+Xylene[1,4-]	VOC	9	9	1	0	0				0	0			620	WQCC-11	7	0

Table B-24

Nonfiltered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	23	16	0.6957	7	0.3043	70	130	315								
Chlorate	ANION	5	5	1	0	0											
Chloride	ANION	97	1	0.01031	96	0.9897	1380	5800	56300	0	0	0.0232	0.2252	250000	WQCC-12	17	0
Fluoride	ANION	92	1	0.01087	91	0.9891	124	350	49000	0	4	0.2188	30.62	1600	WQCC-11	17	0
Nitrate	ANION	102	12	0.1176	90	0.8824	10	535	12900	0	1	0.0535	1.29	10000	EPA-4	17	0
Nitrite	ANION	6	6	1	0	0				0	0			1000	EPA-4	6	0
Oxalate	ANION	10	10	1	0	0											
Perchlorate	ANION	67	66	0.9851	1	0.01493	5	5	5	10	1	1.351	1.351	3.7	EPA-4	11	8
Sulfate	ANION	94	12	0.1277	82	0.8723	409	5950	34000	0	0	0.009917	0.05667	600000	WQCC-12	17	0
Calcium	GENINORG	80	0	0	80	1	2000	15770	232000								
Hardness	GENINORG	69	0	0	69	1	5400	49800	875000								
Magnesium	GENINORG	80	6	0.075	74	0.925	100	5142	71800								
Potassium	GENINORG	80	10	0.125	70	0.875	500	2450	28600								
Sodium	GENINORG	80	0	0	80	1	7650	18100	147000								
Deuterium Ratio	STABLE_ISOTOPES	10	0	0	10	1	-83	-76.5	-70								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	7	0	0	7	1	0.2	3.5	4.9								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	10	0	0	10	1	-11.5	-10.65	-10.4								
pH	WATER_QUAL	68	0	0	68	1	6.08	7.9	9.5								
Specific Conductance	WATER_QUAL	66	0	0	66	1	109	208.5	728								
Suspended Sediment Concentration	WATER_QUAL	1	0	0	1	1	4000	4000	4000								
Total Dissolved Solids	WATER_QUAL	14	0	0	14	1	108000	169000	386000	0	0	0.169	0.386	1000000	WQCC-12	8	0
Total Organic Carbon	WATER_QUAL	11	2	0.1818	9	0.8182	534	3690	26000								
Total Suspended Solids	WATER_QUAL	63	30	0.4762	33	0.5238	1000	3100	982000								

Table B-25
Filtered Inorganics of Los Alamos/Pueblo Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		by Location	
Inorganic Analyt	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	27	21	0.7778	6	0.2222	27	382.5	2100	8	5	4.397	24.14	87	WQCC-6	6	4
AluminumRe	METALS	27	21	0.7778	6	0.2222	27	382.5	2100	0	0	0.0765	0.42	5000	WQCC-4	6	0
Antimony	METALS	25	22	0.88	3	0.12	3	3	3	6	0	0.5	0.5	6	EPA-2	6	4
Arsenic	METALS	26	14	0.5385	12	0.4615	1.8	4.55	7	5	0	0.455	0.7	10	EPA-2	6	1
Barium	METALS	27	4	0.1481	23	0.8519	37.7	85.2	200	0	0	0.0852	0.2	1000	WQCC-1	6	0
Beryllium	METALS	27	24	0.8889	3	0.1111	0.01	3	3	5	0	0.75	0.75	4	EPA-2	6	3
Boron	METALS	16	3	0.1875	13	0.8125	20	66.5	280	0	0	0.02015	0.08485	3300	EPA-4	6	0
Cadmium	METALS	25	25	1	0	0				9	0			2.24	WQCC-6	6	5
CadmiumRe	METALS	25	25	1	0	0				7	0			5	EPA-2	6	1
Chromium	METALS	25	22	0.88	3	0.12	0.48	0.66	0.784	0	0	0.0132	0.01568	50	WQCC-1	6	0
Cobalt	METALS	25	17	0.68	8	0.32	0.09	2.88	8	0	0	0.00288	0.008	1000	WQCC-4	6	0
Copper	METALS	25	14	0.56	11	0.44	3.25	7.3	11	7	2	0.8151	1.228	8.96	WQCC-6	6	4
CopperRe	METALS	25	14	0.56	11	0.44	3.25	7.3	11	0	0	0.0146	0.022	500	WQCC-4	6	0
Cyanide (Total)	CN	2	2	1	0	0				0	0			200	WQCC-1	2	0
Iron	METALS	27	18	0.6667	9	0.3333	10.4	130	940	0	0	0.13	0.94	1000	WQCC-1	6	0
Lead	METALS	26	21	0.8077	5	0.1923	0.06	0.095	3.78	10	2	0.03775	1.502	2.52	WQCC-6	6	5
LeadRe	METALS	26	21	0.8077	5	0.1923	0.06	0.095	3.78	1	0	0.006333	0.252	15	EPA-2	6	1
Lithium	METALS	7	1	0.1429	6	0.8571	10	16.05	20	0	0	0.02199	0.0274	730	EPA-4	4	0
Manganese	METALS	26	13	0.5	13	0.5	0.19	4	20	0	0	0.02	0.1	200	WQCC-1	6	0
Mercury	METALS	19	15	0.7895	4	0.2105	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-1	6	0
Molybdenum	METALS	18	15	0.8333	3	0.1667	3.2	6.8	7.85	0	0	0.03778	0.04361	180	EPA-4	6	0
Nickel	METALS	25	14	0.56	11	0.44	1.4	9	10.1	0	0	0.1731	0.1942	52.01	WQCC-6	6	0
NickelRe	METALS	25	14	0.56	11	0.44	1.4	9	10.1	0	0	0.09	0.101	100	EPA-2	6	0
Selenium	METALS	20	15	0.75	5	0.25	0.59	3.16	8	1	0	0.316	0.8	10	EPA-1	6	1
SeleniumRe	METALS	20	15	0.75	5	0.25	0.59	3.16	8	0	0	0.0632	0.16	50	WQCC-4	6	0
Silver	METALS	25	23	0.92	2	0.08	0.02	5.01	10	10	1	1.452	2.898	3.45	WQCC-2	6	5
SilverRe	METALS	25	23	0.92	2	0.08	0.02	5.01	10	0	0	0.1002	0.2	50	WQCC-1	6	0
Strontium	METALS	13	0	0	13	1	60	160	229	0	0	0.007273	0.01041	22000	EPA-4	5	0
Thallium	METALS	24	18	0.75	6	0.25	0.191	3.1	3.8	11	5	1.55	1.9	2	EPA-2	6	5
Tin	METALS	11	9	0.8182	2	0.1818	10	10	10	0	0	0.0004545	0.0004545	22000	EPA-4	5	0
Titanium	METALS	1	1	1	0	0											
Uranium	URANIUM	14	1	0.07143	13	0.9286	5.96E-05	0.3656	2.09	0	0	0.01219	0.06967	30	EPA-2	4	0
Vanadium	METALS	25	8	0.32	17	0.68	2.9	7.27	10	0	0	0.0727	0.1	100	WQCC-4	6	0
Zinc	METALS	26	20	0.7692	6	0.2308	1.96	4.63	70	0	0	0.03951	0.5973	117.19	WQCC-2	6	0
ZincRe	METALS	26	20	0.7692	6	0.2308	1.96	4.63	70	0	0	0.000463	0.007	10000	WQCC-1	6	0

Table B-26
Filtered Radionuclides of Los Alamos/Pueblo Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	21	20	0.9524	1	0.04762	0.025	0.025	0.025	2	0	0.02083	0.02083	1.2	DOE	4	2
Cesium-137	rad	17	17	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	17	14	0.8235	3	0.1765	10.39	19.64	66.1	0	0	0.1964	0.661	100	EPA-2	3	0
Gross alpha	rad	15	9	0.6	6	0.4	1.41	2.855	331	0	1	0.1903	22.07	15	EPA-2	5	0
Gross beta	rad	16	6	0.375	10	0.625	3.42	8.025	214	2	2	0.1605	4.28	50	EPA-2	5	1
Gross gamma	rad	5	5	1	0	0											
Plutonium-238	rad	21	21	1	0	0				0	0			1.6	DOE	4	0
Plutonium-239	rad	21	19	0.9048	2	0.09524	0.0374	0.0395	0.0416	0	0	0.03292	0.03467	1.2	DOE	4	0
Strontium-90	rad	27	14	0.5185	13	0.4815	0.611	57.47	119	0	9	7.184	14.88	8	EPA-2	4	0
Thorium-228	rad	1	0	0	1	1	0.0384	0.0384	0.0384								
Thorium-230	rad	1	1	1	0	0											
Thorium-232	rad	1	1	1	0	0											
Tritium	rad	5	4	0.8	1	0.2	72	72	72	0	0	0.0036	0.0036	20000	EPA-2	5	0
Uranium-234	rad	18	3	0.1667	15	0.8333	0.14	0.481	1.17	0	0	0.02405	0.0585	20	DOE	4	0
Uranium-235	rad	18	13	0.7222	5	0.2778	0.0245	0.0405	0.053	0	0	0.001688	0.002208	24	DOE	4	0
Uranium-238	rad	18	5	0.2778	13	0.7222	0.076	0.2736	1	0	0	0.0114	0.04167	24	DOE	4	0

Table B-27
Filtered Organics of Los Alamos/Pueblo Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Diesel Range Organics	DRO	1	1	1	0	0											
Aroclor-1016	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Acenaphthene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzo(a)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	SVOC	1	1	1	0	0				1	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzoic Acid	SVOC	1	1	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	1	1	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	1	1	1	0	0											
Bis(2-chloroethyl)ether	SVOC	1	1	1	0	0				1	0			0.10	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	1	1	1	0	0				1	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	1	1	1	0	0											
Butylbenzylphthalate	SVOC	1	1	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	1	1	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	1	1	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	1	1	1	0	0											
Chrysene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	SVOC	1	1	1	0	0				1	0			0.092	EPA-4	1	1
Dibenzofuran	SVOC	1	1	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	1	1	1	0	0				1	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	1	1	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	1	1	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	1	1	1	0	0				0	0			765	WQCC-9	1	0

Table B-27 (continued)

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	1	1	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	SVOC	1	1	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	1	1	1	0	0				1	0			0.01	WQCC-9	1	1
Hexachlorobutadiene	SVOC	1	1	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	1	1	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Isophorone	SVOC	1	1	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Nitroaniline[2-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	1	1	1	0	0				1	0			3.4	EPA-4	1	1
Nitrophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				1	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	1	1	1	0	0				1	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
Phenanthrene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Pyrene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Dichlorobenzene[1,2-]	VOC	1	1	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	1	1	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	1	1	1	0	0				0	0			75	EPA-2	1	0
Trichlorobenzene[1,2,4-]	VOC	1	1	1	0	0				0	0			70	EPA-2	1	0

Table B-28
Filtered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	26	0	0	26	1	9300	29500	57400								
Hardness	GENINORG	7	0	0	7	1	43300	89900	151000								
Magnesium	GENINORG	26	0	0	26	1	1600	6705	10600								
Potassium	GENINORG	26	0	0	26	1	2000	9915	14000								
Sodium	GENINORG	26	0	0	26	1	10000	47500	56100								
Humic, Hydrophilic Acids	HUMIC_ACID	1	0	0	1	1	1600	1600	1600								
Humic, Hydrophilic Bases	HUMIC_ACID	1	0	0	1	1	100	100	100								
Humic, Hydrophilic Neutrals	HUMIC_ACID	1	0	0	1	1	100	100	100								
Humic, Hydrophilic Total	HUMIC_ACID	1	0	0	1	1	1800	1800	1800								
Humic, Hydrophobic Acids	HUMIC_ACID	1	0	0	1	1	1900	1900	1900								
Humic, Hydrophobic Bases	HUMIC_ACID	1	1	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	1	0	0	1	1	1000	1000	1000								
Humic, Hydrophobic Total	HUMIC_ACID	1	0	0	1	1	2900	2900	2900								
Dissolved Organic Carbon	WATER_QUAL	11	0	0	11	1	680	6800	17000								
pH	WATER_QUAL	20	0	0	20	1	6	7	8								
Specific Conductance	WATER_QUAL	20	0	0	20	1	113	341.5	555								
Total Dissolved Solids	WATER_QUAL	22	0	0	22	1	86000	257000	418000	0	0	0.257	0.418	1000000	WQCC-12	6	0
Total Suspended Solids	WATER_QUAL	9	3	0.3333	6	0.6667	1000	3500	580000								

Table B-29
Nonfiltered Inorganics of Los Alamos/Pueblo Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	20	5	0.25	15	0.75	3.97	180	2600	0	0	0.004865	0.07027	37000	EPA-4	4	0
Antimony	METALS	19	16	0.8421	3	0.1579	0.6	3	3.3	2	0	0.5	0.55	6	EPA-2	4	1
Arsenic	METALS	21	11	0.5238	10	0.4762	2.8	4.1	6.9	11	10	9.111	15.33	0.45	EPA-4	4	3
Barium	METALS	20	0	0	20	1	3.97	80.1	182	0	0	0.0801	0.182	1000	WQCC-11	4	0
Beryllium	METALS	20	16	0.8	4	0.2	0.01	0.028	0.3	2	0	0.007	0.075	4	EPA-2	4	0
Boron	METALS	9	2	0.2222	7	0.7778	41.1	186.3	269	0	0	0.05645	0.08152	3300	EPA-4	4	0
Cadmium	METALS	19	19	1	0	0				3	0			5	EPA-2	4	1
Chromium	METALS	22	15	0.6818	7	0.3182	0.36	0.867	4.4	0	0	0.01734	0.088	50	WQCC-11	4	0
Cobalt	METALS	19	9	0.4737	10	0.5263	0.18	2.905	15								
Copper	METALS	21	9	0.4286	12	0.5714	1.71	9.12	22.2	0	0	0.00912	0.0222	1000	WQCC-12	4	0
Cyanide (Total)	CN	14	11	0.7857	3	0.2143	10	10	10	6	3	1.923	1.923	5.2	WQCC-7	2	2
Cyanide (Total)Re	CN	14	11	0.7857	3	0.2143	10	10	10	0	0	0.05	0.05	200	WQCC-11	2	0
Cyanide, Amenable	CN	4	4	1	0	0				0	0			5.2	WQCC-8	3	0
Iron	METALS	20	6	0.3	14	0.7	3.97	185	1300	0	1	0.185	1.3	1000	WQCC-12	4	0
Lead	METALS	22	17	0.7727	5	0.2273	0.07	0.145	5.6	0	0	0.009667	0.3733	15	EPA-2	4	0
Lithium	METALS	3	1	0.3333	2	0.6667	13.5	13.98	14.45	0	0	0.01915	0.01979	730	EPA-4	2	0
Manganese	METALS	20	4	0.2	16	0.8	0.44	7.25	644	0	1	0.03625	3.22	200	WQCC-12	4	0
Mercury	METALS	27	19	0.7037	8	0.2963	0.1	0.2	0.474	16	8	16.67	39.5	0.012	WQCC-7	4	4
MercuryRe	METALS	27	19	0.7037	8	0.2963	0.1	0.2	0.474	1	0	0.2597	0.6156	0.77	WQCC-8	4	1
Molybdenum	METALS	15	8	0.5333	7	0.4667	3.4	6.68	69	0	0	0.03711	0.3833	180	EPA-4	4	0
Nickel	METALS	19	8	0.4211	11	0.5789	2.7	9.3	34	0	0	0.093	0.34	100	EPA-2	4	0
Selenium	METALS	27	23	0.8519	4	0.1481	0.58	2.4	3.97	2	0	0.48	0.794	5	WQCC-8	4	0
Silver	METALS	19	18	0.9474	1	0.05263	0.03	0.03	0.03	0	0	0.0006	0.0006	50	WQCC-11	4	0
Strontium	METALS	6	0	0	6	1	60	112.2	197	0	0	0.0051	0.008955	22000	EPA-4	2	0
Thallium	METALS	19	15	0.7895	4	0.2105	0.42	3.6	5.6	10	3	1.8	2.8	2	EPA-2	4	3
Tin	METALS	4	4	1	0	0				0	0			22000	EPA-4	2	0
Uranium	METALS	12	0	0	12	1	6.40E-05	0.65	3.97	0	0	0.02167	0.1323	30	EPA-2	4	0
Vanadium	METALS	19	5	0.2632	14	0.7368	3.1	7.165	19	0	0	0.02756	0.07308	260	EPA-4	4	0
Zinc	METALS	19	15	0.7895	4	0.2105	4.26	21.85	50	0	0	0.002185	0.005	10000	WQCC-12	4	0

Table B-30
Nonfiltered Radionuclides of Los Alamos/Pueblo Watershed Springs

Unfiltered WGS Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	17	14	0.8235	3	0.1765	0.0462	0.0828	122	2	1	0.069	101.7	1.2	DOE	5	2
Cesium-137	rad	14	13	0.9286	1	0.07143	50.2	50.2	50.2	0	0	0.4183	0.4183	120	DOE	3	0
Cobalt-60	rad	12	11	0.9167	1	0.08333	38.1	38.1	38.1	0	0	0.381	0.381	100	EPA-2	3	0
Gross alpha	rad	7	7	1	0	0				0	0			15	EPA-2	4	0
Gross beta	rad	6	2	0.3333	4	0.6667	3.6	76.15	228	0	2	1.523	4.56	50	EPA-2	3	0
Gross gamma	rad	1	1	1	0	0											
Plutonium-238	rad	17	16	0.9412	1	0.05882	0.0131	0.0131	0.0131	1	0	0.008188	0.008188	1.6	DOE	5	1
Plutonium-239	rad	17	13	0.7647	4	0.2353	0.071	0.124	0.476	1	0	0.1033	0.3967	1.2	DOE	5	1
Strontium-90	rad	21	15	0.7143	6	0.2857	40.7	71.45	113	0	6	8.931	14.12	8	EPA-2	5	0
Technetium-99	rad	6	6	1	0	0				0	0			4000	DOE	4	0
Thorium-228	rad	1	1	1	0	0											
Thorium-230	rad	1	0	0	1	1	0.21	0.21	0.21								
Thorium-232	rad	1	1	1	0	0											
Tritium	rad	22	18	0.8182	4	0.1818	55.24	355	455	0	0	0.01775	0.02275	20000	WQCC-5	4	0
Uranium-234	rad	12	0	0	12	1	0.226	0.5295	3.97	0	0	0.02648	0.1985	20	DOE	4	0
Uranium-235	rad	12	10	0.8333	2	0.1667	0.0107	0.02625	0.0418	0	0	0.001094	0.001742	24	DOE	5	0
Uranium-238	rad	12	4	0.3333	8	0.6667	0.075	0.3095	3.97	0	0	0.0129	0.1654	24	DOE	4	0

Table B-31
Nonfiltered Organics of Los Alamos/Pueblo Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
DDT[4,4'-]	PEST	7	6	0.8571	1	0.1429	0.09	0.09	0.09	6	1	90	90	0.001	WQCC-8	3	2
Methylene Chloride	VOC	21	18	0.8571	3	0.1429	1.4	2.4	19	15	1	0.48	3.8	5	EPA-2	4	1
Bis(2-ethylhexyl)phthalate	SVOC	16	15	0.9375	1	0.0625	2.5	2.5	2.5	14	0	0.4167	0.4167	6	EPA-2	3	3
Methyl-2-pentanone[4-]	VOC	19	18	0.9474	1	0.05263	55	55	55	0	0	0.3438	0.3438	160	EPA-4	4	0
Bromomethane	VOC	21	20	0.9524	1	0.04762	2.7	2.7	2.7	12	0	0.3103	0.3103	8.7	EPA-4	4	2
Chloroethane	VOC	21	20	0.9524	1	0.04762	21	21	21	0	0	0.5385	0.5385	39	EPA-4	4	0
Dichloroethane[1,2-]	VOC	21	20	0.9524	1	0.04762	7.6	7.6	7.6	13	1	1.52	1.52	5	EPA-2	4	0
Diesel Range Organics	DRO	2	2	1	0	0											
Aroclor-1016	PCB	15	15	1	0	0				15	0			0.0017	WQCC-9	3	3
Aroclor-1221	PCB	15	15	1	0	0				15	0			0.0017	WQCC-9	3	3
Aroclor-1232	PCB	15	15	1	0	0				15	0			0.0017	WQCC-9	3	3
Aroclor-1242	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	3	3
Aroclor-1248	PCB	15	15	1	0	0				15	0			0.0017	WQCC-9	3	3
Aroclor-1254	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	3	3
Aroclor-1260	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	3	3
Aroclor-1262	PCB	5	5	1	0	0				5	0			0.0017	WQCC-9	2	2
Aldrin	PEST	7	7	1	0	0				7	0			0.0014	WQCC-9	3	3
BHC[alpha-]	PEST	7	7	1	0	0				0	0			0.11	EPA-4	3	0
BHC[beta-]	PEST	7	7	1	0	0				0	0			0.37	EPA-4	3	0
BHC[delta-]	PEST	7	7	1	0	0											
BHC[gamma-]	PEST	7	7	1	0	0				0	0			0.2	EPA-2	3	0
Chlordane[alpha-]	PEST	7	7	1	0	0				4	0			0.02	WQCC-9	3	2
Chlordane[gamma-]	PEST	7	7	1	0	0				4	0			0.02	WQCC-9	3	2
DDD[4,4'-]	PEST	7	7	1	0	0				7	0			0.001	WQCC-8	3	3
DDE[4,4'-]	PEST	7	7	1	0	0				7	0			0.001	WQCC-8	3	3
Dieldrin	PEST	7	7	1	0	0				7	0			0.0014	WQCC-9	3	3
Endosulfan I	PEST	7	7	1	0	0				0	0			0.06	WQCC-7	3	0
Endosulfan IRe	PEST	7	7	1	0	0				0	0			220	EPA-4	3	0
Endosulfan II	PEST	7	7	1	0	0				4	0			0.06	WQCC-7	3	2
Endosulfan IIRe	PEST	7	7	1	0	0				0	0			220	EPA-4	3	0
Endosulfan Sulfate	PEST	7	7	1	0	0				0	0			220	EPA-4	3	0
Endrin	PEST	7	7	1	0	0				7	0			0.04	WQCC-7	3	3
EndrinRe	PEST	7	7	1	0	0				0	0			0.81	WQCC-9	3	0
Endrin Aldehyde	PEST	7	7	1	0	0				0	0			0.2	EPA-1	3	0
Endrin AldehydeRe	PEST	7	7	1	0	0				0	0			0.81	WQCC-9	3	0
Endrin Ketone	PEST	7	7	1	0	0				0	0			0.2	EPA-1	3	0
Endrin KetoneRe	PEST	7	7	1	0	0				0	0			0.81	WQCC-9	3	0
Heptachlor	PEST	7	7	1	0	0				7	0			0.0021	WQCC-9	3	3
Heptachlor Epoxide	PEST	7	7	1	0	0				7	0			0.0011	WQCC-9	3	3
Methoxychlor[4,4'-]	PEST	7	7	1	0	0				0	0			40	EPA-2	3	0

Table B-31 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Toxaphene (Technical Grade)	PEST	7	7	1	0	0				7	0			0.0002	WQCC-7	3	3
Toxaphene (Technical Grade)Re	PEST	7	7	1	0	0				7	0			0.01	WQCC-9	3	3
Acenaphthene	SVOC	18	18	1	0	0				0	0			370	EPA-4	4	0
Acenaphthylene	SVOC	18	18	1	0	0				0	0			370	EPA-4	4	0
Aniline	SVOC	16	16	1	0	0				0	0			120	EPA-4	3	0
Anthracene	SVOC	18	18	1	0	0				0	0			1800	EPA-4	4	0
Azobenzene	SVOC	12	12	1	0	0				11	0			6.1	EPA-4	2	2
Benzidine	SVOC	12	12	1	0	0				12	0			0.0029	EPA-4	3	3
Benzo(a)anthracene	SVOC	18	18	1	0	0				14	0			0.49	WQCC-9	4	3
Benzo(a)pyrene	SVOC	18	18	1	0	0				14	0			0.2	EPA-2	4	3
Benzo(b)fluoranthene	SVOC	18	18	1	0	0				13	0			0.49	WQCC-9	4	2
Benzo(g,h,i)perylene	SVOC	18	18	1	0	0				0	0			180	EPA-4	4	0
Benzo(k)fluoranthene	SVOC	18	18	1	0	0				14	0			0.49	WQCC-9	4	3
Benzoic Acid	SVOC	17	17	1	0	0				0	0			150000	EPA-4	3	0
Benzyl Alcohol	SVOC	17	17	1	0	0				0	0			11000	EPA-4	3	0
Bis(2-chloroethoxy)methane	SVOC	17	17	1	0	0											
Bis(2-chloroethyl)ether	SVOC	17	17	1	0	0				17	0			0.10	EPA-4	3	3
Bromophenyl-phenylether[4-]	SVOC	17	17	1	0	0											
Butylbenzylphthalate	SVOC	17	17	1	0	0				0	0			5200	WQCC-9	3	0
Carbazole	SVOC	6	6	1	0	0				0	0			34	EPA-4	3	0
Chloro-3-methylphenol[4-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Chloroaniline[4-]	SVOC	17	17	1	0	0				0	0			150	EPA-4	3	0
Chloronaphthalene[2-]	SVOC	17	17	1	0	0				0	0			490	EPA-4	3	0
Chlorophenol[2-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Chlorophenyl-phenyl[4-] Ether	SVOC	17	17	1	0	0											
Chrysene	SVOC	18	18	1	0	0				15	0			0.49	WQCC-9	4	3
Dibenz(a,h)anthracene	SVOC	18	18	1	0	0				15	0			0.09	EPA-4	4	3
Dibenzofuran	SVOC	17	17	1	0	0				1	0			24	EPA-4	3	1
Dichlorobenzidine[3,3'-]	SVOC	17	17	1	0	0				17	0			0.77	WQCC-9	3	3
Dichlorophenol[2,4-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Diethylphthalate	SVOC	17	17	1	0	0				0	0			29000	EPA-4	3	0
Dimethyl Phthalate	SVOC	16	16	1	0	0				0	0			370000	EPA-4	3	0
Dimethylphenol[2,4-]	SVOC	17	17	1	0	0				0	0			730	EPA-4	3	0
Di-n-butylphthalate	SVOC	17	17	1	0	0				0	0			3700	EPA-4	3	0
Dinitro-2-methylphenol[4,6-]	SVOC	17	17	1	0	0				0	0			765	WQCC-9	3	0
Dinitrophenol[2,4-]	SVOC	17	17	1	0	0				0	0			73	EPA-4	3	0
Dinitrotoluene[2,4-]	SVOC	17	17	1	0	0				0	0			73	EPA-4	3	0
Dinitrotoluene[2,6-]	SVOC	17	17	1	0	0				0	0			37	EPA-4	3	0
Di-n-octylphthalate	SVOC	17	17	1	0	0				0	0			730	EPA-4	3	0
Diphenylamine	SVOC	5	5	1	0	0				0	0			910	EPA-4	3	0

Table B-31 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Diphenylhydrazine[1,2-]	SVOC	4	4	1	0	0											
Fluoranthene	SVOC	18	18	1	0	0				0	0			370	WQCC-9	4	0
Fluorene	SVOC	18	18	1	0	0				0	0			240	EPA-4	4	0
Hexachlorobenzene	SVOC	17	17	1	0	0				17	0			0.01	WQCC-9	3	3
Hexachlorobutadiene	SVOC	20	20	1	0	0				8	0			7.3	EPA-4	4	2
Hexachlorocyclopentadiene	SVOC	17	17	1	0	0				0	0			50	EPA-2	3	0
Hexachloroethane	SVOC	17	17	1	0	0				0	0			37	EPA-4	3	0
Indeno(1,2,3-cd)pyrene	SVOC	18	18	1	0	0				13	0			0.49	WQCC-9	4	2
Isophorone	SVOC	17	17	1	0	0				0	0			710	EPA-4	3	0
Methylnaphthalene[2-]	SVOC	17	17	1	0	0				11	0			6.2	EPA-4	3	2
Methylphenol[2-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Methylphenol[4-]	SVOC	16	16	1	0	0				0	0			180	EPA-4	3	0
Methylpyridine[2-]	SVOC	4	4	1	0	0											
Naphthalene	SVOC	20	20	1	0	0				7	0			6.2	EPA-4	4	2
Nitroaniline[2-]	SVOC	17	17	1	0	0				16	0			2.2	EPA-4	3	3
Nitroaniline[3-]	SVOC	17	17	1	0	0				16	0			2.2	EPA-4	3	3
Nitroaniline[4-]	SVOC	17	17	1	0	0				16	0			2.2	EPA-4	3	3
Nitrobenzene	SVOC	17	17	1	0	0				16	0			3.4	EPA-4	3	3
Nitrophenol[2-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Nitrophenol[4-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Nitrosodimethylamine[N-]	SVOC	16	16	1	0	0				16	0			0.013	EPA-4	3	3
Nitroso-di-n-propylamine[N-]	SVOC	17	17	1	0	0				17	0			0.10	EPA-4	3	3
Nitrosodiphenylamine[N-]	SVOC	12	12	1	0	0				0	0			140	EPA-4	2	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	13	13	1	0	0				0	0			170000	WQCC-9	3	0
Pentachlorophenol	SVOC	17	17	1	0	0				17	0			1	EPA-2	3	3
Phenanthrene	SVOC	18	18	1	0	0				0	0			1800	EPA-4	4	0
Phenol	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Pyrene	SVOC	18	18	1	0	0				0	0			180	EPA-4	4	0
Pyridine	SVOC	12	12	1	0	0				0	0			37	EPA-4	3	0
Trichlorophenol[2,4,5-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Trichlorophenol[2,4,6-]	SVOC	17	17	1	0	0				16	0			5	WQCC-12	3	3
Acetone	VOC	18	18	1	0	0				0	0			610	EPA-4	4	0
Acrolein	VOC	2	2	1	0	0											
Acrylonitrile	VOC	2	2	1	0	0											
Benzene	VOC	21	21	1	0	0				14	0			5	EPA-2	4	0
Bromobenzene	VOC	19	19	1	0	0				0	0			23	EPA-4	4	0
Bromochloromethane	VOC	19	19	1	0	0				13	0			5	EPA-2	4	0
Bromodichloromethane	VOC	21	21	1	0	0				0	0			100	EPA-2	4	0
Bromoform	VOC	21	21	1	0	0				0	0			100	EPA-2	4	0
Butanone[2-]	VOC	19	19	1	0	0				0	0			1900	EPA-4	4	0

Table B-31 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Butylbenzene[n-]	VOC	19	19	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[sec-]	VOC	19	19	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[tert-]	VOC	19	19	1	0	0				0	0			61	EPA-4	4	0
Carbon Disulfide	VOC	19	19	1	0	0				0	0			1000	EPA-4	4	0
Carbon Tetrachloride	VOC	21	21	1	0	0				14	0			5	EPA-2	4	0
Chlorobenzene	VOC	21	21	1	0	0				0	0			100	EPA-2	4	0
Chlorodibromomethane	VOC	21	21	1	0	0				0	0			100	EPA-2	4	0
Chloroform	VOC	20	20	1	0	0				0	0			100	WQCC-11	4	0
Chloromethane	VOC	21	21	1	0	0				0	0			15	EPA-4	4	0
Chlorotoluene[2-]	VOC	19	19	1	0	0				0	0			120	EPA-4	4	0
Chlorotoluene[4-]	VOC	19	19	1	0	0				0	0			120	EPA-4	4	0
Dibromo-3-Chloropropane[1,2-]	VOC	17	17	1	0	0											
Dibromoethane[1,2-]	VOC	17	17	1	0	0				17	0			0.01	EPA-4	3	3
Dibromomethane	VOC	19	19	1	0	0				0	0			61	EPA-4	4	0
Dichlorobenzene[1,2-]	VOC	22	22	1	0	0				0	0			600	EPA-2	4	0
Dichlorobenzene[1,3-]	VOC	22	22	1	0	0				0	0			18	EPA-4	4	0
Dichlorobenzene[1,4-]	VOC	22	22	1	0	0				0	0			75	EPA-2	4	0
Dichlorodifluoromethane	VOC	20	20	1	0	0				0	0			390	EPA-4	4	0
Dichloroethane[1,1-]	VOC	21	21	1	0	0				0	0			25	WQCC-11	4	0
Dichloroethene[1,1-]	VOC	21	21	1	0	0				14	0			5	WQCC-11	4	0
Dichloroethene[cis/trans-1,2-]	VOC	3	3	1	0	0											
Dichloroethene[cis-1,2-]	VOC	15	15	1	0	0				0	0			61	EPA-4	4	0
Dichloroethene[trans-1,2-]	VOC	20	20	1	0	0				0	0			100	EPA-2	4	0
Dichloropropane[1,2-]	VOC	21	21	1	0	0				14	0			5	EPA-2	4	0
Dichloropropane[1,3-]	VOC	19	19	1	0	0				13	0			5	EPA-2	4	0
Dichloropropane[2,2-]	VOC	19	19	1	0	0				13	0			5	EPA-2	4	0
Dichloropropene[1,1-]	VOC	19	19	1	0	0				13	0			4	EPA-4	4	2
Dichloropropene[cis-1,3-]	VOC	21	21	1	0	0				14	0			4	EPA-4	4	2
Dichloropropene[trans-1,3-]	VOC	20	20	1	0	0				13	0			4	EPA-4	4	2
Ethylbenzene	VOC	21	21	1	0	0				0	0			700	EPA-2	4	0
Hexanone[2-]	VOC	19	19	1	0	0				0	0			1900	EPA-4	4	0
Iodomethane	VOC	18	18	1	0	0				0	0			8.7	EPA-4	4	0
Isopropylbenzene	VOC	19	19	1	0	0				0	0			660	EPA-4	4	0
Isopropyltoluene[4-]	VOC	19	19	1	0	0				0	0			660	EPA-4	4	0
Propylbenzene[1-]	VOC	19	19	1	0	0				0	0			61	EPA-4	4	0
Styrene	VOC	20	20	1	0	0				0	0			100	EPA-2	4	0
Tetrachloroethane[1,1,1,2-]	VOC	19	19	1	0	0				13	0			4.3	EPA-4	4	2
Tetrachloroethane[1,1,2,2-]	VOC	20	20	1	0	0				0	0			10	WQCC-11	4	0
Tetrachloroethene	VOC	21	21	1	0	0				14	0			5	EPA-2	4	0
Toluene	VOC	21	21	1	0	0				0	0			750	WQCC-11	4	0

Table B-31 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloro-1,2,2-trifluoroethane	VOC	11	11	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	11	11	1	0	0				0	0			70	EPA-2	4	0
Trichlorobenzene[1,2,4-]	VOC	20	20	1	0	0				0	0			70	EPA-2	4	0
Trichloroethane[1,1,1-]	VOC	21	21	1	0	0				0	0			60	WQCC-11	4	0
Trichloroethane[1,1,2-]	VOC	21	21	1	0	0				14	0			5	EPA-2	4	0
Trichloroethene	VOC	21	21	1	0	0				14	0			5	EPA-2	4	0
Trichlorofluoromethane	VOC	21	21	1	0	0				0	0			1300	EPA-4	4	0
Trichloropropane[1,2,3-]	VOC	19	19	1	0	0				19	0			0.02	EPA-4	4	4
Trichlorotrifluoroethane	VOC	5	5	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	19	19	1	0	0				0	0			12	EPA-4	4	0
Trimethylbenzene[1,3,5-]	VOC	19	19	1	0	0				0	0			12	EPA-4	4	0
Vinyl Chloride	VOC	21	21	1	0	0				20	0			1	WQCC-11	4	3
Xylene (Total)	VOC	15	15	1	0	0				0	0			620	WQCC-11	4	0
Xylene[1,2-]	VOC	13	13	1	0	0				0	0			1400	EPA-4	4	0
Xylene[1,3-]	VOC	1	1	1	0	0											
Xylene[1,3-]+Xylene[1,4-]	VOC	10	10	1	0	0				0	0			620	WQCC-11	4	0

Table B-32
Nonfiltered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	9	8	0.8889	1	0.1111	60	60	60								
Bromide	ANION	9	5	0.5556	4	0.4444	69	132.5	357								
Chloride	ANION	31	0	0	31	1	6000	34000	106000	0	0	0.136	0.424	250000	WQCC-12	6	0
Fluoride	ANION	26	1	0.03846	25	0.9615	179	430	1168	0	0	0.2688	0.73	1600	WQCC-11	6	0
Nitrate	ANION	26	1	0.03846	25	0.9615	280	2360	16200	0	1	0.236	1.62	10000	EPA-4	5	0
Nitrite	ANION	2	1	0.5	1	0.5	920	920	920	0	0	0.92	0.92	1000	EPA-4	2	0
Oxalate	ANION	3	3	1	0	0											
Perchlorate	ANION	15	15	1	0	0				10	0			3.7	EPA-4	4	4
Sulfate	ANION	30	0	0	30	1	6600	21500	40000	0	0	0.03583	0.06667	600000	WQCC-12	6	0
Calcium	GENINORG	18	0	0	18	1	3.97	26500	57300								
Hardness	GENINORG	3	0	0	3	1	42800	56000	70000								
Magnesium	GENINORG	18	0	0	18	1	3.97	5200	10500								
Potassium	GENINORG	18	0	0	18	1	3.97	9950	15000								
Sodium	GENINORG	18	0	0	18	1	3.97	43250	54000								
Dissolved Organic Carbon	WATER_QUAL	1	0	0	1	1	4000	4000	4000								
pH	WATER_QUAL	3	0	0	3	1	6.7	6.9	7.3								
Specific Conductance	WATER_QUAL	3	0	0	3	1	250	353	411								
Total Organic Carbon	WATER_QUAL	11	1	0.09091	10	0.9091	3.97	4650	9700								
Total Suspended Solids	WATER_QUAL	10	3	0.3	7	0.7	1000	3700	30000								

Table B-33
Filtered Inorganics of Los Alamos/Pueblo Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	133	76	0.5714	57	0.4286	15	149	3550	13	44	1.713	40.8	87	WQCC-6	46	13
AluminumRe	METALS	133	76	0.5714	57	0.4286	15	149	3550	0	0	0.0298	0.71	5000	WQCC-4	46	0
Antimony	METALS	132	116	0.8788	16	0.1212	0.174	2.85	9	0	0	0.0006628	0.002093	4300	WQCC-9	45	0
Arsenic	METALS	132	83	0.6288	49	0.3712	0.42	4.02	13	0	0	0.1661	0.5372	24.2	WQCC-9	46	0
Barium	METALS	135	7	0.05185	128	0.9481	10	48.7	215	0	0	0.01873	0.08269	2600	EPA-4	47	0
Beryllium	METALS	135	123	0.9111	12	0.08889	0.01	0.08	3	0	0	0.01509	0.566	5.3	WQCC-6	47	0
BerylliumRe	METALS	135	123	0.9111	12	0.08889	0.01	0.08	3	0	0	0.001096	0.0411	73	EPA-4	47	0
Boron	METALS	76	42	0.5526	34	0.4474	21	245.5	494	0	0	0.0491	0.0988	5000	WQCC-4	35	0
Cadmium	METALS	132	124	0.9394	8	0.06061	0.052	0.26	7	24	3	0.1162	3.128	2.24	WQCC-6	45	14
CadmiumRe	METALS	132	124	0.9394	8	0.06061	0.052	0.26	7	0	0	0.0052	0.14	50	WQCC-4	45	0
Chromium	METALS	134	94	0.7015	40	0.2985	0.27	1.2	9	0	0	0.01619	0.1214	74.12	WQCC-6	47	0
ChromiumRe	METALS	134	94	0.7015	40	0.2985	0.27	1.2	9	0	0	0.0012	0.009	1000	WQCC-4	47	0
Cobalt	METALS	133	85	0.6391	48	0.3609	0.1	1.25	15	0	0	0.00125	0.015	1000	WQCC-4	45	0
Copper	METALS	132	78	0.5909	54	0.4091	0.44	3.35	36.2	15	9	0.3741	4.042	8.96	WQCC-6	45	10
CopperRe	METALS	132	78	0.5909	54	0.4091	0.44	3.35	36.2	0	0	0.0067	0.0724	500	WQCC-4	45	0
Cyanide (Total)	CN	21	19	0.9048	2	0.09524	10	11	12								
Iron	METALS	133	59	0.4436	74	0.5564	8	155.5	3900	0	0	0.01414	0.3545	11000	EPA-4	45	0
Lead	METALS	133	114	0.8571	19	0.1429	0.011	0.281	3	27	4	0.1117	1.192	2.52	WQCC-6	46	15
LeadRe	METALS	133	114	0.8571	19	0.1429	0.011	0.281	3	0	0	0.00281	0.03	100	WQCC-4	46	0
Lithium	METALS	7	6	0.8571	1	0.1429	23	23	23	0	0	0.03151	0.03151	730	EPA-4	7	0
Manganese	METALS	131	24	0.1832	107	0.8168	0.63	76	5600	0	7	0.04471	3.294	1700	EPA-4	45	0
Mercury	METALS	109	99	0.9083	10	0.09174	0.011	0.0685	0.2	0	0	0.006227	0.01818	11	EPA-4	45	0
Molybdenum	METALS	95	61	0.6421	34	0.3579	1.22	9.85	39.7	0	0	0.05472	0.2206	180	EPA-4	37	0
Nickel	METALS	133	85	0.6391	48	0.3609	0.52	2.35	20	0	0	0.04519	0.3846	52.01	WQCC-6	45	0
NickelRe	METALS	133	85	0.6391	48	0.3609	0.52	2.35	20	0	0	0.0005109	0.004348	4600	WQCC-9	45	0
Selenium	METALS	112	100	0.8929	12	0.1071	0.487	1.4	6	0	0	0.028	0.12	50	WQCC-4	45	0
Silver	METALS	133	115	0.8647	18	0.1353	0.04	3.63	37	28	9	1.052	10.72	3.45	WQCC-2	45	20
SilverRe	METALS	133	115	0.8647	18	0.1353	0.04	3.63	37	0	0	0.02017	0.2056	180	EPA-4	45	0
Strontium	METALS	65	0	0	65	1	50	95.8	283	0	0	0.004355	0.01286	22000	EPA-4	23	0
Thallium	METALS	127	101	0.7953	26	0.2047	0.03	1.075	3.4	2	0	0.1706	0.5397	6.3	WQCC-9	45	2
Tin	METALS	59	55	0.9322	4	0.0678	2.63	30	30	0	0	0.001364	0.001364	22000	EPA-4	18	0
Titanium	METALS	20	13	0.65	7	0.35	1.35	4.49	12								
Uranium	URANIUM	67	28	0.4179	39	0.5821	8.56E-06	0.425	11.42								
Vanadium	METALS	131	57	0.4351	74	0.5649	0.34	4.9	35.1	0	0	0.049	0.351	100	WQCC-4	45	0
Zinc	METALS	131	70	0.5344	61	0.4656	1.2	14	580	0	2	0.1195	4.949	117.19	WQCC-2	45	0
ZincRe	METALS	131	70	0.5344	61	0.4656	1.2	14	580	0	0	0.00056	0.0232	25000	WQCC-4	45	0

Table B-34
Filtered Radionuclides of Los Alamos/Pueblo Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	90	74	0.8222	16	0.1778	0.0132	0.03735	0.149	2	0	0.03113	0.1242	1.2	DOE	41	2
Cesium-137	rad	79	79	1	0	0				0	0			120	DOE	36	0
Cobalt-60	rad	80	80	1	0	0				0	0			200	DOE	36	0
Gross alpha	rad	37	33	0.8919	4	0.1081	1.13	2.375	6.5								
Gross beta	rad	37	7	0.1892	30	0.8108	2.84	5.395	139								
Plutonium-238	rad	101	97	0.9604	4	0.0396	0.0112	0.03915	0.0984	0	0	0.02447	0.0615	1.6	DOE	42	0
Plutonium-239	rad	101	91	0.901	10	0.09901	0.00871	0.0581	3.51	0	3	0.04842	2.925	1.2	DOE	42	0
Radium-226	rad	25	16	0.64	9	0.36	0.184	0.44	0.574								
Radium-228	rad	19	15	0.7895	4	0.2105	0.996	1.26	1.33								
Strontium-90	rad	107	52	0.486	55	0.514	0.355	1.28	165.6	0	2	0.032	4.14	40	DOE	46	0
Technetium-99	rad	4	4	1	0	0				0	0			4000	DOE	4	0
Thorium-228	rad	25	22	0.88	3	0.12	0.0602	0.0693	0.0938								
Thorium-230	rad	29	13	0.4483	16	0.5517	0.0332	0.0565	0.23								
Thorium-232	rad	25	21	0.84	4	0.16	0.0175	0.0344	0.0593								
Uranium-234	rad	77	23	0.2987	54	0.7013	0.0391	0.2055	7.5	0	0	0.01028	0.375	20	DOE	38	0
Uranium-235	rad	77	68	0.8831	9	0.1169	0.0246	0.0372	0.263	0	0	0.00155	0.01096	24	DOE	38	0
Uranium-238	rad	77	27	0.3506	50	0.6494	0.027	0.137	3.8	0	0	0.005708	0.1583	24	DOE	38	0

Table B-35
Filtered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	119	1	0.008403	118	0.9916	6000	25650	65900								
Hardness	GENINORG	43	0	0	43	1	27000	63300	1800000								
Magnesium	GENINORG	129	4	0.03101	125	0.969	1310	4810	9400								
Potassium	GENINORG	119	3	0.02521	116	0.9748	1047	6385	20500								
Sodium	GENINORG	119	0	0	119	1	6029	32400	160000								
Humic, Hydrophilic Acids	HUMIC_ACID	12	0	0	12	1	1800	2150	3700								
Humic, Hydrophilic Bases	HUMIC_ACID	12	1	0.08333	11	0.9167	200	400	600								
Humic, Hydrophilic Neutrals	HUMIC_ACID	12	2	0.1667	10	0.8333	100	250	700								
Humic, Hydrophilic Total	HUMIC_ACID	12	0	0	12	1	2300	2800	4600								
Humic, Hydrophobic Acids	HUMIC_ACID	12	0	0	12	1	900	1600	3100								
Humic, Hydrophobic Bases	HUMIC_ACID	12	11	0.9167	1	0.08333	100	100	100								
Humic, Hydrophobic Neutrals	HUMIC_ACID	11	0	0	11	1	300	800	1400								
Humic, Hydrophobic Total	HUMIC_ACID	12	0	0	12	1	1700	2450	4600								
Dissolved Organic Carbon	WATER_QUAL	71	0	0	71	1	2200	9200	77000								
Dissolved Oxygen	WATER_QUAL	1	0	0	1	1	10000	10000	10000								
pH	WATER_QUAL	41	0	0	41	1	5.12	7.63	8.4								
Specific Conductance	WATER_QUAL	25	0	0	25	1	78	308	899								
Total Dissolved Solids	WATER_QUAL	58	0	0	58	1	59000	200500	632000								

Table B-36
Nonfiltered Inorganics of Los Alamos/Pueblo Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	116	19	0.1638	97	0.8362	17.7	933	57600	0	2	0.02522	1.557	37000	EPA-4	48	0
Antimony	METALS	113	104	0.9204	9	0.07965	0.233	0.803	3	0	0	0.05353	0.2	15	EPA-4	48	0
Arsenic	METALS	117	61	0.5214	56	0.4786	0.54	4	14.9	61	56	8.889	33.11	0.45	EPA-4	49	33
Barium	METALS	116	4	0.03448	112	0.9655	20	77	851	0	0	0.02962	0.3273	2600	EPA-4	48	0
Beryllium	METALS	113	79	0.6991	34	0.3009	0.01	0.1835	1.63	0	0	0.002514	0.02233	73	EPA-4	48	0
Boron		52	35	0.6731	17	0.3269	22.7	99.7	384	0	0	0.03021	0.1164	3300	EPA-4	31	0
Cadmium	METALS	114	93	0.8158	21	0.1842	0.045	0.23	1.62	0	0	0.01278	0.09	18	EPA-4	49	0
Chromium	METALS	115	64	0.5565	51	0.4435	0.4	1.7	30.1	0	0	3.09E-05	0.0005473	55000	EPA-4	48	0
Cobalt	METALS	114	59	0.5175	55	0.4825	0.12	1.5	30.2								
Copper	METALS	116	43	0.3707	73	0.6293	0.41	5.2	68.7	0	0	0.003714	0.04907	1400	EPA-4	48	0
Cyanide (Total)	CN	74	56	0.7568	18	0.2432	1	7.385	25	24	9	1.42	4.808	5.2	WQCC-7	36	20
Cyanide, Amenable	CN	42	40	0.9524	2	0.04762	3.24	16.17	29.1	0	1	3.11	5.596	5.2	WQCC-8	21	0
Iron	METALS	116	12	0.1034	104	0.8966	34.6	829	38400	0	4	0.07536	3.491	11000	EPA-4	48	0
Lead	METALS	116	48	0.4138	68	0.5862	0.273	3.15	93.3								
Lithium	METALS	10	6	0.6	4	0.4	6	10.5	12	0	0	0.01438	0.01644	730	EPA-4	10	0
Manganese	METALS	116	3	0.02586	113	0.9741	2.3	135	6200	0	9	0.07941	3.647	1700	EPA-4	48	0
Mercury	METALS	154	121	0.7857	33	0.2143	0.016	0.2	1.1	110	33	16.67	91.67	0.012	WQCC-7	55	48
MercuryRe	METALS	154	121	0.7857	33	0.2143	0.016	0.2	1.1	0	1	0.2597	1.429	0.77	WQCC-8	55	0
Molybdenum	METALS	76	45	0.5921	31	0.4079	1.19	7.63	40.9	0	0	0.04239	0.2272	180	EPA-4	38	0
Nickel	METALS	115	53	0.4609	62	0.5391	0.39	3.11	43.8	0	0	0.00426	0.06	730	EPA-4	48	0
Selenium	METALS	142	113	0.7958	29	0.2042	0.317	2.1	18	11	3	0.42	3.6	5	WQCC-8	51	0
Silver	METALS	117	106	0.906	11	0.09402	0.03	0.74	2.92	0	0	0.004111	0.01622	180	EPA-4	49	0
Strontium	METALS	42	1	0.02381	41	0.9762	50	108	419	0	0	0.004909	0.01905	22000	EPA-4	20	0
Thallium	METALS	115	93	0.8087	22	0.1913	0.037	0.421	3								
Tin	METALS	37	37	1	0	0				0	0			22000	EPA-4	15	0
Titanium	METALS	17	1	0.05882	16	0.9412	10.4	30	162								
Uranium	METALS	100	30	0.3	70	0.7	8.03E-06	0.4095	10.27								
Vanadium	METALS	116	35	0.3017	81	0.6983	0.64	6	62.5	0	0	0.02308	0.2404	260	EPA-4	48	0
Zinc	METALS	116	36	0.3103	80	0.6897	1.42	21.85	940	0	0	0.001986	0.08545	11000	EPA-4	48	0

Table B-37
Nonfiltered Radionuclides of Los Alamos/Pueblo Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	135	93	0.6889	42	0.3111	0.0139	0.08925	0.905	2	0	0.07438	0.7542	1.2	DOE	49	2
Cesium-137	rad	131	129	0.9847	2	0.01527	8.71	12.16	15.6	0	0	0.1013	0.13	120	DOE	47	0
Cobalt-60	rad	118	111	0.9407	7	0.05932	8.5	40.9	62	0	0	0.2045	0.31	200	DOE	47	0
Gross alpha	rad	76	64	0.8421	12	0.1579	0.754	5.745	27.4								
Gross beta	rad	76	31	0.4079	45	0.5921	2.37	10.1	165								
Gross gamma	rad	27	24	0.8889	3	0.1111	439.8	449.8	595.7								
Plutonium-238	rad	147	140	0.9524	7	0.04762	0.00861	0.0213	0.171	0	0	0.01331	0.1069	1.6	DOE	49	0
Plutonium-239	rad	147	85	0.5782	62	0.4218	0.0213	0.119	7.11	0	6	0.09917	5.925	1.2	DOE	49	0
Radium-226	rad	25	8	0.32	17	0.68	0.23	0.48	7.09								
Radium-228	rad	20	17	0.85	3	0.15	1.2	1.66	2.39								
Strontium-90	rad	142	75	0.5282	67	0.4718	0.121	1.39	95.2	1	4	0.03475	2.38	40	DOE	50	1
Technetium-99		38	38	1	0	0				0	0			4000	DOE	21	0
Thorium-228	rad	25	15	0.6	10	0.4	0.055	0.34	5.23								
Thorium-230	rad	29	9	0.3103	20	0.6897	0.0368	0.1705	4.93								
Thorium-232	rad	25	11	0.44	14	0.56	0.0166	0.09765	4.54								
Tritium	rad	108	99	0.9167	9	0.08333	61.62	75.99	392	0	0	0.0038	0.0196	20000	WQCC-5	35	0
Uranium-234	rad	85	18	0.2118	67	0.7882	0.0502	0.229	7.3	0	0	0.01145	0.365	20	DOE	38	0
Uranium-235	rad	85	71	0.8353	14	0.1647	0.0149	0.03855	0.346	0	0	0.001606	0.01442	24	DOE	38	0
Uranium-238	rad	85	23	0.2706	62	0.7294	0.0312	0.154	3.91	0	0	0.006417	0.1629	24	DOE	38	0

Table B-38
Nonfiltered Organics of Los Alamos/Pueblo Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Heptachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	0	0	1	1	2.59E-05	2.59E-05	2.59E-05								
Diesel Range Organics	DRO	8	4	0.5	4	0.5	0.5	351.1	1400								
Acetone	VOC	57	41	0.719	16	0.281	2.8	11	30.4	0	0	0.01803	0.04984	610	EPA-4	26	0
Bis(2-ethylhexyl)phthalate	SVOC	99	72	0.727	27	0.273	0.16	1.8	6.8	0	0	0.03051	0.1153	59	WQCC-9	39	0
DDT[4,4'-]	PEST	55	44	0.8	11	0.2	0.0096	0.028	0.34	44	11	28	340	0.001	WQCC-8	29	23
Methylene Chloride	VOC	87	71	0.816	16	0.184	0.44	2.1	40	0	0	0.0001313	0.0025	16000	WQCC-9	35	0
Toluene	VOC	88	79	0.898	9	0.102	0.18	0.38	1.3	0	0	1.90E-06	6.50E-06	200000	WQCC-9	35	0
Chloroform	VOC	85	80	0.941	5	0.059	0.2	0.33	2.8	0	0	7.02E-05	0.000596	4700	WQCC-9	34	0
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	18	17	0.944	1	0.056	1.23E-05	1.23E-05	1.23E-05								
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	18	17	0.944	1	0.056	5.96E-05	5.96E-05	5.96E-05								
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	18	17	0.944	1	0.056	1.81E-05	1.81E-05	1.81E-05								
DDE[4,4'-]	PEST	55	52	0.946	3	0.055	0.049	0.074	0.57	52	3	74	570	0.001	WQCC-8	29	26
BHC[beta-]	PEST	55	53	0.964	2	0.036	0.014	0.057	0.1	0	0	0.1239	0.2174	0.46	WQCC-9	29	0
BHC[gamma-]	PEST	55	53	0.964	2	0.036	0.0057	0.01485	0.024	1	0	0.02357	0.0381	0.63	WQCC-9	29	1
DDD[4,4'-]	PEST	55	53	0.964	2	0.036	0.008	0.0084	0.0088	53	2	8.4	8.8	0.001	WQCC-8	29	29
Benzo(k)fluoranthene	SVOC	111	107	0.964	4	0.036	0.0191	0.75	0.83	76	3	1.531	1.694	0.49	WQCC-9	45	35
Fluorene	SVOC	111	107	0.964	4	0.036	0.47	0.62	1.5	0	0	4.43E-05	0.000107	14000	WQCC-9	45	0
Butanone[2-]	VOC	61	59	0.967	2	0.033	1.9	4.45	7	0	0	0.002342	0.003684	1900	EPA-4	27	0
Chloronaphthalene[2-]	SVOC	105	102	0.971	3	0.029	0.42	0.6	0.66	0	0	0.0001395	0.000154	4300	WQCC-9	39	0
Diethylphthalate	SVOC	105	102	0.971	3	0.029	1.5	2	5.5	0	0	1.67E-05	4.58E-05	120000	WQCC-9	39	0
Di-n-butylphthalate	SVOC	105	102	0.971	3	0.029	3	4	7	0	0	0.0003333	0.000583	12000	WQCC-9	39	0
Methylnaphthalene[2-]	SVOC	105	102	0.971	3	0.029	0.36	0.58	0.68	51	0	0.09355	0.1097	6.2	EPA-4	39	24
Acenaphthene	SVOC	111	108	0.973	3	0.027	0.53	0.63	0.71	0	0	0.0002333	0.000263	2700	WQCC-9	45	0
Acenaphthylene	SVOC	111	108	0.973	3	0.027	0.46	0.63	0.65	0	0	0.0002333	0.000241	2700	WQCC-9	45	0
Anthracene	SVOC	111	108	0.973	3	0.027	0.57	0.61	0.7	0	0	5.55E-06	6.36E-06	110000	WQCC-9	45	0
Benzo(a)anthracene	SVOC	111	108	0.973	3	0.027	0.65	0.79	0.81	75	3	1.612	1.653	0.49	WQCC-9	45	34
Benzo(a)pyrene	SVOC	111	108	0.973	3	0.027	0.56	0.63	0.74	75	3	1.286	1.51	0.49	WQCC-9	45	34
Benzo(b)fluoranthene	SVOC	111	108	0.973	3	0.027	0.49	0.58	0.72	75	3	1.184	1.469	0.49	WQCC-9	45	34
Benzo(g,h,i)perylene	SVOC	111	108	0.973	3	0.027	0.54	0.58	0.58	0	0	5.27E-05	5.27E-05	11000	WQCC-9	45	0
Chrysene	SVOC	111	108	0.973	3	0.027	0.63	0.69	0.8	83	3	1.408	1.633	0.49	WQCC-9	45	35
Fluoranthene	SVOC	111	108	0.973	3	0.027	0.51	0.63	0.68	0	0	0.001703	0.001838	370	WQCC-9	45	0
Indeno(1,2,3-cd)pyrene	SVOC	111	108	0.973	3	0.027	0.47	0.54	0.57	75	2	1.102	1.163	0.49	WQCC-9	45	34
Phenanthrene	SVOC	111	108	0.973	3	0.027	0.68	0.68	0.75	0	0	6.18E-06	6.82E-06	110000	WQCC-9	45	0
Pyrene	SVOC	111	108	0.973	3	0.027	0.55	0.68	0.82	0	0	6.18E-05	7.46E-05	11000	WQCC-9	45	0
Naphthalene	SVOC	112	109	0.973	3	0.027	0.38	0.56	0.64	35	0	0.09032	0.1032	6.2	EPA-4	45	18
Benzoic Acid	SVOC	89	87	0.978	2	0.022	11	17.9	24.8	0	0	0.0001193	0.000165	150000	EPA-4	34	0
Isopropyltoluene[4-]	VOC	49	48	0.98	1	0.02	0.21	0.21	0.21	0	0	0.0003182	0.000318	660	EPA-4	22	0
Dichlorobenzene[1,4-]	VOC	103	101	0.981	2	0.019	0.17	0.29	0.41	0	0	0.0001115	0.000158	2600	WQCC-9	38	0
Di-n-octylphthalate	SVOC	105	103	0.981	2	0.019	1	4.5	8	0	0	0.006164	0.01096	730	EPA-4	39	0
Endrin Aldehyde	PEST	55	54	0.982	1	0.018	0.028	0.028	0.028	0	0	0.03457	0.03457	0.81	WQCC-9	29	0
Dibenz(a,h)anthracene	SVOC	111	109	0.982	2	0.018	0.43	0.47	0.51	76	1	0.9592	1.041	0.49	WQCC-9	45	35
Carbon Disulfide	VOC	61	60	0.984	1	0.016	1	1	1	0	0	0.001	0.001	1000	EPA-4	27	0
Bromodichloromethane	VOC	86	85	0.988	1	0.012	0.21	0.21	0.21	0	0	0.0004565	0.000457	460	WQCC-9	35	0

Table B-38 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzene	VOC	88	87	0.989	1	0.011	0.85	0.85	0.85	0	0	0.001197	0.001197	710	WQCC-9	35	0
Benzyl Alcohol	SVOC	94	93	0.989	1	0.011	3.5	3.5	3.5	0	0	0.0003182	0.000318	11000	EPA-4	34	0
Phenol	SVOC	100	99	0.99	1	0.01	3	3	3	0	0	6.52E-07	6.52E-07	4600000	WQCC-9	39	0
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	18	18	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	18	18	1	0	0											
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0				0	0			0.00011	EPA-4	1	0
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	18	18	1	0	0											
Hexachlorodibenzofuran[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	18	18	1	0	0											
Pentachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	18	18	1	0	0											
Pentachlorodibenzofuran[2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	18	18	1	0	0				18	0			1.40E-07	WQCC-9	5	5
Tetrachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	18	18	1	0	0											
Tetrachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Amino-2,6-dinitrotoluene[4-]	HEXP	17	17	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	17	17	1	0	0											
Dinitrobenzene[1,3-]	HEXP	17	17	1	0	0				0	0			3.65	EPA-4	4	0
HMX	HEXP	17	17	1	0	0				0	0			1825	EPA-4	4	0
Nitrotoluene[2-]	HEXP	17	17	1	0	0											
Nitrotoluene[3-]	HEXP	17	17	1	0	0				0	0			60.83	EPA-4	4	0
Nitrotoluene[4-]	HEXP	17	17	1	0	0				0	0			60.83	EPA-4	4	0
RDX	HEXP	17	17	1	0	0				0	0			0.61	EPA-4	4	0
Tetryl	HEXP	17	17	1	0	0				0	0			365	EPA-4	4	0
Trinitrobenzene[1,3,5-]	HEXP	17	17	1	0	0				0	0			1095	EPA-4	4	0
Trinitrotoluene[2,4,6-]	HEXP	17	17	1	0	0				0	0			18.25	EPA-4	4	0
Aroclor-1016	PCB	104	104	1	0	0				104	0			0.0017	WQCC-9	44	44
Aroclor-1221	PCB	104	104	1	0	0				104	0			0.0017	WQCC-9	44	44
Aroclor-1232	PCB	104	104	1	0	0				104	0			0.0017	WQCC-9	44	44
Aroclor-1242	PCB	109	109	1	0	0				109	0			0.0017	WQCC-9	44	44
Aroclor-1248	PCB	104	104	1	0	0				104	0			0.0017	WQCC-9	44	44
Aroclor-1254	PCB	109	109	1	0	0				109	0			0.0017	WQCC-9	44	44
Aroclor-1260	PCB	109	109	1	0	0				109	0			0.0017	WQCC-9	44	44
Aroclor-1262	PCB	41	41	1	0	0				41	0			0.0017	WQCC-9	15	15

Table B-38 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aldrin	PEST	55	55	1	0	0				55	0			0.0014	WQCC-9	29	29
BHC[alpha-]	PEST	55	55	1	0	0				0	0			0.13	WQCC-9	29	0
BHC[delta-]	PEST	55	55	1	0	0											
Chlordane[alpha-]	PEST	55	55	1	0	0				32	0			0.022	WQCC-9	29	17
Chlordane[gamma-]	PEST	55	55	1	0	0				32	0			0.022	WQCC-9	29	17
Dieldrin	PEST	55	55	1	0	0				55	0			0.0014	WQCC-9	29	29
Endosulfan I	PEST	55	55	1	0	0				4	0			0.06	WQCC-7	29	3
Endosulfan IRe	PEST	55	55	1	0	0				0	0			240	WQCC-9	29	0
Endosulfan II	PEST	55	55	1	0	0				26	0			0.06	WQCC-7	29	16
Endosulfan IIRe	PEST	55	55	1	0	0				0	0			240	WQCC-9	29	0
Endosulfan Sulfate	PEST	55	55	1	0	0				0	0			240	WQCC-9	29	0
Endrin	PEST	55	55	1	0	0				46	0			0.04	WQCC-7	29	24
EndrinRe	PEST	55	55	1	0	0				0	0			0.81	WQCC-9	29	0
Endrin Ketone	PEST	55	55	1	0	0				0	0			0.81	WQCC-9	29	0
Heptachlor	PEST	55	55	1	0	0				55	0			0.0021	WQCC-9	29	29
Heptachlor Epoxide	PEST	55	55	1	0	0				55	0			0.0011	WQCC-9	29	29
Methoxychlor[4,4'-]	PEST	55	55	1	0	0				0	0			180	EPA-4	29	0
Pentachlorophenol Re	PEST	100	100	1	0	0				0	0			82	WQCC-9	39	0
Toxaphene (Technical Grade)	PEST	55	55	1	0	0				55	0			0.0002	WQCC-7	29	29
Toxaphene (Technical Grade)Re	PEST	55	55	1	0	0				55	0			0.01	WQCC-9	29	29
Aniline	SVOC	89	89	1	0	0				0	0			120	EPA-4	33	0
Azobenzene	SVOC	57	57	1	0	0				48	0			6.1	EPA-4	23	23
Benzidine	SVOC	77	77	1	0	0				77	0			0.01	WQCC-9	29	29
Bis(2-chloroethoxy)methane	SVOC	105	105	1	0	0											
Bis(2-chloroethyl)ether	SVOC	105	105	1	0	0				0	0			14	WQCC-9	39	0
Bromophenyl-phenylether[4-]	SVOC	105	105	1	0	0											
Butylbenzylphthalate	SVOC	105	105	1	0	0				0	0			5200	WQCC-9	39	0
Carbazole	SVOC	29	29	1	0	0				0	0			34	EPA-4	14	0
Chloro-3-methylphenol[4-]	SVOC	100	100	1	0	0											
Chloroaniline[4-]	SVOC	105	105	1	0	0				0	0			150	EPA-4	39	0
Chlorophenol[2-]	SVOC	100	100	1	0	0				0	0			400	WQCC-9	39	0
Chlorophenyl-phenyl[4-] Ether	SVOC	105	105	1	0	0											
Dibenzofuran	SVOC	105	105	1	0	0				3	0			24	EPA-4	39	3
Dichlorobenzidine[3,3'-]	SVOC	105	105	1	0	0				104	0			0.77	WQCC-9	39	39
Dichlorophenol[2,4-]	SVOC	100	100	1	0	0				0	0			790	WQCC-9	39	0
Dimethyl Phthalate	SVOC	101	101	1	0	0				0	0			2900000	WQCC-9	38	0
Dimethylphenol[2,4-]	SVOC	100	100	1	0	0				0	0			2300	WQCC-9	39	0
Dinitro-2-methylphenol[4,6-]	SVOC	100	100	1	0	0				0	0			765	WQCC-9	39	0
Dinitrophenol[2,4-]	SVOC	100	100	1	0	0				0	0			14000	WQCC-9	39	0
Dinitrotoluene[2,4-]	SVOC	105	105	1	0	0				0	0			91	WQCC-9	39	0
Dinitrotoluene[2,6-]	SVOC	105	105	1	0	0				0	0			37	EPA-4	39	0
Diphenylamine	SVOC	39	39	1	0	0				0	0			910	EPA-4	22	0
Diphenylhydrazine[1,2-]	SVOC	32	32	1	0	0											

Table B-38 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexachlorobenzene	SVOC	105	105	1	0	0				105	0			0.01	WQCC-9	39	39
Hexachlorobutadiene	SVOC	106	106	1	0	0				0	0			500	WQCC-9	39	0
Hexachlorocyclopentadiene	SVOC	105	105	1	0	0				0	0			17000	WQCC-9	39	0
Hexachloroethane	SVOC	105	105	1	0	0				0	0			89	WQCC-9	39	0
Isophorone	SVOC	105	105	1	0	0				0	0			26000	WQCC-9	39	0
Methylphenol[2-]	SVOC	100	100	1	0	0				0	0			1800	EPA-4	39	0
Methylphenol[4-]	SVOC	93	93	1	0	0				0	0			180	EPA-4	38	0
Methylpyridine[2-]	SVOC	32	32	1	0	0											
Nitroaniline[2-]	SVOC	105	105	1	0	0				91	0			2.2	EPA-4	39	37
Nitroaniline[3-]	SVOC	105	105	1	0	0				91	0			2.2	EPA-4	39	37
Nitroaniline[4-]	SVOC	105	105	1	0	0				91	0			2.2	EPA-4	39	37
Nitrobenzene	SVOC	105	105	1	0	0				0	0			1900	WQCC-9	39	0
Nitrophenol[2-]	SVOC	100	100	1	0	0				0	0			290	EPA-4	39	0
Nitrophenol[4-]	SVOC	100	100	1	0	0				0	0			290	EPA-4	39	0
Nitrosodimethylamine[N-]	SVOC	89	89	1	0	0				0	0			81	WQCC-9	33	0
Nitroso-di-n-propylamine[N-]	SVOC	105	105	1	0	0				0	0			14	WQCC-9	39	0
Nitrosodiphenylamine[N-]	SVOC	66	66	1	0	0				0	0			160	WQCC-9	30	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	83	83	1	0	0				0	0			170000	WQCC-9	37	0
Pentachlorophenol	SVOC	100	100	1	0	0				56	0			15	WQCC-7	39	29
Pyridine	SVOC	86	86	1	0	0				0	0			37	EPA-4	33	0
Trichlorophenol[2,4,5-]	SVOC	100	100	1	0	0				0	0			3700	EPA-4	39	0
Trichlorophenol[2,4,6-]	SVOC	100	100	1	0	0				0	0			65	WQCC-9	39	0
Acrolein	VOC	2	2	1	0	0											
Acrylonitrile	VOC	2	2	1	0	0											
Bromobenzene	VOC	49	49	1	0	0				0	0			23	EPA-4	22	0
Bromochloromethane	VOC	53	53	1	0	0				0	0			16000	WQCC-9	26	0
Bromoform	VOC	88	88	1	0	0				0	0			3600	WQCC-9	35	0
Bromomethane	VOC	88	88	1	0	0				0	0			4000	WQCC-9	35	0
Butylbenzene[n-]	VOC	49	49	1	0	0				0	0			61	EPA-4	22	0
Butylbenzene[sec-]	VOC	49	49	1	0	0				0	0			61	EPA-4	22	0
Butylbenzene[tert-]	VOC	49	49	1	0	0				0	0			61	EPA-4	22	0
Carbon Tetrachloride	VOC	88	88	1	0	0				0	0			44	WQCC-9	35	0
Chlorobenzene	VOC	88	88	1	0	0				0	0			21000	WQCC-9	35	0
Chlorodibromomethane	VOC	87	87	1	0	0				0	0			340	WQCC-9	35	0
Chloroethane	VOC	88	88	1	0	0				0	0			39	EPA-4	35	0
Chloroethyl vinyl ether[2-]	VOC	7	7	1	0	0											
Chloromethane	VOC	88	88	1	0	0				0	0			15	EPA-4	35	0
Chlorotoluene[2-]	VOC	49	49	1	0	0				0	0			120	EPA-4	22	0
Chlorotoluene[4-]	VOC	49	49	1	0	0				0	0			120	EPA-4	22	0
Dibromo-3-Chloropropane[1,2-]	VOC	53	53	1	0	0											
Dibromoethane[1,2-]	VOC	53	53	1	0	0				53	0			0.01	EPA-4	26	26
Dibromomethane	VOC	49	49	1	0	0				0	0			61	EPA-4	22	0
Dichlorobenzene[1,2-]	VOC	103	103	1	0	0				0	0			17000	WQCC-9	38	0

Table B-38 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzene[1,3-]	VOC	103	103	1	0	0				0	0			2600	WQCC-9	38	0
Dichlorodifluoromethane	VOC	57	57	1	0	0				0	0			390	EPA-4	23	0
Dichloroethane[1,1-]	VOC	88	88	1	0	0				0	0			810	EPA-4	35	0
Dichloroethane[1,2-]	VOC	88	88	1	0	0				0	0			990	WQCC-9	35	0
Dichloroethene[1,1-]	VOC	88	88	1	0	0				0	0			32	WQCC-9	35	0
Dichloroethene[cis/trans-1,2-]	VOC	9	9	1	0	0											
Dichloroethene[cis-1,2-]	VOC	45	45	1	0	0				0	0			61	EPA-4	23	0
Dichloroethene[trans-1,2-]	VOC	80	80	1	0	0				0	0			140000	WQCC-9	35	0
Dichloropropane[1,2-]	VOC	88	88	1	0	0				0	0			390	WQCC-9	35	0
Dichloropropane[1,3-]	VOC	49	49	1	0	0				0	0			390	WQCC-9	22	0
Dichloropropane[2,2-]	VOC	49	49	1	0	0				0	0			390	WQCC-9	22	0
Dichloropropene[1,1-]	VOC	49	49	1	0	0				0	0			1700	WQCC-9	22	0
Dichloropropene[cis-1,3-]	VOC	88	88	1	0	0				0	0			1700	WQCC-9	35	0
Dichloropropene[trans-1,3-]	VOC	82	82	1	0	0				0	0			1700	WQCC-9	34	0
Ethylbenzene	VOC	88	88	1	0	0				0	0			29000	WQCC-9	35	0
Hexanone[2-]	VOC	61	61	1	0	0				0	0			1900	EPA-4	27	0
Iodomethane	VOC	49	49	1	0	0				0	0			4000	WQCC-9	22	0
Isopropylbenzene	VOC	49	49	1	0	0				0	0			660	EPA-4	22	0
Methyl-2-pentanone[4-]	VOC	61	61	1	0	0				0	0			160	EPA-4	27	0
Propylbenzene[1-]	VOC	49	49	1	0	0				0	0			61	EPA-4	22	0
Styrene	VOC	61	61	1	0	0				0	0			1600	EPA-4	27	0
Tetrachloroethane[1,1,1,2-]	VOC	49	49	1	0	0				33	0			4.3	EPA-4	22	19
Tetrachloroethane[1,1,2,2-]	VOC	88	88	1	0	0				0	0			110	WQCC-9	35	0
Tetrachloroethene	VOC	87	87	1	0	0				0	0			88.5	WQCC-9	35	0
Trichloro-1,2,2-trifluoroethane	VOC	32	32	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	32	32	1	0	0				0	0			940	WQCC-9	19	0
Trichlorobenzene[1,2,4-]	VOC	106	106	1	0	0				0	0			940	WQCC-9	39	0
Trichloroethane[1,1,1-]	VOC	88	88	1	0	0				0	0			790	EPA-4	35	0
Trichloroethane[1,1,2-]	VOC	88	88	1	0	0				0	0			420	WQCC-9	35	0
Trichloroethene	VOC	88	88	1	0	0				0	0			810	WQCC-9	35	0
Trichlorofluoromethane	VOC	84	84	1	0	0				0	0			1300	EPA-4	31	0
Trichloropropane[1,2,3-]	VOC	49	49	1	0	0				49	0			0.02	EPA-4	22	22
Trichlorotrifluoroethane	VOC	10	10	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	49	49	1	0	0				0	0			12	EPA-4	22	0
Trimethylbenzene[1,3,5-]	VOC	49	49	1	0	0				0	0			12	EPA-4	22	0
Vinyl Chloride	VOC	88	88	1	0	0				0	0			5250	WQCC-9	35	0
Xylene (Total)	VOC	47	47	1	0	0				0	0			1400	EPA-4	25	0
Xylene[1,2-]	VOC	41	41	1	0	0				0	0			1400	EPA-4	21	0
Xylene[1,3-]+Xylene[1,4-]	VOC	24	24	1	0	0				0	0			1400	EPA-4	15	0

Table B-39
Nonfiltered Miscellaneous Constituents of Los Alamos/Pueblo Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	28	23	0.8214	5	0.1786	59	127	157								
Chlorate	ANION	10	1	0.1	9	0.9	561	668	2210								
Chloride	ANION	138	0	0	138	1	2340	34400	246000								
Fluoride	ANION	89	14	0.1573	75	0.8427	68	260	1100	0	0	0.1182	0.5	2200	EPA-4	37	0
Nitrate	ANION	90	7	0.07778	83	0.9222	20	600	15500	0	2	0.06	1.55	10000	EPA-4	33	0
Nitrite	ANION	11	10	0.9091	1	0.09091	60	60	60	0	0	0.06	0.06	1000	EPA-4	6	0
Oxalate	ANION	9	9	1	0	0											
Perchlorate	ANION	103	96	0.932	7	0.06796	4.61	10	11.6	61	7	2.703	3.135	3.7	EPA-4	39	23
Sulfate	ANION	134	8	0.0597	126	0.9403	1000	13650	51300								
Calcium	GENINORG	91	2	0.02198	89	0.978	6400	30900	218000								
Hardness	GENINORG	11	0	0	11	1	26100	40000	150000								
Loss on Ignition	GENINORG	19	0	0	19	1	38500	70000	384000								
Magnesium	GENINORG	112	4	0.03571	108	0.9643	1200	5360	45400								
Potassium	GENINORG	91	4	0.04396	87	0.956	1700	7300	85100								
Sodium	GENINORG	91	0	0	91	1	5000	34000	418000								
Chemical Oxygen Demand	WATER_QUAL	20	7	0.35	13	0.65	12000	20400	153000								
pH	WATER_QUAL	18	0	0	18	1	6.7	7.55	8.5								
Specific Conductance	WATER_QUAL	34	0	0	34	1	13.5	188.5	1330								
Specific Gravity	WATER_QUAL	19	0	0	19	1	0.965	0.99	1.02								
Total Organic Carbon	WATER_QUAL	63	2	0.03175	61	0.9683	3.5	8200	94000								
Total Suspended Solids	WATER_QUAL	67	11	0.1642	56	0.8358	1000	26050	5360000								

Table B-40
Filtered Inorganics of Sandia Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		mary by Loc	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	8	6	0.75	2	0.25	12	42.1	72.2	0	0	0.001138	0.001951	37000	EPA-4	1	0
Antimony	METALS	8	7	0.875	1	0.125	1.28	1.28	1.28	0	0	0.2133	0.2133	6	EPA-2	1	0
Arsenic	METALS	8	8	1	0	0	-			0	0			10	EPA-2	1	0
Barium	METALS	8	0	0	8	1	11	19.15	48	0	0	0.01915	0.048	1000	WQCC-11	1	0
Beryllium	METALS	8	6	0.75	2	0.25	0.01	0.038	0.066	0	0	0.0095	0.0165	4	EPA-2	1	0
Boron	METALS	8	3	0.375	5	0.625	37	96	122	0	0	0.02909	0.03697	3300	EPA-4	1	0
Cadmium	METALS	8	7	0.875	1	0.125	0.04	0.04	0.04	0	0	0.008	0.008	5	EPA-2	1	0
Chromium	METALS	8	8	1	0	0				0	0			50	WQCC-11	1	0
Cobalt	METALS	8	6	0.75	2	0.25	0.34	0.4	0.46								
Copper	METALS	8	6	0.75	2	0.25	0.45	3.47	6.49	0	0	0.00347	0.00649	1000	WQCC-12	1	0
Iron	METALS	8	6	0.75	2	0.25	109	354.5	600	0	0	0.3545	0.6	1000	WQCC-12	1	0
Lead	METALS	8	6	0.75	2	0.25	0.465	3.148	5.83	0	0	0.2099	0.3887	15	EPA-2	1	0
Manganese	METALS	8	0	0	8	1	34	120	860	0	3	0.6	4.3	200	WQCC-12	1	0
Mercury	METALS	8	8	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	8	0	0	8	1	2.8	11.5	25	0	0	0.06389	0.1389	180	EPA-4	1	0
Nickel	METALS	8	4	0.5	4	0.5	0.76	1.625	5.1	0	0	0.01625	0.051	100	EPA-2	1	0
Selenium	METALS	8	8	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	8	8	1	0	0				0	0			50	WQCC-11	1	0
Silver	METALS	8	7	0.875	1	0.125	0.85	0.85	0.85	0	0	0.017	0.017	50	WQCC-11	1	0
Strontium	METALS	8	0	0	8	1	13.9	63	130	0	0	0.002864	0.005909	22000	EPA-4	1	0
Thallium	METALS	8	5	0.625	3	0.375	0.095	0.158	0.542	0	0	0.079	0.271	2	EPA-2	1	0
Uranium	URANIUM	8	4	0.5	4	0.5	0.431	0.561	0.927	0	0	0.0187	0.0309	30	EPA-2	1	0
Vanadium	METALS	8	4	0.5	4	0.5	0.48	1.195	2.63	0	0	0.004596	0.01012	260	EPA-4	1	0
Zinc	METALS	8	7	0.875	1	0.125	1.6	1.6	1.6	0	0	0.00016	0.00016	10000	WQCC-12	1	0

Table B-41
Filtered Radionuclides Sandia Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	8	8	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	7	7	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	7	7	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	2	2	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	2	1	0.5	1	0.5	5.23	5.23	5.23	0	0	0.1046	0.1046	50	EPA-2	1	0
Gross gamma	rad	1	1	1	0	0											
Plutonium-238	rad	8	8	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	8	8	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	8	8	1	0	0				0	0			8	EPA-2	1	0
Uranium-234	rad	8	1	0.125	7	0.875	0.0228	0.292	0.399	0	0	0.0146	0.02	20	DOE	1	0
Uranium-235	rad	8	8	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	8	2	0.25	6	0.75	0.0185	0.2085	0.29	0	0	0.008688	0.0121	24	DOE	1	0

Table B-42
Filtered Miscellaneous Constituents of Sandia Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	8	0	0	8	1	3030	15000	30000								
Magnesium	GENINORG	8	0	0	8	1	569	2250	9000								
Potassium	GENINORG	8	0	0	8	1	1510	2150	4500								
Sodium	GENINORG	8	0	0	8	1	9000	16050	26000								
Humic, Hydrophilic Acids	HUMIC_ACID	2	0	0	2	1	500	850	1200								
Humic, Hydrophilic Bases	HUMIC_ACID	2	0	0	2	1	100	200	300								
Humic, Hydrophilic Neutrals	HUMIC_ACID	2	0	0	2	1	100	150	200								
Humic, Hydrophilic Total	HUMIC_ACID	2	0	0	2	1	800	1200	1600								
Humic, Hydrophobic Acids	HUMIC_ACID	2	0	0	2	1	400	1250	2100								
Humic, Hydrophobic Bases	HUMIC_ACID	2	2	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	2	0	0	2	1	600	900	1200								
Humic, Hydrophobic Total	HUMIC_ACID	2	0	0	2	1	1000	2150	3300								
Dissolved Organic Carbon	WATER_QUAL	2	0	0	2	1	1800	3400	5000								
pH	WATER_QUAL	2	0	0	2	1	7.1	7.9	8.7								
Specific Conductance	WATER_QUAL	2	0	0	2	1	75	104.5	134								

Table B-43
Nonfiltered Inorganics of Sandia Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	10	6	0.6	4	0.4	16	137.2	283	0	0	0.003708	0.007649	37000	EPA-4	1	0
Antimony	METALS	10	10	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	10	6	0.6	4	0.4	1.8	2.96	3.77	0	0	0.296	0.377	10	EPA-2	1	0
Barium	METALS	10	0	0	10	1	14	22.15	51	0	0	0.02215	0.051	1000	WQCC-11	1	0
Beryllium	METALS	10	7	0.7	3	0.3	0.044	0.05	0.102	0	0	0.0125	0.0255	4	EPA-2	1	0
Boron	METALS	10	4	0.4	6	0.6	30	103.5	130	0	0	0.03136	0.03939	3300	EPA-4	1	0
Cadmium	METALS	10	7	0.7	3	0.3	0.04	0.072	0.12	0	0	0.0144	0.024	5	EPA-2	1	0
Chromium	METALS	10	6	0.6	4	0.4	1.83	5.015	7.61	0	0	0.1003	0.1522	50	WQCC-11	1	0
Cobalt	METALS	10	8	0.8	2	0.2	0.79	4.63	8.47								
Copper	METALS	10	3	0.3	7	0.7	0.66	3	14.2	0	0	0.003	0.0142	1000	WQCC-12	1	0
Cyanide (Total)	CN	10	8	0.8	2	0.2	10.8	12.4	14	0	0	0.062	0.07	200	WQCC-11	1	0
Iron	METALS	10	5	0.5	5	0.5	350	610	1400	0	2	0.61	1.4	1000	WQCC-12	1	0
Lead	METALS	10	4	0.4	6	0.6	0.448	3.15	8.34	0	0	0.21	0.556	15	EPA-2	1	0
Manganese	METALS	10	0	0	10	1	42.9	101.3	890	0	3	0.5065	4.45	200	WQCC-12	1	0
Mercury	METALS	10	10	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	10	1	0.1	9	0.9	5.6	22.3	29	0	0	0.1239	0.1611	180	EPA-4	1	0
Nickel	METALS	10	5	0.5	5	0.5	1.1	5.6	7.19	0	0	0.056	0.0719	100	EPA-2	1	0
Selenium	METALS	10	10	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	10	10	1	0	0				0	0			50	WQCC-11	1	0
Silver	METALS	10	9	0.9	1	0.1	1.3	1.3	1.3	0	0	0.026	0.026	50	WQCC-11	1	0
Strontium	METALS	10	0	0	10	1	16.5	64.5	130	0	0	0.002932	0.005909	22000	EPA-4	1	0
Thallium	METALS	10	7	0.7	3	0.3	0.115	0.299	0.486	0	0	0.1495	0.243	2	EPA-2	1	0
Tin	METALS	2	2	1	0	0				0	0			22000	EPA-4	1	0
Uranium	URANIUM	8	4	0.5	4	0.5	0.372	0.5725	0.919	0	0	0.01908	0.03063	30	EPA-2	1	0
Vanadium	METALS	10	6	0.6	4	0.4	0.682	0.905	2.45	0	0	0.003481	0.009423	260	EPA-4	1	0
Zinc	METALS	10	8	0.8	2	0.2	5.91	10.96	16	0	0	0.001096	0.0016	10000	WQCC-12	1	0

Table B-44
Nonfiltered Radionuclides of Sandia Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	2	2	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	3	3	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	10	7	0.7	3	0.3	0.71	1.55	2.49	0	0	0.1033	0.166	15	EPA-2	1	0
Gross beta	rad	10	5	0.5	5	0.5	1.78	3.84	6.35	0	0	0.0768	0.127	50	EPA-2	1	0
Gross gamma	rad	7	2	0.2857	5	0.7143	119	298	469								
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Radium-226	rad	2	2	1	0	0											
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	1	0
Thorium-228	rad	2	1	0.5	1	0.5	0.0659	0.0659	0.0659								
Thorium-230	rad	2	0	0	2	1	0.0179	0.02995	0.042								
Thorium-232	rad	2	1	0.5	1	0.5	0.0353	0.0353	0.0353								
Tritium	rad	10	4	0.4	6	0.6	78.2	96.88	187.4	0	0	0.004844	0.00937	20000	EPA-2	1	0
Uranium-234	rad	4	0	0	4	1	0.0548	0.3325	0.431	0	0	0.01662	0.02155	20	DOE	1	0
Uranium-235	rad	4	3	0.75	1	0.25	0.0389	0.0389	0.0389	0	0	0.001621	0.001621	24	DOE	1	0
Uranium-238	rad	4	1	0.25	3	0.75	0.16	0.207	0.26	0	0	0.008625	0.01083	24	DOE	1	0

Table B-45
Nonfiltered Organics of Sandia Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	2	1	0.5	1	0.5	3.2	3.2	3.2	1	0	0.5333	0.5333	6	EPA-2	1	1
Acetone	VOC	4	3	0.75	1	0.25	19.1	19.1	19.1	0	0	0.03131	0.03131	610	EPA-4	1	0
Butanone[2-]	VOC	4	3	0.75	1	0.25	1.1	1.1	1.1	0	0	0.0005789	0.0005789	1900	EPA-4	1	0
Carbon Disulfide	VOC	4	3	0.75	1	0.25	1.7	1.7	1.7	0	0	0.0017	0.0017	1000	EPA-4	1	0
Methylene Chloride	VOC	4	3	0.75	1	0.25	1.1	1.1	1.1	3	0	0.22	0.22	5	EPA-2	1	0
Amino-2,6-dinitrotoluene[4-]	HEXP	6	5	0.8333	1	0.1667	0.12	0.12	0.12								
Amino-4,6-dinitrotoluene[2-]	HEXP	6	6	1	0	0											
Dinitrobenzene[1,3-]	HEXP	6	6	1	0	0											
HMX	HEXP	6	6	1	0	0											
Nitrotoluene[2-]	HEXP	6	6	1	0	0											
Nitrotoluene[3-]	HEXP	6	6	1	0	0											
Nitrotoluene[4-]	HEXP	6	6	1	0	0											
RDX	HEXP	6	6	1	0	0											
Tetryl	HEXP	6	6	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	6	6	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	6	6	1	0	0											
Aroclor-1016	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aroclor-1221	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aroclor-1232	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aroclor-1242	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aroclor-1248	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aroclor-1254	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aroclor-1260	PCB	2	2	1	0	0				2	0			0.5	EPA-2	1	1
Aldrin	PEST	2	2	1	0	0				2	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	2	2	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	2	2	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	2	2	1	0	0											
BHC[gamma-]	PEST	2	2	1	0	0				0	0			0.2	EPA-2	1	0
Chlordane[alpha-]	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	2	2	1	0	0				0	0			2.8	EPA-4	1	0
DDE[4,4'-]	PEST	2	2	1	0	0				0	0			2	EPA-4	1	0
DDT[4,4'-]	PEST	2	2	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	2	2	1	0	0				2	0			0.042	EPA-4	1	1
Endosulfan I	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endosulfan II	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endrin	PEST	2	2	1	0	0				0	0			0.2	EPA-1	1	0
EndrinRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Endrin Aldehyde	PEST	2	2	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	2	2	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0

Table B-45 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Heptachlor	PEST	2	2	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	2	2	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	2	2	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	2	2	1	0	0				2	0			3	EPA-2	1	1
Acenaphthene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	2	2	1	0	0				2	0			6.1	EPA-4	1	1
Benzo(a)anthracene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(a)pyrene	SVOC	2	2	1	0	0				2	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(g,h,i)perylene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	2	2	1	0	0				2	0			9.2	EPA-4	1	1
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			7300	EPA-4	1	0
Carbazole	SVOC	2	2	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Chrysene	SVOC	2	2	1	0	0				0	0			92	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	2	2	1	0	0				2	0			0.09	EPA-4	1	1
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			1.5	EPA-4	1	1
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0											
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	6	6	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	6	6	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	2	2	1	0	0				0	0			1500	EPA-4	1	0
Fluorene	SVOC	2	2	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1

Table B-45 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexachlorobutadiene	SVOC	2	2	1	0	0				0	0			7.3	EPA-4	1	0
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	6	6	1	0	0				0	0			3.4	EPA-4	1	0
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	2	2	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	2	2	1	0	0											
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Phenanthrene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Pyrene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Benzene	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Bromobenzene	VOC	4	4	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Bromodichloromethane	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	4	4	1	0	0				2	0			8.7	EPA-4	1	1
Butylbenzene[n-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Carbon Tetrachloride	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Chlorobenzene	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	4	4	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	4	4	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	4	4	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	4	4	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	4	4	1	0	0				0	0			120	EPA-4	1	0

Table B-45 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibromo-3-Chloropropane[1,2-]	VOC	4	4	1	0	0											
Dibromoethane[1,2-]	VOC	4	4	1	0	0				4	0			0.05	EPA-2	1	1
Dibromomethane	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	4	4	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	4	4	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	4	4	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	4	4	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	4	4	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	4	4	1	0	0				2	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	4	4	1	0	0				0	0			70	EPA-2	1	0
Dichloroethene[trans-1,2-]	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	4	4	1	0	0				2	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	4	4	1	0	0				2	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	4	4	1	0	0				2	0			4	EPA-4	1	1
Ethylbenzene	VOC	4	4	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	4	4	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	4	4	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	4	4	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	4	4	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	4	4	1	0	0				0	0			160	EPA-4	1	0
Propylbenzene[1-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	4	4	1	0	0				2	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	4	4	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Toluene	VOC	4	4	1	0	0				0	0			750	WQCC-11	1	0
Trichloro-1,2,2-trifluoroethane	VOC	4	4	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	4	4	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Trichloroethene	VOC	4	4	1	0	0				2	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	4	4	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	4	4	1	0	0				4	0			0.016	EPA-4	1	1
Trimethylbenzene[1,2,4-]	VOC	4	4	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	4	4	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	4	4	1	0	0				4	0			1	WQCC-11	1	1
Xylene (Total)	VOC	4	4	1	0	0				0	0			620	WQCC-11	1	0
Xylene[1,2-]	VOC	4	4	1	0	0				0	0			1400	EPA-4	1	0

Table B-46
Nonfiltered Miscellaneous Constituents of Sandia Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	10	3	0.3	7	0.7	270	1100	3120								
Ammonia (as N)	ANION	2	0	0	2	1	400	1245	2090								
Bromide	ANION	10	10	1	0	0											
Chloride	ANION	12	0	0	12	1	4505	8675	16000	0	0	0.0347	0.064	250000	WQCC-12	1	0
Fluoride	ANION	12	0	0	12	1	268	460	690	0	0	0.2875	0.4312	1600	WQCC-11	1	0
Nitrate	ANION	12	5	0.4167	7	0.5833	30	51	230	0	0	0.0051	0.023	10000	EPA-4	1	0
Oxalate	ANION	1	1	1	0	0											
Perchlorate	ANION	10	10	1	0	0				0	0			3.7	EPA-4	1	0
Sulfate	ANION	12	3	0.25	9	0.75	301	7580	8275	0	0	0.01263	0.01379	600000	WQCC-12	1	0
Calcium	GENINORG	10	0	0	10	1	3520	15000	30000								
Hardness	GENINORG	2	0	0	2	1	12000	30750	49500								
Magnesium	GENINORG	10	0	0	10	1	631	2190	9000								
Potassium	GENINORG	10	0	0	10	1	1610	2200	4500								
Sodium	GENINORG	10	1	0.1	9	0.9	9000	21000	26000								
Deuterium Ratio	STABLE_ISOTOPES	8	0	0	8	1	-85	-80.5	-78								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	6	0	0	6	1	-6.2	-1.1	10.4								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	8	0	0	8	1	-11.7	-11.5	-11.4								
pH	WATER_QUAL	2	0	0	2	1	7.97	8.51	9.05								
Specific Conductance	WATER_QUAL	2	0	0	2	1	132	137.5	143								
Suspended Sediment Concentration	WATER_QUAL	2	1	0.5	1	0.5	3200	3200	3200								
Total Dissolved Solids	WATER_QUAL	2	0	0	2	1	94000	102500	111000	0	0	0.1025	0.111	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	10	0	0	10	1	1660	7960	16000								

Table B-47
Filtered Inorganics of Sandia Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	4	4	1	0	0				0	0			37000	EPA-4	1	0
Antimony	METALS	4	4	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	4	4	1	0	0				0	0			10	EPA-2	1	0
Barium	METALS	4	0	0	4	1	110	140	145	0	0	0.14	0.145	1000	WQCC-11	1	0
Beryllium	METALS	4	3	0.75	1	0.25	0.019	0.019	0.019	0	0	0.00475	0.00475	4	EPA-2	1	0
Boron	METALS	4	1	0.25	3	0.75	68	84	110	0	0	0.02545	0.03333	3300	EPA-4	1	0
Cadmium	METALS	4	4	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	4	3	0.75	1	0.25	0.78	0.78	0.78	0	0	0.0156	0.0156	50	WQCC-11	1	0
Cobalt	METALS	4	1	0.25	3	0.75	0.93	1.4	3.1								
Copper	METALS	4	4	1	0	0				0	0			1000	WQCC-12	1	0
Iron	METALS	4	2	0.5	2	0.5	270	505	740	0	0	0.505	0.74	1000	WQCC-12	1	0
Lead	METALS	4	4	1	0	0				0	0			15	EPA-2	1	0
Manganese	METALS	4	0	0	4	1	340	605	1100	0	4	3.025	5.5	200	WQCC-12	1	0
Mercury	METALS	4	4	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	4	0	0	4	1	3.9	6.11	8.3	0	0	0.03394	0.04611	180	EPA-4	1	0
Nickel	METALS	4	0	0	4	1	4.8	10.4	49	0	0	0.104	0.49	100	EPA-2	1	0
Selenium	METALS	4	3	0.75	1	0.25	2.1	2.1	2.1	0	0	0.21	0.21	10	EPA-1	1	0
SeleniumRe	METALS	4	3	0.75	1	0.25	2.1	2.1	2.1	0	0	0.042	0.042	50	WQCC-11	1	0
Silver	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	4	0	0	4	1	210	230	231	0	0	0.01045	0.0105	22000	EPA-4	1	0
Thallium	METALS	4	4	1	0	0				0	0			2	EPA-2	1	0
Uranium	URANIUM	4	0	0	4	1	0.333	1.595	1.95	0	0	0.05317	0.065	30	EPA-2	1	0
Vanadium	METALS	4	1	0.25	3	0.75	0.9	1.7	2.3	0	0	0.006538	0.008846	260	EPA-4	1	0
Zinc	METALS	4	4	1	0	0				0	0			10000	WQCC-12	1	0

Table B-48
Filtered Radionuclides of Sandia Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Level		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	4	4	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	4	4	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	1	1	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	1	0	0	1	1	4.9	4.9	4.9	0	0	0.098	0.098	50	EPA-2	1	0
Gross gamma		1	1	1	0	0											
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	1	0
Uranium-234	rad	4	0	0	4	1	0.236	0.965	1.33	0	0	0.04825	0.0665	20	DOE	1	0
Uranium-235	rad	4	3	0.75	1	0.25	0.0222	0.0222	0.0222	0	0	0.000925	0.000925	24	DOE	1	0
Uranium-238	rad	4	0	0	4	1	0.108	0.55	0.7	0	0	0.02292	0.02917	24	DOE	1	0

Table B-49
Filtered Miscellaneous Constituents of Sandia Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	4	0	0	4	1	41000	43500	46000								
Magnesium	GENINORG	4	0	0	4	1	9900	10200	11000								
Potassium	GENINORG	4	0	0	4	1	4280	4500	4600								
Sodium	GENINORG	4	0	0	4	1	17000	17500	18300								
Humic, Hydrophilic Acids	HUMIC_ACID	1	0	0	1	1	300	300	300								
Humic, Hydrophilic Bases	HUMIC_ACID	1	1	1	0	0											
Humic, Hydrophilic Neutrals	HUMIC_ACID	1	0	0	1	1	200	200	200								
Humic, Hydrophilic Total	HUMIC_ACID	1	0	0	1	1	500	500	500								
Humic, Hydrophobic Acids	HUMIC_ACID	1	0	0	1	1	200	200	200								
Humic, Hydrophobic Bases	HUMIC_ACID	1	1	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	1	0	0	1	1	400	400	400								
Humic, Hydrophobic Total	HUMIC_ACID	1	0	0	1	1	600	600	600								
Dissolved Organic Carbon	WATER_QUAL	1	0	0	1	1	1100	1100	1100								
pH	WATER_QUAL	5	0	0	5	1	7	8	8.1								
Specific Conductance	WATER_QUAL	5	0	0	5	1	235	260	358								
Total Dissolved Solids	WATER_QUAL	13	0	0	13	1	138000	212000	254000	0	0	0.212	0.254	1000000	WQCC-12	2	0

Table B-50
Nonfiltered Inorganics of Sandia Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	13	6	0.4615	7	0.5385	22	54	131.4	0	0	0.001459	0.003551	37000	EPA-4	3	0
Antimony	METALS	15	13	0.8667	2	0.1333	3	3	3	2	0	0.5	0.5	6	EPA-2	3	2
Arsenic	METALS	16	12	0.75	4	0.25	2	2.7	3.4	0	0	0.27	0.34	10	EPA-2	3	0
Barium	METALS	15	2	0.1333	13	0.8667	40	78.2	151	0	0	0.0782	0.151	1000	WQCC-11	3	0
Beryllium	METALS	15	12	0.8	3	0.2	0.02	3	3	0	0	0.75	0.75	4	EPA-2	3	0
Boron	METALS	13	1	0.07692	12	0.9231	38	49	100	0	0	0.01485	0.0303	3300	EPA-4	3	0
Cadmium	METALS	15	12	0.8	3	0.2	0.04	7	7	2	2	1.4	1.4	5	EPA-2	3	2
Chromium	METALS	15	5	0.3333	10	0.6667	1.06	3.95	9.3	0	0	0.079	0.186	50	WQCC-11	3	0
Cobalt	METALS	13	8	0.6154	5	0.3846	1	2.6	8								
Copper	METALS	13	11	0.8462	2	0.1538	10	10	10	0	0	0.01	0.01	1000	WQCC-12	3	0
Cyanide (Total)	CN	23	18	0.7826	5	0.2174	3.75	10	10	0	0	0.05	0.05	200	WQCC-11	3	0
Iron	METALS	13	4	0.3077	9	0.6923	40	333	1100	0	1	0.333	1.1	1000	WQCC-12	3	0
Lead	METALS	13	13	1	0	0				2	0			15	EPA-2	3	2
Lithium	METALS	2	0	0	2	1	41	42	43	0	0	0.05753	0.0589	730	EPA-4	2	0
Manganese	METALS	13	6	0.4615	7	0.5385	2	360	1100	0	5	1.8	5.5	200	WQCC-12	3	0
Mercury	METALS	13	9	0.6923	4	0.3077	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	3	0
Molybdenum	METALS	13	7	0.5385	6	0.4615	5.8	10.1	30	0	0	0.05611	0.1667	180	EPA-4	3	0
Nickel	METALS	15	9	0.6	6	0.4	5.15	18	53	0	0	0.18	0.53	100	EPA-2	3	0
Selenium	METALS	15	15	1	0	0				0	0			10	EPA-1	3	0
SeleniumRe	METALS	15	15	1	0	0				0	0			50	WQCC-11	3	0
Silver	METALS	13	8	0.6154	5	0.3846	0.65	10	58	0	1	0.2	1.16	50	WQCC-11	3	0
Strontium	METALS	13	0	0	13	1	120	142.3	240	0	0	0.006468	0.01091	22000	EPA-4	3	0
Thallium	METALS	15	10	0.6667	5	0.3333	0.109	0.74	3	6	2	0.37	1.5	2	EPA-2	3	2
Tin	METALS	9	9	1	0	0				0	0			22000	EPA-4	3	0
Uranium	URANIUM	15	0	0	15	1	0.4112	1.49	2.09	0	0	0.04967	0.06967	30	EPA-2	3	0
Vanadium	METALS	13	4	0.3077	9	0.6923	1	10.9	16	0	0	0.04192	0.06154	260	EPA-4	3	0
Zinc	METALS	13	8	0.6154	5	0.3846	4.8	24	50	0	0	0.0024	0.005	10000	WQCC-12	3	0

Table B-51
Nonfiltered Radionuclides of Sandia Watershed Regional Aquifer Groundwater

Unfiltered WGR Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	16	15	0.9375	1	0.0625	0.064	0.064	0.064	0	0	0.05333	0.05333	1.2	DOE	3	0
Cesium-137	rad	18	18	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	14	12	0.8571	2	0.1429	24	25.7	27.4	0	0	0.257	0.274	100	EPA-2	3	0
Gross alpha	rad	19	17	0.8947	2	0.1053	1.33	1.77	2.21	0	0	0.118	0.1473	15	EPA-2	3	0
Gross beta	rad	19	7	0.3684	12	0.6316	3.2	3.9	8.06	0	0	0.078	0.1612	50	EPA-2	3	0
Gross gamma	rad	12	10	0.8333	2	0.1667	153	225	297								
Plutonium-238	rad	17	17	1	0	0				0	0			1.6	DOE	3	0
Plutonium-239	rad	17	17	1	0	0				0	0			1.2	DOE	3	0
Radium-226	rad	1	1	1	0	0											
Strontium-90	rad	32	31	0.9688	1	0.03125	0.0707	0.0707	0.0707	0	0	0.008838	0.008838	8	EPA-2	3	0
Thorium-228	rad	1	1	1	0	0											
Thorium-230	rad	1	1	1	0	0											
Thorium-232	rad	1	1	1	0	0											
Tritium	rad	25	22	0.88	3	0.12	49.8	57.14	82.67	0	0	0.002857	0.004134	20000	EPA-2	3	0
Uranium-234	rad	9	0	0	9	1	0.261	1.07	1.329	0	0	0.0535	0.06645	20	DOE	3	0
Uranium-235	rad	9	6	0.6667	3	0.3333	0.0311	0.0564	0.101	0	0	0.00235	0.004208	24	DOE	3	0
Uranium-238	rad	9	0	0	9	1	0.163	0.581	0.63	0	0	0.02421	0.02625	24	DOE	3	0

Table B-52
Nonfiltered Organics of Sandia Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	2	1	0.5	1	0.5	2.4	2.4	2.4	0	0	0.003934	0.003934	610	EPA-4	1	0
Diesel Range Organics	DRO	20	18	0.9	2	0.1	67	133.5	200								
Amino-2,6-dinitrotoluene[4-]	HEXP	19	19	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	19	19	1	0	0											
Dinitrobenzene[1,3-]	HEXP	19	19	1	0	0											
HMX	HEXP	19	19	1	0	0											
Nitrotoluene[2-]	HEXP	19	19	1	0	0											
Nitrotoluene[3-]	HEXP	19	19	1	0	0											
Nitrotoluene[4-]	HEXP	19	19	1	0	0											
RDX	HEXP	19	19	1	0	0											
Tetryl	HEXP	19	19	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	13	13	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	19	19	1	0	0											
Aroclor-1016	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1221	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1232	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1242	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1248	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1254	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1260	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aldrin	PEST	1	1	1	0	0				1	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	1	1	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	1	1	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	1	1	1	0	0											
BHC[gamma-]	PEST	1	1	1	0	0				0	0			0.2	EPA-2	1	0
Chlordane[alpha-]	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	1	1	1	0	0				0	0			2.8	EPA-4	1	0
DDE[4,4'-]	PEST	1	1	1	0	0				0	0			2	EPA-4	1	0
DDT[4,4'-]	PEST	1	1	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	1	1	1	0	0				1	0			0.04	EPA-4	1	1
Endosulfan I	PEST	1	1	1	0	0				0	0			220	EPA-4	1	0
Endosulfan II	PEST	1	1	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	1	1	1	0	0				0	0			220	EPA-4	1	0
Endrin	PEST	1	1	1	0	0				0	0			0.2	EPA-1	1	0
EndrinRe	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Endrin Aldehyde	PEST	1	1	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	1	1	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0

Table B-52 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Heptachlor	PEST	1	1	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	1	1	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	1	1	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	1	1	1	0	0				1	0			3	EPA-2	1	1
Acenaphthene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	2	2	1	0	0				2	0			6.1	EPA-4	1	1
Benzidine	SVOC	1	1	1	0	0				1	0			0.0029	EPA-4	1	1
Benzo(a)anthracene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(a)pyrene	SVOC	2	2	1	0	0				2	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(g,h,i)perylene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	2	2	1	0	0				1	0			9.2	EPA-4	1	1
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	2	2	1	0	0				1	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			7300	EPA-4	1	0
Carbazole	SVOC	1	1	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Chrysene	SVOC	2	2	1	0	0				0	0			92	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	2	2	1	0	0				2	0			0.09	EPA-4	1	1
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			1.5	EPA-4	1	1
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0											
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	19	19	1	0	0				0	0			73	EPA-4	3	0

Table B-52 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dinitrotoluene[2,6-]	SVOC	19	19	1	0	0				0	0			37	EPA-4	3	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Fluoranthene	SVOC	2	2	1	0	0				0	0			1500	EPA-4	1	0
Fluorene	SVOC	2	2	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Hexachlorobutadiene	SVOC	2	2	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	19	19	1	0	0				0	0			3.4	EPA-4	3	0
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	2	2	1	0	0											
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Phenanthrene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Pyrene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Benzene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Bromobenzene	VOC	2	2	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Bromodichloromethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	2	2	1	0	0				1	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0

Table B-52 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Butylbenzene[sec-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	2	2	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Chlorobenzene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	2	2	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	2	2	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	2	2	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	2	2	1	0	0											
Dibromoethane[1,2-]	VOC	2	2	1	0	0				2	0			0.05	EPA-2	1	1
Dibromomethane	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	2	2	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	2	2	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	2	2	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	2	2	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	2	2	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	2	2	1	0	0				1	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Ethylbenzene	VOC	2	2	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	2	2	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	2	2	1	0	0				2	0			5	EPA-2	1	0
Propylbenzene[1-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	2	2	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	2	2	1	0	0				0	0			10	WQCC-11	1	0

Table B-52 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Tetrachloroethene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Toluene	VOC	2	2	1	0	0				0	0			750	WQCC-11	1	0
Trichloro-1,2,2-trifluoroethane	VOC	2	2	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	1	1	1	0	0				0	0			70	EPA-2	1	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	2	2	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Trichloroethene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	2	2	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	2	2	1	0	0				2	0			0.016	EPA-4	1	1
Trimethylbenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	2	2	1	0	0				2	0			1	WQCC-11	1	1
Xylene (Total)	VOC	2	2	1	0	0				0	0			620	WQCC-11	1	0
Xylene[1,2-]	VOC	2	2	1	0	0				0	0			1400	EPA-4	1	0

Table B-53
Nonfiltered Miscellaneous Constituents of Sandia Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	6	6	1	0	0											
Ammonia (as N)	ANION	1	0	0	1	1	40	40	40								
Bromide	ANION	5	5	1	0	0											
Chloride	ANION	22	0	0	22	1	4449	6735	10000	0	0	0.02694	0.04	250000	WQCC-12	3	0
Fluoride	ANION	34	1	0.0294	33	0.971	209	280	470	0	0	0.175	0.2938	1600	WQCC-11	3	0
Nitrate	ANION	36	6	0.1667	30	0.833	10	470	1400	0	0	0.047	0.14	10000	EPA-4	3	0
Perchlorate	ANION	41	41	1	0	0				7	0			3.7	EPA-4	3	2
Sulfate	ANION	22	0	0	22	1	4570	5950	16000	0	0	0.009917	0.02667	600000	WQCC-12	3	0
Calcium	GENINORG	20	0	0	20	1	21000	25250	46000								
Hardness	GENINORG	16	0	0	16	1	81000	91400	132000								
Magnesium	GENINORG	20	0	0	20	1	5900	7640	11000								
Potassium	GENINORG	20	2	0.1	18	0.9	2610	3600	4600								
Sodium	GENINORG	20	0	0	20	1	15000	17880	20100								
Deuterium Ratio	STABLE_ISOTOPES	4	0	0	4	1	-81	-75	-74								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	4	0	0	4	1	-11.3	-10.95	-10.8								
pH	WATER_QUAL	17	0	0	17	1	1.7	7.91	8.28								
Specific Conductance	WATER_QUAL	17	0	0	17	1	178	244	12000								
Suspended Sediment Concentration	WATER_QUAL	1	1	1	0	0											
Total Dissolved Solids	WATER_QUAL	5	0	0	5	1	199000	212000	233000	0	0	0.212	0.233	1000000	WQCC-12	3	0
Total Organic Carbon	WATER_QUAL	5	1	0.2	4	0.8	886	3240	45000								
Total Suspended Solids	WATER_QUAL	15	12	0.8	3	0.2	1000	1000	3000								
Note: Nitrogen-15/Nitrogen-14 Ratio results were NA, insufficient sample																	

Table B-54
Filtered Inorganics of Sandia Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	5	5	1	0	0				2	0			87	WQCC-6	1	1
AluminumRe	METALS	5	5	1	0	0				0	0			5000	WQCC-4	1	0
Antimony	METALS	2	2	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	3	3	1	0	0				1	0			10	EPA-2	1	0
Barium	METALS	5	1	0.2	4	0.8	57.1	111	126.3	0	0	0.111	0.1263	1000	WQCC-11	1	0
Beryllium	METALS	4	3	0.75	1	0.25	3	3	3	1	0	0.75	0.75	4	EPA-2	1	1
Boron	METALS	4	2	0.5	2	0.5	18	29.5	41	0	0	0.008939	0.01242	3300	EPA-4	1	0
Cadmium	METALS	3	3	1	0	0				2	0			2.24	WQCC-6	1	1
CadmiumRe	METALS	3	3	1	0	0				1	0			5	EPA-2	1	1
Chromium	METALS	3	3	1	0	0				0	0			50	WQCC-11	1	0
Cobalt	METALS	3	3	1	0	0				0	0			1000	WQCC-4	1	0
Copper	METALS	4	4	1	0	0				3	0			8.96	WQCC-6	1	1
CopperRe	METALS	4	4	1	0	0				0	0			500	WQCC-4	1	0
Iron	METALS	5	3	0.6	2	0.4	40	70	100	0	0	0.07	0.1	1000	WQCC-12	1	0
Lead	METALS	3	3	1	0	0				2	0			2.52	WQCC-6	1	1
LeadRe	METALS	3	3	1	0	0				1	0			15	EPA-2	1	1
Lithium	METALS	1	0	0	1	1	30	30	30	0	0	0.0411	0.0411	730	EPA-4	1	0
Manganese	METALS	4	0	0	4	1	18.2	76.45	80	0	0	0.3823	0.4	200	WQCC-12	1	0
Molybdenum	METALS	3	3	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	3	3	1	0	0				0	0			52.01	WQCC-6	1	0
NickelRe	METALS	3	3	1	0	0				0	0			100	EPA-2	1	0
Silver	METALS	3	3	1	0	0				2	0			2.24	WQCC-2	1	1
SilverRe	METALS	3	3	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	3	0	0	3	1	323	336.4	340	0	0	0.01529	0.01545	22000	EPA-4	1	0
Thallium	METALS	2	2	1	0	0				1	0			2	EPA-2	1	1
Tin	METALS	3	3	1	0	0				0	0			22000	EPA-4	1	0
Vanadium	METALS	3	2	0.6667	1	0.3333	7.85	7.85	7.85	0	0	0.0785	0.0785	100	WQCC-4	1	0
Zinc	METALS	3	3	1	0	0				0	0			117.19	WQCC-2	1	0
ZincRe	METALS	3	3	1	0	0				0	0			10000	WQCC-12	1	0

Table B-55
Filtered Miscellaneous Constituents of Sandia Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	7	0	0	7	1	30000	35500	50300								
Hardness	GENINORG	5	0	0	5	1	97200	106000	144000								
Magnesium	GENINORG	7	0	0	7	1	2000	2394	5240								
Potassium	GENINORG	7	0	0	7	1	2000	2640	4350								
Sodium	GENINORG	7	0	0	7	1	14400	16000	19700								
pH	WATER_QUAL	7	0	0	7	1	7	7.3	8								
Specific Conductance	WATER_QUAL	8	0	0	8	1	212	259.5	276								
Total Dissolved Solids	WATER_QUAL	8	0	0	8	1	167500	212500	259000	0	0	0.2125	0.259	1000000	WQCC-12	1	0
Total Phosphorus	WATER_QUAL	2	2	1	0	0											
Total Suspended Solids	WATER_QUAL	1	1	1	0	0											

Table B-56
Nonfiltered Inorganics of Sandia Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	3	0	0	3	1	137.1	2490	41000	0	1	0.0673	1.108	37000	EPA-4	1	0
Antimony	METALS	3	3	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	3	2	0.6667	1	0.3333	20	20	20	2	1	44.44	44.44	0.45	EPA-4	1	1
Barium	METALS	3	0	0	3	1	91.3	118	690	0	0	0.118	0.69	1000	WQCC-11	1	0
Beryllium	METALS	3	3	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	3	1	0.3333	2	0.6667	22	36.15	50.3	0	0	0.01095	0.01524	3300	EPA-4	1	0
Cadmium	METALS	3	3	1	0	0				2	0			5	EPA-2	1	1
Chromium	METALS	3	2	0.6667	1	0.3333	13	13	13	0	0	0.26	0.26	50	WQCC-11	1	0
Cobalt	METALS	3	2	0.6667	1	0.3333	19	19	19								
Copper	METALS	3	2	0.6667	1	0.3333	250	250	250	0	0	0.25	0.25	1000	WQCC-12	1	0
Cyanide (Total)	CN	8	6	0.75	2	0.25	10	10	10	3	2	1.923	1.923	5.2	WQCC-7	1	1
Cyanide (Total)Re	CN	8	6	0.75	2	0.25	10	10	10	0	0	0.05	0.05	200	WQCC-11	1	0
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	3	0	0	3	1	170	1480	18000	0	2	1.48	18	1000	WQCC-12	1	0
Lead	METALS	3	2	0.6667	1	0.3333	57	57	57	0	1	3.8	3.8	15	EPA-2	1	0
Lithium	METALS	1	0	0	1	1	58	58	58	0	0	0.07945	0.07945	730	EPA-4	1	0
Manganese	METALS	3	0	0	3	1	38.2	194	1400	0	1	0.97	7	200	WQCC-12	1	0
Mercury	METALS	5	1	0.2	4	0.8	0.1	0.2	0.26	1	4	16.67	21.67	0.012	WQCC-7	1	1
MercuryRe	METALS	5	1	0.2	4	0.8	0.1	0.2	0.26	0	0	0.2597	0.3377	0.77	WQCC-8	1	0
Molybdenum	METALS	3	3	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	3	2	0.6667	1	0.3333	22	22	22	0	0	0.22	0.22	100	EPA-2	1	0
Selenium	METALS	5	4	0.8	1	0.2	6	6	6	0	1	1.2	1.2	5	WQCC-8	1	0
Silver	METALS	3	2	0.6667	1	0.3333	21	21	21	0	0	0.42	0.42	50	WQCC-11	1	0
Strontium	METALS	3	0	0	3	1	313.1	320	530	0	0	0.01455	0.02409	22000	EPA-4	1	0
Thallium	METALS	3	3	1	0	0				3	0			2	EPA-2	1	1
Tin	METALS	3	3	1	0	0				0	0			22000	EPA-4	1	0
Vanadium	METALS	3	2	0.6667	1	0.3333	90	90	90	0	0	0.3462	0.3462	260	EPA-4	1	0
Zinc	METALS	3	2	0.6667	1	0.3333	69	69	69	0	0	0.0069	0.0069	10000	WQCC-12	1	0

Table B-57
Nonfiltered Organics of Sandia Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzo(a)anthracene	SVOC	3	2	0.6667	1	0.3333	0.11	0.11	0.11	2	0	0.2245	0.2245	0.49	WQCC-9	1	1
Benzo(a)pyrene	SVOC	3	2	0.6667	1	0.3333	0.15	0.15	0.15	2	0	0.75	0.75	0.2	EPA-2	1	1
Amino-2,6-dinitrotoluene[4-]	HEXP	3	3	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	3	3	1	0	0											
Dinitrobenzene[1,3-]	HEXP	3	3	1	0	0											
HMX	HEXP	3	3	1	0	0											
Nitrotoluene[2-]	HEXP	3	3	1	0	0											
Nitrotoluene[3-]	HEXP	3	3	1	0	0											
Nitrotoluene[4-]	HEXP	3	3	1	0	0											
RDX	HEXP	3	3	1	0	0											
Tetryl	HEXP	3	3	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	1	1	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	3	3	1	0	0											
Aroclor-1016	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1
Aroclor-1262	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Acenaphthene	SVOC	3	3	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	3	3	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	3	3	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzidine	SVOC	2	2	1	0	0				2	0			0.0029	EPA-4	1	1
Benzo(b)fluoranthene	SVOC	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	SVOC	3	3	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Benzoic Acid	SVOC	3	3	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	3	3	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	3	3	1	0	0											
Bis(2-chloroethyl)ether	SVOC	3	3	1	0	0				3	0			0.10	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	3	3	1	0	0				2	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	3	3	1	0	0											
Butylbenzylphthalate	SVOC	3	3	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	3	3	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	3	3	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	3	3	1	0	0											
Chrysene	SVOC	3	3	1	0	0				3	0			0.49	WQCC-9	1	1

Table B-57 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibenz(a,h)anthracene	SVOC	3	3	1	0	0				3	0			0.092	EPA-4	1	1
Dibenzofuran	SVOC	3	3	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	3	3	1	0	0				3	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	3	3	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	3	3	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	3	3	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	3	3	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	3	3	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	4	4	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	4	4	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	3	3	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Fluoranthene	SVOC	3	3	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	SVOC	3	3	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	3	3	1	0	0				3	0			0.01	WQCC-9	1	1
Hexachlorobutadiene	SVOC	3	3	1	0	0				2	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	3	3	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	3	3	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Isophorone	SVOC	3	3	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	3	3	1	0	0				2	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
Naphthalene	SVOC	3	3	1	0	0				2	0			6.2	EPA-4	1	1
Nitroaniline[2-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	4	4	1	0	0				2	0			3.4	EPA-4	1	1
Nitrophenol[2-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	3	3	1	0	0				3	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	2	2	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	3	3	1	0	0				3	0			1	EPA-2	1	1
Phenanthrene	SVOC	3	3	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Pyrene	SVOC	3	3	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0

Table B-57 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichlorophenol[2,4,5-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Acetone	VOC	1	1	1	0	0				0	0			610	EPA-4	1	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Bromobenzene	VOC	2	2	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Bromodichloromethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	2	2	1	0	0				1	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	2	2	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Chlorobenzene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	1	1	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	2	2	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	2	2	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	2	2	1	0	0											
Dibromoethane[1,2-]	VOC	2	2	1	0	0				2	0			0.01	EPA-4	1	1
Dibromomethane	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	3	3	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	3	3	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	3	3	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	2	2	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	2	2	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	2	2	1	0	0				1	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Ethylbenzene	VOC	2	2	1	0	0				0	0			700	EPA-2	1	0

Table B-57 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	2	2	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Propylbenzene[1-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	2	2	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	2	2	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Toluene	VOC	2	2	1	0	0				0	0			750	WQCC-11	1	0
Trichloro-1,2,2-trifluoroethane	VOC	1	1	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	3	3	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	2	2	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Trichloroethene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	2	2	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	2	2	1	0	0				2	0			0.02	EPA-4	1	1
Trimethylbenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	2	2	1	0	0				2	0			1	WQCC-11	1	1
Xylene (Total)	VOC	2	2	1	0	0				0	0			620	WQCC-11	1	0
Xylene[1,2-]	VOC	1	1	1	0	0				0	0			1400	EPA-4	1	0
Xylene[1,3-]+Xylene[1,4-]	VOC	1	1	1	0	0				0	0			620	WQCC-11	1	0

Table B-58
Nonfiltered Miscellaneous Constituents of Sandia Watershed Springs

Unfitered WGS Samples		Summary by Sample													Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	rate	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chloride	ANION	10	0	0	10	1	3300	4735	5800	0	0	0	0.01894	0.0232	250000	WQCC-12	1	0
Fluoride	ANION	10	0	0	10	1	450	574.5	662	0	0	1	0.3591	0.4138	1600	WQCC-11	1	0
Nitrate	ANION	9	3	0.3333	6	0.6667	30	40	400	0	0	0	0.004	0.04	10000	EPA-4	1	0
Perchlorate	ANION	3	3	1	0	0				0	0	0			3.7	EPA-4	1	0
Sulfate	ANION	10	0	0	10	1	2630	5200	8600	0	0	0	0.008667	0.01433	600000	WQCC-12	1	0
Calcium	GENINORG	3	0	0	3	1	27600	30400	51000									
Hardness	GENINORG	3	0	0	3	1	77000	85000	192000									
Magnesium	GENINORG	3	0	0	3	1	1700	2500	16000									
Potassium	GENINORG	3	0	0	3	1	2100	4000	6400									
Sodium	GENINORG	3	0	0	3	1	8400	16300	16400									
pH	WATER_QUAL	3	0	0	3	1	7.3	7.7	7.7									
Specific Conductance	WATER_QUAL	3	0	0	3	1	229	234	239									
Suspended Sediment Concentration	WATER_QUAL	1	0	0	1	1	6040	6040	6040									
Total Suspended Solids	WATER_QUAL	7	3	0.4286	4	0.5714	84000	102000	561000									

Table B-59
Filtered Inorganics of Sandia Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	34	19	0.5588	15	0.4412	57.5	165	356	1	10	1.897	4.092	87	WQCC-6	10	1
AluminumRe	METALS	34	19	0.5588	15	0.4412	57.5	165	356	0	0	0.033	0.0712	5000	WQCC-4	10	0
Antimony	METALS	33	29	0.8788	4	0.1212	0.4	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	10	0
Arsenic	METALS	33	15	0.4545	18	0.5455	2.5	4.8	11	0	0	0.1983	0.4545	24.2	WQCC-9	10	0
Barium	METALS	35	0	0	35	1	12	32.6	300	0	0	0.01254	0.1154	2600	EPA-4	11	0
Beryllium	METALS	35	32	0.9143	3	0.08571	3	3	3	0	0	0.566	0.566	5.3	WQCC-6	11	0
BerylliumRe	METALS	35	32	0.9143	3	0.08571	3	3	3	0	0	0.0411	0.0411	73	EPA-4	11	0
Boron	METALS	34	5	0.1471	29	0.8529	12.8	78.4	234	0	0	0.01568	0.0468	5000	WQCC-4	10	0
Cadmium	METALS	34	32	0.9412	2	0.05882	7	7	7	6	2	3.128	3.128	2.24	WQCC-6	10	3
CadmiumRe	METALS	34	32	0.9412	2	0.05882	7	7	7	0	0	0.14	0.14	50	WQCC-4	10	0
Chromium	METALS	35	8	0.2286	27	0.7714	0.4	5.1	18	0	0	0.06881	0.2429	74.12	WQCC-6	11	0
ChromiumRe	METALS	35	8	0.2286	27	0.7714	0.4	5.1	18	0	0	0.0051	0.018	1000	WQCC-4	11	0
Cobalt	METALS	34	32	0.9412	2	0.05882	0.65	0.7	0.75	0	0	0.0007	0.00075	1000	WQCC-4	10	0
Copper	METALS	35	9	0.2571	26	0.7429	1.5	7.31	64.6	6	8	0.8162	7.213	8.96	WQCC-6	11	4
CopperRe	METALS	35	9	0.2571	26	0.7429	1.5	7.31	64.6	0	0	0.01462	0.1292	500	WQCC-4	11	0
Cyanide (Total)	CN	3	1	0.3333	2	0.6667	10	10	10								
Iron	METALS	34	10	0.2941	24	0.7059	48.5	215.5	1420	0	0	0.01959	0.1291	11000	EPA-4	10	0
Lead	METALS	34	34	1	0	0				8	0			2.52	WQCC-6	11	4
LeadRe	METALS	34	34	1	0	0				0	0			100	WQCC-4	11	0
Manganese	METALS	34	2	0.05882	32	0.9412	2.1	10.6	222.5	0	0	0.006235	0.1309	1700	EPA-4	10	0
Mercury	METALS	26	24	0.9231	2	0.07692	0.03	0.05	0.07	0	0	0.004545	0.006364	11	EPA-4	10	0
Molybdenum	METALS	34	6	0.1765	28	0.8235	4.9	75.55	1410	0	9	0.4197	7.833	180	EPA-4	10	0
Nickel	METALS	34	15	0.4412	19	0.5588	0.989	2.7	8.7	0	0	0.05192	0.1673	52.01	WQCC-6	10	0
NickelRe	METALS	34	15	0.4412	19	0.5588	0.989	2.7	8.7	0	0	0.000587	0.001891	4600	WQCC-9	10	0
Selenium	METALS	25	24	0.96	1	0.04	2.9	2.9	2.9	0	0	0.058	0.058	50	WQCC-4	9	0
Silver	METALS	34	33	0.9706	1	0.02941	0.68	0.68	0.68	8	0	0.1971	0.1971	3.45	WQCC-2	10	3
SilverRe	METALS	34	33	0.9706	1	0.02941	0.68	0.68	0.68	0	0	0.003778	0.003778	180	EPA-4	10	0
Strontium	METALS	34	0	0	34	1	16.8	96.05	247	0	0	0.004366	0.01123	22000	EPA-4	10	0
Thallium	METALS	32	27	0.8438	5	0.1562	3	3	5.2	0	0	0.4762	0.8254	6.3	WQCC-9	10	0
Tin	METALS	13	12	0.9231	1	0.07692	32	32	32	0	0	0.001455	0.001455	22000	EPA-4	4	0
Uranium	URANIUM	2	0	0	2	1	1	14.05	27.1								
Vanadium	METALS	34	4	0.1176	30	0.8824	3.4	10.62	38.6	0	0	0.1062	0.386	100	WQCC-4	10	0
Zinc	METALS	34	5	0.1471	29	0.8529	20.5	60.8	420	0	2	0.5188	3.584	117.19	WQCC-2	10	0
ZincRe	METALS	34	5	0.1471	29	0.8529	20.5	60.8	420	0	0	0.002432	0.0168	25000	WQCC-4	10	0

Table B-60
Filtered Radionuclides of Sandia Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	12	12	1	0	0				0	0			1.2	DOE	6	0
Cesium-137	rad	12	12	1	0	0				0	0			120	DOE	6	0
Cobalt-60	rad	12	12	1	0	0				0	0			200	DOE	6	0
Gross alpha	rad	1	1	1	0	0											
Gross beta	rad	1	1	1	0	0											
Plutonium-238	rad	12	12	1	0	0				0	0			1.6	DOE	6	0
Plutonium-239	rad	12	12	1	0	0				0	0			1.2	DOE	6	0
Strontium-90	rad	12	12	1	0	0				0	0			40	DOE	6	0
Uranium-234	rad	12	1	0.08333	11	0.9167	0.106	0.224	1.4	0	0	0.0112	0.07	20	DOE	6	0
Uranium-235	rad	12	12	1	0	0				0	0			24	DOE	6	0
Uranium-238	rad	12	5	0.4167	7	0.5833	0.077	0.198	0.69	0	0	0.00825	0.02875	24	DOE	6	0

Table B-61
Filtered Miscellaneous Constituents of Sandia Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	37	0	0	37	1	7700	21200	55000								
Hardness	GENINORG	16	0	0	16	1	58700	79400	109300								
Magnesium	GENINORG	37	0	0	37	1	1670	5609	19600								
Potassium	GENINORG	37	1	0.02703	36	0.973	2360	12700	47800								
Sodium	GENINORG	37	0	0	37	1	9750	101700	1310000								
Chlorine, Total Residual	WATER_QUAL	1	1	1	0	0											
Dissolved Organic Carbon	WATER_QUAL	21	1	0.04762	20	0.9524	4300	8550	31000								
Dissolved Oxygen	WATER_QUAL	1	0	0	1	1	6000	6000	6000								
pH	WATER_QUAL	14	0	0	14	1	7.97	8.625	9								
Specific Conductance	WATER_QUAL	13	0	0	13	1	185	686	1028								
Total Dissolved Solids	WATER_QUAL	22	0	0	22	1	220000	488000	804000								

Table B-62
Nonfiltered Inorganics of Sandia Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	27	7	0.2593	20	0.7407	65.3	421.5	5200	0	0	0.01139	0.1405	37000	EPA-4	9	0
Antimony	METALS	27	26	0.963	1	0.03704	8.9	8.9	8.9	0	0	0.5933	0.5933	15	EPA-4	9	0
Arsenic	METALS	27	9	0.3333	18	0.6667	2.3	5.5	10.9	9	18	12.22	24.22	0.45	EPA-4	9	4
Barium	METALS	27	0	0	27	1	12.5	43.2	147	0	0	0.01662	0.05654	2600	EPA-4	9	0
Beryllium	METALS	27	27	1	0	0				0	0			73	EPA-4	9	0
Boron	METALS	27	5	0.1852	22	0.8148	10.6	66	234	0	0	0.02	0.07091	3300	EPA-4	9	0
Cadmium	METALS	27	27	1	0	0				0	0			18	EPA-4	9	0
Chromium	METALS	27	2	0.07407	25	0.9259	0.63	5.9	22.05	0	0	0.0001073	0.0004009	55000	EPA-4	9	0
Cobalt	METALS	27	24	0.8889	3	0.1111	0.51	1.2	1.9								
Copper	METALS	27	2	0.07407	25	0.9259	1.9	9.5	85.6	0	0	0.006786	0.06114	1400	EPA-4	9	0
Cyanide (Total)	CN	19	8	0.4211	11	0.5789	3.64	10	30	6	9	1.923	5.769	5.2	WQCC-7	4	3
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	27	5	0.1852	22	0.8148	120	601.5	3580	0	0	0.05468	0.3255	11000	EPA-4	9	0
Lead	METALS	27	21	0.7778	6	0.2222	1.8	2.3	3.2								
Lithium	METALS	3	0	0	3	1	43	44	59	0	0	0.06027	0.08082	730	EPA-4	3	0
Manganese	METALS	27	2	0.07407	25	0.9259	4	17.8	303	0	0	0.01047	0.1782	1700	EPA-4	9	0
Mercury	METALS	41	25	0.6098	16	0.3902	0.02	0.2	0.29	25	16	16.67	24.17	0.012	WQCC-7	11	10
MercuryRe	METALS	41	25	0.6098	16	0.3902	0.02	0.2	0.29	0	0	0.2597	0.3766	0.77	WQCC-8	11	0
Molybdenum	METALS	27	5	0.1852	22	0.8148	2.3	220.5	1420	0	13	1.225	7.889	180	EPA-4	9	0
Nickel	METALS	27	10	0.3704	17	0.6296	1	3.4	10.2	0	0	0.004658	0.01397	730	EPA-4	9	0
Selenium	METALS	38	32	0.8421	6	0.1579	2	3	4	0	0	0.6	0.8	5	WQCC-8	10	0
Silver	METALS	27	19	0.7037	8	0.2963	0.58	3.65	67	0	0	0.02028	0.3722	180	EPA-4	9	0
Strontium	METALS	27	0	0	27	1	17.6	101	271	0	0	0.004591	0.01232	22000	EPA-4	9	0
Thallium	METALS	27	23	0.8519	4	0.1481	3.7	4.45	5.1								
Tin	METALS	6	6	1	0	0				0	0			22000	EPA-4	3	0
Titanium	METALS	1	1	1	0	0											
Uranium	URANIUM	15	0	0	15	1	0.2	0.5	0.9								
Vanadium	METALS	27	0	0	27	1	3.5	11.1	39.4	0	0	0.04269	0.1515	260	EPA-4	9	0
Zinc	METALS	27	0	0	27	1	30.3	74.8	523	0	0	0.0068	0.04755	11000	EPA-4	9	0

Table B-63
Nonfiltered Radionuclides of Sandia Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	33	29	0.8788	4	0.1212	0.00908	0.01695	0.063	0	0	0.01412	0.0525	1.2	DOE	9	0
Cesium-137	rad	34	32	0.9412	2	0.05882	2.53	3.095	3.66	0	0	0.02579	0.0305	120	DOE	10	0
Cobalt-60	rad	26	22	0.8462	4	0.1538	1.68	47.79	53.42	0	0	0.239	0.2671	200	DOE	10	0
Gross alpha	rad	22	22	1	0	0											
Gross beta	rad	22	15	0.6818	7	0.3182	4.78	9.418	31.2								
Gross gamma	rad	12	9	0.75	3	0.25	194.5	266.7	392.3								
Plutonium-238	rad	34	31	0.9118	3	0.08824	0.0575	0.1104	0.2082	0	0	0.069	0.1301	1.6	DOE	10	0
Plutonium-239	rad	34	32	0.9412	2	0.05882	0.064	0.0915	0.119	0	0	0.07625	0.09917	1.2	DOE	10	0
Radium-226	rad	1	1	1	0	0											
Strontium-90	rad	31	30	0.9677	1	0.03226	0.281	0.281	0.281	0	0	0.007025	0.007025	40	DOE	10	0
Thorium-228	rad	1	1	1	0	0											
Thorium-230	rad	1	1	1	0	0											
Thorium-232	rad	1	1	1	0	0											
Tritium	rad	34	33	0.9706	1	0.02941	719	719	719	0	0	0.03595	0.03595	20000	WQCC-5	10	0
Uranium-234	rad	19	1	0.05263	18	0.9474	0.104	0.2175	1.67	0	0	0.01088	0.0835	20	DOE	10	0
Uranium-235	rad	19	17	0.8947	2	0.1053	0.0082	0.0152	0.0222	0	0	0.0006333	0.000925	24	DOE	10	0
Uranium-238	rad	19	4	0.2105	15	0.7895	0.0534	0.14	0.89	0	0	0.005833	0.03708	24	DOE	10	0

Table B-64
Nonfiltered Organics of Sandia Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	28	18	0.6429	10	0.3571	0.39	2	5.7	0	0	0.0339	0.09661	59	WQCC-9	9	0
Acetone	VOC	6	5	0.8333	1	0.1667	5.7	5.7	5.7	0	0	0.009344	0.009344	610	EPA-4	3	0
Bromodichloromethane	VOC	8	7	0.875	1	0.125	4	4	4	0	0	0.008696	0.008696	460	WQCC-9	3	0
Diesel Range Organics	DRO	21	19	0.9048	2	0.09524	1100	1100	1100								
Di-n-butylphthalate	SVOC	29	27	0.931	2	0.06897	1	1.5	2	0	0	0.000125	0.0001667	12000	WQCC-9	10	0
Phenol	SVOC	28	27	0.9643	1	0.03571	4	4	4	0	0	8.70E-07	8.70E-07	4600000	WQCC-9	9	0
Aroclor-1016	PCB	29	29	1	0	0				29	0			0.0017	WQCC-9	10	10
Aroclor-1221	PCB	29	29	1	0	0				29	0			0.0017	WQCC-9	10	10
Aroclor-1232	PCB	29	29	1	0	0				29	0			0.0017	WQCC-9	10	10
Aroclor-1242	PCB	31	31	1	0	0				31	0			0.0017	WQCC-9	10	10
Aroclor-1248	PCB	29	29	1	0	0				29	0			0.0017	WQCC-9	10	10
Aroclor-1254	PCB	31	31	1	0	0				31	0			0.0017	WQCC-9	10	10
Aroclor-1260	PCB	31	31	1	0	0				31	0			0.0017	WQCC-9	10	10
Aroclor-1262	PCB	7	7	1	0	0				7	0			0.0017	WQCC-9	4	4
Aldrin	PEST	21	21	1	0	0				21	0			0.0014	WQCC-9	6	6
BHC[alpha-]	PEST	21	21	1	0	0				0	0			0.13	WQCC-9	6	0
BHC[beta-]	PEST	21	21	1	0	0				0	0			0.46	WQCC-9	6	0
BHC[delta-]	PEST	21	21	1	0	0											
BHC[gamma-]	PEST	21	21	1	0	0				0	0			0.63	WQCC-9	6	0
Chlordane[alpha-]	PEST	21	21	1	0	0				21	0			0.022	WQCC-9	6	6
Chlordane[gamma-]	PEST	21	21	1	0	0				21	0			0.022	WQCC-9	6	6
DDD[4,4'-]	PEST	21	21	1	0	0				21	0			0.001	WQCC-8	6	6
DDE[4,4'-]	PEST	21	21	1	0	0				21	0			0.001	WQCC-8	6	6
DDT[4,4'-]	PEST	21	21	1	0	0				21	0			0.001	WQCC-8	6	6
Dieldrin	PEST	21	21	1	0	0				21	0			0.0014	WQCC-9	6	6
Endosulfan I	PEST	21	21	1	0	0				7	0			0.06	WQCC-7	6	6
Endosulfan IRe	PEST	21	21	1	0	0				0	0			240	WQCC-9	6	0
Endosulfan II	PEST	21	21	1	0	0				21	0			0.06	WQCC-7	6	6
Endosulfan IIRe	PEST	21	21	1	0	0				0	0			240	WQCC-9	6	0
Endosulfan Sulfate	PEST	21	21	1	0	0				0	0			240	WQCC-9	6	0
Endrin	PEST	21	21	1	0	0				21	0			0.04	WQCC-7	6	6
EndrinRe	PEST	21	21	1	0	0				0	0			0.81	WQCC-9	6	0
Endrin Aldehyde	PEST	21	21	1	0	0				0	0			0.81	WQCC-9	6	0
Endrin Ketone	PEST	21	21	1	0	0				0	0			0.81	WQCC-9	6	0
Heptachlor	PEST	21	21	1	0	0				21	0			0.0021	WQCC-9	6	6
Heptachlor Epoxide	PEST	21	21	1	0	0				21	0			0.0011	WQCC-9	6	6
Methoxychlor[4,4'-]	PEST	21	21	1	0	0				0	0			180	EPA-4	6	0
PentachlorophenolRe	PEST	28	28	1	0	0				0	0			82	WQCC-9	9	0
Toxaphene (Technical Grade)	PEST	21	21	1	0	0				21	0			0.0002	WQCC-7	6	6
Toxaphene (Technical Grade)Re	PEST	21	21	1	0	0				21	0			0.01	WQCC-9	6	6

Table B-64 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acenaphthene	SVOC	29	29	1	0	0				0	0			2700	WQCC-9	10	0
Acenaphthylene	SVOC	29	29	1	0	0				0	0			2700	WQCC-9	10	0
Aniline	SVOC	28	28	1	0	0				0	0			120	EPA-4	10	0
Anthracene	SVOC	29	29	1	0	0				0	0			110000	WQCC-9	10	0
Azobenzene	SVOC	26	26	1	0	0				26	0			6.1	EPA-4	9	9
Benzidine	SVOC	26	26	1	0	0				26	0			0.01	WQCC-9	10	10
Benzo(a)anthracene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Benzo(a)pyrene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Benzo(b)fluoranthene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Benzo(g,h,i)perylene	SVOC	29	29	1	0	0				0	0			11000	WQCC-9	10	0
Benzo(k)fluoranthene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Benzoic Acid	SVOC	29	29	1	0	0				0	0			150000	EPA-4	10	0
Benzyl Alcohol	SVOC	29	29	1	0	0				0	0			11000	EPA-4	10	0
Bis(2-chloroethoxy)methane	SVOC	29	29	1	0	0											
Bis(2-chloroethyl)ether	SVOC	29	29	1	0	0				1	0			14	WQCC-9	10	1
Bromophenyl-phenylether[4-]	SVOC	29	29	1	0	0											
Butylbenzylphthalate	SVOC	29	29	1	0	0				0	0			5200	WQCC-9	10	0
Carbazole	SVOC	18	18	1	0	0				0	0			34	EPA-4	6	0
Chloro-3-methylphenol[4-]	SVOC	29	29	1	0	0											
Chloroaniline[4-]	SVOC	29	29	1	0	0				0	0			150	EPA-4	10	0
Chloronaphthalene[2-]	SVOC	29	29	1	0	0				0	0			4300	WQCC-9	10	0
Chlorophenol[2-]	SVOC	28	28	1	0	0				0	0			400	WQCC-9	9	0
Chlorophenyl-phenyl[4-] Ether	SVOC	29	29	1	0	0											
Chrysene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Dibenz(a,h)anthracene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Dibenzofuran	SVOC	29	29	1	0	0				1	0			24	EPA-4	10	1
Dichlorobenzidine[3,3'-]	SVOC	29	29	1	0	0				29	0			0.77	WQCC-9	10	10
Dichlorophenol[2,4-]	SVOC	28	28	1	0	0				0	0			790	WQCC-9	9	0
Diethylphthalate	SVOC	29	29	1	0	0				0	0			120000	WQCC-9	10	0
Dimethyl Phthalate	SVOC	28	28	1	0	0				0	0			2900000	WQCC-9	10	0
Dimethylphenol[2,4-]	SVOC	28	28	1	0	0				0	0			2300	WQCC-9	9	0
Dinitro-2-methylphenol[4,6-]	SVOC	28	28	1	0	0				0	0			765	WQCC-9	9	0
Dinitrophenol[2,4-]	SVOC	28	28	1	0	0				0	0			14000	WQCC-9	9	0
Dinitrotoluene[2,4-]	SVOC	29	29	1	0	0				0	0			91	WQCC-9	10	0
Dinitrotoluene[2,6-]	SVOC	29	29	1	0	0				0	0			37	EPA-4	10	0
Di-n-octylphthalate	SVOC	29	29	1	0	0				0	0			730	EPA-4	10	0
Diphenylamine	SVOC	2	2	1	0	0				0	0			910	EPA-4	2	0
Diphenylhydrazine[1,2-]	SVOC	2	2	1	0	0											
Fluoranthene	SVOC	29	29	1	0	0				0	0			370	WQCC-9	10	0
Fluorene	SVOC	29	29	1	0	0				0	0			14000	WQCC-9	10	0

Table B-64 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexachlorobenzene	SVOC	29	29	1	0	0				29	0			0.0077	WQCC-9	10	10
Hexachlorobutadiene	SVOC	29	29	1	0	0				0	0			500	WQCC-9	10	0
Hexachlorocyclopentadiene	SVOC	29	29	1	0	0				0	0			17000	WQCC-9	10	0
Hexachloroethane	SVOC	29	29	1	0	0				0	0			89	WQCC-9	10	0
Indeno(1,2,3-cd)pyrene	SVOC	29	29	1	0	0				29	0			0.49	WQCC-9	10	10
Isophorone	SVOC	29	29	1	0	0				0	0			26000	WQCC-9	10	0
Methylnaphthalene[2-]	SVOC	29	29	1	0	0				27	0			6.2	EPA-4	10	9
Methylphenol[2-]	SVOC	28	28	1	0	0				0	0			1800	EPA-4	9	0
Methylphenol[4-]	SVOC	27	27	1	0	0				0	0			180	EPA-4	9	0
Methylpyridine[2-]	SVOC	7	7	1	0	0											
Naphthalene	SVOC	29	29	1	0	0				27	0			6.2	EPA-4	10	9
Nitroaniline[2-]	SVOC	29	29	1	0	0				29	0			2.2	EPA-4	10	10
Nitroaniline[3-]	SVOC	29	29	1	0	0				29	0			2.2	EPA-4	10	10
Nitroaniline[4-]	SVOC	29	29	1	0	0				29	0			2.2	EPA-4	10	10
Nitrobenzene	SVOC	29	29	1	0	0				0	0			1900	WQCC-9	10	0
Nitrophenol[2-]	SVOC	28	28	1	0	0				0	0			290	EPA-4	9	0
Nitrophenol[4-]	SVOC	28	28	1	0	0				0	0			290	EPA-4	9	0
Nitrosodimethylamine[N-]	SVOC	28	28	1	0	0				0	0			81	WQCC-9	10	0
Nitroso-di-n-propylamine[N-]	SVOC	29	29	1	0	0				1	0			14	WQCC-9	10	1
Nitrosodiphenylamine[N-]	SVOC	27	27	1	0	0				0	0			160	WQCC-9	9	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	22	22	1	0	0				0	0			170000	WQCC-9	8	0
Pentachlorophenol	SVOC	28	28	1	0	0				26	0			15	WQCC-7	9	9
Phenanthrene	SVOC	29	29	1	0	0				0	0			110000	WQCC-9	10	0
Pyrene	SVOC	29	29	1	0	0				0	0			11000	WQCC-9	10	0
Pyridine	SVOC	25	25	1	0	0				0	0			37	EPA-4	10	0
Trichlorophenol[2,4,5-]	SVOC	28	28	1	0	0				0	0			3700	EPA-4	9	0
Trichlorophenol[2,4,6-]	SVOC	28	28	1	0	0				0	0			65	WQCC-9	9	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	9	9	1	0	0				0	0			710	WQCC-9	4	0
Bromobenzene	VOC	7	7	1	0	0				0	0			23	EPA-4	4	0
Bromochloromethane	VOC	7	7	1	0	0				0	0			16000	WQCC-9	4	0
Bromoform	VOC	9	9	1	0	0				0	0			3600	WQCC-9	4	0
Bromomethane	VOC	9	9	1	0	0				0	0			4000	WQCC-9	4	0
Butanone[2-]	VOC	8	8	1	0	0				0	0			1900	EPA-4	4	0
Butylbenzene[n-]	VOC	7	7	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[sec-]	VOC	7	7	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[tert-]	VOC	7	7	1	0	0				0	0			61	EPA-4	4	0
Carbon Disulfide	VOC	8	8	1	0	0				0	0			1000	EPA-4	4	0
Carbon Tetrachloride	VOC	9	9	1	0	0				0	0			44	WQCC-9	4	0

Table B-64 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chlorobenzene	VOC	9	9	1	0	0				0	0			21000	WQCC-9	4	0
Chlorodibromomethane	VOC	9	9	1	0	0				0	0			340	WQCC-9	4	0
Chloroethane	VOC	9	9	1	0	0				0	0			39	EPA-4	4	0
Chloroform	VOC	8	8	1	0	0				0	0			4700	WQCC-9	3	0
Chloromethane	VOC	9	9	1	0	0				0	0			15	EPA-4	4	0
Chlorotoluene[2-]	VOC	7	7	1	0	0				0	0			120	EPA-4	4	0
Chlorotoluene[4-]	VOC	7	7	1	0	0				0	0			120	EPA-4	4	0
Dibromo-3-Chloropropane[1,2-]	VOC	7	7	1	0	0											
Dibromoethane[1,2-]	VOC	7	7	1	0	0				7	0			0.01	EPA-4	4	4
Dibromomethane	VOC	7	7	1	0	0				0	0			61	EPA-4	4	0
Dichlorobenzene[1,2-]	VOC	29	29	1	0	0				0	0			17000	WQCC-9	10	0
Dichlorobenzene[1,3-]	VOC	29	29	1	0	0				0	0			2600	WQCC-9	10	0
Dichlorobenzene[1,4-]	VOC	29	29	1	0	0				0	0			2600	WQCC-9	10	0
Dichlorodifluoromethane	VOC	8	8	1	0	0				0	0			390	EPA-4	4	0
Dichloroethane[1,1-]	VOC	9	9	1	0	0				0	0			810	EPA-4	4	0
Dichloroethane[1,2-]	VOC	9	9	1	0	0				0	0			990	WQCC-9	4	0
Dichloroethene[1,1-]	VOC	9	9	1	0	0				0	0			32	WQCC-9	4	0
Dichloroethene[cis/trans-1,2-]	VOC	3	3	1	0	0											
Dichloroethene[cis-1,2-]	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	8	8	1	0	0				0	0			140000	WQCC-9	4	0
Dichloropropane[1,2-]	VOC	9	9	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropane[1,3-]	VOC	7	7	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropane[2,2-]	VOC	7	7	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropene[1,1-]	VOC	7	7	1	0	0				0	0			1700	WQCC-9	4	0
Dichloropropene[cis-1,3-]	VOC	9	9	1	0	0				0	0			1700	WQCC-9	4	0
Dichloropropene[trans-1,3-]	VOC	6	6	1	0	0				0	0			1700	WQCC-9	2	0
Ethylbenzene	VOC	9	9	1	0	0				0	0			29000	WQCC-9	4	0
Hexanone[2-]	VOC	8	8	1	0	0				0	0			1900	EPA-4	4	0
Iodomethane	VOC	7	7	1	0	0				0	0			4000	WQCC-9	4	0
Isopropylbenzene	VOC	7	7	1	0	0				0	0			660	EPA-4	4	0
Isopropyltoluene[4-]	VOC	7	7	1	0	0				0	0			660	EPA-4	4	0
Methyl-2-pentanone[4-]	VOC	8	8	1	0	0				0	0			160	EPA-4	4	0
Methylene Chloride	VOC	9	9	1	0	0				0	0			16000	WQCC-9	4	0
Propylbenzene[1-]	VOC	7	7	1	0	0				0	0			61	EPA-4	4	0
Styrene	VOC	8	8	1	0	0				0	0			1600	EPA-4	4	0
Tetrachloroethane[1,1,1,2-]	VOC	7	7	1	0	0				6	0			4.3	EPA-4	4	3
Tetrachloroethane[1,1,2,2-]	VOC	9	9	1	0	0				0	0			110	WQCC-9	4	0
Tetrachloroethene	VOC	9	9	1	0	0				0	0			88.5	WQCC-9	4	0
Toluene	VOC	9	9	1	0	0				0	0			200000	WQCC-9	4	0
Trichloro-1,2,2-trifluoroethane	VOC	4	4	1	0	0											

Table B-64 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichlorobenzene[1,2,3-]	VOC	4	4	1	0	0				0	0			940	WQCC-9	3	0
Trichlorobenzene[1,2,4-]	VOC	29	29	1	0	0				0	0			940	WQCC-9	10	0
Trichloroethane[1,1,1-]	VOC	9	9	1	0	0				0	0			790	EPA-4	4	0
Trichloroethane[1,1,2-]	VOC	9	9	1	0	0				0	0			420	WQCC-9	4	0
Trichloroethene	VOC	9	9	1	0	0				0	0			810	WQCC-9	4	0
Trichlorofluoromethane	VOC	9	9	1	0	0				0	0			1300	EPA-4	4	0
Trichloropropane[1,2,3-]	VOC	7	7	1	0	0				7	0			0.02	EPA-4	4	4
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	7	7	1	0	0				0	0			12	EPA-4	4	0
Trimethylbenzene[1,3,5-]	VOC	7	7	1	0	0				0	0			12	EPA-4	4	0
Vinyl Chloride	VOC	9	9	1	0	0				0	0			5250	WQCC-9	4	0
Xylene (Total)	VOC	4	4	1	0	0				0	0			1400	EPA-4	2	0
Xylene[1,2-]	VOC	5	5	1	0	0				0	0			1400	EPA-4	4	0
Xylene[1,3-]+Xylene[1,4-]	VOC	5	5	1	0	0				0	0			1400	EPA-4	4	0

Table B-65
Nonfiltered Miscellaneous Constituents of Sandia Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	30	30	1	0	0											
Bromide	ANION	42	20	0.4762	22	0.5238	280	3000	32000								
Chloride	ANION	65	0	0	65	1	3600	65500	280000								
Fluoride	ANION	64	0	0	64	1	180	600	3800	0	3	0.2727	1.727	2200	EPA-4	10	0
Nitrate	ANION	65	4	0.06154	61	0.9385	40	1100	15000	0	2	0.11	1.5	10000	EPA-4	10	0
Nitrite	ANION	42	35	0.8333	7	0.1667	150	310	460	0	0	0.31	0.46	1000	EPA-4	6	0
Perchlorate	ANION	10	10	1	0	0				2	0			3.7	EPA-4	4	2
Sulfate	ANION	65	0	0	65	1	1500	45000	2700000								
Calcium	GENINORG	27	0	0	27	1	7650	22200	62200								
Hardness	GENINORG	6	0	0	6	1	58700	75950	82000								
Magnesium	GENINORG	27	0	0	27	1	1630	5000	20200								
Potassium	GENINORG	27	1	0.03704	26	0.963	2260	11350	48500								
Sodium	GENINORG	27	0	0	27	1	9600	79000	1340000								
pH	WATER_QUAL	9	0	0	9	1	8.3	8.6	8.9								
Specific Conductance	WATER_QUAL	9	0	0	9	1	352	577	680								
Suspended Sediment Concentration	WATER_QUAL	3	0	0	3	1	13800	31800	53570								
Total Organic Carbon	WATER_QUAL	17	0	0	17	1	1800	8300	54000								
Total Suspended Solids	WATER_QUAL	43	20	0.4651	23	0.5349	2400	9000	88000								

Table B-66
Filtered Inorganics of Mortandad Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	50	12	0.24	38	0.76	14.8	225	7220	0	0	0.006081	0.1951	37000	EPA-4	14	0
Antimony	METALS	52	40	0.7692	12	0.2308	0.7	3	3	5	0	0.5	0.5	6	EPA-2	14	3
Arsenic	METALS	53	49	0.9245	4	0.07547	3.3	4.2	17	1	1	0.42	1.7	10	EPA-2	15	0
Barium	METALS	51	4	0.07843	47	0.9216	22	104	189	0	0	0.104	0.189	1000	WQCC-11	14	0
Beryllium	METALS	51	41	0.8039	10	0.1961	2	3	3	3	0	0.75	0.75	4	EPA-2	14	1
Boron	METALS	50	7	0.14	43	0.86	32	69.9	170	0	0	0.02118	0.05152	3300	EPA-4	14	0
Cadmium	METALS	53	49	0.9245	4	0.07547	0.103	4.085	7	17	2	0.817	1.4	5	EPA-2	14	10
Chromium	METALS	51	45	0.8824	6	0.1176	1.1	6.5	13	0	0	0.13	0.26	50	WQCC-11	14	0
Cobalt	METALS	52	48	0.9231	4	0.07692	6	8	44.1								
Copper	METALS	54	43	0.7963	11	0.2037	0.31	11	33	0	0	0.011	0.033	1000	WQCC-12	14	0
Cyanide (Total)	CN	15	14	0.9333	1	0.06667	2.74	2.74	2.74	0	0	0.0137	0.0137	200	WQCC-11	7	0
Cyanide, Amenable	METALS	1	0	0	1	1	2.74	2.74	2.74	0	0	0.0137	0.0137	200	EPA-2	1	0
Iron	METALS	52	21	0.4038	31	0.5962	40	183	15330	0	5	0.183	15.33	1000	WQCC-12	14	0
Lead	METALS	54	49	0.9074	5	0.09259	0.03	1.47	3.32	8	0	0.098	0.2213	15	EPA-2	14	8
Lithium	METALS	19	4	0.2105	15	0.7895	2	22.6	59	0	0	0.03096	0.08082	730	EPA-4	6	0
Manganese	METALS	51	36	0.7059	15	0.2941	2	9	2266	0	2	0.045	11.33	200	WQCC-12	14	0
Mercury	METALS	28	10	0.3571	18	0.6429	0.03	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	11	0
Molybdenum	METALS	48	7	0.1458	41	0.8542	0.2	119	401	0	7	0.6611	2.228	180	EPA-4	13	0
Nickel	METALS	52	38	0.7308	14	0.2692	4.8	6.72	20	0	0	0.0672	0.2	100	EPA-2	14	0
Selenium	METALS	29	29	1	0	0				0	0			10	EPA-1	11	0
SeleniumRe	METALS	29	29	1	0	0				0	0			50	WQCC-11	11	0
Silver	METALS	52	45	0.8654	7	0.1346	9	10	29	5	0	0.2	0.58	50	WQCC-11	14	5
Strontium	METALS	50	0	0	50	1	57.1	120.5	220	0	0	0.005477	0.01	22000	EPA-4	13	0
Thallium	METALS	50	37	0.74	13	0.26	2.2	3	4	25	13	1.5	2	2	EPA-2	13	11
Tin	METALS	50	48	0.96	2	0.04	30	30	30	0	0	0.001364	0.001364	22000	EPA-4	13	0
Titanium	METALS	2	1	0.5	1	0.5	0.25	0.25	0.25								
Uranium	URANIUM	19	0	0	19	1	1.08	1.66	2.53	0	0	0.006081	0.08433	30	EPA-2	7	0
Vanadium	METALS	52	45	0.8654	7	0.1346	3	6.3	8	0	0	0.02423	0.03077	260	EPA-4	14	0
Zinc	METALS	53	41	0.7736	12	0.2264	4.4	10.4	50	0	0	0.00104	0.005	10000	WQCC-12	14	0

Table B-67
Filtered Radionuclides of Mortandad Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	22	2	0.09091	20	0.9091	0.107	0.269	1.2	0	1	0.2242	1	1.2	DOE	10	0
Cesium-137	rad	17	17	1	0	0				0	0			120	DOE	6	0
Cobalt-60	rad	8	6	0.75	2	0.25	25	35.5	46	0	0	0.355	0.46	100	EPA-2	4	0
Gross alpha	rad	32	29	0.9062	3	0.09375	3.43	6.7	7.29	5	0	0.4467	0.486	15	EPA-2	15	3
Gross beta	rad	31	11	0.3548	20	0.6452	3.2	41.2	611	10	9	0.824	12.22	50	EPA-2	15	4
Gross gamma	rad	4	4	1	0	0											
Plutonium-238	rad	23	19	0.8261	4	0.1739	0.05	0.0865	0.7	0	0	0.05406	0.4375	1.6	DOE	10	0
Plutonium-239	rad	23	18	0.7826	5	0.2174	0.058	0.092	0.145	0	0	0.07667	0.1208	1.2	DOE	10	0
Radium-226	rad	1	0	0	1	1	0.502	0.502	0.502								
Radium-228	rad	1	1	1	0	0											
Strontium-90	rad	34	22	0.6471	12	0.3529	4.5	40.45	84	4	11	5.056	10.5	8	EPA-2	15	3
Tritium	rad	33	32	0.9697	1	0.0303	8720	8720	8720	10	0	0.436	0.436	20000	EPA-2	14	8
Uranium-234	rad	12	9	0.75	3	0.25	0.46	3.23	5.62	0	0	0.1615	0.281	20	DOE	12	0
Uranium-235	rad	13	13	1	0	0				0	0			24	DOE	12	0
Uranium-238	rad	13	11	0.8462	2	0.1538	0.412	0.4925	0.573	0	0	0.02052	0.02388	24	DOE	12	0

Table B-68
Filtered Organics of Mortandad Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzene	VOC	1	1	1	0	0				0	0			5	EPA-2	1	0
Carbon Tetrachloride	VOC	1	1	1	0	0				0	0			5	EPA-2	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chloroform	VOC	1	1	1	0	0				0	0			100	WQCC-11	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Dibromoethane[1,2-]	VOC	1	1	1	0	0				1	0			0.05	EPA-2	1	1
Dichloroethane[1,1-]	VOC	1	1	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	1	1	1	0	0				0	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	1	1	1	0	0				0	0			5	WQCC-11	1	0
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	1	1	1	0	0											
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Ethylbenzene	VOC	1	1	1	0	0				0	0			700	EPA-2	1	0
Methylene Chloride	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Methylphenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	1	1	1	0	0				0	0			30	WQCC-11	1	0
Nitrophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Pentachlorophenol	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
Phenol	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Tetrachloroethane[1,1,1,2-]	VOC	1	1	1	0	0				0	0			4.3	EPA-4	1	0
Tetrachloroethane[1,1,2,2-]	VOC	1	1	1	0	0				0	0			10	WQCC-11	1	0
Toluene	VOC	1	1	1	0	0				0	0			750	WQCC-11	1	0
Trichloroethane[1,1,1-]	VOC	1	1	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	1	1	1	0	0				0	0			5	EPA-2	1	0
Trichloroethene	VOC	1	1	1	0	0				0	0			5	EPA-2	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Vinyl Chloride	VOC	1	1	1	0	0				1	0			1	WQCC-11	1	0
Xylene (Total)	VOC	1	1	1	0	0				0	0			620	WQCC-11	1	0

Table B-69
Filtered Miscellaneous Constituents Mortandad Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	52	0	0	52	1	12400	22210	64630								
Hardness	GENINORG	31	0	0	31	1	42900	73700	176000								
Magnesium	GENINORG	52	4	0.07692	48	0.9231	1624	3777	6800								
Potassium	GENINORG	52	0	0	52	1	1000	15750	27000								
Sodium	GENINORG	52	0	0	52	1	18870	77500	110000								
Total Phosphate as Phosphorus	GENINORG	2	0	0	2	1	210	320	430								
Total Phosphorus	GENINORG	27	3	0.1111	24	0.8889	20	118	929								
Humic, Hydrophilic Acids	HUMIC_ACID	1	0	0	1	1	800	800	800								
Humic, Hydrophilic Bases	HUMIC_ACID	1	0	0	1	1	200	200	200								
Humic, Hydrophilic Neutrals	HUMIC_ACID	1	0	0	1	1	200	200	200								
Humic, Hydrophilic Total	HUMIC_ACID	1	0	0	1	1	1200	1200	1200								
Humic, Hydrophobic Acids	HUMIC_ACID	1	0	0	1	1	700	700	700								
Humic, Hydrophobic Bases	HUMIC_ACID	1	0	0	1	1	0	0	0								
Humic, Hydrophobic Neitrals	HUMIC_ACID	1	0	0	1	1	500	500	500								
Humic, Hydrophobic Total	HUMIC_ACID	1	0	0	1	1	1200	1200	1200								
Dissolved Organic Carbon	WATER_QUAL	1	0	0	1	1	2400	2400	2400								
pH	WATER_QUAL	55	0	0	55	1	1.63	7.27	8.4								
Specific Conductance	WATER_QUAL	56	0	0	56	1	52.1	527.5	11600								
Total Dissolved Solids	WATER_QUAL	103	0	0	103	1	150000	349000	775500	0	0	0.349	0.7755	1000000	WQCC-12	16	0
Total Suspended Solids	WATER_QUAL	19	6	0.3158	13	0.6842	3000	9000	2200000								

Table B-70
Nonfiltered Inorganics of Mortandad Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	76	6	0.07895	70	0.9211	51.7	513.5	662000	0	3	0.01388	17.89	37000	EPA-4	17	0
Antimony	METALS	66	51	0.7727	15	0.2273	0.5	3	7	6	1	0.5	1.167	6	EPA-2	15	4
Arsenic	METALS	76	58	0.7632	18	0.2368	2.5	7	192	1	6	0.7	19.2	10	EPA-2	16	1
Barium	METALS	77	2	0.02597	75	0.974	23.9	140	8600	0	3	0.14	8.6	1000	WQCC-11	17	0
Beryllium	METALS	75	56	0.7467	19	0.2533	0.04	3	150	2	7	0.75	37.5	4	EPA-2	17	0
Boron	METALS	76	4	0.05263	72	0.9474	35	72.6	176	0	0	0.022	0.05333	3300	EPA-4	17	0
Cadmium	METALS	67	61	0.9104	6	0.08955	0.179	1.725	7	23	2	0.345	1.4	5	EPA-2	15	10
Chromium	METALS	77	52	0.6753	25	0.3247	0.995	15	361	0	2	0.3	7.22	50	WQCC-11	17	0
Cobalt	METALS	66	55	0.8333	11	0.1667	4.25	8	204								
Copper	METALS	75	46	0.6133	29	0.3867	2.01	14.3	454	0	0	0.0143	0.454	1000	WQCC-12	17	0
Cyanide (Total)	CN	63	42	0.6667	21	0.3333	2	10	60	0	0	0.05	0.3	200	WQCC-11	13	0
Iron	METALS	77	6	0.07792	71	0.9221	24.1	385	734000	0	25	0.385	734	1000	WQCC-12	17	0
Lead	METALS	76	53	0.6974	23	0.3026	0.062	15.6	1320	8	12	1.04	88	15	EPA-2	17	8
Lithium	METALS	23	4	0.1739	19	0.8261	2	27.1	95	0	0	0.03712	0.1301	730	EPA-4	10	0
Manganese	METALS	76	16	0.2105	60	0.7895	1	16.35	27700	0	14	0.08175	138.5	200	WQCC-12	17	0
Mercury	METALS	77	27	0.3506	50	0.6494	0.03	0.2	1.5	0	0	0.1	0.75	2	WQCC-11	17	0
Molybdenum	METALS	73	14	0.1918	59	0.8082	19	117	1040	0	11	0.65	5.778	180	EPA-4	15	0
Nickel	METALS	66	49	0.7424	17	0.2576	5.1	11.1	477	0	1	0.111	4.77	100	EPA-2	15	0
Selenium	METALS	76	61	0.8026	15	0.1974	1.4	3	13.9	1	1	0.3	1.39	10	EPA-1	17	1
SeleniumRe	METALS	76	61	0.8026	15	0.1974	1.4	3	13.9	0	0	0.06	0.278	50	WQCC-11	17	0
Silver	METALS	67	57	0.8507	10	0.1493	7	10.5	170	4	1	0.21	3.4	50	WQCC-11	15	4
Strontium	METALS	65	0	0	65	1	55.4	130	356	0	0	0.005909	0.01618	22000	EPA-4	13	0
Thallium	METALS	64	50	0.7812	14	0.2188	0.2	3	23	37	13	1.5	11.5	2	EPA-2	14	11
Tin	METALS	63	57	0.9048	6	0.09524	14.5	30	50	0	0	0.001364	0.002273	22000	EPA-4	13	0
Titanium	METALS	1	0	0	1	1	342	342	342								
Uranium	URANIUM	57	2	0.03509	55	0.9649	0.27	1.921	62.69	0	1	0.06403	2.09	30	EPA-2	13	0
Vanadium	METALS	66	44	0.6667	22	0.3333	0.916	15.6	657	0	1	0.06	2.527	260	EPA-4	15	0
Zinc	METALS	66	38	0.5758	28	0.4242	3.6	52.5	2670	0	0	0.00525	0.267	10000	WQCC-12	15	0

Table B-71
Nonfiltered Radionuclides of Mortandad Watershed Alluvial Groundwater

Unfiltered WGA Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	68	15	0.2206	53	0.7794	0.106	0.345	14.09	0	4	0.2875	11.74	1.2	DOE	15	0
Cesium-137	rad	64	62	0.9688	2	0.03125	7.65	7.665	7.68	0	0	0.06388	0.064	120	DOE	13	0
Cobalt-60	rad	44	40	0.9091	4	0.09091	5.04	26.66	50.5	0	0	0.2666	0.505	100	EPA-2	13	0
Gross alpha	rad	68	52	0.7647	16	0.2353	2.72	8.1	307	10	5	0.54	20.47	15	EPA-2	14	5
Gross beta	rad	67	31	0.4627	36	0.5373	3.26	58.5	625.8	21	21	1.17	12.52	50	EPA-2	14	8
Gross gamma	rad	33	29	0.8788	4	0.1212	148.3	416.2	817.7								
Plutonium-238	rad	68	54	0.7941	14	0.2059	0.00573	0.1491	16.2	0	2	0.09319	10.12	1.6	DOE	15	0
Plutonium-239	rad	68	49	0.7206	19	0.2794	0.0153	0.099	12.52	0	2	0.0825	10.43	1.2	DOE	15	0
Radium-226	rad	3	0	0	3	1	0.491	0.728	0.789								
Radium-228	rad	2	1	0.5	1	0.5	1.13	1.13	1.13								
Strontium-90	rad	60	34	0.5667	26	0.4333	0.116	42.32	2170	7	22	5.29	271.2	8	EPA-2	15	5
Thorium-228	rad	4	3	0.75	1	0.25	0.109	0.109	0.109								
Thorium-230	rad	4	0	0	4	1	0.0364	0.049	0.091								
Thorium-232	rad	4	3	0.75	1	0.25	0.0542	0.0542	0.0542								
Tritium	rad	68	56	0.8235	12	0.1765	2094	7190	76300	9	1	0.3595	3.815	20000	EPA-2	15	5
Uranium-234	rad	15	0	0	15	1	0.101	0.887	7.928	0	0	0.04435	0.3964	20	DOE	9	0
Uranium-235	rad	16	7	0.4375	9	0.5625	0.0242	0.0825	0.414	0	0	0.003438	0.01725	24	DOE	9	0
Uranium-238	rad	16	2	0.125	14	0.875	0.1567	0.397	6.405	0	0	0.01654	0.2669	24	DOE	9	0

Table B-72
Nonfiltered Organics of Mortandad Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	0	0	1	1	1.84E-05	1.84E-05	1.84E-05								
Endosulfan II	PESTPCB	3	2	0.667	1	0.333	0.005	0.005	0.005	0	0	2.27E-05	2.27E-05	220	EPA-4	3	0
Bis(2-ethylhexyl)phthalate	SVOC	40	33	0.825	7	0.175	0.25	2.9	77	32	2	0.4833	12.83	6	EPA-2	14	13
Acetone	VOC	36	32	0.889	4	0.111	3.4	16	21	0	0	0.02623	0.03443	610	EPA-4	15	0
Pyridine	SVOC	30	28	0.933	2	0.067	10	10	10	0	0	0.2703	0.2703	37	EPA-4	13	0
Xylene[1,3-]+Xylene[1,4-]	VOC	19	18	0.947	1	0.053	0.45	0.45	0.45	0	0	0.0007258	0.0007258	620	WQCC-1	12	0
Xylene[1,2-]	VOC	24	23	0.958	1	0.042	0.19	0.19	0.19	0	0	0.0001357	0.0001357	1400	EPA-4	13	0
Toluene	VOC	49	47	0.959	2	0.041	0.34	0.585	0.83	0	0	0.00078	0.001107	750	WQCC-1	17	0
Xylene (Total)	VOC	37	36	0.973	1	0.027	0.64	0.64	0.64	0	0	0.001032	0.001032	620	WQCC-1	16	0
Benzidine	SVOC	39	38	0.974	1	0.026	20	20	20	38	1	6897	6897	0.0029	EPA-4	14	14
Pentachlorophenol	SVOC	41	40	0.976	1	0.024	11	11	11	40	1	11	11	1	EPA-2	*14	14
Benzoic Acid	SVOC	42	41	0.976	1	0.024	3	3	3	0	0	2.00E-05	2.00E-05	150000	EPA-4	15	0
Benzyl Alcohol	SVOC	42	41	0.976	1	0.024	4	4	4	0	0	0.0003636	0.0003636	11000	EPA-4	15	0
Di-n-butylphthalate	SVOC	42	41	0.976	1	0.024	12	12	12	0	0	0.003243	0.003243	3700	EPA-4	14	0
Trichlorobenzene[1,2,4-]	VOC	43	42	0.977	1	0.023	5	5	5	0	0	0.07143	0.07143	70	EPA-2	15	0
Methylene Chloride	VOC	45	44	0.978	1	0.022	2	2	2	41	0	0.4	0.4	5	EPA-2	16	0
Benzene	VOC	49	48	0.98	1	0.02	0.45	0.45	0.45	39	0	0.09	0.09	5	EPA-2	17	0
Chloromethane	VOC	49	48	0.98	1	0.02	11	11	11	0	0	0.7333	0.7333	15	EPA-4	17	0
Trichloroethene	VOC	49	48	0.98	1	0.02	0.3	0.3	0.3	39	0	0.06	0.06	5	EPA-2	17	0
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0				0	0			0.10	EPA-4	1	0
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0				0	0			3.00E-05	EPA-2	1	0
Tetrachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Aroclor-1016	PCB	29	29	1	0	0				15	0			0.5	EPA-2	14	10
Aroclor-1221	PCB	29	29	1	0	0				15	0			0.5	EPA-2	14	10
Aroclor-1232	PCB	29	29	1	0	0				15	0			0.5	EPA-2	14	10

Table B-72 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1242	PCB	35	35	1	0	0				21	0			0.5	EPA-2	15	13
Aroclor-1248	PCB	29	29	1	0	0				15	0			0.5	EPA-2	14	10
Aroclor-1254	PCB	35	35	1	0	0				21	0			0.5	EPA-2	15	13
Aroclor-1260	PCB	35	35	1	0	0				21	0			0.5	EPA-2	15	13
Aroclor-1262	PCB	20	20	1	0	0				11	0			0.5	EPA-2	11	8
Aldrin	PEST	3	3	1	0	0				2	0			0.04	EPA-4	3	2
BHC[alpha-]	PEST	3	3	1	0	0				0	0			0.11	EPA-4	3	0
BHC[beta-]	PEST	3	3	1	0	0				0	0			0.37	EPA-4	3	0
BHC[delta-]	PEST	3	3	1	0	0											
BHC[gamma-]	PEST	3	3	1	0	0				0	0			0.2	EPA-2	3	0
Chlordane(alpha/gamma)	PEST	1	1	1	0	0											
Chlordane[alpha-]	PEST	3	3	1	0	0				0	0			2	EPA-2	3	0
Chlordane[gamma-]	PEST	3	3	1	0	0				0	0			2	EPA-2	3	0
DDD[4,4'-]	PEST	3	3	1	0	0				0	0			2.8	EPA-4	3	0
DDE[4,4'-]	PEST	3	3	1	0	0				0	0			2	EPA-4	3	0
DDT[4,4'-]	PEST	3	3	1	0	0				0	0			2	EPA-4	3	0
Dieldrin	PEST	3	3	1	0	0				2	0			0.04	EPA-4	3	2
Endosulfan I	PEST	3	3	1	0	0				0	0			220	EPA-4	3	0
Endosulfan Sulfate	PEST	3	3	1	0	0				0	0			220	EPA-4	3	0
Endrin	PEST	3	3	1	0	0				0	0			0.2	EPA-1	3	0
EndrinRe	PEST	3	3	1	0	0				0	0			2	EPA-2	3	0
Endrin Aldehyde	PEST	3	3	1	0	0				0	0			0.2	EPA-1	3	0
Endrin AldehydeRe	PEST	3	3	1	0	0				0	0			2	EPA-2	3	0
Endrin Ketone	PEST	3	3	1	0	0				0	0			0.2	EPA-1	3	0
Endrin KetoneRe	PEST	3	3	1	0	0				0	0			2	EPA-2	3	0
Heptachlor	PEST	3	3	1	0	0				0	0			0.4	EPA-2	3	0
Heptachlor Epoxide	PEST	3	3	1	0	0				0	0			0.2	EPA-2	3	0
Methoxychlor[4,4'-]	PEST	3	3	1	0	0				0	0			40	EPA-2	3	0
Toxaphene (Technical Grade)	PEST	3	3	1	0	0				2	0			3	EPA-2	3	2
Acenaphthene	SVOC	42	42	1	0	0				0	0			370	EPA-4	14	0
Acenaphthylene	SVOC	42	42	1	0	0				0	0			370	EPA-4	14	0
Aniline	SVOC	42	42	1	0	0				0	0			120	EPA-4	15	0
Anthracene	SVOC	42	42	1	0	0				0	0			1800	EPA-4	14	0
Azobenzene	SVOC	28	28	1	0	0				28	0			6.1	EPA-4	14	14
Benzo(a)anthracene	SVOC	42	42	1	0	0				41	0			0.92	EPA-4	14	14
Benzo(a)pyrene	SVOC	42	42	1	0	0				41	0			0.2	EPA-2	14	14
Benzo(b)fluoranthene	SVOC	42	42	1	0	0				41	0			0.92	EPA-4	14	14
Benzo(g,h,i)perylene	SVOC	42	42	1	0	0				0	0			180	EPA-4	14	0
Benzo(k)fluoranthene	SVOC	42	42	1	0	0				29	0			9.2	EPA-4	14	14
Bis(2-chloroethoxy)methane	SVOC	43	43	1	0	0											
Bis(2-chloroethyl)ether	SVOC	43	43	1	0	0				43	0			0.10	EPA-4	15	15
Bromophenyl-phenylether[4-]	SVOC	42	42	1	0	0											
Butylbenzylphthalate	SVOC	42	42	1	0	0				0	0			7300	EPA-4	14	0
Carbazole	SVOC	7	7	1	0	0				0	0			34	EPA-4	7	0
Chloro-3-methylphenol[4-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15
Chloroaniline[4-]	SVOC	43	43	1	0	0				0	0			150	EPA-4	15	0

Table B-72 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chloronaphthalene[2-]	SVOC	43	43	1	0	0				0	0			490	EPA-4	15	0
Chlorophenol[2-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15
Chlorophenyl-phenyl[4-] Ether	SVOC	42	42	1	0	0											
Chrysene	SVOC	42	42	1	0	0				0	0			92	EPA-4	14	0
Dibenz(a,h)anthracene	SVOC	42	42	1	0	0				42	0			0.09	EPA-4	14	14
Dibenzofuran	SVOC	42	42	1	0	0				10	0			24	EPA-4	14	6
Dichlorobenzidine[3,3'-]	SVOC	42	42	1	0	0				41	0			1.5	EPA-4	14	14
Dichlorophenol[2,4-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15
Diethylphthalate	SVOC	42	42	1	0	0				0	0			29000	EPA-4	14	0
Dimethyl Phthalate	SVOC	42	42	1	0	0				0	0			370000	EPA-4	15	0
Dimethylphenol[2,4-]	SVOC	42	42	1	0	0				0	0			730	EPA-4	15	0
Dinitro-2-methylphenol[4,6-]	SVOC	41	41	1	0	0											
Dinitrophenol[2,4-]	SVOC	41	41	1	0	0				0	0			73	EPA-4	14	0
Dinitrotoluene[2,4-]	SVOC	42	42	1	0	0				0	0			73	EPA-4	14	0
Dinitrotoluene[2,6-]	SVOC	42	42	1	0	0				0	0			37	EPA-4	14	0
Di-n-octylphthalate	SVOC	42	42	1	0	0				0	0			730	EPA-4	14	0
Diphenylamine	SVOC	13	13	1	0	0				0	0			910	EPA-4	7	0
Diphenylhydrazine[1,2-]	SVOC	13	13	1	0	0											
Fluoranthene	SVOC	42	42	1	0	0				0	0			1500	EPA-4	14	0
Fluorene	SVOC	42	42	1	0	0				0	0			240	EPA-4	14	0
Hexachlorobenzene	SVOC	42	42	1	0	0				41	0			1	EPA-2	14	14
Hexachlorobutadiene	SVOC	43	43	1	0	0				27	0			7.3	EPA-4	15	13
Hexachlorocyclopentadiene	SVOC	43	43	1	0	0				0	0			50	EPA-2	15	0
Hexachloroethane	SVOC	43	43	1	0	0				0	0			37	EPA-4	15	0
Indeno(1,2,3-cd)pyrene	SVOC	42	42	1	0	0				41	0			0.92	EPA-4	14	14
Isophorone	SVOC	43	43	1	0	0				0	0			710	EPA-4	15	0
Methylnaphthalene[2-]	SVOC	43	43	1	0	0				0	0			30	WQCC-1	15	0
Methylphenol[2-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15
Methylphenol[4-]	SVOC	41	41	1	0	0				0	0			180	EPA-4	15	0
Methylpyridine[2-]	SVOC	23	23	1	0	0											
Naphthalene	SVOC	43	43	1	0	0				0	0			30	WQCC-1	15	0
Nitroaniline[2-]	SVOC	43	43	1	0	0				42	0			2.2	EPA-4	15	15
Nitroaniline[3-]	SVOC	42	42	1	0	0				41	0			2.2	EPA-4	14	14
Nitroaniline[4-]	SVOC	42	42	1	0	0				41	0			2.2	EPA-4	14	14
Nitrobenzene	SVOC	43	43	1	0	0				42	0			3.4	EPA-4	15	15
Nitrophenol[2-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15
Nitrophenol[4-]	SVOC	41	41	1	0	0				40	0			5	WQCC-1	14	14
Nitrosodimethylamine[N-]	SVOC	42	42	1	0	0				42	0			0.01	EPA-4	15	15
Nitroso-di-n-propylamine[N-]	SVOC	43	43	1	0	0				43	0			0.10	EPA-4	15	15
Nitrosodiphenylamine[N-]	SVOC	29	29	1	0	0				0	0			140	EPA-4	14	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	16	16	1	0	0											
Phenanthrene	SVOC	42	42	1	0	0				0	0			1800	EPA-4	14	0
Phenol	SVOC	43	43	1	0	0				42	0			5	WQCC-1	15	15
Pyrene	SVOC	42	42	1	0	0				0	0			180	EPA-4	14	0
Trichlorophenol[2,4,5-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15
Trichlorophenol[2,4,6-]	SVOC	42	42	1	0	0				41	0			5	WQCC-1	15	15

Table B-72 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Total Recoverable Petroleum Hyd	TPH	1	1	1	0	0											
Acrolein	VOC	7	7	1	0	0											
Acrylonitrile	VOC	9	9	1	0	0											
Bromobenzene	VOC	36	36	1	0	0				0	0			23	EPA-4	15	0
Bromochloromethane	VOC	36	36	1	0	0				27	0			5	EPA-2	15	0
Bromodichloromethane	VOC	49	49	1	0	0				0	0			100	EPA-2	17	0
Bromoform	VOC	49	49	1	0	0				0	0			100	EPA-2	17	0
Bromomethane	VOC	49	49	1	0	0				39	0			8.7	EPA-4	17	17
Butanone[2-]	VOC	48	48	1	0	0				0	0			1900	EPA-4	17	0
Butylbenzene[n-]	VOC	36	36	1	0	0				0	0			61	EPA-4	15	0
Butylbenzene[sec-]	VOC	36	36	1	0	0				0	0			61	EPA-4	15	0
Butylbenzene[tert-]	VOC	36	36	1	0	0				0	0			61	EPA-4	15	0
Carbon Disulfide	VOC	48	48	1	0	0				0	0			1000	EPA-4	17	0
Carbon Tetrachloride	VOC	49	49	1	0	0				39	0			5	EPA-2	17	0
Chlorobenzene	VOC	49	49	1	0	0				0	0			100	EPA-2	17	0
Chlorodibromomethane	VOC	49	49	1	0	0				0	0			100	EPA-2	17	0
Chloroethane	VOC	49	49	1	0	0				0	0			39	EPA-4	17	0
Chloroethyl vinyl ether[2-]	VOC	6	6	1	0	0											
Chloroform	VOC	46	46	1	0	0				0	0			100	WQCC-1	16	0
Chlorotoluene[2-]	VOC	36	36	1	0	0				0	0			120	EPA-4	15	0
Chlorotoluene[4-]	VOC	36	36	1	0	0				0	0			120	EPA-4	15	0
Dibromo-3-Chloropropane[1,2-]	VOC	36	36	1	0	0											
Dibromoethane[1,2-]	VOC	36	36	1	0	0				36	0			0.05	EPA-2	15	15
Dibromomethane	VOC	36	36	1	0	0				0	0			61	EPA-4	15	0
Dichlorobenzene[1,2-]	VOC	43	43	1	0	0				0	0			600	EPA-2	15	0
Dichlorobenzene[1,3-]	VOC	43	43	1	0	0				0	0			18	EPA-4	15	0
Dichlorobenzene[1,4-]	VOC	43	43	1	0	0				0	0			75	EPA-2	15	0
Dichlorodifluoromethane	VOC	37	37	1	0	0				0	0			390	EPA-4	15	0
Dichloroethane[1,1-]	VOC	49	49	1	0	0				0	0			25	WQCC-1	17	0
Dichloroethane[1,2-]	VOC	49	49	1	0	0				39	0			5	EPA-2	17	0
Dichloroethene[1,1-]	VOC	49	49	1	0	0				39	0			5	WQCC-1	17	0
Dichloroethene[cis/trans-1,2-]	VOC	15	15	1	0	0											
Dichloroethene[cis-1,2-]	VOC	24	24	1	0	0				0	0			70	EPA-2	12	0
Dichloroethene[trans-1,2-]	VOC	37	37	1	0	0				0	0			100	EPA-2	15	0
Dichloropropane[1,2-]	VOC	49	49	1	0	0				39	0			5	EPA-2	17	0
Dichloropropane[1,3-]	VOC	36	36	1	0	0				27	0			5	EPA-2	15	0
Dichloropropane[2,2-]	VOC	33	33	1	0	0				24	0			5	EPA-2	15	0
Dichloropropene[1,1-]	VOC	36	36	1	0	0				27	0			4	EPA-4	15	14
Dichloropropene[cis-1,3-]	VOC	49	49	1	0	0				39	0			4	EPA-4	17	17
Dichloropropene[trans-1,3-]	VOC	46	46	1	0	0				36	0			4	EPA-4	16	16
Ethylbenzene	VOC	49	49	1	0	0				0	0			700	EPA-2	17	0
Hexanone[2-]	VOC	48	48	1	0	0				0	0			1900	EPA-4	17	0
Iodomethane	VOC	36	36	1	0	0				0	0			8.7	EPA-4	15	0
Isopropylbenzene	VOC	36	36	1	0	0				0	0			660	EPA-4	15	0
Isopropyltoluene[4-]	VOC	36	36	1	0	0				0	0			660	EPA-4	15	0
Methyl-2-pentanone[4-]	VOC	48	48	1	0	0				0	0			160	EPA-4	17	0

Table B-72 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Propylbenzene[1-]	VOC	36	36	1	0	0				0	0			61	EPA-4	15	0
Styrene	VOC	48	48	1	0	0				0	0			100	EPA-2	17	0
Tetrachloroethane[1,1,1,2-]	VOC	47	47	1	0	0				38	0			4.3	EPA-4	17	17
Tetrachloroethane[1,1,2,2-]	VOC	38	38	1	0	0				0	0			10	WQCC-1	15	* 0
Tetrachloroethene	VOC	49	49	1	0	0				39	0			5	EPA-2	17	0
Trichloro-1,2,2-trifluoroethane	VOC	22	22	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	14	14	1	0	0				0	0			70	EPA-2	12	0
Trichloroethane[1,1,1-]	VOC	49	49	1	0	0				0	0			60	WQCC-1	17	0
Trichloroethane[1,1,2-]	VOC	49	49	1	0	0				39	0			5	EPA-2	17	0
Trichlorofluoromethane	VOC	38	38	1	0	0				0	0			1300	EPA-4	15	0
Trichloropropane[1,2,3-]	VOC	36	36	1	0	0				36	0			0.02	EPA-4	15	15
Trichlorotrifluoroethane	VOC	7	7	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	36	36	1	0	0				0	0			12	EPA-4	15	0
Trimethylbenzene[1,3,5-]	VOC	36	36	1	0	0				0	0			12	EPA-4	15	0
Vinyl Chloride	VOC	49	49	1	0	0				48	0			1	WQCC-1	17	17
Xylene[1,3-]	VOC	3	3	1	0	0											

Table B-73
Nonfiltered Miscellaneous Constituents of Mortandad Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	44	39	0.8864	5	0.1136	50	70	240								
Ammonia (as N)	ANION	30	30	1	0	0											
Bromide	ANION	14	14	1	0	0											
Chloride	ANION	91	0	0	91	1	4590	18000	29400	0	0	0.072	0.1176	250000	WQCC-12	17	0
Fluoride	ANION	131	2	0.01527	129	0.9847	120	1300	2230	0	35	0.8125	1.394	1600	WQCC-11	17	0
Nitrate	ANION	159	4	0.02516	155	0.9748	10	10800	66000	0	78	1.08	6.6	10000	EPA-4	17	0
Nitrite	ANION	18	14	0.7778	4	0.2222	30	30	90	0	0	0.03	0.09	1000	EPA-4	3	0
Perchlorate	ANION	57	12	0.2105	45	0.7895	4.34	139	400	8	45	37.57	108.1	3.7	EPA-4	8	4
Sulfate	ANION	97	0	0	97	1	1300	16700	89100	0	0	0.02783	0.1485	600000	WQCC-12	17	0
Calcium	GENINORG	47	0	0	47	1	14000	24200	221000								
Hardness	GENINORG	26	0	0	26	1	48600	69020	208000								
Magnesium	GENINORG	45	2	0.04444	43	0.9556	2500	4300	132000								
Potassium	GENINORG	45	0	0	45	1	1976	17000	113000								
Sodium	GENINORG	42	0	0	42	1	19900	80400	130000								
Total Phosphorus	GENINORG	7	2	0.2857	5	0.7143	97	100	150								
pH	WATER_QUAL	30	0	0	30	1	6.4	7.5	9								
Specific Conductance	WATER_QUAL	31	0	0	31	1	160	484.5	1078								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	346000	346000	346000	0	0	0.346	0.346	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	1	0	0	1	1	19800	19800	19800								
Total Suspended Solids	WATER_QUAL	63	13	0.2063	50	0.7937	943	36900	860000								

Table B-74
Filtered Inorganics of Mortandad Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	4	4	1	0	0				0	0			37000	EPA-4	1	0
Antimony	METALS	4	4	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	4	4	1	0	0				0	0			10	EPA-2	1	0
Barium	METALS	4	1	0.25	3	0.75	13.4	13.7	13.7	0	0	0.0137	0.0137	1000	WQCC-11	1	0
Beryllium	METALS	4	4	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	4	0	0	4	1	14.6	16.4	27.4	0	0	0.00497	0.008303	3300	EPA-4	1	0
Cadmium	METALS	4	1	0.25	3	0.75	0.044	0.044	0.186	0	0	0.0088	0.0372	5	EPA-2	1	0
Chromium	METALS	4	0	0	4	1	41.7	48.8	50.5	0	1	0.976	1.01	50	WQCC-11	1	0
Cobalt	METALS	4	4	1	0	0											
Copper	METALS	4	0	0	4	1	1.49	1.605	2.28	0	0	0.001605	0.00228	1000	WQCC-12	1	0
Iron	METALS	4	4	1	0	0				0	0			1000	WQCC-12	1	0
Lead	METALS	4	3	0.75	1	0.25	0.056	0.056	0.056	0	0	0.003733	0.003733	15	EPA-2	1	0
Manganese	METALS	4	3	0.75	1	0.25	1.96	1.96	1.96	0	0	0.0098	0.0098	200	WQCC-12	1	0
Mercury	METALS	4	4	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	4	0	0	4	1	0.788	0.9795	0.991	0	0	0.005442	0.005506	180	EPA-4	1	0
Nickel	METALS	4	4	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	4	4	1	0	0				0	0			10	EPA-1	1	0
Silver	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	4	0	0	4	1	156	158.5	160	0	0	0.007205	0.007273	22000	EPA-4	1	0
Thallium	METALS	4	4	1	0	0				0	0			2	EPA-2	1	0
Uranium	URANIUM	4	0	0	4	1	0.116	0.129	0.141	0	0	0.0043	0.0047	30	EPA-2	1	0
Vanadium	METALS	4	1	0.25	3	0.75	0.989	1.06	1.06	0	0	0.004077	0.004077	260	EPA-4	1	0
Zinc	METALS	4	1	0.25	3	0.75	2.01	9.4	9.4	0	0	0.00094	0.00094	10000	WQCC-12	1	0
SeleniumRe	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0

Table B-75
Filtered Radionuclides Mortandad Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	2	2	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	1	1	1	0	0				0	0			100	EPA-2	1	0
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	1	0
Uranium-234	rad	4	2	0.5	2	0.5	0.0963	0.1021	0.108	0	0	0.005105	0.0054	20	DOE	1	0
Uranium-235	rad	4	4	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	4	3	0.75	1	0.25	0.0514	0.0514	0.0514	0	0	0.002142	0.002142	24	DOE	1	0

Table B-76
Filtered Miscellaneous Constituents of Mortandad Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	4	0	0	4	1	32300	33450	34200								
Magnesium	GENINORG	4	0	0	4	1	5360	5530	5670								
Potassium	GENINORG	4	0	0	4	1	623	658	694								
Silica	GENINORG	1	0	0	1	1	34500	34500	34500								
Sodium	GENINORG	4	0	0	4	1	21300	21850	22000								
Total Phosphorus	GENINORG	2	0	0	2	1	30	38.55	47.1								
Dissolved Organic Carbon	WATER_QUAL	1	0	0	1	1	830	830	830								
Total Organic Carbon	WATER_QUAL	1	0	0	1	1	680	680	680								

Table B-77
Nonfiltered Inorganics of Mortandad Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	4	2	0.5	2	0.5	16.3	16.3	16.3	0	0	0.0004405	0.0004405	37000	EPA-4	1	0
Antimony	METALS	4	4	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	4	3	0.75	1	0.25	2.24	2.24	2.24	0	0	0.224	0.224	10	EPA-2	1	0
Barium	METALS	4	0	0	4	1	13.3	13.9	13.9	0	0	0.0139	0.0139	1000	WQCC-11	1	0
Beryllium	METALS	4	4	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	4	0	0	4	1	15.7	17.2	29.4	0	0	0.005212	0.008909	3300	EPA-4	1	0
Cadmium	METALS	4	4	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	4	0	0	4	1	41.5	49.9	50.7	0	1	0.998	1.014	50	WQCC-11	1	0
Cobalt	METALS	4	4	1	0	0											
Copper	METALS	4	0	0	4	1	1.67	1.915	4	0	0	0.001915	0.004	1000	WQCC-12	1	0
Cyanide (Total)	CN	4	2	0.5	2	0.5	2.27	3.675	5.08	0	0	0.01838	0.0254	200	WQCC-11	1	0
Iron	METALS	4	4	1	0	0				0	0			1000	WQCC-12	1	0
Lead	METALS	4	3	0.75	1	0.25	0.05	0.05	0.05	0	0	0.003333	0.003333	15	EPA-2	1	0
Manganese	METALS	4	3	0.75	1	0.25	1.95	1.95	1.95	0	0	0.00975	0.00975	200	WQCC-12	1	0
Mercury	METALS	4	4	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	4	0	0	4	1	0.961	0.972	1.19	0	0	0.0054	0.006611	180	EPA-4	1	0
Nickel	METALS	4	4	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	4	4	1	0	0				0	0			10	EPA-1	1	0
Silver	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	4	0	0	4	1	156	159	161	0	0	0.007227	0.007318	22000	EPA-4	1	0
Thallium	METALS	4	3	0.75	1	0.25	0.108	0.108	0.108	0	0	0.054	0.054	2	EPA-2	1	0
Uranium	URANIUM	4	0	0	4	1	0.118	0.127	0.163	0	0	0.004233	0.005433	30	EPA-2	1	0
Vanadium	METALS	4	0	0	4	1	0.71	1.376	1.83	0	0	0.005292	0.007038	260	EPA-4	1	0
Zinc	METALS	4	1	0.25	3	0.75	1.77	21.1	21.1	0	0	0.00211	0.00211	10000	WQCC-12	1	0
SeleniumRe	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0

Table B-78
Nonfiltered Radionuclides of Mortandad Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	1	1	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	1	1	1	0	0				0	0			100	EPA-2	1	0
Gross alpha/beta	rad	4	4	1	0	0											
Gross beta	rad	4	4	1	0	0				0	0			50	EPA-2	1	0
Gross gamma	rad	2	2	1	0	0											
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	5	0	0	5	1	0.34	14900	15000	0	0	0.745	0.75	20000	EPA-2	2	0
Uranium-234	rad	4	0	0	4	1	0.0999	0.108	0.112	0	0	0.0054	0.0056	20	DOE	1	0
Uranium-235	rad	4	4	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	4	3	0.75	1	0.25	0.0404	0.0404	0.0404	0	0	0.001683	0.001683	24	DOE	1	0

Table B-79
Nonfiltered Organics of Mortandad Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
DDT[4,4'-]	PEST	3	1	0.3333	2	0.6667	0.015	0.027	0.039	0	0	0.0135	0.0195	2	EPA-4	1	0
DDD[4,4'-]	PEST	2	1	0.5	1	0.5	0.0063	0.0063	0.0063	0	0	0.00225	0.00225	2.8	EPA-4	1	0
Amino-2,6-dinitrotoluene[4-]	HEXP	2	2	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	2	2	1	0	0											
Dinitrobenzene[1,3-]	HEXP	2	2	1	0	0											
HMX	HEXP	2	2	1	0	0											
Nitrotoluene[2-]	HEXP	2	2	1	0	0											
Nitrotoluene[3-]	HEXP	2	2	1	0	0											
Nitrotoluene[4-]	HEXP	2	2	1	0	0											
PETN	HEXP	1	1	1	0	0											
RDX	HEXP	2	2	1	0	0											
Tetryl	HEXP	2	2	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	2	2	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	2	2	1	0	0											
Aroclor-1016	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aroclor-1221	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aroclor-1232	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aroclor-1242	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aroclor-1248	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aroclor-1254	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aroclor-1260	PCB	2	2	1	0	0				0	0			0.5	EPA-2	1	0
Aldrin	PEST	2	2	1	0	0				0	0			0.04	EPA-4	1	0
BHC[alpha-]	PEST	2	2	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	2	2	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	2	2	1	0	0											
BHC[gamma-]	PEST	2	2	1	0	0				0	0			0.2	EPA-2	1	0
Chlordane[alpha-]	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
DDE[4,4'-]	PEST	2	2	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	2	2	1	0	0				0	0			0.042	EPA-4	1	0
Endosulfan I	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endrin	PEST	2	2	1	0	0				0	0			0.2	EPA-1	1	0
EndrinRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Endrin Aldehyde	PEST	2	2	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	2	2	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Heptachlor	PEST	2	2	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	2	2	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	2	2	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	2	2	1	0	0				0	0			3	EPA-2	1	0
Endosulfan II	PESTPCB	2	2	1	0	0				0	0			220	EPA-4	1	0

Table B-79 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acenaphthene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	2	2	1	0	0				1	0			6.1	EPA-4	1	1
Benzo(a)anthracene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(a)pyrene	SVOC	2	2	1	0	0				2	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(g,h,i)perylene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	2	2	1	0	0				0	0			9.2	EPA-4	1	0
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.098	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	2	2	1	0	0				2	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			7300	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Chrysene	SVOC	2	2	1	0	0				0	0			92	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	2	2	1	0	0				2	0			0.092	EPA-4	1	1
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			1.5	EPA-4	1	1
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0											
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	2	2	1	0	0				0	0			1500	EPA-4	1	0
Fluorene	SVOC	2	2	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Hexachlorobutadiene	SVOC	2	2	1	0	0				2	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1

Table B-79 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	2	2	1	0	0				0	0			3.4	EPA-4	1	0
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.096	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	2	2	1	0	0											
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Phenanthrene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Pyrene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Acetone	VOC	2	2	1	0	0				0	0			610	EPA-4	1	0
Benzene	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Bromobenzene	VOC	2	2	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Bromodichloromethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	1	0
Butanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	2	2	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Chlorobenzene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	2	2	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	2	2	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	2	2	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	2	2	1	0	0											

Table B-79 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibromoethane[1,2-]	VOC	2	2	1	0	0				2	0			0.05	EPA-2	1	1
Dibromomethane	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	2	2	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	2	2	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	2	2	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	2	2	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	2	2	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	2	2	1	0	0				0	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	2	2	1	0	0				0	0			4	EPA-4	1	0
Dichloropropene[cis-1,3-]	VOC	2	2	1	0	0				0	0			4	EPA-4	1	0
Dichloropropene[trans-1,3-]	VOC	2	2	1	0	0				0	0			4	EPA-4	1	0
Ethylbenzene	VOC	2	2	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	2	2	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	2	2	1	0	0				2	0			5	EPA-2	1	0
Propylbenzene[1-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	2	2	1	0	0				0	0			4.3	EPA-4	1	0
Tetrachloroethane[1,1,2,2-]	VOC	2	2	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Toluene	VOC	2	2	1	0	0				0	0			750	WQCC-11	1	0
Trichloro-1,2,2-trifluoroethane[1,1,2-]	VOC	2	2	1	0	0				0	0			59000	EPA-4	1	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	2	2	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Trichloroethene	VOC	2	2	1	0	0				0	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	2	2	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	2	2	1	0	0				2	0			0.016	EPA-4	1	1
Trimethylbenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	2	2	1	0	0				2	0			1	WQCC-11	1	0
Xylene[1,2-]	VOC	2	2	1	0	0				0	0			1400	EPA-4	1	0
Xylene[1,3-]+Xylene[1,4-]	VOC	2	2	1	0	0				0	0			620	WQCC-11	1	0

Table B-80
Nonfiltered Miscellaneous Constituents of Mortandad Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	3	3	1	0	0											
Ammonia (as N)	ANION	1	1	1	0	0											
Bromide	ANION	4	1	0.25	3	0.75	255	302	302								
Chloride	ANION	4	0	0	4	1	16700	16900	16900	0	0	0.0676	0.0676	250000	WQCC-12	1	0
Fluoride	ANION	4	0	0	4	1	409	431	448	0	0	0.2694	0.28	1600	WQCC-11	1	0
Nitrate	ANION	4	0	0	4	1	12500	12500	14800	0	4	1.25	1.48	10000	EPA-4	1	0
Oxalate	ANION	4	4	1	0	0											
Perchlorate	ANION	4	0	0	4	1	162	166	179	0	4	44.86	48.38	3.7	EPA-4	1	0
Sulfate	ANION	4	0	0	4	1	25300	25900	26000	0	0	0.04317	0.04333	600000	WQCC-12	1	0
Calcium	GENINORG	4	0	0	4	1	32200	33450	34200								
Magnesium	GENINORG	4	0	0	4	1	5270	5535	5670								
Potassium	GENINORG	4	0	0	4	1	618	657	682								
Silica	GENINORG	1	0	0	1	1	34500	34500	34500								
Sodium	GENINORG	4	0	0	4	1	21100	21900	21900								
Deuterium Ratio	STABLE_ISOTOPES	2	0	0	2	1	-75	-68.5	-62								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-10.9	-10.75	-10.6								
Total Organic Carbon	WATER_QUAL	2	0	0	2	1	727	761	795								

Table B-81
Filtered Inorganics of Mortandad Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	9	7	0.7778	2	0.2222	16.3	18.7	21.1	0	0	0.0005054	0.0005703	37000	EPA-4	3	0
Antimony	METALS	10	10	1	0	0				1	0			6	EPA-2	4	1
Arsenic	METALS	10	10	1	0	0				1	0			10	EPA-2	4	0
Barium	METALS	10	1	0.1	9	0.9	22	27.4	39.6	0	0	0.0274	0.0396	1000	WQCC-11	4	0
Beryllium	METALS	9	7	0.7778	2	0.2222	0.017	0.021	0.025	0	0	0.00525	0.00625	4	EPA-2	3	0
Boron	METALS	8	5	0.625	3	0.375	10.7	15	19	0	0	0.004545	0.005758	3300	EPA-4	3	0
Cadmium	METALS	10	10	1	0	0				1	0			5	EPA-2	4	0
Chromium	METALS	9	3	0.3333	6	0.6667	2.6	3.78	5.3	0	0	0.0756	0.106	50	WQCC-11	3	0
Cobalt	METALS	10	10	1	0	0											
Copper	METALS	9	8	0.8889	1	0.1111	1.76	1.76	1.76	0	0	0.00176	0.00176	1000	WQCC-12	3	0
Iron	METALS	10	3	0.3	7	0.7	20	91.2	210	0	0	0.0912	0.21	1000	WQCC-12	4	0
Lead	METALS	9	4	0.4444	5	0.5556	0.051	0.126	0.144	0	0	0.0084	0.0096	15	EPA-2	3	0
Lithium	METALS	1	0	0	1	1	20	20	20	0	0	0.0274	0.0274	730	EPA-4	1	0
Manganese	METALS	9	0	0	9	1	0.24	3.86	364	0	2	0.0193	1.82	200	WQCC-12	3	0
Mercury	METALS	9	9	1	0	0				0	0			2	WQCC-11	3	0
Molybdenum	METALS	7	4	0.5714	3	0.4286	1.08	1.09	1.12	0	0	0.006056	0.006222	180	EPA-4	2	0
Nickel	METALS	10	7	0.7	3	0.3	1.1	1.9	2.82	0	0	0.019	0.0282	100	EPA-2	4	0
Selenium	METALS	9	8	0.8889	1	0.1111	0.956	0.956	0.956	0	0	0.0956	0.0956	10	EPA-1	3	0
SeleniumRe	METALS	9	8	0.8889	1	0.1111	0.956	0.956	0.956	0	0	0.01912	0.01912	50	WQCC-11	3	0
Silver	METALS	10	10	1	0	0				0	0			50	WQCC-11	4	0
Strontium	METALS	8	0	0	8	1	50	53.2	56	0	0	0.002418	0.002545	22000	EPA-4	3	0
Thallium	METALS	10	4	0.4	6	0.6	0.032	0.272	0.966	1	0	0.136	0.483	2	EPA-2	4	1
Tin	METALS	1	1	1	0	0				0	0			22000	EPA-4	1	0
Uranium	URANIUM	9	1	0.1111	8	0.8889	0.33	0.4525	1.13	0	0	0.01508	0.03767	30	EPA-2	3	0
Vanadium	METALS	10	2	0.2	8	0.8	4.62	6.2	8.98	0	0	0.02385	0.03454	260	EPA-4	4	0
Zinc	METALS	10	5	0.5	5	0.5	5.78	361	740	0	0	0.0361	0.074	10000	WQCC-12	4	0

Table B-82
Filtered Radionuclides of Mortandad Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	8	8	1	0	0				0	0			1.2	DOE	3	0
Cesium-137	rad	6	6	1	0	0				0	0			120	DOE	2	0
Cobalt-60	rad	5	5	1	0	0				0	0			100	EPA-2	2	0
Gross alpha	rad	3	3	1	0	0				0	0			15	EPA-2	2	0
Gross beta	rad	3	2	0.6667	1	0.3333	1.98	1.98	1.98	0	0	0.0396	0.0396	50	EPA-2	2	0
Gross gamma	rad	1	0	0	1	1	137	137	137								
Plutonium-238	rad	8	8	1	0	0				0	0			1.6	DOE	3	0
Plutonium-239	rad	8	8	1	0	0				0	0			1.2	DOE	3	0
Strontium-90	rad	8	7	0.875	1	0.125	1.51	1.51	1.51	0	0	0.1888	0.1888	8	EPA-2	3	0
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0
Uranium-234	rad	8	1	0.125	7	0.875	0.2	0.257	0.339	0	0	0.01285	0.01695	20	DOE	3	0
Uranium-235	rad	9	8	0.8889	1	0.1111	0.048	0.048	0.048	0	0	0.002	0.002	24	DOE	3	0
Uranium-238	rad	8	1	0.125	7	0.875	0.099	0.132	0.149	0	0	0.0055	0.006208	24	DOE	3	0

Table B-83
Filtered Miscellaneous Constituents of Mortandad Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	10	0	0	10	1	9860	12000	14100								
Magnesium	GENINORG	10	0	0	10	1	3060	3400	4000								
Potassium	GENINORG	10	0	0	10	1	1290	1750	2000								
Silica	GENINORG	1	0	0	1	1	33500	33500	33500								
Sodium	GENINORG	10	0	0	10	1	6800	9240	13000								
Total Phosphorus	GENINORG	5	3	0.6	2	0.4	65	97.5	130								
Humic, Hydrophilic Acids	HUMIC_ACID	2	0	0	2	1	200	600	1000								
Humic, Hydrophilic Bases	HUMIC_ACID	2	2	1	0	0											
Humic, Hydrophilic Neutrals	HUMIC_ACID	2	1	0.5	1	0.5	300	300	300								
Humic, Hydrophilic Total	HUMIC_ACID	2	0	0	2	1	200	800	1400								
Humic, Hydrophobic Acids	HUMIC_ACID	2	0	0	2	1	100	650	1200								
Humic, Hydrophobic Bases	HUMIC_ACID	2	2	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	2	0	0	2	1	400	1950	3500								
Humic, Hydrophobic Total	HUMIC_ACID	2	0	0	2	1	500	2600	4700								
Dissolved Organic Carbon	WATER_QUAL	4	0	0	4	1	210	480	6100								
Specific Conductance	WATER_QUAL	9	0	0	9	1	115	124	259								
Total Dissolved Solids	WATER_QUAL	20	0	0	20	1	73500	135200	176000	0	0	0.1352	0.176	1000000	WQCC-12	3	0
Total Organic Carbon	WATER_QUAL	4	0	0	4	1	215	232.5	370								
Total Suspended Solids	WATER_QUAL	2	1	0.5	1	0.5	3000	3000	3000								
pH	WATER_QUAL	9	0	0	9	1	6.5	8	8								

Table B-84
Nonfiltered Inorganics of Mortandad Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	26	20	0.7692	6	0.2308	19	75.65	358.8	0	0	0.002045	0.009697	37000	EPA-4	5	0
Antimony	METALS	27	21	0.7778	6	0.2222	0	1.5	4.5	1	0	0.25	0.75	6	EPA-2	5	1
Arsenic	METALS	26	25	0.9615	1	0.03846	3.5	3.5	3.5	0	0	0.35	0.35	10	EPA-2	5	0
Barium	METALS	27	1	0.03704	26	0.963	5	21.5	32.7	0	0	0.0215	0.0327	1000	WQCC-11	5	0
Beryllium	METALS	27	21	0.7778	6	0.2222	0	0.025	3	0	0	0.00625	0.75	4	EPA-2	5	0
Boron	METALS	23	12	0.5217	11	0.4783	10	18	45.8	0	0	0.005455	0.01388	3300	EPA-4	5	0
Cadmium	METALS	27	22	0.8148	5	0.1852	0	0	7	5	2	0	1.4	5	EPA-2	5	3
Chromium	METALS	27	11	0.4074	16	0.5926	2.99	4.4	27.7	0	0	0.088	0.554	50	WQCC-11	5	0
Cobalt	METALS	26	23	0.8846	3	0.1154	8	8	8								
Copper	METALS	26	24	0.9231	2	0.07692	1.3	5.65	10	0	0	0.00565	0.01	1000	WQCC-12	5	0
Cyanide (Total)	CN	33	25	0.7576	8	0.2424	6	10	60	0	0	0.05	0.3	200	WQCC-11	5	0
Iron	METALS	26	9	0.3462	17	0.6538	40	121	944	0	0	0.121	0.944	1000	WQCC-12	5	0
Lead	METALS	26	10	0.3846	16	0.6154	0	2.327	7	3	0	0.1551	0.4667	15	EPA-2	5	2
Lithium	METALS	3	0	0	3	1	22	30	34	0	0	0.0411	0.04658	730	EPA-4	3	0
Manganese	METALS	26	10	0.3846	16	0.6154	0.86	3.53	74.8	0	0	0.01765	0.374	200	WQCC-12	5	0
Mercury	METALS	25	18	0.72	7	0.28	0.078	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	5	0
Molybdenum	METALS	26	18	0.6923	8	0.3077	1.03	4.25	451.5	0	1	0.02361	2.508	180	EPA-4	5	0
Nickel	METALS	27	22	0.8148	5	0.1852	1.2	20	23	0	0	0.2	0.23	100	EPA-2	5	0
Selenium	METALS	26	22	0.8462	4	0.1538	0.889	2.05	3.9	0	0	0.205	0.39	10	EPA-1	5	0
SeleniumRe	METALS	26	22	0.8462	4	0.1538	0.889	2.05	3.9	0	0	0.041	0.078	50	WQCC-11	5	0
Silver	METALS	26	19	0.7308	7	0.2692	0	10	49	0	0	0.2	0.98	50	WQCC-11	5	0
Strontium	METALS	23	0	0	23	1	40	54	63.4	0	0	0.002455	0.002882	22000	EPA-4	5	0
Thallium	METALS	26	17	0.6538	9	0.3462	0.133	0.591	3	11	3	0.2955	1.5	2	EPA-2	5	3
Tin	METALS	16	15	0.9375	1	0.0625	30	30	30	0	0	0.001364	0.001364	22000	EPA-4	3	0
Titanium		4	1	0.25	3	0.75	0	0	0.2								
Uranium	URANIUM	26	3	0.1154	23	0.8846	0.3212	0.474	0.76	0	0	0.0158	0.02533	30	EPA-2	5	0
Vanadium	METALS	26	8	0.3077	18	0.6923	4.85	6.1	22	0	0	0.02346	0.08462	260	EPA-4	5	0
Zinc	METALS	26	9	0.3462	17	0.6538	3.17	187	687	0	0	0.0187	0.0687	10000	WQCC-12	5	0

Table B-85
Nonfiltered Radionuclides of Mortandad Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	31	28	0.9032	3	0.09677	0.012	0.067	0.109	0	0	0.05583	0.09083	1.2	DOE	6	0
Cesium-137	rad	28	28	1	0	0				0	0			120	DOE	5	0
Cobalt-60	rad	19	16	0.8421	3	0.1579	3.9	9.34	29.8	0	0	0.0934	0.298	100	EPA-2	5	0
Gross alpha	rad	29	29	1	0	0				0	0			15	EPA-2	5	0
Gross alpha/beta	rad	5	5	1	0	0											
Gross beta	rad	34	28	0.8235	6	0.1765	1.92	3.555	6.03	0	0	0.0711	0.1206	50	EPA-2	6	0
Gross gamma	rad	16	13	0.8125	3	0.1875	173	184	240								
Plutonium-238	rad	33	32	0.9697	1	0.0303	0.0168	0.0168	0.0168	0	0	0.0105	0.0105	1.6	DOE	7	0
Plutonium-239	rad	33	33	1	0	0				0	0			1.2	DOE	7	0
Strontium-90	rad	58	58	1	0	0				0	0			8	EPA-2	7	0
Technetium-99	rad	3	3	1	0	0				0	0			4000	DOE	1	0
Tritium	rad	44	38	0.8636	6	0.1364	0.2235	0.3672	3.288	0	0	1.84E-05	0.0001644	20000	EPA-2	7	0
Uranium-234	rad	19	0	0	19	1	0.234	0.316	1.16	0	0	0.0158	0.058	20	DOE	7	0
Uranium-235	rad	19	16	0.8421	3	0.1579	0.0334	0.0609	0.076	0	0	0.002538	0.003167	24	DOE	7	0
Uranium-238	rad	19	1	0.05263	18	0.9474	0.1166	0.1565	0.707	0	0	0.006521	0.02946	24	DOE	7	0

Table B-86
Nonfiltered Organics of Mortandad Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	5	2	0.4	3	0.6	5.9	9.3	17.75	1	2	1.55	2.958	6	EPA-2	3	1
Toluene	VOC	11	6	0.5455	5	0.4545	0.3	2.3	21.6	0	0	0.003067	0.0288	750	WQCC-11	5	0
DDE[4,4'-]	PEST	3	2	0.6667	1	0.3333	0.018	0.018	0.018	0	0	0.009	0.009	2	EPA-4	2	0
Endrin	PEST	3	2	0.6667	1	0.3333	0.0084	0.0084	0.0084	1	0	0.042	0.042	0.2	EPA-1	2	1
EndrinRe	PEST	3	2	0.6667	1	0.3333	0.0084	0.0084	0.0084	0	0	0.0042	0.0042	2	EPA-2	2	0
Naphthalene	SVOC	7	5	0.7143	2	0.2857	0.37	0.49	0.61	0	0	0.01633	0.02033	30	WQCC-11	3	0
Acetone	VOC	10	8	0.8	2	0.2	19	45.1	71.2	0	0	0.07393	0.1167	610	EPA-4	5	0
Methylene Chloride	VOC	10	8	0.8	2	0.2	1.1	1.725	2.35	7	0	0.345	0.47	5	EPA-2	4	0
Bromodichloromethane	VOC	10	9	0.9	1	0.1	1.9	1.9	1.9	0	0	0.019	0.019	100	EPA-2	4	0
Chloroform	VOC	10	9	0.9	1	0.1	6.9	6.9	6.9	0	0	0.069	0.069	100	WQCC-11	4	0
Trinitrobenzene[1,3,5-]	HEXP	23	22	0.9565	1	0.04348	3.545	3.545	3.545								
Amino-2,6-dinitrotoluene[4-]	HEXP	30	29	0.9667	1	0.03333	3.855	3.855	3.855								
Amino-4,6-dinitrotoluene[2-]	HEXP	30	29	0.9667	1	0.03333	3.66	3.66	3.66								
Dinitrobenzene[1,3-]	HEXP	30	29	0.9667	1	0.03333	3.47	3.47	3.47								
HMX	HEXP	30	29	0.9667	1	0.03333	3.695	3.695	3.695								
Nitrotoluene[2-]	HEXP	30	29	0.9667	1	0.03333	3.465	3.465	3.465								
Nitrotoluene[3-]	HEXP	30	29	0.9667	1	0.03333	3.57	3.57	3.57								
Nitrotoluene[4-]	HEXP	30	29	0.9667	1	0.03333	3.525	3.525	3.525								
RDX	HEXP	30	29	0.9667	1	0.03333	3.6	3.6	3.6								
Tetryl	HEXP	30	29	0.9667	1	0.03333	2.86	2.86	2.86								
Trinitrotoluene[2,4,6-]	HEXP	30	29	0.9667	1	0.03333	3.36	3.36	3.36								
Dinitrotoluene[2,4-]	HEXP	32	31	0.9688	1	0.03125	3.605	3.605	3.605	0	0	0.04938	0.04938	73	EPA-4	4	0
Dinitrotoluene[2,6-]	HEXP	32	31	0.9688	1	0.03125	3.605	3.605	3.605	0	0	0.09743	0.09743	37	EPA-4	4	0
Nitrobenzene	HEXP	32	31	0.9688	1	0.03125	3.2	3.2	3.2	3	0	0.9412	0.9412	3.4	EPA-4	4	2
Aroclor-1016	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1221	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1232	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1242	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1248	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1254	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1260	PCB	5	5	1	0	0				4	0			0.5	EPA-2	3	3
Aroclor-1262	PCB	2	2	1	0	0				1	0			0.5	EPA-2	1	1
Aldrin	PEST	2	2	1	0	0				2	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	2	2	1	0	0				1	0			0.11	EPA-4	1	1
BHC[beta-]	PEST	2	2	1	0	0				1	0			0.37	EPA-4	1	1
BHC[delta-]	PEST	2	2	1	0	0											
BHC[gamma-]	PEST	2	2	1	0	0				1	0			0.2	EPA-2	1	1
Chlordane[alpha-]	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	2	2	1	0	0				0	0			2.8	EPA-4	1	0
DDT[4,4'-]	PEST	2	2	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	2	2	1	0	0				2	0			0.042	EPA-4	1	1
Endosulfan I	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0

Table B-86 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Endosulfan II	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	2	2	1	0	0				0	0			220	EPA-4	1	0
Endrin Aldehyde	PEST	2	2	1	0	0				1	0			0.2	EPA-1	1	1
Endrin AldehydeRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	2	2	1	0	0				1	0			0.2	EPA-1	1	1
Endrin KetoneRe	PEST	2	2	1	0	0				0	0			2	EPA-2	1	0
Heptachlor	PEST	2	2	1	0	0				1	0			0.4	EPA-2	1	1
Heptachlor Epoxide	PEST	2	2	1	0	0				1	0			0.2	EPA-2	1	1
Methoxychlor[4,4'-]	PEST	2	2	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	2	2	1	0	0				2	0			3	EPA-2	1	1
Acenaphthene	SVOC	5	5	1	0	0				0	0			370	EPA-4	3	0
Acenaphthylene	SVOC	5	5	1	0	0				0	0			370	EPA-4	3	0
Aniline	SVOC	5	5	1	0	0				0	0			120	EPA-4	3	0
Anthracene	SVOC	5	5	1	0	0				0	0			1800	EPA-4	3	0
Azobenzene	SVOC	4	4	1	0	0				4	0			6.1	EPA-4	3	3
Benzidine	SVOC	4	4	1	0	0				4	0			0.0029	EPA-4	3	3
Benzo(a)anthracene	SVOC	5	5	1	0	0				5	0			0.92	EPA-4	3	3
Benzo(a)pyrene	SVOC	5	5	1	0	0				5	0			0.2	EPA-2	3	3
Benzo(b)fluoranthene	SVOC	5	5	1	0	0				5	0			0.92	EPA-4	3	3
Benzo(g,h,i)perylene	SVOC	5	5	1	0	0				0	0			180	EPA-4	3	0
Benzo(k)fluoranthene	SVOC	5	5	1	0	0				4	0			9.2	EPA-4	3	3
Benzoic Acid	SVOC	5	5	1	0	0				0	0			150000	EPA-4	3	0
Benzyl Alcohol	SVOC	5	5	1	0	0				0	0			11000	EPA-4	3	0
Bis(2-chloroethoxy)methane	SVOC	5	5	1	0	0											
Bis(2-chloroethyl)ether	SVOC	5	5	1	0	0				5	0			0.098	EPA-4	3	3
Bromophenyl-phenylether[4-]	SVOC	5	5	1	0	0											
Butylbenzylphthalate	SVOC	5	5	1	0	0				0	0			7300	EPA-4	3	0
Carbazole	SVOC	2	2	1	0	0				0	0			34	EPA-4	2	0
Chloro-3-methylphenol[4-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Chloroaniline[4-]	SVOC	5	5	1	0	0				0	0			150	EPA-4	3	0
Chloronaphthalene[2-]	SVOC	5	5	1	0	0				0	0			490	EPA-4	3	0
Chlorophenol[2-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Chlorophenyl-phenyl[4-] Ether	SVOC	5	5	1	0	0											
Chrysene	SVOC	5	5	1	0	0				0	0			92	EPA-4	3	0
Dibenz(a,h)anthracene	SVOC	5	5	1	0	0				5	0			0.092	EPA-4	3	3
Dibenzofuran	SVOC	5	5	1	0	0				0	0			24	EPA-4	3	0
Dichlorobenzidine[3,3'-]	SVOC	5	5	1	0	0				5	0			1.5	EPA-4	3	3
Dichlorophenol[2,4-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Diethylphthalate	SVOC	5	5	1	0	0				0	0			29000	EPA-4	3	0
Dimethyl Phthalate	SVOC	5	5	1	0	0				0	0			370000	EPA-4	3	0
Dimethylphenol[2,4-]	SVOC	5	5	1	0	0				0	0			730	EPA-4	3	0
Di-n-butylphthalate	SVOC	5	5	1	0	0				0	0			3700	EPA-4	3	0
Dinitro-2-methylphenol[4,6-]	SVOC	5	5	1	0	0											

Table B-86 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dinitrophenol[2,4-]	SVOC	5	5	1	0	0				0	0			73	EPA-4	3	0
Di-n-octylphthalate	SVOC	5	5	1	0	0				0	0			730	EPA-4	3	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Fluoranthene	SVOC	5	5	1	0	0				0	0			1500	EPA-4	3	0
Fluorene	SVOC	5	5	1	0	0				0	0			240	EPA-4	3	0
Hexachlorobenzene	SVOC	5	5	1	0	0				5	0			1	EPA-2	3	3
Hexachlorocyclopentadiene	SVOC	5	5	1	0	0				1	0			50	EPA-2	3	0
Hexachloroethane	SVOC	5	5	1	0	0				0	0			37	EPA-4	3	0
Indeno(1,2,3-cd)pyrene	SVOC	5	5	1	0	0				5	0			0.92	EPA-4	3	3
Isophorone	SVOC	5	5	1	0	0				0	0			710	EPA-4	3	0
Methylnaphthalene[2-]	SVOC	5	5	1	0	0				0	0			30	WQCC-11	3	0
Methylphenol[2-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Methylphenol[4-]	SVOC	5	5	1	0	0				0	0			180	EPA-4	3	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
Nitroaniline[2-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	3	3
Nitroaniline[3-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	3	3
Nitroaniline[4-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	3	3
Nitrophenol[2-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Nitrophenol[4-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Nitrosodimethylamine[N-]	SVOC	5	5	1	0	0				5	0			0.013	EPA-4	3	3
Nitroso-di-n-propylamine[N-]	SVOC	5	5	1	0	0				5	0			0.096	EPA-4	3	3
Nitrosodiphenylamine[N-]	SVOC	4	4	1	0	0				0	0			140	EPA-4	3	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	4	4	1	0	0											
Pentachlorophenol	SVOC	5	5	1	0	0				5	0			1	EPA-2	3	3
Phenanthrene	SVOC	5	5	1	0	0				0	0			1800	EPA-4	3	0
Phenol	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Pyrene	SVOC	5	5	1	0	0				0	0			180	EPA-4	3	0
Pyridine	SVOC	4	4	1	0	0				0	0			37	EPA-4	3	0
Trichlorophenol[2,4,5-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Trichlorophenol[2,4,6-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	3	3
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Bromobenzene	VOC	9	9	1	0	0				0	0			23	EPA-4	4	0
Bromochloromethane	VOC	9	9	1	0	0				4	0			5	EPA-2	4	0
Bromoform	VOC	10	10	1	0	0				0	0			100	EPA-2	4	0
Bromomethane	VOC	10	10	1	0	0				5	0			8.7	EPA-4	4	3
Butanone[2-]	VOC	9	9	1	0	0				0	0			1900	EPA-4	4	0
Butylbenzene[n-]	VOC	9	9	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[sec-]	VOC	8	8	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[tert-]	VOC	9	9	1	0	0				0	0			61	EPA-4	4	0
Carbon Disulfide	VOC	10	10	1	0	0				0	0			1000	EPA-4	4	0

Table B-86 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Carbon Tetrachloride	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Chlorobenzene	VOC	10	10	1	0	0				0	0			100	EPA-2	4	0
Chlorodibromomethane	VOC	9	9	1	0	0				0	0			100	EPA-2	4	0
Chloroethane	VOC	10	10	1	0	0				0	0			39	EPA-4	4	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloromethane	VOC	10	10	1	0	0				0	0			15	EPA-4	4	0
Chlorotoluene[2-]	VOC	9	9	1	0	0				0	0			120	EPA-4	4	0
Chlorotoluene[4-]	VOC	9	9	1	0	0				0	0			120	EPA-4	4	0
Dibromo-3-Chloropropane[1,2-]	VOC	9	9	1	0	0											
Dibromoethane[1,2-]	VOC	9	9	1	0	0				9	0			0.05	EPA-2	4	4
Dibromomethane	VOC	9	9	1	0	0				0	0			61	EPA-4	4	0
Dichlorobenzene[1,2-]	VOC	10	10	1	0	0				0	0			600	EPA-2	4	0
Dichlorobenzene[1,3-]	VOC	10	10	1	0	0				0	0			18	EPA-4	4	0
Dichlorobenzene[1,4-]	VOC	10	10	1	0	0				0	0			75	EPA-2	4	0
Dichlorodifluoromethane	VOC	10	10	1	0	0				0	0			390	EPA-4	4	0
Dichloroethane[1,1-]	VOC	10	10	1	0	0				0	0			25	WQCC-11	4	0
Dichloroethane[1,2-]	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Dichloroethene[1,1-]	VOC	10	10	1	0	0				5	0			5	WQCC-11	4	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											
Dichloroethene[cis-1,2-]	VOC	7	7	1	0	0				0	0			70	EPA-2	3	0
Dichloroethene[trans-1,2-]	VOC	8	8	1	0	0				0	0			100	EPA-2	4	0
Dichloropropane[1,2-]	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Dichloropropane[1,3-]	VOC	9	9	1	0	0				4	0			5	EPA-2	4	0
Dichloropropane[2,2-]	VOC	9	9	1	0	0				4	0			5	EPA-2	4	0
Dichloropropene[1,1-]	VOC	9	9	1	0	0				4	0			4	EPA-4	4	2
Dichloropropene[cis-1,3-]	VOC	10	10	1	0	0				5	0			4	EPA-4	4	3
Dichloropropene[trans-1,3-]	VOC	10	10	1	0	0				5	0			4	EPA-4	4	3
Ethylbenzene	VOC	10	10	1	0	0				0	0			700	EPA-2	4	0
Hexachlorobutadiene	VOC	7	7	1	0	0				2	0			7.3	EPA-4	3	2
Hexanone[2-]	VOC	10	10	1	0	0				0	0			1900	EPA-4	4	0
Iodomethane	VOC	9	9	1	0	0				0	0			8.7	EPA-4	4	0
Isopropylbenzene	VOC	9	9	1	0	0				0	0			660	EPA-4	4	0
Isopropyltoluene[4-]	VOC	9	9	1	0	0				0	0			660	EPA-4	4	0
Methyl-2-pentanone[4-]	VOC	10	10	1	0	0				0	0			160	EPA-4	4	0
Propylbenzene[1-]	VOC	9	9	1	0	0				0	0			61	EPA-4	4	0
Styrene	VOC	10	10	1	0	0				0	0			100	EPA-2	4	0
Tetrachloroethane[1,1,1,2-]	VOC	9	9	1	0	0				4	0			4.3	EPA-4	4	2
Tetrachloroethane[1,1,2,2-]	VOC	10	10	1	0	0				0	0			10	WQCC-11	4	0
Tetrachloroethene	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Trichloro-1,2,2-trifluoroethane	VOC	6	6	1	0	0											
Trichloro-1,2,2-trifluoroethane[1,1,2-]	VOC	3	3	1	0	0				0	0			59000	EPA-4	1	0
Trichlorobenzene[1,2,3-]	VOC	4	4	1	0	0				0	0			70	EPA-2	2	0
Trichlorobenzene[1,2,4-]	VOC	7	7	1	0	0				0	0			70	EPA-2	3	0

Table B-86 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloroethane[1,1,1-]	VOC	10	10	1	0	0				0	0			60	WQCC-11	4	0
Trichloroethane[1,1,2-]	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Trichloroethene	VOC	10	10	1	0	0				5	0			5	EPA-2	4	0
Trichlorofluoromethane	VOC	10	10	1	0	0				0	0			1300	EPA-4	4	0
Trichloropropane[1,2,3-]	VOC	9	9	1	0	0				9	0			0.016	EPA-4	4	4
Trimethylbenzene[1,2,4-]	VOC	8	8	1	0	0				0	0			12	EPA-4	4	0
Trimethylbenzene[1,3,5-]	VOC	9	9	1	0	0				0	0			12	EPA-4	4	0
Vinyl Chloride	VOC	10	10	1	0	0				10	0			1	WQCC-11	4	3
Xylene (Total)	VOC	7	7	1	0	0				0	0			620	WQCC-11	3	0
Xylene[1,2-]	VOC	8	8	1	0	0				0	0			1400	EPA-4	4	0
Xylene[1,3-]+Xylene[1,4-]	VOC	4	4	1	0	0				0	0			620	WQCC-11	2	0

Table B-87
Nonfiltered Miscellaneous Constituents of Mortandad Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	13	10	0.7692	3	0.2308	40	110	160								
Ammonium	ANION	1	1	1	0	0											
Bromide	ANION	13	12	0.9231	1	0.07692	21000	21000	21000								
Chlorate	ANION	3	3	1	0	0											
Chloride	ANION	36	0	0	36	1	1730	2925	4900	0	0	0.0117	0.0196	250000	WQCC-12	5	0
Fluoride	ANION	44	1	0.02273	43	0.9773	140	250	28000	0	1	0.1562	17.5	1600	WQCC-11	5	0
Iodide	ANION	3	3	1	0	0											
Nitrate	ANION	45	3	0.06667	42	0.9333	205	320	2400	0	0	0.032	0.24	10000	EPA-4	5	0
Oxalate	ANION	5	5	1	0	0											
Perchlorate	ANION	48	45	0.9375	3	0.0625	0.55	1	4.19	8	1	0.2703	1.132	3.7	EPA-4	6	5
Sulfate	ANION	36	1	0.02778	35	0.9722	1750	3000	6400	0	0	0.005	0.01067	600000	WQCC-12	5	0
Calcium	GENINORG	33	0	0	33	1	8348	11500	14100								
Hardness	GENINORG	23	0	0	23	1	10300	44700	52800								
Magnesium	GENINORG	33	0	0	33	1	2800	3824	5180								
Potassium	GENINORG	33	2	0.06061	31	0.9394	800	1899	3100								
Silica	GENINORG	1	0	0	1	1	33500	33500	33500								
Sodium	GENINORG	33	0	0	33	1	6648	10400	14000								
Total Phosphate as Phosphorus	GENINORG	3	1	0.3333	2	0.6667	33	34.5	36								
Total Phosphorus	GENINORG	7	5	0.7143	2	0.2857	60	69	78								
Deuterium Ratio	STABLE_ISOTOPES	11	0	0	11	1	-83	-77	-74								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	7	0	0	7	1	-2.5	-0.8	1.4								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	11	0	0	11	1	-11.3	-11	-10.75								
Max TSS	WATER_QUAL	2	2	1	0	0											
pH	WATER_QUAL	22	0	0	22	1	7.4	7.865	8.1								
Specific Conductance	WATER_QUAL	21	0	0	21	1	96	136	154								
Total Dissolved Solids	WATER_QUAL	5	0	0	5	1	133000	147000	166000	0	0	0.147	0.166	1000000	WQCC-12	3	0
Total Organic Carbon	WATER_QUAL	8	2	0.25	6	0.75	246	778	13000								
Total Suspended Solids	WATER_QUAL	20	16	0.8	4	0.2	1000	1000	2000								

Table B-88
Filtered Inorganics of Mortandad Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	1	0	0	1	1	570	570	570	0	1	6.552	6.552	87	WQCC-6	1	0
AluminumRe	METALS	1	0	0	1	1	570	570	570	0	0	0.114	0.114	5000	WQCC-4	1	0
Antimony	METALS	1	1	1	0	0				1	0			6	EPA-2	1	1
Arsenic	METALS	1	1	1	0	0				0	0			10	EPA-2	1	0
Barium	METALS	1	0	0	1	1	120	120	120	0	0	0.12	0.12	1000	WQCC-11	1	0
Beryllium	METALS	1	1	1	0	0				0	0			4	EPA-2	1	0
Cadmium	METALS	1	1	1	0	0				0	0			2.24	WQCC-6	1	0
CadmiumRe	METALS	1	1	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Cobalt	METALS	1	1	1	0	0				0	0			1000	WQCC-4	1	0
Copper	METALS	1	0	0	1	1	6.1	6.1	6.1	0	0	0.6811	0.6811	8.96	WQCC-6	1	0
CopperRe	METALS	1	0	0	1	1	6.1	6.1	6.1	0	0	0.0122	0.0122	500	WQCC-4	1	0
Iron	METALS	1	0	0	1	1	1400	1400	1400	0	1	1.4	1.4	1000	WQCC-12	1	0
Lead	METALS	1	1	1	0	0				1	0			2.52	WQCC-6	1	1
LeadRe	METALS	1	1	1	0	0				0	0			15	EPA-2	1	0
Manganese	METALS	1	0	0	1	1	740	740	740	0	1	3.7	3.7	200	WQCC-12	1	0
Mercury	METALS	1	0	0	1	1	2	2	2	0	1	1	1	2	WQCC-11	1	0
Molybdenum	METALS	1	1	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	1	1	1	0	0				0	0			52.01	WQCC-6	1	0
NickelRe	METALS	1	1	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	1	1	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	1	1	1	0	0				0	0			50	WQCC-4	1	0
Silver	METALS	1	1	1	0	0				1	0			3.45	WQCC-2	1	1
SilverRe	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Thallium	METALS	1	1	1	0	0				1	0			2	EPA-2	1	1
Tin	METALS	1	1	1	0	0				0	0			22000	EPA-4	1	0
Vanadium	METALS	1	1	1	0	0				0	0			100	WQCC-4	1	0
Zinc	METALS	1	1	1	0	0				0	0			117.19	WQCC-2	1	0
ZincRe	METALS	1	1	1	0	0				0	0			10000	WQCC-12	1	0

Table B-89
Filtered Radionuclides of Mortandad Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Cesium-137	rad	1	1	1	0	0				0	0			120	DOE	1	0
Gross alpha	rad	1	1	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	1	0	0	1	1	45	45	45	0	0	0.9	0.9	50	EPA-2	1	0
Plutonium-238	rad	1	1	1	0	0				1	0			1.6	DOE	1	1
Plutonium-239	rad	1	0	0	1	1	0.86	0.86	0.86	0	0	0.7167	0.7167	1.2	DOE	1	0
Strontium-90	rad	1	1	1	0	0				1	0			8	EPA-2	1	1
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0
Uranium-234	rad	1	1	1	0	0				0	0			20	DOE	1	0
Uranium-235	rad	1	1	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	1	1	1	0	0				0	0			24	DOE	1	0

Table B-90
Filtered Miscellaneous Constituents of Mortandad Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	1	0	0	1	1	19900	19900	19900								
Magnesium	GENINORG	1	0	0	1	1	2800	2800	2800								
Potassium	GENINORG	1	0	0	1	1	2900	2900	2900								
Sodium	GENINORG	1	0	0	1	1	33800	33800	33800								
pH	WATER_QUAL	1	0	0	1	1	7	7	7								
Specific Conductance	WATER_QUAL	1	0	0	1	1	227	227	227								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	193000	193000	193000	0	0	0.193	0.193	1000000	WQCC-12	1	0
Total Suspended Solids	WATER_QUAL	1	0	0	1	1	95000	95000	95000								

Table B-91
Nonfiltered Organics of Mortandad Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1016	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Acenaphthene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzidine	SVOC	1	1	1	0	0				1	0			0.0029	EPA-4	1	1
Benzo(a)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	SVOC	1	1	1	0	0				1	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzoic Acid	SVOC	1	1	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	1	1	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	1	1	1	0	0											
Bis(2-chloroethyl)ether	SVOC	1	1	1	0	0				1	0			0.098	EPA-4	1	1
Bromophenyl-phenylether[4-]	SVOC	1	1	1	0	0											
Butylbenzylphthalate	SVOC	1	1	1	0	0				0	0			5200	WQCC-9	1	0
Carbazole	SVOC	1	1	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	1	1	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	1	1	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	1	1	1	0	0											
Chrysene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	SVOC	1	1	1	0	0				1	0			0.092	EPA-4	1	1
Dibenzofuran	SVOC	1	1	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	1	1	1	0	0				1	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	1	1	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	1	1	1	0	0				0	0			3700	EPA-4	1	0

Table B-91 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dinitro-2-methylphenol[4,6-]	SVOC	1	1	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	1	1	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	SVOC	1	1	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	1	1	1	0	0				1	0			0.0077	WQCC-9	1	1
Hexachlorobutadiene	SVOC	1	1	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	1	1	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Isophorone	SVOC	1	1	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Nitroaniline[2-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	1	1	1	0	0				1	0			3.4	EPA-4	1	1
Nitrophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				1	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	1	1	1	0	0				1	0			0.096	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Pentachlorophenol	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
Phenanthrene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Pyrene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Acetone	VOC	1	1	1	0	0				0	0			610	EPA-4	1	0
Benzene	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Bromodichloromethane	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	1	1	1	0	0				1	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0

Table B-91 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Carbon Disulfide	VOC	1	1	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Chlorobenzene	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	1	1	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	1	1	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	1	1	1	0	0				0	0			15	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	1	1	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	1	1	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	1	1	1	0	0				0	0			75	EPA-2	1	0
Dichloroethane[1,1-]	VOC	1	1	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	1	1	1	0	0				1	0			5	WQCC-11	1	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											
Dichloroethene[trans-1,2-]	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Dichloropropene[cis-1,3-]	VOC	1	1	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	1	1	1	0	0				1	0			4	EPA-4	1	1
Ethylbenzene	VOC	1	1	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	1	1	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Styrene	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	1	1	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethene	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Toluene	VOC	1	1	1	0	0				0	0			750	WQCC-11	1	0
Trichlorobenzene[1,2,4-]	VOC	1	1	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	1	1	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Trichloroethene	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Vinyl acetate	VOC	1	1	1	0	0											
Vinyl Chloride	VOC	1	1	1	0	0				1	0			1	WQCC-11	1	1
Xylene (Total)	VOC	1	1	1	0	0				0	0			620	WQCC-11	1	0

Table B-92
Nonfiltered Miscellaneous Constituents of Mortandad Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	1	0	0	1	1	120	120	120								
Chloride	ANION	1	0	0	1	1	15100	15100	15100	0	0	0.0604	0.0604	250000	WQCC-12	1	0
Fluoride	ANION	1	0	0	1	1	360	360	360	0	0	0.225	0.225	1600	WQCC-11	1	0
Nitrate	ANION	1	0	0	1	1	30	30	30	0	0	0.003	0.003	10000	EPA-4	1	0
Sulfate	ANION	1	0	0	1	1	1700	1700	1700	0	0	0.002833	0.002833	600000	WQCC-12	1	0

Table B-93
Filtered Inorganics of Mortandad Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	15	5	0.3333	10	0.6667	64	197	1021	1	9	2.264	11.74	87	WQCC-6	6	1
AluminumRe	METALS	15	5	0.3333	10	0.6667	64	197	1021	0	0	0.0394	0.2042	5000	WQCC-4	6	0
Antimony	METALS	15	11	0.7333	4	0.2667	1	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	6	0
Arsenic	METALS	16	13	0.8125	3	0.1875	2.4	2.4	3.5	0	0	0.09917	0.1446	24.2	WQCC-9	7	0
Barium	METALS	15	1	0.06667	14	0.9333	16.6	38.45	72.2	0	0	0.01479	0.02777	2600	EPA-4	6	0
Beryllium	METALS	15	12	0.8	3	0.2	0.023	3	3	1	0	0.566	0.566	5.3	WQCC-6	6	1
BerylliumRe	METALS	15	12	0.8	3	0.2	0.023	3	3	0	0	0.0411	0.0411	73	EPA-4	6	0
Boron	METALS	13	3	0.2308	10	0.7692	45	96	572	0	0	0.0192	0.1144	5000	WQCC-4	5	0
Cadmium	METALS	14	12	0.8571	2	0.1429	1.02	4.01	7	6	1	1.792	3.128	2.237972728	WQCC-6	6	3
CadmiumRe	METALS	14	12	0.8571	2	0.1429	1.02	4.01	7	0	0	0.0802	0.14	50	WQCC-4	6	0
Chromium	METALS	15	11	0.7333	4	0.2667	7	7.1	7.2	0	0	0.0958	0.09714	74.11621856	WQCC-6	6	0
ChromiumRe	METALS	15	11	0.7333	4	0.2667	7	7.1	7.2	0	0	0.0071	0.0072	1000	WQCC-4	6	0
Cobalt	METALS	15	10	0.6667	5	0.3333	0.87	7.44	12.8	0	0	0.00744	0.0128	1000	WQCC-4	6	0
Copper	METALS	15	0	0	15	1	5.67	16.3	110	0	13	1.82	12.28	8.955948281	WQCC-6	6	0
CopperRe	METALS	15	0	0	15	1	5.67	16.3	110	0	0	0.0326	0.22	500	WQCC-4	6	0
Cyanide (Total)	CN	2	1	0.5	1	0.5	10	10	10								
Iron	METALS	15	2	0.1333	13	0.8667	19.7	118	584	0	0	0.01073	0.05309	11000	EPA-4	6	0
Lead	METALS	16	12	0.75	4	0.25	0.056	0.21	4	6	1	0.08344	1.589	2.516643724	WQCC-6	7	4
LeadRe	METALS	16	12	0.75	4	0.25	0.056	0.21	4	0	0	0.0021	0.04	100	WQCC-4	7	0
Lithium	METALS	1	0	0	1	1	130	130	130	0	0	0.1781	0.1781	730	EPA-4	1	0
Manganese	METALS	15	2	0.1333	13	0.8667	3	8.4	300	0	0	0.004941	0.1765	1700	EPA-4	6	0
Mercury	METALS	8	7	0.875	1	0.125	0.1	0.1	0.1	0	0	0.009091	0.009091	11	EPA-4	5	0
Molybdenum	METALS	13	4	0.3077	9	0.6923	23.3	97	418.6	0	2	0.5389	2.326	180	EPA-4	5	0
Nickel	METALS	15	8	0.5333	7	0.4667	5.36	13	41	0	0	0.25	0.7884	52.0067739	WQCC-6	6	0
NickelRe	METALS	15	8	0.5333	7	0.4667	5.36	13	41	0	0	0.002826	0.008913	4600	WQCC-9	6	0
Selenium	METALS	5	3	0.6	2	0.4	1.6	1.6	1.6	0	0	0.032	0.032	50	WQCC-4	3	0
Silver	METALS	15	11	0.7333	4	0.2667	0.06	5.03	10	5	2	1.458	2.898	3.450063787	WQCC-2	6	3
SilverRe	METALS	15	11	0.7333	4	0.2667	0.06	5.03	10	0	0	0.02794	0.05556	180	EPA-4	6	0
Strontium	METALS	13	0	0	13	1	32	72.5	123	0	0	0.003295	0.005591	22000	EPA-4	5	0
Thallium	METALS	14	11	0.7857	3	0.2143	3	3	3	1	0	0.4762	0.4762	6.3	WQCC-9	6	1
Tin	METALS	13	11	0.8462	2	0.1538	30	35	40	0	0	0.001591	0.001818	22000	EPA-4	5	0
Titanium	METALS	2	0	0	2	1	0.17	3.265	6.36								
Uranium	URANIUM	3	0	0	3	1	0.504	3.79	3.79								
Vanadium	METALS	15	9	0.6	6	0.4	4.5	7.055	9	0	0	0.07055	0.09	100	WQCC-4	6	0
Zinc	METALS	15	7	0.4667	8	0.5333	14.8	33.45	265	0	1	0.2854	2.261	117.1857987	WQCC-2	6	0
ZincRe	METALS	15	7	0.4667	8	0.5333	14.8	33.45	265	0	0	0.001338	0.0106	25000	WQCC-4	6	0

Table B-94
Filtered Radionuclides of Mortandad Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	3	0	0	3	1	0.603	0.603	4.2	0	1	0.5025	3.5	1.2	DOE	2	0
Gross alpha	rad	3	2	0.6667	1	0.3333	4.9	4.9	4.9								
Gross beta	rad	3	1	0.3333	2	0.6667	9.2	244.1	479								
Plutonium-238	rad	3	0	0	3	1	1.52	1.52	10.7	0	1	0.95	6.688	1.6	DOE	2	0
Plutonium-239	rad	3	0	0	3	1	0.822	0.822	2.96	0	1	0.685	2.467	1.2	DOE	2	0
Strontium-90	rad	3	1	0.3333	2	0.6667	45.3	45.3	45.3	0	2	1.132	1.132	40	DOE	2	0
Tritium	rad	1	1	1	0	0				0	0			80000	DOE	1	0
Uranium-234	rad	2	0	0	2	1	3.52	3.52	3.52	0	0	0.176	0.176	20	DOE	2	0
Uranium-235	rad	2	0	0	2	1	0.0738	0.0738	0.0738	0	0	0.003075	0.003075	24	DOE	2	0
Uranium-238	rad	2	0	0	2	1	1.08	1.08	1.08	0	0	0.045	0.045	24	DOE	2	0

Table B-95
Filtered Miscellaneous Constituents of Mortandad Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	14	0	0	14	1	9600	26560	59580								
Hardness	GENINORG	12	0	0	12	1	32600	85200	151500								
Magnesium	GENINORG	14	0	0	14	1	1290	2811	7370								
Potassium	GENINORG	14	0	0	14	1	2500	6705	15770								
Sodium	GENINORG	14	0	0	14	1	10300	67100	96400								
Dissolved Oxygen	WATER_QUAL	1	0	0	1	1	7000	7000	7000								
pH	WATER_QUAL	8	0	0	8	1	5.68	7.975	8.37								
Specific Conductance	WATER_QUAL	10	0	0	10	1	10.1	302.5	597								
Total Dissolved Solids	WATER_QUAL	17	0	0	17	1	130000	321000	586000								

Table B-96
Nonfiltered Inorganics of Mortandad Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	14	1	0.07143	13	0.9286	49.6	1010	37400	0	1	0.0273	1.011	37000	EPA-4	9	0
Antimony	METALS	11	10	0.9091	1	0.09091	0.6	0.6	0.6	1	0	0.04	0.04	15	EPA-4	6	1
Arsenic	METALS	13	5	0.3846	8	0.6154	2.6	4	16	5	8	8.889	35.56	0.45	EPA-4	8	5
Barium	METALS	14	0	0	14	1	7.6	64.2	437	0	0	0.02469	0.1681	2600	EPA-4	9	0
Beryllium	METALS	14	10	0.7143	4	0.2857	0.131	2.15	5.3	0	0	0.02945	0.0726	73	EPA-4	9	0
Boron	METALS	10	1	0.1	9	0.9	33.2	105	410	0	0	0.03182	0.1242	3300	EPA-4	7	0
Cadmium	METALS	11	11	1	0	0				0	0			18	EPA-4	6	0
Chromium	METALS	14	7	0.5	7	0.5	4.5	8.7	29.9	0	0	0.0001582	0.0005436	55000	EPA-4	9	0
Cobalt	METALS	11	7	0.6364	4	0.3636	1.4	4.6	10.4								
Copper	METALS	14	2	0.1429	12	0.8571	15	32.5	192	0	0	0.02321	0.1371	1400	EPA-4	9	0
Cyanide (Total)	CN	17	10	0.5882	7	0.4118	3.72	10	30	4	6	1.923	5.769	5.2	WQCC-7	5	3
Cyanide, Amenable	CN	4	4	1	0	0				0	0			5.2	WQCC-8	3	0
Iron	METALS	14	0	0	14	1	73	644	37500	0	3	0.05855	3.409	11000	EPA-4	9	0
Lead	METALS	13	7	0.5385	6	0.4615	0.527	9.95	71.8								
Lithium	METALS	4	1	0.25	3	0.75	29	34	41	0	0	0.04658	0.05616	730	EPA-4	4	0
Manganese	METALS	14	1	0.07143	13	0.9286	5	30	1010	0	0	0.01765	0.5941	1700	EPA-4	9	0
Mercury	METALS	26	10	0.3846	16	0.6154	0.08	0.2	0.84	10	16	16.67	70	0.012	WQCC-7	11	5
MercuryRe	METALS	26	10	0.3846	16	0.6154	0.08	0.2	0.84	0	1	0.2597	1.091	0.77	WQCC-8	11	0
Molybdenum	METALS	10	3	0.3	7	0.7	28.8	151	500	0	3	0.8389	2.778	180	EPA-4	7	0
Nickel	METALS	11	7	0.6364	4	0.3636	14.4	15.23	38.4	0	0	0.02086	0.0526	730	EPA-4	6	0
Selenium	METALS	24	20	0.8333	4	0.1667	1.4	1.7	7	1	1	0.34	1.4	5	WQCC-8	10	0
Silver	METALS	11	7	0.6364	4	0.3636	0.12	9.05	21.5	0	0	0.05028	0.1194	180	EPA-4	6	0
Strontium	METALS	7	0	0	7	1	64.6	110	170	0	0	0.005	0.007727	22000	EPA-4	4	0
Thallium	METALS	11	9	0.8182	2	0.1818	0.2	1.4	2.6								
Tin	METALS	7	5	0.7143	2	0.2857	40	42.5	45	0	0	0.001932	0.002045	22000	EPA-4	4	0
Uranium	URANIUM	14	0	0	14	1	0.4512	0.9	3.81								
Vanadium	METALS	11	4	0.3636	7	0.6364	5.8	11	71.3	0	0	0.04231	0.2742	260	EPA-4	6	0
Zinc	METALS	11	5	0.4545	6	0.5455	23	73.95	254	0	0	0.006723	0.02309	11000	EPA-4	6	0

Table B-97
Nonfiltered Radionuclides of Mortandad Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	20	7	0.35	13	0.65	0.0221	2.19	24.9	0	10	1.825	20.75	1.2	DOE	5	0
Cesium-137	rad	19	16	0.8421	3	0.1579	32.1	47.31	49.6	0	0	0.3943	0.4133	120	DOE	5	0
Cobalt-60	rad	13	10	0.7692	3	0.2308	9.42	26.28	45.4	0	0	0.1314	0.227	200	DOE	4	0
Gross alpha	rad	22	14	0.6364	8	0.3636	1.64	46.9	92.7								
Gross beta	rad	22	7	0.3182	15	0.6818	4.948	80.3	995.8								
Gross gamma	rad	9	7	0.7778	2	0.2222	262	319.8	377.6								
Plutonium-238	rad	23	11	0.4783	12	0.5217	0.014	4.851	52.02	0	10	3.032	32.51	1.6	DOE	8	0
Plutonium-239	rad	23	11	0.4783	12	0.5217	0.014	2.814	16.91	0	10	2.345	14.09	1.2	DOE	8	0
Radium-226	rad	2	2	1	0	0											
Strontium-90	rad	21	15	0.7143	6	0.2857	8.1	39.25	408.6	1	3	0.9812	10.22	40	DOE	7	1
Thorium-228	rad	2	1	0.5	1	0.5	0.041	0.041	0.041								
Thorium-230	rad	2	1	0.5	1	0.5	0.072	0.072	0.072								
Thorium-232	rad	2	2	1	0	0											
Tritium	rad	20	16	0.8	4	0.2	3140	6763	16480	2	0	0.3382	0.824	20000	WQCC-5	5	1
Uranium-234	rad	11	0	0	11	1	0.15	0.846	4.29	0	0	0.0423	0.2145	20	DOE	7	0
Uranium-235	rad	12	9	0.75	3	0.25	0.0731	0.0731	0.115	0	0	0.003046	0.004792	24	DOE	8	0
Uranium-238	rad	11	0	0	11	1	0.13	0.283	1.13	0	0	0.01179	0.04708	24	DOE	7	0

Table B-98
Nonfiltered Organics of Mortandad Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	6	3	0.5	3	0.5	29	49	75.8	0	0	0.08033	0.1243	610	EPA-4	5	0
Di-n-butylphthalate	SVOC	6	4	0.6667	2	0.3333	4	7	10	0	0	0.0005833	0.0008333	12000	WQCC-9	4	0
Bis(2-ethylhexyl)phthalate	SVOC	6	5	0.8333	1	0.1667	3	3	3	0	0	0.05085	0.05085	59	WQCC-9	4	0
Di-n-octylphthalate	SVOC	6	5	0.8333	1	0.1667	1	1	1	0	0	0.00137	0.00137	730	EPA-4	4	0
Methylene Chloride	VOC	8	7	0.875	1	0.125	2	2	2	0	0	0.000125	0.000125	16000	WQCC-9	6	0
Amino-2,6-dinitrotoluene[4-]	HEXP	2	2	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	2	2	1	0	0											
Dinitrobenzene[1,3-]	HEXP	2	2	1	0	0				0	0			3.65	EPA-4	1	0
HMX	HEXP	2	2	1	0	0				0	0			1825	EPA-4	1	0
Nitrotoluene[2-]	HEXP	2	2	1	0	0											
Nitrotoluene[3-]	HEXP	2	2	1	0	0				0	0			60.83333333	EPA-4	1	0
Nitrotoluene[4-]	HEXP	2	2	1	0	0				0	0			60.83333333	EPA-4	1	0
RDX	HEXP	2	2	1	0	0				1	0			0.611195767	EPA-4	1	1
Tetryl	HEXP	2	2	1	0	0				0	0			365	EPA-4	1	0
Trinitrotoluene[2,4,6-]	HEXP	2	2	1	0	0				0	0			18.25	EPA-4	1	0
Acenaphthene	PAH	8	8	1	0	0				0	0			2700	WQCC-9	5	0
Acenaphthylene	PAH	8	8	1	0	0				0	0			2700	WQCC-9	5	0
Anthracene	PAH	7	7	1	0	0				0	0			110000	WQCC-9	4	0
Benzo(a)anthracene	PAH	7	7	1	0	0				6	0			0.49	WQCC-9	4	4
Benzo(a)pyrene	PAH	7	7	1	0	0				6	0			0.49	WQCC-9	4	4
Benzo(b)fluoranthene	PAH	7	7	1	0	0				6	0			0.49	WQCC-9	4	4
Benzo(g,h,i)perylene	PAH	7	7	1	0	0				0	0			11000	WQCC-9	4	0
Benzo(k)fluoranthene	PAH	6	6	1	0	0				5	0			0.49	WQCC-9	4	4
Chrysene	PAH	6	6	1	0	0				5	0			0.49	WQCC-9	4	4
Dibenz(a,h)anthracene	PAH	6	6	1	0	0				5	0			0.49	WQCC-9	4	4
Fluoranthene	PAH	6	6	1	0	0				0	0			370	WQCC-9	4	0
Fluorene	PAH	6	6	1	0	0				0	0			14000	WQCC-9	4	0
Indeno(1,2,3-cd)pyrene	PAH	6	6	1	0	0				5	0			0.49	WQCC-9	4	4
Naphthalene	PAH	7	7	1	0	0				4	0			6.2	EPA-4	4	3
Phenanthrene	PAH	6	6	1	0	0				0	0			110000	WQCC-9	4	0
Pyrene	PAH	6	6	1	0	0				0	0			11000	WQCC-9	4	0
Aroclor-1016	PCB	9	9	1	0	0				9	0			0.0017	WQCC-9	5	5
Aroclor-1221	PCB	9	9	1	0	0				9	0			0.0017	WQCC-9	5	5
Aroclor-1232	PCB	9	9	1	0	0				9	0			0.0017	WQCC-9	5	5
Aroclor-1242	PCB	10	10	1	0	0				10	0			0.0017	WQCC-9	5	5
Aroclor-1248	PCB	9	9	1	0	0				9	0			0.0017	WQCC-9	5	5
Aroclor-1254	PCB	10	10	1	0	0				10	0			0.0017	WQCC-9	5	5
Aroclor-1260	PCB	10	10	1	0	0				10	0			0.0017	WQCC-9	5	5
Aroclor-1262	PCB	4	4	1	0	0				4	0			0.0017	WQCC-9	3	3
Aldrin	PEST	3	3	1	0	0				3	0			0.0014	WQCC-9	3	3

Table B-98 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
BHC[alpha-]	PEST	3	3	1	0	0				0	0			0.13	WQCC-9	3	0
BHC[beta-]	PEST	3	3	1	0	0				0	0			0.46	WQCC-9	3	0
BHC[delta-]	PEST	3	3	1	0	0											
BHC[gamma-]	PEST	3	3	1	0	0				0	0			0.63	WQCC-9	3	0
Chlordane[alpha-]	PEST	3	3	1	0	0				3	0			0.022	WQCC-9	3	3
Chlordane[gamma-]	PEST	3	3	1	0	0				3	0			0.022	WQCC-9	3	3
DDD[4,4'-]	PEST	3	3	1	0	0				3	0			0.001	WQCC-8	3	3
DDE[4,4'-]	PEST	3	3	1	0	0				3	0			0.001	WQCC-8	3	3
DDT[4,4'-]	PEST	3	3	1	0	0				3	0			0.001	WQCC-8	3	3
Dieldrin	PEST	3	3	1	0	0				3	0			0.0014	WQCC-9	3	3
Endosulfan I	PEST	3	3	1	0	0				0	0			0.056	WQCC-7	3	0
Endosulfan IRe	PEST	3	3	1	0	0				0	0			240	WQCC-9	3	0
Endosulfan II	PEST	3	3	1	0	0				3	0			0.056	WQCC-7	3	3
Endosulfan IIRe	PEST	3	3	1	0	0				0	0			240	WQCC-9	3	0
Endosulfan Sulfate	PEST	3	3	1	0	0				0	0			240	WQCC-9	3	0
Endrin	PEST	3	3	1	0	0				3	0			0.036	WQCC-7	3	3
EndrinRe	PEST	3	3	1	0	0				0	0			0.81	WQCC-9	3	0
Endrin Aldehyde	PEST	3	3	1	0	0				0	0			0.81	WQCC-9	3	0
Endrin Ketone	PEST	3	3	1	0	0				0	0			0.81	WQCC-9	3	0
Heptachlor	PEST	3	3	1	0	0				3	0			0.0021	WQCC-9	3	3
Heptachlor Epoxide	PEST	3	3	1	0	0				3	0			0.0011	WQCC-9	3	3
Methoxychlor[4,4'-]	PEST	3	3	1	0	0				0	0			180	EPA-4	3	0
PentachlorophenolRe	PEST	5	5	1	0	0				0	0			82	WQCC-9	4	0
Toxaphene (Technical Grade)	PEST	3	3	1	0	0				3	0			0.0002	WQCC-7	3	3
Toxaphene (Technical Grade)Re	PEST	3	3	1	0	0				3	0			0.0075	WQCC-9	3	3
Aniline	SVOC	7	7	1	0	0				0	0			120	EPA-4	4	0
Azobenzene	SVOC	5	5	1	0	0				5	0			6.1	EPA-4	3	3
Benzidine	SVOC	6	6	1	0	0				6	0			0.0054	WQCC-9	4	4
Benzoic Acid	SVOC	5	5	1	0	0				0	0			150000	EPA-4	4	0
Benzyl Alcohol	SVOC	5	5	1	0	0				0	0			11000	EPA-4	4	0
Bis(2-chloroethoxy)methane	SVOC	6	6	1	0	0											
Bis(2-chloroethyl)ether	SVOC	6	6	1	0	0				0	0			14	WQCC-9	4	0
Bromophenyl-phenylether[4-]	SVOC	6	6	1	0	0											
Butylbenzylphthalate	SVOC	6	6	1	0	0				0	0			5200	WQCC-9	4	0
Carbazole	SVOC	1	1	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	5	5	1	0	0											
Chloroaniline[4-]	SVOC	6	6	1	0	0				0	0			150	EPA-4	4	0
Chloronaphthalene[2-]	SVOC	6	6	1	0	0				0	0			4300	WQCC-9	4	0
Chlorophenol[2-]	SVOC	5	5	1	0	0				0	0			400	WQCC-9	4	0
Chlorophenyl-phenyl[4-] Ether	SVOC	6	6	1	0	0											

Table B-98 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibenzofuran	SVOC	6	6	1	0	0				0	0			24	EPA-4	4	0
Dichlorobenzidine[3,3'-]	SVOC	6	6	1	0	0				5	0			0.77	WQCC-9	4	4
Dichlorophenol[2,4-]	SVOC	5	5	1	0	0				0	0			790	WQCC-9	4	0
Diethylphthalate	SVOC	6	6	1	0	0				0	0			120000	WQCC-9	4	0
Dimethyl Phthalate	SVOC	6	6	1	0	0				0	0			2900000	WQCC-9	4	0
Dimethylphenol[2,4-]	SVOC	5	5	1	0	0				0	0			2300	WQCC-9	4	0
Dinitro-2-methylphenol[4,6-]	SVOC	5	5	1	0	0				0	0			765	WQCC-9	4	0
Dinitrophenol[2,4-]	SVOC	5	5	1	0	0				0	0			14000	WQCC-9	4	0
Dinitrotoluene[2,4-]	SVOC	6	6	1	0	0				0	0			91	WQCC-9	4	0
Dinitrotoluene[2,6-]	SVOC	6	6	1	0	0				0	0			37	EPA-4	4	0
Diphenylamine	SVOC	2	2	1	0	0				0	0			910	EPA-4	2	0
Diphenylhydrazine[1,2-]	SVOC	2	2	1	0	0											
Hexachlorobenzene	SVOC	6	6	1	0	0				6	0			0.0077	WQCC-9	4	4
Hexachlorobutadiene	SVOC	7	7	1	0	0				0	0			500	WQCC-9	4	0
Hexachlorocyclopentadiene	SVOC	6	6	1	0	0				0	0			17000	WQCC-9	4	0
Hexachloroethane	SVOC	6	6	1	0	0				0	0			89	WQCC-9	4	0
Isophorone	SVOC	6	6	1	0	0				0	0			26000	WQCC-9	4	0
Methylnaphthalene[2-]	SVOC	6	6	1	0	0				4	0			6.2	EPA-4	4	3
Methylphenol[2-]	SVOC	6	6	1	0	0				0	0			1800	EPA-4	4	0
Methylphenol[4-]	SVOC	6	6	1	0	0				0	0			180	EPA-4	4	0
Methylpyridine[2-]	SVOC	4	4	1	0	0											
Nitroaniline[2-]	SVOC	6	6	1	0	0				5	0			2.2	EPA-4	4	4
Nitroaniline[3-]	SVOC	6	6	1	0	0				5	0			2.2	EPA-4	4	4
Nitroaniline[4-]	SVOC	6	6	1	0	0				5	0			2.2	EPA-4	4	4
Nitrobenzene	SVOC	6	6	1	0	0				0	0			1900	WQCC-9	4	0
Nitrophenol[2-]	SVOC	5	5	1	0	0				0	0			290	EPA-4	4	0
Nitrophenol[4-]	SVOC	5	5	1	0	0				0	0			290	EPA-4	4	0
Nitrosodimethylamine[N-]	SVOC	6	6	1	0	0				0	0			81	WQCC-9	4	0
Nitroso-di-n-propylamine[N-]	SVOC	6	6	1	0	0				0	0			14	WQCC-9	4	0
Nitrosodiphenylamine[N-]	SVOC	4	4	1	0	0				0	0			160	WQCC-9	3	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	3	3	1	0	0				0	0			170000	WQCC-9	3	0
Pentachlorophenol	SVOC	5	5	1	0	0				4	0			15	WQCC-7	4	3
Phenol	SVOC	5	5	1	0	0				0	0			4600000	WQCC-9	4	0
Pyridine	SVOC	6	6	1	0	0				0	0			37	EPA-4	4	0
Trichlorophenol[2,4,5-]	SVOC	5	5	1	0	0				0	0			3700	EPA-4	4	0
Trichlorophenol[2,4,6-]	SVOC	5	5	1	0	0				0	0			65	WQCC-9	4	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	9	9	1	0	0				0	0			710	WQCC-9	7	0
Bromobenzene	VOC	5	5	1	0	0				0	0			23	EPA-4	4	0

Table B-98 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromochloromethane	VOC	5	5	1	0	0				0	0			16000	WQCC-9	4	0
Bromodichloromethane	VOC	7	7	1	0	0				0	0			460	WQCC-9	6	0
Bromoform	VOC	9	9	1	0	0				0	0			3600	WQCC-9	7	0
Bromomethane	VOC	9	9	1	0	0				0	0			4000	WQCC-9	7	0
Butanone[2-]	VOC	8	8	1	0	0				0	0			1900	EPA-4	7	0
Butylbenzene[n-]	VOC	5	5	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[sec-]	VOC	5	5	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[tert-]	VOC	5	5	1	0	0				0	0			61	EPA-4	4	0
Carbon Disulfide	VOC	8	8	1	0	0				0	0			1000	EPA-4	7	0
Carbon Tetrachloride	VOC	9	9	1	0	0				0	0			44	WQCC-9	7	0
Chlorobenzene	VOC	9	9	1	0	0				0	0			21000	WQCC-9	7	0
Chlorodibromomethane	VOC	9	9	1	0	0				0	0			340	WQCC-9	7	0
Chloroethane	VOC	9	9	1	0	0				0	0			39	EPA-4	7	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	7	7	1	0	0				0	0			4700	WQCC-9	6	0
Chloromethane	VOC	9	9	1	0	0				0	0			15	EPA-4	7	0
Chlorotoluene[2-]	VOC	5	5	1	0	0				0	0			120	EPA-4	4	0
Chlorotoluene[4-]	VOC	5	5	1	0	0				0	0			120	EPA-4	4	0
Dibromo-3-Chloropropane[1,2-]	VOC	5	5	1	0	0											
Dibromoethane[1,2-]	VOC	5	5	1	0	0				5	0			0.0076	EPA-4	4	4
Dibromomethane	VOC	5	5	1	0	0				0	0			61	EPA-4	4	0
Dichlorobenzene[1,2-]	VOC	8	8	1	0	0				0	0			17000	WQCC-9	4	0
Dichlorobenzene[1,3-]	VOC	8	8	1	0	0				0	0			2600	WQCC-9	4	0
Dichlorobenzene[1,4-]	VOC	8	8	1	0	0				0	0			2600	WQCC-9	4	0
Dichlorodifluoromethane	VOC	5	5	1	0	0				0	0			390	EPA-4	4	0
Dichloroethane[1,1-]	VOC	9	9	1	0	0				0	0			810	EPA-4	7	0
Dichloroethane[1,2-]	VOC	9	9	1	0	0				0	0			990	WQCC-9	7	0
Dichloroethene[1,1-]	VOC	9	9	1	0	0				0	0			32	WQCC-9	7	0
Dichloroethene[cis/trans-1,2-]	VOC	5	5	1	0	0											
Dichloroethene[cis-1,2-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Dichloroethene[trans-1,2-]	VOC	6	6	1	0	0				0	0			140000	WQCC-9	4	0
Dichloropropane[1,2-]	VOC	9	9	1	0	0				0	0			390	WQCC-9	7	0
Dichloropropane[1,3-]	VOC	5	5	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropane[2,2-]	VOC	5	5	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropene[1,1-]	VOC	5	5	1	0	0				0	0			1700	WQCC-9	4	0
Dichloropropene[cis-1,3-]	VOC	9	9	1	0	0				0	0			1700	WQCC-9	7	0
Dichloropropene[trans-1,3-]	VOC	7	7	1	0	0				0	0			1700	WQCC-9	6	0
Ethylbenzene	VOC	9	9	1	0	0				0	0			29000	WQCC-9	7	0
Hexanone[2-]	VOC	8	8	1	0	0				0	0			1900	EPA-4	7	0
Iodomethane	VOC	5	5	1	0	0				0	0			4000	WQCC-9	4	0

Table B-98 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Isopropylbenzene	VOC	5	5	1	0	0				0	0			660	EPA-4	4	0
Isopropyltoluene[4-]	VOC	5	5	1	0	0				0	0			660	EPA-4	4	0
Methyl-2-pentanone[4-]	VOC	8	8	1	0	0				0	0			160	EPA-4	7	0
Propylbenzene[1-]	VOC	5	5	1	0	0				0	0			61	EPA-4	4	0
Styrene	VOC	8	8	1	0	0				0	0			1600	EPA-4	7	0
Tetrachloroethane[1,1,1,2-]	VOC	7	7	1	0	0				6	0			4.3	EPA-4	7	6
Tetrachloroethane[1,1,2,2-]	VOC	6	6	1	0	0				0	0			110	WQCC-9	4	0
Tetrachloroethene	VOC	9	9	1	0	0				0	0			88.5	WQCC-9	7	0
Toluene	VOC	9	9	1	0	0				0	0			200000	WQCC-9	7	0
Trichloro-1,2,2-trifluoroethane	VOC	4	4	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	3	3	1	0	0				0	0			940	WQCC-9	3	0
Trichlorobenzene[1,2,4-]	VOC	7	7	1	0	0				0	0			940	WQCC-9	4	0
Trichloroethane[1,1,1-]	VOC	9	9	1	0	0				0	0			790	EPA-4	7	0
Trichloroethane[1,1,2-]	VOC	9	9	1	0	0				0	0			420	WQCC-9	7	0
Trichloroethene	VOC	9	9	1	0	0				0	0			810	WQCC-9	7	0
Trichlorofluoromethane	VOC	6	6	1	0	0				0	0			1300	EPA-4	4	0
Trichloropropane[1,2,3-]	VOC	5	5	1	0	0				5	0			0.016	EPA-4	4	4
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	5	5	1	0	0				0	0			12	EPA-4	4	0
Trimethylbenzene[1,3,5-]	VOC	5	5	1	0	0				0	0			12	EPA-4	4	0
Vinyl Chloride	VOC	9	9	1	0	0				0	0			5250	WQCC-9	7	0
Xylene (Total)	VOC	6	6	1	0	0				0	0			1400	EPA-4	6	0
Xylene[1,2-]	VOC	4	4	1	0	0				0	0			1400	EPA-4	4	0
Xylene[1,3-]+Xylene[1,4-]	VOC	3	3	1	0	0				0	0			1400	EPA-4	3	0

Table B-99
Nonfiltered Miscellaneous Constituents of Mortandad Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	1	1	1	0	0											
Chloride	ANION	20	0	0	20	1	4230	15550	73800								
Fluoride	ANION	20	0	0	20	1	229	765	2800	0	1	0.3477	1.273	2200	EPA-4	5	0
Nitrate	ANION	22	1	0.04545	21	0.9545	60	3900	17000	0	2	0.39	1.7	10000	EPA-4	5	0
Perchlorate	ANION	6	4	0.6667	2	0.3333	39	69.25	99.5	0	2	18.72	26.89	3.7	EPA-4	4	0
Sulfate	ANION	20	1	0.05	19	0.95	2000	25700	110000								
Calcium	GENINORG	10	0	0	10	1	7815	26100	51000								
Hardness	GENINORG	6	0	0	6	1	38100	82000	140000								
Magnesium	GENINORG	10	0	0	10	1	2600	3562	7900								
Potassium	GENINORG	10	0	0	10	1	3200	8055	14000								
Sodium	GENINORG	10	0	0	10	1	7320	48500	87000								
pH	WATER_QUAL	8	0	0	8	1	6.4	7.6	8.1								
Specific Conductance	WATER_QUAL	8	0	0	8	1	128	412.5	662								
Suspended Sediment Concentration	WATER_QUAL	1	0	0	1	1	15200	15200	15200								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	220000	220000	220000								
Total Suspended Solids	WATER_QUAL	20	4	0.2	16	0.8	2000	14000	1000000								

Table B-100
Filtered Inorganics of Pajarito Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	45	8	0.1778	37	0.8222	78.1	740	24600	0	0	0.02	0.6649	37000	EPA-4	11	0
Antimony	METALS	41	32	0.7805	9	0.2195	0.41	3	11.3	13	4	0.5	1.883	6	EPA-2	12	7
Arsenic	METALS	47	45	0.9574	2	0.04255	3.5	3.55	3.6	3	0	0.355	0.36	10	EPA-2	12	0
Barium	METALS	47	2	0.04255	45	0.9574	40	70	480	0	0	0.07	0.48	1000	WQCC-11	12	0
Beryllium	METALS	46	32	0.6957	14	0.3043	0.02	0.1375	3	17	0	0.03438	0.75	4	EPA-2	12	2
Boron	METALS	15	1	0.06667	14	0.9333	20	31.5	80.1	0	0	0.009545	0.02427	3300	EPA-4	11	0
Cadmium	METALS	46	39	0.8478	7	0.1522	0.162	0.29	7	17	2	0.058	1.4	5	EPA-2	12	0
Chromium	METALS	46	34	0.7391	12	0.2609	0.8	3.55	7	0	0	0.071	0.14	50	WQCC-11	12	0
Cobalt	METALS	46	32	0.6957	14	0.3043	0.12	1.55	15								
Copper	METALS	46	33	0.7174	13	0.2826	0.61	9.5	17.8	0	0	0.0095	0.0178	1000	WQCC-12	12	0
Cyanide (Total)	CN	1	1	1	0	0				0	0			200	WQCC-11	1	0
Iron	METALS	45	2	0.04444	43	0.9556	55.3	480	13500	0	11	0.48	13.5	1000	WQCC-12	11	0
Lead	METALS	47	39	0.8298	8	0.1702	0.3555	1.804	8.6	1	0	0.1203	0.5733	15	EPA-2	12	1
Lithium	METALS	1	1	1	0	0				0	0			730	EPA-4	1	0
Manganese	METALS	48	7	0.1458	41	0.8542	1.8	15	12000	0	6	0.075	60	200	WQCC-12	12	0
Mercury	METALS	43	40	0.9302	3	0.06977	0.062	0.2	0.22	0	0	0.1	0.11	2	WQCC-11	12	0
Molybdenum	METALS	7	5	0.7143	2	0.2857	30	30	30	0	0	0.1667	0.1667	180	EPA-4	4	0
Nickel	METALS	46	34	0.7391	12	0.2609	1.34	5	20	0	0	0.05	0.2	100	EPA-2	12	0
Selenium	METALS	43	40	0.9302	3	0.06977	0.292	2.3	2.9	0	0	0.23	0.29	10	EPA-1	12	0
SeleniumRe	METALS	43	40	0.9302	3	0.06977	0.292	2.3	2.9	0	0	0.046	0.058	50	WQCC-11	12	0
Silver	METALS	45	42	0.9333	3	0.06667	0.65	10	10	0	0	0.2	0.2	50	WQCC-11	11	0
Strontium	METALS	7	1	0.1429	6	0.8571	95	187.5	1200	0	0	0.008523	0.05455	22000	EPA-4	4	0
Thallium	METALS	46	38	0.8261	8	0.1739	0.016	0.1005	3	30	2	0.05025	1.5	2	EPA-2	12	11
Tin	METALS	6	3	0.5	3	0.5	20	30	30	0	0	0.001364	0.001364	22000	EPA-4	3	0
Uranium	URANIUM	6	2	0.3333	4	0.6667	0.036	0.0595	0.109	0	0	0.001983	0.003633	30	EPA-2	6	0
Vanadium	METALS	46	30	0.6522	16	0.3478	0.64	2.355	20.1	0	0	0.009058	0.07731	260	EPA-4	12	0
Zinc	METALS	46	23	0.5	23	0.5	4.39	11.5	50	0	0	0.00115	0.005	10000	WQCC-12	12	0

Table B-101
Filtered Radionuclides of Pajarito Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	11	9	0.8182	2	0.1818	0.0345	0.0453	0.0561	0	0	0.03775	0.04675	1.2	DOE	6	0
Cesium-137	rad	4	4	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	4	4	1	0	0				0	0			100	EPA-2	3	0
Gross alpha	rad	4	4	1	0	0				0	0			15	EPA-2	3	0
Gross beta	rad	4	1	0.25	3	0.75	3.408	5	5.04	0	0	0.1	0.1008	50	EPA-2	3	0
Gross gamma	rad	1	1	1	0	0											
Plutonium-238	rad	11	10	0.9091	1	0.09091	0.0238	0.0238	0.0238	0	0	0.01488	0.01488	1.6	DOE	6	0
Plutonium-239	rad	11	11	1	0	0				0	0			1.2	DOE	6	0
Strontium-90	rad	11	10	0.9091	1	0.09091	0.393	0.393	0.393	0	0	0.04912	0.04912	8	EPA-2	6	0
Thorium-228	rad	3	2	0.6667	1	0.3333	0.157	0.157	0.157								
Thorium-230	rad	3	3	1	0	0											
Thorium-232	rad	3	3	1	0	0											
Tritium	rad	5	4	0.8	1	0.2	107	107	107	0	0	0.00535	0.00535	20000	EPA-2	4	0
Uranium-234	rad	21	10	0.4762	11	0.5238	0.0224	0.078	0.918	0	0	0.0039	0.0459	20	DOE	6	0
Uranium-235	rad	21	20	0.9524	1	0.04762	0.064	0.064	0.064	0	0	0.002667	0.002667	24	DOE	6	0
Uranium-238	rad	21	13	0.619	8	0.381	0.0168	0.05235	0.655	0	0	0.002181	0.02729	24	DOE	6	0

Table B-102
Filtered Organics of Pajarito Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	2	1	0.5	1	0.5	41	41	41	0	0	0.06721	0.06721	610	EPA-4	2	0
Chloromethane	VOC	2	1	0.5	1	0.5	0.78	0.78	0.78	0	0	0.052	0.052	15	EPA-4	2	0
HMX	HEXP	4	3	0.75	1	0.25	1.2	1.2	1.2	0	0	0.0006575	0.0006575	1825	EPA-4	3	0
RDX	HEXP	4	3	0.75	1	0.25	1.3	1.3	1.3	3	1	2.127	2.127	0.61	EPA-4	3	2
Amino-2,6-dinitrotoluene[4-]	HEXP	4	4	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	4	4	1	0	0											
Dinitrobenzene[1,3-]	HEXP	4	4	1	0	0				0	0			3.65	EPA-4	3	0
Dinitrotoluene[2,4-]	HEXP	4	4	1	0	0				0	0			73	EPA-4	3	0
Dinitrotoluene[2,6-]	HEXP	4	4	1	0	0				0	0			37	EPA-4	3	0
Nitrobenzene	HEXP	4	4	1	0	0				3	0			3.4	EPA-4	3	3
Nitroglycerin	HEXP	3	3	1	0	0											
Nitrotoluene[2-]	HEXP	4	4	1	0	0											
Nitrotoluene[3-]	HEXP	4	4	1	0	0				0	0			60.83	EPA-4	3	0
Nitrotoluene[4-]	HEXP	4	4	1	0	0				0	0			60.83	EPA-4	3	0
PETN	HEXP	3	3	1	0	0											
Tetryl	HEXP	4	4	1	0	0				0	0			365	EPA-4	3	0
Trinitrobenzene[1,3,5-]	HEXP	4	4	1	0	0				0	0			1095	EPA-4	3	0
Trinitrotoluene[2,4,6-]	HEXP	4	4	1	0	0				0	0			18.25	EPA-4	3	0
Aroclor-1016	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1221	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1232	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1242	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1248	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1254	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aroclor-1260	PCB	1	1	1	0	0				1	0			0.5	EPA-2	1	1
Aldrin	PEST	1	1	1	0	0				1	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	1	1	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	1	1	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	1	1	1	0	0											
BHC[gamma-]	PEST	1	1	1	0	0				0	0			0.2	EPA-2	1	0
Chlordane[alpha-]	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	1	1	1	0	0				0	0			2.8	EPA-4	1	0
DDE[4,4'-]	PEST	1	1	1	0	0				0	0			2	EPA-4	1	0
DDT[4,4'-]	PEST	1	1	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	1	1	1	0	0				1	0			0.04	EPA-4	1	1
Endosulfan I	PEST	1	1	1	0	0				0	0			220	EPA-4	1	0
Endosulfan II	PEST	1	1	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	1	1	1	0	0				0	0			220	EPA-4	1	0

Table B-102 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Endrin	PEST	1	1	1	0	0				0	0			0.2	EPA-1	1	0
EndrinRe	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Endrin Aldehyde	PEST	1	1	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	1	1	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	1	1	1	0	0				0	0			2	EPA-2	1	0
Heptachlor	PEST	1	1	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	1	1	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	1	1	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	1	1	1	0	0				1	0			3	EPA-2	1	1
Acenaphthene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzidine	SVOC	1	1	1	0	0				1	0			0.0029	EPA-4	1	1
Benzo(a)anthracene	SVOC	1	1	1	0	0				1	0			0.92	EPA-4	1	1
Benzo(a)pyrene	SVOC	1	1	1	0	0				1	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	1	1	1	0	0				1	0			0.92	EPA-4	1	1
Benzo(g,h,i)perylene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	1	1	1	0	0				1	0			9.2	EPA-4	1	1
Benzoic Acid	SVOC	1	1	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	1	1	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	1	1	1	0	0											
Bis(2-chloroethyl)ether	SVOC	1	1	1	0	0				1	0			0.10	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	1	1	1	0	0				1	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	1	1	1	0	0											
Butylbenzylphthalate	SVOC	1	1	1	0	0				0	0			7300	EPA-4	1	0
Carbazole	SVOC	1	1	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	1	1	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	1	1	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	1	1	1	0	0											
Chrysene	SVOC	1	1	1	0	0				0	0			92	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	1	1	1	0	0				1	0			0.09	EPA-4	1	1
Dibenzofuran	SVOC	1	1	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	1	1	1	0	0				1	0			1.5	EPA-4	1	1
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1

Table B-102 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Diethylphthalate	SVOC	1	1	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	1	1	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	1	1	1	0	0											
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Di-n-octylphthalate	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	1	1	1	0	0				0	0			1500	EPA-4	1	0
Fluorene	SVOC	1	1	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
Hexachlorobutadiene	SVOC	2	2	1	0	0				0	0			7.3	EPA-4	2	0
Hexachlorocyclopentadiene	SVOC	1	1	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	1	1	1	0	0				1	0			0.92	EPA-4	1	1
Isophorone	SVOC	1	1	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	1	1	1	0	0				0	0			30	WQCC-11	1	0
Methylphenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	2	2	1	0	0				0	0			30	WQCC-11	2	0
Nitroaniline[2-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitrophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				1	0			0.01	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	1	1	1	0	0				1	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0											
Pentachlorophenol	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
Phenanthrene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Pyrene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Benzene	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Bromobenzene	VOC	2	2	1	0	0				0	0			23	EPA-4	2	0
Bromochloromethane	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Bromodichloromethane	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0

Table B-102 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromoform	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Bromomethane	VOC	2	2	1	0	0				2	0			8.7	EPA-4	2	2
Butanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	2	0
Butylbenzene[n-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Butylbenzene[sec-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Butylbenzene[tert-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Carbon Disulfide	VOC	2	2	1	0	0				0	0			1000	EPA-4	2	0
Carbon Tetrachloride	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Chlorobenzene	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Chlorodibromomethane	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Chloroethane	VOC	2	2	1	0	0				0	0			39	EPA-4	2	0
Chloroform	VOC	2	2	1	0	0				0	0			100	WQCC-11	2	0
Chlorotoluene[2-]	VOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Chlorotoluene[4-]	VOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Dibromo-3-Chloropropane[1,2-]	VOC	2	2	1	0	0											
Dibromoethane[1,2-]	VOC	2	2	1	0	0				2	0			0.05	EPA-2	2	2
Dibromomethane	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Dichlorobenzene[1,2-]	VOC	2	2	1	0	0				0	0			600	EPA-2	2	0
Dichlorobenzene[1,3-]	VOC	2	2	1	0	0				0	0			18	EPA-4	2	0
Dichlorobenzene[1,4-]	VOC	2	2	1	0	0				0	0			75	EPA-2	2	0
Dichlorodifluoromethane	VOC	2	2	1	0	0				0	0			390	EPA-4	2	0
Dichloroethane[1,1-]	VOC	2	2	1	0	0				0	0			25	WQCC-11	2	0
Dichloroethane[1,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloroethene[1,1-]	VOC	2	2	1	0	0				2	0			5	WQCC-11	2	0
Dichloroethene[cis-1,2-]	VOC	2	2	1	0	0				0	0			70	EPA-2	2	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Dichloropropane[1,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloropropane[1,3-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloropropane[2,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloropropene[1,1-]	VOC	2	2	1	0	0				2	0			4	EPA-4	2	2
Dichloropropene[cis-1,3-]	VOC	2	2	1	0	0				2	0			4	EPA-4	2	2
Dichloropropene[trans-1,3-]	VOC	2	2	1	0	0				2	0			4	EPA-4	2	2
Ethylbenzene	VOC	2	2	1	0	0				0	0			700	EPA-2	2	0
Hexanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	2	0
Iodomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	2	0
Isopropylbenzene	VOC	2	2	1	0	0				0	0			660	EPA-4	2	0
Isopropyltoluene[4-]	VOC	2	2	1	0	0				0	0			660	EPA-4	2	0
Methyl-2-pentanone[4-]	VOC	2	2	1	0	0				0	0			160	EPA-4	2	0
Methylene Chloride	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0

Table B-102 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Propylbenzene[1-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Styrene	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Tetrachloroethane[1,1,1,2-]	VOC	2	2	1	0	0				2	0			4.3	EPA-4	2	2
Tetrachloroethane[1,1,2,2-]	VOC	2	2	1	0	0				0	0			10	WQCC-11	2	0
Tetrachloroethene	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Toluene	VOC	2	2	1	0	0				0	0			750	WQCC-11	2	0
Trichloro-1,2,2-trifluoroethane	VOC	2	2	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	2	2	1	0	0				0	0			70	EPA-2	2	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	2	0
Trichloroethane[1,1,1-]	VOC	2	2	1	0	0				0	0			60	WQCC-11	2	0
Trichloroethane[1,1,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Trichloroethene	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Trichlorofluoromethane	VOC	2	2	1	0	0				0	0			1300	EPA-4	2	0
Trichloropropane[1,2,3-]	VOC	2	2	1	0	0				2	0			0.02	EPA-4	2	2
Trimethylbenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			12	EPA-4	2	0
Trimethylbenzene[1,3,5-]	VOC	2	2	1	0	0				0	0			12	EPA-4	2	0
Vinyl Chloride	VOC	2	2	1	0	0				2	0			1	WQCC-11	2	2
Xylene (Total)	VOC	2	2	1	0	0				0	0			620	WQCC-11	2	0
Xylene[1,2-]	VOC	2	2	1	0	0				0	0			1400	EPA-4	2	0

Table B-103
Filtered Miscellaneous Constituents Pajarito Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	47	0	0	47	1	9200	13000	210000								
Hardness	GENINORG	5	0	0	5	1	48100	133000	705600								
Magnesium	GENINORG	47	5	0.1064	42	0.8936	2000	4190	44000								
Potassium	GENINORG	47	4	0.08511	43	0.9149	1530	3200	9000								
Sodium	GENINORG	47	5	0.1064	42	0.8936	9300	15000	280000								
Humic, Hydrophilic Acids	HUMIC_ACID	1	0	0	1	1	700	700	700								
Humic, Hydrophilic Bases	HUMIC_ACID	1	0	0	1	1	100	100	100								
Humic, Hydrophilic Neutrals	HUMIC_ACID	1	0	0	1	1	1100	1100	1100								
Humic, Hydrophilic Total	HUMIC_ACID	1	0	0	1	1	1900	1900	1900								
Humic, Hydrophobic Acids	HUMIC_ACID	1	0	0	1	1	500	500	500								
Humic, Hydrophobic Bases	HUMIC_ACID	1	0	0	1	1	100	100	100								
Humic, Hydrophobic Neutrals	HUMIC_ACID	1	0	0	1	1	300	300	300								
Humic, Hydrophobic Total	HUMIC_ACID	1	0	0	1	1	800	800	800								
Dissolved Organic Carbon	WATER_QUAL	16	0	0	16	1	810	2555	7100								
pH	WATER_QUAL	7	0	0	7	1	1.22	6.65	7.41								
Specific Conductance	WATER_QUAL	7	0	0	7	1	143	226	2250								
Total Dissolved Solids	WATER_QUAL	14	0	0	14	1	130000	217000	1450000	0	2	0.217	1.45	1000000	WQCC-12	6	0
Total Suspended Solids	WATER_QUAL	1	0	0	1	1	14000	14000	14000								

Table B-104
Nonfiltered Inorganics of Pajarito Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	84	5	0.05952	79	0.9405	30.6	14400	306700	0	19	0.3892	8.289	37000	EPA-4	20	0
Antimony	METALS	78	61	0.7821	17	0.2179	0.51	3	534.7	28	4	0.5	89.12	6	EPA-2	20	9
Arsenic	METALS	83	48	0.5783	35	0.4217	1.9	10	674.1	5	18	1	67.41	10	EPA-2	20	1
Barium	METALS	84	4	0.04762	80	0.9524	60	190	2460	0	6	0.19	2.46	1000	WQCC-11	20	0
Beryllium	METALS	84	53	0.631	31	0.369	0.24	3.06	687.7	25	15	0.765	171.9	4	EPA-2	20	1
Boron	METALS	19	7	0.3684	12	0.6316	20	31	58	0	0	0.009394	0.01758	3300	EPA-4	11	0
Cadmium	METALS	84	68	0.8095	16	0.1905	0.09	0.93	959	31	4	0.186	191.8	5	EPA-2	20	1
Chromium	METALS	84	40	0.4762	44	0.5238	3.2	19.05	766.5	0	12	0.381	15.33	50	WQCC-11	20	0
Cobalt	METALS	84	42	0.5	42	0.5	0.28	6.25	20000								
Copper	METALS	84	40	0.4762	44	0.5238	0.83	14.15	769.3	0	0	0.01415	0.7693	1000	WQCC-12	20	0
Cyanide (Total)	CN	15	12	0.8	3	0.2	7.15	10	10	0	0	0.05	0.05	200	WQCC-11	7	0
Iron	METALS	84	0	0	84	1	35.4	7880	195900	0	62	7.88	195.9	1000	WQCC-12	20	0
Lead	METALS	84	36	0.4286	48	0.5714	2	20.15	791	1	27	1.343	52.73	15	EPA-2	20	1
Lithium	METALS	3	1	0.3333	2	0.6667	1	1	1	0	0	0.00137	0.00137	730	EPA-4	3	0
Manganese	METALS	85	8	0.09412	77	0.9059	2.5	372	12000	0	57	1.86	60	200	WQCC-12	20	0
Mercury	METALS	84	67	0.7976	17	0.2024	0.032	0.2	2.44	0	1	0.1	1.22	2	WQCC-11	20	0
Molybdenum	METALS	10	8	0.8	2	0.2	30	30	30	0	0	0.1667	0.1667	180	EPA-4	3	0
Nickel	METALS	84	43	0.5119	41	0.4881	1.4	12.5	723	0	3	0.125	7.23	100	EPA-2	20	0
Selenium	METALS	83	69	0.8313	14	0.1687	0.563	2.6	935.5	0	2	0.26	93.55	10	EPA-1	20	0
SeleniumRe	METALS	83	69	0.8313	14	0.1687	0.563	2.6	935.5	0	2	0.052	18.71	50	WQCC-11	20	0
Silver	METALS	84	76	0.9048	8	0.09524	0.11	5.9	979	0	2	0.118	19.58	50	WQCC-11	20	0
Strontium	METALS	10	0	0	10	1	94	166	1100	0	0	0.007545	0.05	22000	EPA-4	3	0
Thallium	METALS	84	70	0.8333	14	0.1667	0.1	1.325	977.5	66	5	0.6625	488.8	2	EPA-2	20	18
Tin	METALS	10	8	0.8	2	0.2	30	30	30	0	0	0.001364	0.001364	22000	EPA-4	3	0
Uranium	URANIUM	41	4	0.09756	37	0.9024	0.11	0.82	31.4	0	1	0.02733	1.047	30	EPA-2	18	0
Vanadium	METALS	84	32	0.381	52	0.619	2.6	27.5	817	0	3	0.1058	3.142	260	EPA-4	20	0
Zinc	METALS	84	23	0.2738	61	0.7262	5.3	55.1	1180	0	0	0.00551	0.118	10000	WQCC-12	20	0

Table B-105
Nonfiltered Radionuclides of Pajarito Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	16	12	0.75	4	0.25	0.0536	0.0603	0.6114	0	0	0.05025	0.5095	1.2	DOE	7	0
Cesium-137	rad	15	15	1	0	0				0	0			120	DOE	7	0
Cobalt-60	rad	10	9	0.9	1	0.1	28.56	28.56	28.56	0	0	0.2856	0.2856	100	EPA-2	6	0
Gross alpha	rad	18	18	1	0	0				5	0			15	EPA-2	9	5
Gross beta	rad	18	15	0.8333	3	0.1667	4.5	6.9	8.085	1	0	0.138	0.1617	50	EPA-2	9	1
Gross gamma	rad	13	12	0.9231	1	0.07692	240	240	240								
Plutonium-238	rad	41	38	0.9268	3	0.07317	0.03	0.03	0.7074	0	0	0.01875	0.4421	1.6	DOE	15	0
Plutonium-239	rad	49	46	0.9388	3	0.06122	0.05	17150	33250	5	2	14290	27710	1.2	DOE	20	5
Strontium-90	rad	15	15	1	0	0				0	0			8	EPA-2	7	0
Thorium-228	rad	18	8	0.4444	10	0.5556	0.06	0.455	6.69								
Thorium-230	rad	18	4	0.2222	14	0.7778	0.12	0.315	3.68								
Thorium-232	rad	18	9	0.5	9	0.5	0.05	0.6	6.35								
Tritium	rad	32	24	0.75	8	0.25	80.46	101.1	3720	0	0	0.005055	0.186	20000	EPA-2	18	0
Uranium-234	rad	23	2	0.08696	21	0.913	0.0833	0.85	11.05	0	0	0.0425	0.5525	20	DOE	8	0
Uranium-235	rad	23	12	0.5217	11	0.4783	0.0232	0.075	0.239	0	0	0.003125	0.009958	24	DOE	8	0
Uranium-238	rad	23	2	0.08696	21	0.913	0.0604	0.844	10.3	0	0	0.03517	0.4292	24	DOE	8	0

Table B-106
Nonfiltered Organics of Pajarito Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	0	0	1	1	3.63E-05	3.63E-05	3.63E-05								
Heptachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	0	0	1	1	6.93E-05	6.93E-05	6.93E-05								
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	0	0	1	1	8.87E-06	8.87E-06	8.87E-06								
Heptachlorodibenzofurans (Total)	DIOXIN_FURAN	1	0	0	1	1	8.87E-06	8.87E-06	8.87E-06								
Hexachlorodibenzofurans (Total)	DIOXIN_FURAN	1	0	0	1	1	1.18E-05	1.18E-05	1.18E-05								
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-	DIOXIN_FURAN	1	0	0	1	1	0.000354	0.000354	0.000354								
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	0	0	1	1	9.84E-06	9.84E-06	9.84E-06								
HMX	HEXP	41	31	0.7561	10	0.2439	0.435	1.425	2.74	0	0	0.0007808	0.001501	1825	EPA-4	17	0
RDX	HEXP	41	31	0.7561	10	0.2439	0.282	0.622	1.2	18	6	1.018	1.963	0.61	EPA-4	17	11
PETN	HEXP	10	8	0.8	2	0.2	0.18	0.18	0.18								
Acetone	VOC	69	60	0.8696	9	0.1304	7.83	18.2	35.4	2	0	0.02984	0.05803	610	EPA-4	20	2
Methylene Chloride	VOC	73	68	0.9315	5	0.06849	1.08	1.72	27.52	51	2	0.344	5.504	5	EPA-2	20	0
Toluene	VOC	73	69	0.9452	4	0.05479	1	14.71	48.5	0	0	0.01961	0.06467	750	WQCC-11	20	0
Bis(2-ethylhexyl)phthalate	SVOC	55	52	0.9455	3	0.05455	1	1.4	23	44	1	0.2333	3.833	6	EPA-2	20	20
Butanone[2-]	VOC	70	67	0.9571	3	0.04286	1	1	7	4	0	0.0005263	0.003684	1900	EPA-4	20	4
Nitrobenzene	HEXP	71	68	0.9577	3	0.04225	0.175	0.316	0.493	35	0	0.09294	0.145	3.4	EPA-4	20	13
Nitrobenzene	SVOC	71	68	0.9577	3	0.04225	0.175	0.316	0.493	35	0	0.09294	0.145	3.4	EPA-4	20	13
Chloro-3-methylphenol[4-]	SVOC	54	52	0.963	2	0.03704	5.04	15.05	25.05	52	2	3.01	5.01	5	WQCC-12	20	18
Phenol	SVOC	54	52	0.963	2	0.03704	6.12	12.18	18.25	52	2	2.436	3.65	5	WQCC-12	20	18
Nitroso-di-n-propylamine[N-]	SVOC	55	53	0.9636	2	0.03636	16.5	17.5	18.5	53	2	182.3	192.7	0.10	EPA-4	20	18
Acenaphthene	SVOC	58	56	0.9655	2	0.03448	12.1	12.15	12.2	0	0	0.03284	0.03297	370	EPA-4	22	0
Pyrene	SVOC	58	56	0.9655	2	0.03448	12.5	13.4	14.3	0	0	0.07444	0.07944	180	EPA-4	22	0
Trichlorobenzene[1,2,4-]	VOC	60	58	0.9667	2	0.03333	11.14	15.57	20	4	0	0.2224	0.2857	70	EPA-2	20	0
Dinitrotoluene[2,4-]	HEXP	71	69	0.9718	2	0.02817	0.6995	6.575	12.45	0	0	0.09007	0.1705	73	EPA-4	20	0
Benzene	VOC	73	71	0.9726	2	0.0274	48.85	52.45	56.05	62	2	10.49	11.21	5	EPA-2	20	0
Chlorobenzene	VOC	73	71	0.9726	2	0.0274	39.45	43.32	47.2	4	0	0.4332	0.472	100	EPA-2	20	4
Dichloroethene[1,1-]	VOC	73	71	0.9726	2	0.0274	49.8	59.12	68.45	58	2	11.82	13.69	5	WQCC-11	20	0
Trichloroethene	VOC	73	71	0.9726	2	0.0274	44.3	48.8	53.3	62	2	9.76	10.66	5	EPA-2	20	4
Amino-4,6-dinitrotoluene[2-]	HEXP	37	36	0.973	1	0.02703	0.8	0.8	0.8								
Trinitrobenzene[1,3,5-]	HEXP	37	36	0.973	1	0.02703	0.308	0.308	0.308	0	0	0.0002813	0.0002813	1095	EPA-4	16	0
Amino-2,6-dinitrotoluene[4-]	HEXP	39	38	0.9744	1	0.02564	0.232	0.232	0.232								
Dinitrobenzene[1,3-]	HEXP	40	39	0.975	1	0.025	0.2845	0.2845	0.2845	0	0	0.07795	0.07795	3.65	EPA-4	16	0
Nitrotoluene[2-]	HEXP	40	39	0.975	1	0.025	0.179	0.179	0.179								
Nitrotoluene[3-]	HEXP	40	39	0.975	1	0.025	0.25	0.25	0.25	0	0	0.00411	0.00411	60.83	EPA-4	16	0
Nitrotoluene[4-]	HEXP	40	39	0.975	1	0.025	0.261	0.261	0.261	0	0	0.00429	0.00429	60.83	EPA-4	16	0
Tetryl	HEXP	40	39	0.975	1	0.025	0.252	0.252	0.252	0	0	0.0006904	0.0006904	365	EPA-4	16	0
Trinitrotoluene[2,4,6-]	HEXP	41	40	0.9756	1	0.02439	0.2725	0.2725	0.2725	0	0	0.01493	0.01493	18.25	EPA-4	17	0
Chlorophenol[2-]	SVOC	54	53	0.9815	1	0.01852	22.95	22.95	22.95	53	1	4.59	4.59	5	WQCC-12	20	19
Nitrophenol[4-]	SVOC	54	53	0.9815	1	0.01852	19.3	19.3	19.3	53	1	3.86	3.86	5	WQCC-12	20	19
Pentachlorophenol	SVOC	54	53	0.9815	1	0.01852	9.68	9.68	9.68	53	1	9.68	9.68	1	EPA-2	20	19
Di-n-butylphthalate	SVOC	55	54	0.9818	1	0.01818	12.2	12.2	12.2	0	0	0.003297	0.003297	3700	EPA-4	20	0
Di-n-octylphthalate	SVOC	55	54	0.9818	1	0.01818	1	1	1	0	0	0.00137	0.00137	730	EPA-4	20	0
Dichloroethene[cis-1,2-]	VOC	64	63	0.9844	1	0.01562	47.15	47.15	47.15	0	0	0.6736	0.6736	70	EPA-2	20	0
Dichloroethene[trans-1,2-]	VOC	68	67	0.9853	1	0.01471	50.55	50.55	50.55	0	0	0.5055	0.5055	100	EPA-2	20	0
Carbon Disulfide	VOC	70	69	0.9857	1	0.01429	0.6	0.6	0.6	0	0	0.0006	0.0006	1000	EPA-4	20	0

Table B-106 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibromomethane	VOC	70	69	0.9857	1	0.01429	45.05	45.05	45.05	0	0	0.7385	0.7385	61	EPA-4	20	0
Methyl-2-pentanone[4-]	VOC	70	69	0.9857	1	0.01429	20	20	20	0	0	0.125	0.125	160	EPA-4	20	0
Styrene	VOC	70	69	0.9857	1	0.01429	41.85	41.85	41.85	4	0	0.4185	0.4185	100	EPA-2	20	0
Dinitrotoluene[2,6-]	HEXP	71	70	0.9859	1	0.01408	0.7305	0.7305	0.7305	0	0	0.01974	0.01974	37	EPA-4	20	0
Chloroform	VOC	72	71	0.9861	1	0.01389	46.05	46.05	46.05	4	0	0.4605	0.4605	100	WQCC-11	20	4
Dichloropropene[trans-1,3-]	VOC	72	71	0.9861	1	0.01389	37.95	37.95	37.95	57	1	9.488	9.488	4	EPA-4	20	15
Bromodichloromethane	VOC	73	72	0.9863	1	0.0137	45.4	45.4	45.4	0	0	0.454	0.454	100	EPA-2	20	0
Bromoform	VOC	73	72	0.9863	1	0.0137	39.85	39.85	39.85	0	0	0.3985	0.3985	100	EPA-2	20	0
Carbon Tetrachloride	VOC	73	72	0.9863	1	0.0137	42	42	42	62	1	8.4	8.4	5	EPA-2	20	0
Chlorodibromomethane	VOC	73	72	0.9863	1	0.0137	37.1	37.1	37.1	0	0	0.371	0.371	100	EPA-2	20	0
Chloromethane	VOC	73	72	0.9863	1	0.0137	1.2	1.2	1.2	0	0	0.08	0.08	15	EPA-4	20	0
Dichlorobenzene[1,2-]	VOC	73	72	0.9863	1	0.0137	40.7	40.7	40.7	4	0	0.06783	0.06783	600	EPA-2	20	0
Dichlorobenzene[1,3-]	VOC	73	72	0.9863	1	0.0137	40.4	40.4	40.4	0	1	2.244	2.244	18	EPA-4	20	0
Dichlorobenzene[1,4-]	VOC	73	72	0.9863	1	0.0137	40.8	40.8	40.8	0	0	0.544	0.544	75	EPA-2	20	0
Dichloroethane[1,1-]	VOC	73	72	0.9863	1	0.0137	46.75	46.75	46.75	4	1	1.87	1.87	25	WQCC-11	20	4
Dichloroethane[1,2-]	VOC	73	72	0.9863	1	0.0137	47.05	47.05	47.05	62	1	9.41	9.41	5	EPA-2	20	0
Dichloropropene[cis-1,3-]	VOC	73	72	0.9863	1	0.0137	49.55	49.55	49.55	58	1	12.39	12.39	4	EPA-4	20	15
Ethylbenzene	VOC	73	72	0.9863	1	0.0137	42.3	42.3	42.3	4	0	0.06043	0.06043	700	EPA-2	20	0
Tetrachloroethene	VOC	73	72	0.9863	1	0.0137	30.1	30.1	30.1	58	1	6.02	6.02	5	EPA-2	20	0
Trichloroethane[1,1,1-]	VOC	73	72	0.9863	1	0.0137	44.05	44.05	44.05	4	0	0.7342	0.7342	60	WQCC-11	20	4
Trichloroethane[1,1,2-]	VOC	73	72	0.9863	1	0.0137	40.7	40.7	40.7	62	1	8.14	8.14	5	EPA-2	20	0
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0				0	0			0.00011	EPA-4	1	0
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0				0	0			3.00E-05	EPA-2	1	0
Tetrachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Amino-DNTs	HEXP	1	1	1	0	0											
Chloronitrobenzene[4-]	HEXP	1	1	1	0	0											
Nitroglycerin	HEXP	8	8	1	0	0											
Aroclor-1016	PCB	6	6	1	0	0				4	0			0.5	EPA-2	4	2
Aroclor-1221	PCB	6	6	1	0	0				4	0			0.5	EPA-2	4	2
Aroclor-1232	PCB	6	6	1	0	0				4	0			0.5	EPA-2	4	2

Table B-106 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1242	PCB	7	7	1	0	0				5	0			0.5	EPA-2	4	3
Aroclor-1248	PCB	6	6	1	0	0				4	0			0.5	EPA-2	4	2
Aroclor-1254	PCB	7	7	1	0	0				5	0			0.5	EPA-2	4	3
Aroclor-1260	PCB	7	7	1	0	0				5	0			0.5	EPA-2	4	3
Aroclor-1262	PCB	4	4	1	0	0				2	0			0.5	EPA-2	2	0
Aldrin	PEST	10	10	1	0	0				10	0			0.04	EPA-4	9	9
BHC[alpha-]	PEST	10	10	1	0	0				8	0			0.11	EPA-4	9	8
BHC[beta-]	PEST	10	10	1	0	0				8	0			0.37	EPA-4	9	8
BHC[delta-]	PEST	10	10	1	0	0											
BHC[gamma-]	PEST	10	10	1	0	0				8	0			0.2	EPA-2	9	8
Chlordane[alpha-]	PEST	2	2	1	0	0				0	0			2	EPA-2	2	0
Chlordane[gamma-]	PEST	2	2	1	0	0				0	0			2	EPA-2	2	0
DDD[4,4'-]	PEST	10	10	1	0	0				8	0			2.8	EPA-4	9	8
DDE[4,4'-]	PEST	10	10	1	0	0				8	0			2	EPA-4	9	8
DDT[4,4'-]	PEST	10	10	1	0	0				8	0			2	EPA-4	9	8
Dieldrin	PEST	10	10	1	0	0				10	0			0.04	EPA-4	9	9
Endosulfan I	PEST	10	10	1	0	0				0	0			220	EPA-4	9	0
Endosulfan II	PEST	10	10	1	0	0				0	0			220	EPA-4	9	0
Endosulfan Sulfate	PEST	10	10	1	0	0				0	0			220	EPA-4	9	0
Endrin	PEST	10	10	1	0	0				8	0			0.2	EPA-1	9	8
EndrinRe	PEST	10	10	1	0	0				8	0			2	EPA-2	9	8
Endrin Aldehyde	PEST	10	10	1	0	0				8	0			0.2	EPA-1	9	8
Endrin AldehydeRe	PEST	10	10	1	0	0				8	0			2	EPA-2	9	8
Endrin Ketone	PEST	2	2	1	0	0				0	0			0.2	EPA-1	2	0
Endrin KetoneRe	PEST	2	2	1	0	0				0	0			2	EPA-2	2	0
Heptachlor	PEST	10	10	1	0	0				8	0			0.4	EPA-2	9	8
Heptachlor Epoxide	PEST	10	10	1	0	0				8	0			0.2	EPA-2	9	8
Methoxychlor[4,4'-]	PEST	2	2	1	0	0				0	0			40	EPA-2	2	0
Toxaphene (Technical Grade)	PEST	2	2	1	0	0				2	0			3	EPA-2	2	2
Acenaphthylene	SVOC	58	58	1	0	0				0	0			370	EPA-4	22	0
Acetophenone	SVOC	8	8	1	0	0											
Aniline	SVOC	55	55	1	0	0				0	0			120	EPA-4	20	0
Anthracene	SVOC	58	58	1	0	0				0	0			1800	EPA-4	22	0
Azobenzene	SVOC	43	43	1	0	0				43	0			6.1	EPA-4	15	15
Benzidine	SVOC	25	25	1	0	0				25	0			0.0029	EPA-4	16	16
Benzo(a)anthracene	SVOC	58	58	1	0	0				55	0			0.92	EPA-4	22	20
Benzo(a)pyrene	SVOC	61	61	1	0	0				58	0			0.2	EPA-2	22	22
Benzo(b)fluoranthene	SVOC	58	58	1	0	0				55	0			0.92	EPA-4	22	20
Benzo(g,h,i)perylene	SVOC	58	58	1	0	0				0	0			180	EPA-4	22	0
Benzo(k)fluoranthene	SVOC	53	53	1	0	0				48	0			9.2	EPA-4	22	20
Benzoic Acid	SVOC	55	55	1	0	0				0	0			150000	EPA-4	20	0
Benzyl Alcohol	SVOC	55	55	1	0	0				0	0			11000	EPA-4	20	0
Bis(2-chloroethoxy)methane	SVOC	55	55	1	0	0											
Bis(2-chloroethyl)ether	SVOC	55	55	1	0	0				55	0			0.10	EPA-4	20	20
Bromophenyl-phenylether[4-]	SVOC	55	55	1	0	0											

Table B-106 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Butylbenzylphthalate	SVOC	55	55	1	0	0				0	0			7300	EPA-4	20	0
Carbazole	SVOC	20	20	1	0	0				0	0			34	EPA-4	8	0
Chloroaniline[4-]	SVOC	55	55	1	0	0				0	0			150	EPA-4	20	0
Chloronaphthalene[2-]	SVOC	55	55	1	0	0				0	0			490	EPA-4	20	0
Chlorophenyl-phenyl[4-] Ether	SVOC	55	55	1	0	0											
Chrysene	SVOC	58	58	1	0	0				0	0			92	EPA-4	22	0
Dibenz(a,h)anthracene	SVOC	58	58	1	0	0				55	0			0.09	EPA-4	22	20
Dibenzofuran	SVOC	55	55	1	0	0				1	0			24	EPA-4	20	1
Dichlorobenzidine[3,3'-]	SVOC	55	55	1	0	0				55	0			1.5	EPA-4	20	20
Dichlorophenol[2,4-]	SVOC	54	54	1	0	0				54	0			5	WQCC-12	20	20
Diethylphthalate	SVOC	55	55	1	0	0				0	0			29000	EPA-4	20	0
Dimethyl Phthalate	SVOC	55	55	1	0	0				0	0			370000	EPA-4	20	0
Dimethylphenol[2,4-]	SVOC	54	54	1	0	0				0	0			730	EPA-4	20	0
Dinitro-2-methylphenol[4,6-]	SVOC	54	54	1	0	0											
Diphenylamine	SVOC	2	2	1	0	0				0	0			910	EPA-4	2	0
Diphenylhydrazine[1,2-]	SVOC	10	10	1	0	0											
Fluoranthene	SVOC	58	58	1	0	0				0	0			1500	EPA-4	22	0
Fluorene	SVOC	58	58	1	0	0				0	0			240	EPA-4	22	0
Hexachlorobenzene	SVOC	55	55	1	0	0				55	0			1	EPA-2	20	20
Hexachlorobutadiene	SVOC	60	60	1	0	0				43	0			7.3	EPA-4	20	20
Hexachlorocyclopentadiene	SVOC	55	55	1	0	0				0	0			50	EPA-2	20	0
Hexachloroethane	SVOC	55	55	1	0	0				0	0			37	EPA-4	20	0
Indeno(1,2,3-cd)pyrene	SVOC	58	58	1	0	0				55	0			0.92	EPA-4	22	20
Isophorone	SVOC	55	55	1	0	0				0	0			710	EPA-4	20	0
Methylnaphthalene[1-]	SVOC	3	3	1	0	0											
Methylnaphthalene[2-]	SVOC	58	58	1	0	0				0	0			30	WQCC-11	22	0
Methylphenol[2-]	SVOC	54	54	1	0	0				54	0			5	WQCC-12	20	20
Methylphenol[3-]	SVOC	8	8	1	0	0											
Methylphenol[4-]	SVOC	46	46	1	0	0				0	0			180	EPA-4	15	0
Methylpyridine[2-]	SVOC	4	4	1	0	0											
Naphthalene	SVOC	61	61	1	0	0				3	0			30	WQCC-11	22	3
Nitroaniline[2-]	SVOC	55	55	1	0	0				55	0			2.2	EPA-4	20	20
Nitroaniline[3-]	SVOC	55	55	1	0	0				55	0			2.2	EPA-4	20	20
Nitroaniline[4-]	SVOC	55	55	1	0	0				55	0			2.2	EPA-4	20	20
Nitrophenol[2-]	SVOC	54	54	1	0	0				54	0			5	WQCC-12	20	20
Nitrosodimethylamine[N-]	SVOC	55	55	1	0	0				55	0			0.013	EPA-4	20	20
Nitrosodiphenylamine[N-]	SVOC	53	53	1	0	0				0	0			140	EPA-4	20	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	52	52	1	0	0											
Phenanthrene	SVOC	58	58	1	0	0				0	0			1800	EPA-4	22	0
Pyridine	SVOC	22	22	1	0	0				0	0			37	EPA-4	15	0
Tributyl Phosphate	SVOC	8	8	1	0	0											
Trichlorophenol[2,4,5-]	SVOC	54	54	1	0	0				54	0			5	WQCC-12	20	20
Trichlorophenol[2,4,6-]	SVOC	54	54	1	0	0				54	0			5	WQCC-12	20	20
Total Recoverable Petroleum Hydrocarb	TPH	3	3	1	0	0											
Acrolein	VOC	8	8	1	0	0											

Table B-106 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acrylonitrile	VOC	8	8	1	0	0											
Bromobenzene	VOC	62	62	1	0	0				0	0			23	EPA-4	15	0
Bromochloromethane	VOC	62	62	1	0	0				58	0			5	EPA-2	15	0
Bromomethane	VOC	73	73	1	0	0				58	0			8.7	EPA-4	20	15
Butylbenzene[n-]	VOC	62	62	1	0	0				0	0			61	EPA-4	15	0
Butylbenzene[sec-]	VOC	62	62	1	0	0				0	0			61	EPA-4	15	0
Butylbenzene[tert-]	VOC	62	62	1	0	0				0	0			61	EPA-4	15	0
Chloroethane	VOC	73	73	1	0	0				0	0			39	EPA-4	20	0
Chloroethyl vinyl ether[2-]	VOC	8	8	1	0	0											
Chlorotoluene[2-]	VOC	62	62	1	0	0				0	0			120	EPA-4	15	0
Chlorotoluene[4-]	VOC	62	62	1	0	0				0	0			120	EPA-4	15	0
Dibromo-3-Chloropropane[1,2-]	VOC	62	62	1	0	0											
Dibromoethane[1,2-]	VOC	63	63	1	0	0				59	0			0.05	EPA-2	15	15
Dichlorodifluoromethane	VOC	70	70	1	0	0				0	0			390	EPA-4	20	0
Dichloroethene[cis/trans-1,2-]	VOC	7	7	1	0	0											
Dichloropropane[1,2-]	VOC	73	73	1	0	0				58	0			5	EPA-2	20	0
Dichloropropane[1,3-]	VOC	70	70	1	0	0				58	0			5	EPA-2	20	0
Dichloropropane[2,2-]	VOC	62	62	1	0	0				58	0			5	EPA-2	15	0
Dichloropropene[1,1-]	VOC	70	70	1	0	0				58	0			4	EPA-4	20	15
Hexanone[2-]	VOC	70	70	1	0	0				0	0			1900	EPA-4	20	0
Iodomethane	VOC	62	62	1	0	0				0	0			8.7	EPA-4	15	0
Isopropylbenzene	VOC	70	70	1	0	0				0	0			660	EPA-4	20	0
Isopropyltoluene[4-]	VOC	62	62	1	0	0				0	0			660	EPA-4	15	0
Methyl tert-Butyl Ether	VOC	1	1	1	0	0											
Propylbenzene[1-]	VOC	62	62	1	0	0				0	0			61	EPA-4	15	0
Tetrachloroethane[1,1,1,2-]	VOC	63	63	1	0	0				58	0			4.3	EPA-4	15	15
Tetrachloroethane[1,1,2,2-]	VOC	72	72	1	0	0				4	0			10	WQCC-11	20	4
Trichloro-1,2,2-trifluoroethane	VOC	50	50	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	19	19	1	0	0				0	0			70	EPA-2	11	0
Trichlorofluoromethane	VOC	73	73	1	0	0				0	0			1300	EPA-4	20	0
Trichloropropane[1,2,3-]	VOC	62	62	1	0	0				62	0			0.10	EPA-4	15	15
Trichlorotrifluoroethane	VOC	11	11	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	62	62	1	0	0				0	0			12	EPA-4	15	0
Trimethylbenzene[1,3,5-]	VOC	62	62	1	0	0				0	0			12	EPA-4	15	0
Vinyl acetate	VOC	8	8	1	0	0											
Vinyl Chloride	VOC	73	73	1	0	0				72	0			1	WQCC-11	20	20
Xylene (Total)	VOC	69	69	1	0	0				0	0			620	WQCC-11	20	0
Xylene[1,2-]	VOC	19	19	1	0	0				0	0			1400	EPA-4	11	0
Xylene[1,3-]+Xylene[1,4-]	VOC	6	6	1	0	0				0	0			620	WQCC-11	6	0

Table B-107
Nonfiltered Miscellaneous Constituents of Pajarito Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	9	7	0.7778	2	0.2222	620	660	700								
Bromide	ANION	9	9	1	0	0											
Chlorate	ANION	5	5	1	0	0											
Chloride	ANION	37	0	0	37	1	7200	18000	382000	0	1	0.072	1.528	250000	WQCC-12	13	0
Fluoride	ANION	27	9	0.3333	18	0.6667	90	150	440	4	0	0.09375	0.275	1600	WQCC-11	11	0
Nitrate	ANION	32	1	0.03125	31	0.9688	15	790	17400	0	1	0.079	1.74	10000	EPA-4	13	0
Nitrite	ANION	5	5	1	0	0				0	0			1000	EPA-4	5	0
Oxalate	ANION	5	5	1	0	0											
Perchlorate	ANION	7	7	1	0	0				0	0			3.7	EPA-4	6	0
Sulfate	ANION	39	1	0.02564	38	0.9744	3300	10120	131000	0	0	0.01687	0.2183	600000	WQCC-12	11	0
Calcium	GENINORG	79	1	0.01266	78	0.9873	10300	16000	131000								
Hardness	GENINORG	5	0	0	5	1	45000	70500	183000								
Magnesium	GENINORG	79	10	0.1266	69	0.8734	3300	5700	53100								
Potassium	GENINORG	79	6	0.07595	73	0.9241	1000	5160	60500								
Sodium	GENINORG	79	5	0.06329	74	0.9367	11700	14950	180000								
Dissolved Organic Carbon	WATER_QUAL	1	0	0	1	1	1400	1400	1400								
pH	WATER_QUAL	10	0	0	10	1	6.1	6.6	7.5								
Specific Conductance	WATER_QUAL	7	2	0.2857	5	0.7143	230	240	322								
Total Dissolved Solids	WATER_QUAL	5	0	0	5	1	110000	120000	150000	0	0	0.12	0.15	1000000	WQCC-12	5	0
Total Organic Carbon	WATER_QUAL	14	2	0.1429	12	0.8571	870	2250	4500								
Total Suspended Solids	WATER_QUAL	17	9	0.5294	8	0.4706	1000	2000	17100000								
Turbidity	WATER_QUAL	5	1	0.2	4	0.8	2.2	4.85	2400								

Table B-108
Filtered Inorganics of Pajarito Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	4	4	1	0	0				0	0			37000	EPA-4	1	0
Antimony	METALS	4	4	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	4	4	1	0	0				0	0			10	EPA-2	1	0
Barium	METALS	4	0	0	4	1	23	25.45	32.5	0	0	0.02545	0.0325	1000	WQCC-11	1	0
Beryllium	METALS	4	4	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	4	3	0.75	1	0.25	21	21	21	0	0	0.006364	0.006364	3300	EPA-4	1	0
Cadmium	METALS	4	4	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	4	1	0.25	3	0.75	0.54	0.78	1.4	0	0	0.0156	0.028	50	WQCC-11	1	0
Cobalt	METALS	4	2	0.5	2	0.5	0.41	0.57	0.73								
Copper	METALS	4	1	0.25	3	0.75	0.56	0.67	12	0	0	0.00067	0.012	1000	WQCC-12	1	0
Iron	METALS	4	3	0.75	1	0.25	370	370	370	0	0	0.37	0.37	1000	WQCC-12	1	0
Lead	METALS	4	3	0.75	1	0.25	1.283	1.283	1.283	0	0	0.08553	0.08553	15	EPA-2	1	0
Manganese	METALS	4	0	0	4	1	3.81	15.3	155	0	0	0.0765	0.775	200	WQCC-12	1	0
Mercury	METALS	4	4	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	4	3	0.75	1	0.25	1.92	1.92	1.92	0	0	0.01067	0.01067	180	EPA-4	1	0
Nickel	METALS	4	2	0.5	2	0.5	1.53	6.265	11	0	0	0.06265	0.11	100	EPA-2	1	0
Selenium	METALS	4	4	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Silver	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	4	0	0	4	1	78	82.5	85.5	0	0	0.00375	0.003886	22000	EPA-4	1	0
Thallium	METALS	4	3	0.75	1	0.25	0.86	0.86	0.86	0	0	0.43	0.43	2	EPA-2	1	0
Uranium	URANIUM	4	1	0.25	3	0.75	0.253	0.314	0.39	0	0	0.01047	0.013	30	EPA-2	1	0
Vanadium	METALS	4	1	0.25	3	0.75	0.6	1.6	1.6	0	0	0.006154	0.006154	260	EPA-4	1	0
Zinc	METALS	4	2	0.5	2	0.5	7.3	45.9	84.5	0	0	0.00459	0.00845	10000	WQCC-12	1	0

Table B-109
Filtered Radionuclides Pajarito Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	3	3	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	3	3	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	1	1	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	1	1	1	0	0				0	0			50	EPA-2	1	0
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0
Uranium-234	rad	4	0	0	4	1	0.209	0.253	0.29	0	0	0.01265	0.0145	20	DOE	1	0
Uranium-235	rad	4	3	0.75	1	0.25	0.041	0.041	0.041	0	0	0.001708	0.001708	24	DOE	1	0
Uranium-238	rad	4	0	0	4	1	0.115	0.123	0.126	0	0	0.005125	0.00525	24	DOE	1	0

Table B-110
Filtered Miscellaneous Constituents of Pajarito Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	4	0	0	4	1	16000	18500	21100								
Magnesium	GENINORG	4	0	0	4	1	2950	3100	3470								
Potassium	GENINORG	4	1	0.25	3	0.75	1220	1300	1400								
Sodium	GENINORG	4	0	0	4	1	13000	14350	15000								
Deuterium Ratio	STABLE_ISOTOPES	1	0	0	1	1	-73	-73	-73								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	1	0	0	1	1	6.6	6.6	6.6								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	1	0	0	1	1	-10.5	-10.5	-10.5								
Total Organic Carbon	WATER_QUAL	1	0	0	1	1	730	730	730								

Table B-111
Nonfiltered Inorganics of Pajarito Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	4	4	1	0	0				0	0			37000	EPA-4	1	0
Antimony	METALS	4	4	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	4	3	0.75	1	0.25	2	2	2	0	0	0.2	0.2	10	EPA-2	1	0
Barium	METALS	4	0	0	4	1	23	26.7	100	0	0	0.0267	0.1	1000	WQCC-11	1	0
Beryllium	METALS	4	4	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	4	2	0.5	2	0.5	15	19.5	24	0	0	0.005909	0.007273	3300	EPA-4	1	0
Cadmium	METALS	4	4	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	4	3	0.75	1	0.25	1.1	1.1	1.1	0	0	0.022	0.022	50	WQCC-11	1	0
Cobalt	METALS	4	2	0.5	2	0.5	0.37	0.535	0.7								
Copper	METALS	4	2	0.5	2	0.5	1.1	16.3	31.5	0	0	0.0163	0.0315	1000	WQCC-12	1	0
Cyanide (Total)	CN	4	4	1	0	0				0	0			200	WQCC-11	1	0
Iron	METALS	4	3	0.75	1	0.25	4000	4000	4000	0	1	4	4	1000	WQCC-12	1	0
Lead	METALS	4	4	1	0	0				0	0			15	EPA-2	1	0
Manganese	METALS	4	1	0.25	3	0.75	3.73	19	890	0	1	0.095	4.45	200	WQCC-12	1	0
Mercury	METALS	4	4	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	4	2	0.5	2	0.5	2.2	5.35	8.5	0	0	0.02972	0.04722	180	EPA-4	1	0
Nickel	METALS	4	3	0.75	1	0.25	2.9	2.9	2.9	0	0	0.029	0.029	100	EPA-2	1	0
Selenium	METALS	4	4	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Silver	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	4	0	0	4	1	76	83.1	730	0	0	0.003777	0.03318	22000	EPA-4	1	0
Thallium	METALS	4	3	0.75	1	0.25	1.8	1.8	1.8	0	0	0.9	0.9	2	EPA-2	1	0
Tin	METALS	1	1	1	0	0				0	0			22000	EPA-4	1	0
Uranium	URANIUM	3	0	0	3	1	0.236	0.315	0.39	0	0	0.0105	0.013	30	EPA-2	1	0
Vanadium	METALS	4	3	0.75	1	0.25	1.3	1.3	1.3	0	0	0.005	0.005	260	EPA-4	1	0
Zinc	METALS	4	1	0.25	3	0.75	4	12.8	56.2	0	0	0.00128	0.00562	10000	WQCC-12	1	0

Table B-112
Nonfiltered Radionuclides of Pajarito Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Gross alpha	rad	3	3	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	3	2	0.6667	1	0.3333	1.79	1.79	1.79	0	0	0.0358	0.0358	50	EPA-2	1	0
Gross gamma	rad	3	2	0.6667	1	0.3333	132	132	132								
Tritium	rad	4	4	1	0	0				0	0			20000	EPA-2	1	0

Table B-113
Nonfiltered Organics of Pajarito Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
RDX	HEXP	4	3	0.75	1	0.25	0.098	0.098	0.098	0	0	0.1603	0.1603	0.61	EPA-4	1	0
Acenaphthene	SVOC	5	4	0.8	1	0.2	0.18	0.18	0.18	0	0	0.0004865	0.0004865	370	EPA-4	1	0
Acenaphthylene	SVOC	5	4	0.8	1	0.2	0.16	0.16	0.16	0	0	0.0004324	0.0004324	370	EPA-4	1	0
Anthracene	SVOC	5	4	0.8	1	0.2	0.2	0.2	0.2	0	0	0.0001111	0.0001111	1800	EPA-4	1	0
Bis(2-ethylhexyl)phthalate	SVOC	5	4	0.8	1	0.2	0.17	0.17	0.17	3	0	0.02833	0.02833	6	EPA-2	1	1
Fluoranthene	SVOC	5	4	0.8	1	0.2	0.19	0.19	0.19	0	0	0.0001267	0.0001267	1500	EPA-4	1	0
Phenanthrene	SVOC	5	4	0.8	1	0.2	0.24	0.24	0.24	0	0	0.0001333	0.0001333	1800	EPA-4	1	0
Pyrene	SVOC	5	4	0.8	1	0.2	0.19	0.19	0.19	0	0	0.001056	0.001056	180	EPA-4	1	0
Acetone	VOC	5	4	0.8	1	0.2	3.1	3.1	3.1	0	0	0.005082	0.005082	610	EPA-4	1	0
Toluene	VOC	5	4	0.8	1	0.2	0.54	0.54	0.54	0	0	0.00072	0.00072	750	WQCC-11	1	0
Amino-2,6-dinitrotoluene[4-]	HEXP	4	4	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	4	4	1	0	0											
Dinitrobenzene[1,3-]	HEXP	4	4	1	0	0				0	0			3.65	EPA-4	1	0
Dinitrotoluene[2,4-]	HEXP	5	5	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	HEXP	5	5	1	0	0				0	0			37	EPA-4	1	0
HMX	HEXP	4	4	1	0	0				0	0			1825	EPA-4	1	0
Nitrobenzene	HEXP	5	5	1	0	0				1	0			3.4	EPA-4	1	1
Nitrotoluene[2-]	HEXP	4	4	1	0	0											
Nitrotoluene[3-]	HEXP	4	4	1	0	0				0	0			60.83	EPA-4	1	0
Nitrotoluene[4-]	HEXP	4	4	1	0	0				0	0			60.83	EPA-4	1	0
Tetryl	HEXP	4	4	1	0	0				0	0			365	EPA-4	1	0
Trinitrobenzene[1,3,5-]	HEXP	4	4	1	0	0				0	0			1095	EPA-4	1	0
Trinitrotoluene[2,4,6-]	HEXP	4	4	1	0	0				0	0			18.25	EPA-4	1	0
Aroclor-1016	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1221	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1232	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1242	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1248	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1254	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1260	PCB	5	5	1	0	0				3	0			0.5	EPA-2	1	1
Aroclor-1262	PCB	1	1	1	0	0				0	0			0.5	EPA-2	1	0
Aldrin	PEST	4	4	1	0	0				3	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	4	4	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	4	4	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	4	4	1	0	0											
BHC[gamma-]	PEST	4	4	1	0	0				0	0			0.2	EPA-2	1	0
Chlordane[alpha-]	PEST	4	4	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	4	4	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	4	4	1	0	0				0	0			2.8	EPA-4	1	0

Table B-113 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
DDE[4,4'-]	PEST	4	4	1	0	0				0	0			2	EPA-4	1	0
DDT[4,4'-]	PEST	4	4	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	4	4	1	0	0				4	0			0.042	EPA-4	1	1
Endosulfan I	PEST	4	4	1	0	0				0	0			220	EPA-4	1	0
Endosulfan II	PEST	4	4	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	4	4	1	0	0				0	0			220	EPA-4	1	0
Endrin	PEST	4	4	1	0	0				0	0			0.2	EPA-1	1	0
Endrin Aldehyde	PEST	4	4	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	4	4	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	4	4	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	4	4	1	0	0				0	0			2	EPA-2	1	0
EndrinRe	PEST	4	4	1	0	0				0	0			2	EPA-2	1	0
Heptachlor	PEST	4	4	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	4	4	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	4	4	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	4	4	1	0	0				3	0			3	EPA-2	1	1
Aniline	SVOC	5	5	1	0	0				0	0			120	EPA-4	1	0
Azobenzene	SVOC	3	3	1	0	0				3	0			6.1	EPA-4	1	1
Benzidine	SVOC	4	4	1	0	0				4	0			0.0029	EPA-4	1	1
Benzo(a)anthracene	SVOC	5	5	1	0	0				5	0			0.92	EPA-4	1	1
Benzo(a)pyrene	SVOC	5	5	1	0	0				5	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	5	5	1	0	0				5	0			0.92	EPA-4	1	1
Benzo(g,h,i)perylene	SVOC	5	5	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	5	5	1	0	0				3	0			9.2	EPA-4	1	1
Benzoic Acid	SVOC	5	5	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	5	5	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	5	5	1	0	0											
Bis(2-chloroethyl)ether	SVOC	5	5	1	0	0				5	0			0.098	EPA-4	1	1
Bromophenyl-phenylether[4-]	SVOC	5	5	1	0	0											
Butylbenzylphthalate	SVOC	5	5	1	0	0				0	0			7300	EPA-4	1	0
Carbazole	SVOC	3	3	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	5	5	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	5	5	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	5	5	1	0	0											
Chrysene	SVOC	5	5	1	0	0				0	0			92	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	5	5	1	0	0				5	0			0.092	EPA-4	1	1
Dibenzofuran	SVOC	5	5	1	0	0				0	0			24	EPA-4	1	0

Table B-113 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzidine[3,3'-]	SVOC	5	5	1	0	0				5	0			1.5	EPA-4	1	1
Dichlorophenol[2,4-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	5	5	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	5	5	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	5	5	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	5	5	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	5	5	1	0	0											
Dinitrophenol[2,4-]	SVOC	5	5	1	0	0				0	0			73	EPA-4	1	0
Di-n-octylphthalate	SVOC	5	5	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	2	2	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Fluorene	SVOC	5	5	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	5	5	1	0	0				5	0			1	EPA-2	1	1
Hexachlorobutadiene	SVOC	5	5	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	5	5	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	5	5	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	5	5	1	0	0				5	0			0.92	EPA-4	1	1
Isophorone	SVOC	5	5	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	5	5	1	0	0				0	0			30	WQCC-11	1	0
Methylphenol[2-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	5	5	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	1	1	1	0	0											
Naphthalene	SVOC	5	5	1	0	0				0	0			30	WQCC-11	1	0
Nitroaniline[2-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	1	1
Nitrophenol[2-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	5	5	1	0	0				5	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	5	5	1	0	0				5	0			0.096	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	3	3	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	5	5	1	0	0											
Pentachlorophenol	SVOC	5	5	1	0	0				5	0			1	EPA-2	1	1
Phenol	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Pyridine	SVOC	5	5	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	5	5	1	0	0				5	0			5	WQCC-12	1	1
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											

Table B-113 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzene	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Bromobenzene	VOC	5	5	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Bromodichloromethane	VOC	5	5	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	5	5	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	5	5	1	0	0				3	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	5	5	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	5	5	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	5	5	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	5	5	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	5	5	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Chlorobenzene	VOC	5	5	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	5	5	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	5	5	1	0	0				0	0			39	EPA-4	1	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	5	5	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	5	5	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	5	5	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	5	5	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	5	5	1	0	0											
Dibromoethane[1,2-]	VOC	5	5	1	0	0				5	0			0.05	EPA-2	1	1
Dibromomethane	VOC	5	5	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	5	5	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	5	5	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	5	5	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	5	5	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	5	5	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	5	5	1	0	0				3	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	4	4	1	0	0				0	0			70	EPA-2	1	0
Dichloroethene[trans-1,2-]	VOC	5	5	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	5	5	1	0	0				3	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	5	5	1	0	0				3	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	5	5	1	0	0				3	0			4	EPA-4	1	1
Ethylbenzene	VOC	5	5	1	0	0				0	0			700	EPA-2	1	0

Table B-113 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexanone[2-]	VOC	5	5	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	5	5	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	5	5	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	5	5	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	5	5	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	5	5	1	0	0				4	0			5	EPA-2	1	0
Propylbenzene[1-]	VOC	5	5	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	5	5	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	5	5	1	0	0				3	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	5	5	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Trichloro-1,2,2-trifluoroethane	VOC	4	4	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	3	3	1	0	0				0	0			70	EPA-2	1	0
Trichlorobenzene[1,2,4-]	VOC	5	5	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	5	5	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Trichloroethene	VOC	5	5	1	0	0				3	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	5	5	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	5	5	1	0	0				5	0			0.016	EPA-4	1	1
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	5	5	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	5	5	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	5	5	1	0	0				5	0			1	WQCC-11	1	1
Xylene (Total)	VOC	5	5	1	0	0				0	0			620	WQCC-11	1	0
Xylene[1,2-]	VOC	5	5	1	0	0				0	0			1400	EPA-4	1	0
Xylene[1,3-]+Xylene[1,4-]	VOC	1	1	1	0	0				0	0			620	WQCC-11	1	0

Table B-114
Nonfiltered Miscellaneous Constituents of Pajarito Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	4	4	1	0	0											
Ammonia (as N)	ANION	1	1	1	0	0											
Bromide	ANION	4	4	1	0	0											
Chloride	ANION	5	0	0	5	1	2180	2500	2800	0	0	0.01	0.0112	250000	WQCC-12	1	0
Fluoride	ANION	5	0	0	5	1	495	566	710	0	0	0.3538	0.4438	1600	WQCC-11	1	0
Nitrate	ANION	5	0	0	5	1	320	340	690	0	0	0.034	0.069	10000	EPA-4	1	0
Oxalate	ANION	1	1	1	0	0											
Perchlorate	ANION	5	5	1	0	0				1	0			3.7	EPA-4	1	1
Sulfate	ANION	5	0	0	5	1	2560	2810	3300	0	0	0.004683	0.0055	600000	WQCC-12	1	0
Calcium	GENINORG	4	0	0	4	1	18000	20100	31000								
Hardness	GENINORG	1	0	0	1	1	61400	61400	61400								
Magnesium	GENINORG	4	0	0	4	1	3000	3230	4800								
Potassium	GENINORG	4	0	0	4	1	1100	1190	2700								
Sodium	GENINORG	4	0	0	4	1	14000	14100	14600								
Deuterium Ratio	STABLE_ISOTOPES	3	0	0	3	1	-78	-75	-73								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	3	0	0	3	1	-1.3	2.7	4.6								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	3	0	0	3	1	-10.8	-10.8	-10.76								
pH	WATER_QUAL	1	0	0	1	1	8.53	8.53	8.53								
Specific Conductance	WATER_QUAL	1	0	0	1	1	147	147	147								
Suspended Sediment Concentration	WATER_QUAL	1	1	1	0	0											
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	160000	160000	160000	0	0	0.16	0.16	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	5	1	0.2	4	0.8	238	881	3300								

Table B-115
Filtered Inorganics of Pajarito Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	37	33	0.8919	4	0.1081	9	74.5	250	0	0	0.002014	0.006757	37000	EPA-4	2	0
Antimony	METALS	37	34	0.9189	3	0.08108	0.13	0.19	5.67	0	0	0.03167	0.945	6	EPA-2	2	0
Arsenic	METALS	37	21	0.5676	16	0.4324	1.6	3.5	11.4	0	1	0.35	1.14	10	EPA-2	2	0
Barium	METALS	37	0	0	37	1	10.4	48	360	0	0	0.048	0.36	1000	WQCC-11	2	0
Beryllium	METALS	37	28	0.7568	9	0.2432	0.003	0.015	1.63	0	0	0.00375	0.4075	4	EPA-2	2	0
Boron	METALS	37	11	0.2973	26	0.7027	8.4	22.75	100	0	0	0.006894	0.0303	3300	EPA-4	2	0
Cadmium	METALS	37	34	0.9189	3	0.08108	0.07	0.147	1.18	0	0	0.0294	0.236	5	EPA-2	2	0
Chromium	METALS	37	19	0.5135	18	0.4865	0.35	1.35	5.2	0	0	0.027	0.104	50	WQCC-11	2	0
Cobalt	METALS	37	26	0.7027	11	0.2973	0.49	0.83	3								
Copper	METALS	37	30	0.8108	7	0.1892	0.43	1.2	1.7	0	0	0.0012	0.0017	1000	WQCC-12	2	0
Iron	METALS	37	12	0.3243	25	0.6757	109	3700	14900	0	21	3.7	14.9	1000	WQCC-12	2	0
Lead	METALS	37	29	0.7838	8	0.2162	0.06	0.14	19.7	0	1	0.009333	1.313	15	EPA-2	2	0
Manganese	METALS	37	0	0	37	1	1.69	339	4410	0	20	1.695	22.05	200	WQCC-12	2	0
Mercury	METALS	36	35	0.9722	1	0.02778	0.084	0.084	0.084	0	0	0.042	0.042	2	WQCC-11	2	0
Molybdenum	METALS	36	7	0.1944	29	0.8056	1.3	15	42	0	0	0.08333	0.2333	180	EPA-4	2	0
Nickel	METALS	37	16	0.4324	21	0.5676	0.89	2.9	10	0	0	0.029	0.1	100	EPA-2	2	0
Selenium	METALS	37	34	0.9189	3	0.08108	2.6	3.4	4.36	0	0	0.34	0.436	10	EPA-1	2	0
SeleniumRe	METALS	37	34	0.9189	3	0.08108	2.6	3.4	4.36	0	0	0.068	0.0872	50	WQCC-11	2	0
Silver	METALS	37	31	0.8378	6	0.1622	0.348	0.77	1.1	0	0	0.0154	0.022	50	WQCC-11	2	0
Strontium	METALS	36	0	0	36	1	28	153.4	1100	0	0	0.006973	0.05	22000	EPA-4	2	0
Thallium	METALS	38	28	0.7368	10	0.2632	0.03	0.348	0.639	0	0	0.174	0.3195	2	EPA-2	2	0
Uranium	URANIUM	34	11	0.3235	23	0.6765	0.037	0.295	15.2	0	0	0.009833	0.5067	30	EPA-2	2	0
Uranium (TIMS isotopic ratio)	URANIUM	1	0	0	1	1	2.264	2.264	2.264								
Vanadium	METALS	37	16	0.4324	21	0.5676	0.46	3.2	5.29	0	0	0.01231	0.02035	260	EPA-4	2	0
Zinc	METALS	37	17	0.4595	20	0.5405	1.3	5.965	180	0	0	0.0005965	0.018	10000	WQCC-12	2	0

Table B-116
Filtered Radionuclides of Pajarito Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample											Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	32	30	0.9375	2	0.0625	0.0254	0.02895	0.0325	0	0.02413	0.0271	1.2	DOE	2	0
Cesium-137	rad	29	29	1	0	0				0			120	DOE	2	0
Cobalt-60	rad	29	29	1	0	0				0			100	EPA-2	2	0
Gross alpha	rad	3	2	0.6667	1	0.3333	4.44	4.44	4.44	0	0.296	0.296	15	EPA-2	1	0
Gross beta	rad	3	1	0.3333	2	0.6667	3.94	4.355	4.77	0	0.0871	0.0954	50	EPA-2	1	0
Gross gamma	rad	1	1	1	0	0										
Plutonium-238	rad	32	32	1	0	0				0			1.6	DOE	2	0
Plutonium-239	rad	32	32	1	0	0				0			1.2	DOE	2	0
Sodium-22	rad	15	15	1	0	0				0			400	EPA-2	1	0
Strontium-90	rad	32	32	1	0	0				0			8	EPA-2	2	0
Uranium-234	rad	32	4	0.125	28	0.875	0.0219	0.2232	7.6	0	0.01116	0.38	20	DOE	2	0
Uranium-235	rad	32	28	0.875	4	0.125	0.0171	0.04085	0.267	0	0.001702	0.0111	24	DOE	2	0
Uranium-238	rad	32	12	0.375	20	0.625	0.0497	0.1575	4.92	0	0.006562	0.205	24	DOE	2	0
Uranium-234/238 (TIMS isotopic ratio)	rad	1	0	0	1	1	9.40E-05	9.40E-05	9.40E-05							
Uranium-238/233 (TIMS isotopic ratio)	rad	1	0	0	1	1	123.6	123.6	123.6							
Uranium-238/235 (TIMS isotopic ratio)	rad	1	0	0	1	1	138	138	138							

Table B-117
Filtered Miscellaneous Constituents of Pajarito Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	37	0	0	37	1	2840	12000	63300								
Magnesium	GENINORG	37	0	0	37	1	754	4800	17400								
Potassium	GENINORG	37	3	0.08108	34	0.9189	1200	3200	9700								
Sodium	GENINORG	37	0	0	37	1	9000	20700	110000								
Humic, Hydrophilic Acids	HUMIC_ACID	8	0	0	8	1	900	1550	4200								
Humic, Hydrophilic Bases	HUMIC_ACID	8	0	0	8	1	100	300	500								
Humic, Hydrophilic Neutrals	HUMIC_ACID	8	0	0	8	1	100	300	600								
Humic, Hydrophilic Total	HUMIC_ACID	8	0	0	8	1	1600	2300	4900								
Humic, Hydrophobic Acids	HUMIC_ACID	8	0	0	8	1	400	1350	4300								
Humic, Hydrophobic Bases	HUMIC_ACID	8	3	0.375	5	0.625	0	0	100								
Humic, Hydrophobic Neutrals	HUMIC_ACID	8	0	0	8	1	1300	1650	2900								
Humic, Hydrophobic Total	HUMIC_ACID	8	0	0	8	1	1700	3450	5800								
Dissolved Organic Carbon	WATER_QUAL	8	0	0	8	1	3300	6550	8400								
pH	WATER_QUAL	6	0	0	6	1	5.8	7.15	8								
Specific Conductance	WATER_QUAL	6	0	0	6	1	68	114.5	243								
Total Dissolved Solids	WATER_QUAL	7	0	0	7	1	77000	128000	176000	0	0	0.128	0.176	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	2	0	0	2	1	290	387.5	485								

Table B-118
Nonfiltered Inorganics of Pajarito Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	48	37	0.7708	11	0.2292	11	129	795	0	0	0.003486	0.02149	37000	EPA-4	3	0
Antimony	METALS	49	46	0.9388	3	0.06122	0.14	0.179	3	1	0	0.02983	0.5	6	EPA-2	3	1
Arsenic	METALS	49	32	0.6531	17	0.3469	1.6	4	11	0	2	0.4	1.1	10	EPA-2	3	0
Barium	METALS	49	1	0.02041	48	0.9796	13	34	360	0	0	0.034	0.36	1000	WQCC-11	3	0
Beryllium	METALS	49	42	0.8571	7	0.1429	0.01	0.022	3	0	0	0.0055	0.75	4	EPA-2	3	0
Boron	METALS	48	21	0.4375	27	0.5625	7.1	24	115	0	0	0.007273	0.03485	3300	EPA-4	3	0
Cadmium	METALS	49	47	0.9592	2	0.04082	0.09	3.545	7	1	1	0.709	1.4	5	EPA-2	3	1
Chromium	METALS	49	17	0.3469	32	0.6531	0.755	5.12	47	0	0	0.1024	0.94	50	WQCC-11	3	0
Cobalt	METALS	48	36	0.75	12	0.25	0.322	1.35	8.87								
Copper	METALS	43	29	0.6744	14	0.3256	0.39	1.1	313.1	0	0	0.0011	0.3131	1000	WQCC-12	3	0
Cyanide	CN	20	20	1	0	0											
Cyanide (Total)	CN	34	31	0.9118	3	0.08824	2	3.42	10	0	0	0.0171	0.05	200	WQCC-11	3	0
Iron	METALS	48	14	0.2917	34	0.7083	23.5	4150	21500	0	26	4.15	21.5	1000	WQCC-12	3	0
Lead	METALS	48	36	0.75	12	0.25	0.02	0.2165	19	1	1	0.01443	1.267	15	EPA-2	3	1
Lithium	METALS	1	0	0	1	1	30	30	30	0	0	0.0411	0.0411	730	EPA-4	1	0
Manganese	METALS	48	4	0.08333	44	0.9167	1.84	350	4320	0	23	1.75	21.6	200	WQCC-12	3	0
Mercury	METALS	47	43	0.9149	4	0.08511	0.057	0.144	0.2	0	0	0.072	0.1	2	WQCC-11	3	0
Molybdenum	METALS	47	19	0.4043	28	0.5957	1.49	23.5	43	0	0	0.1306	0.2389	180	EPA-4	3	0
Nickel	METALS	49	17	0.3469	32	0.6531	0.9	4.45	27	0	0	0.0445	0.27	100	EPA-2	3	0
Selenium	METALS	49	43	0.8776	6	0.1224	2	2.9	4.97	1	0	0.29	0.497	10	EPA-1	3	1
SeleniumRe	METALS	49	43	0.8776	6	0.1224	2	2.9	4.97	0	0	0.058	0.0994	50	WQCC-11	3	0
Silver	METALS	48	43	0.8958	5	0.1042	0.53	10	48	0	0	0.2	0.96	50	WQCC-11	3	0
Strontium	METALS	47	0	0	47	1	25	57	1100	0	0	0.002591	0.05	22000	EPA-4	3	0
Thallium	METALS	48	34	0.7083	14	0.2917	0.019	0.25	3	3	1	0.125	1.5	2	EPA-2	3	1
Tin	METALS	14	14	1	0	0				0	0			22000	EPA-4	3	0
Uranium	URANIUM	37	10	0.2703	27	0.7297	0.02	0.32	16	0	0	0.01067	0.5333	30	EPA-2	3	0
Uranium (TIMS isotopic ratio)	URANIUM	1	0	0	1	1	2.173	2.173	2.173								
Vanadium	METALS	48	23	0.4792	25	0.5208	0.46	3.6	11.5	0	0	0.01385	0.04423	260	EPA-4	3	0
Zinc	METALS	48	15	0.3125	33	0.6875	1.7	6.9	172.7	0	0	0.00069	0.01727	10000	WQCC-12	3	0

Table B-119
Nonfiltered Radionuclides of Pajarito Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	22	21	0.9545	1	0.04545	0.0256	0.0256	0.0256	0	0	0.02133	0.02133	1.2	DOE	3	0
Cesium-137	rad	21	21	1	0	0				0	0			120	DOE	2	0
Cobalt-60	rad	19	18	0.9474	1	0.05263	41.6	41.6	41.6	0	0	0.416	0.416	100	EPA-2	2	0
Gross alpha	rad	29	24	0.8276	5	0.1724	1.27	4.5	6.76	0	0	0.3	0.4507	15	EPA-2	3	0
Gross alpha/beta	rad	5	5	1	0	0											
Gross beta	rad	34	15	0.4412	19	0.5588	1.51	3.12	8	0	0	0.0624	0.16	50	EPA-2	5	0
Gross gamma	rad	20	11	0.55	9	0.45	58	168	251								
Plutonium-238	rad	28	28	1	0	0				0	0			1.6	DOE	5	0
Plutonium-239	rad	28	28	1	0	0				0	0			1.2	DOE	5	0
Radium-226	rad	5	0	0	5	1	0.355	0.402	0.776								
Strontium-90	rad	36	34	0.9444	2	0.05556	0.28	0.3155	0.351	0	0	0.03944	0.04388	8	EPA-2	5	0
Technetium-99	rad	30	28	0.9333	2	0.06667	4.3	4.6	4.9	0	0	0.00115	0.001225	4000	DOE	3	0
Thorium-228	rad	5	4	0.8	1	0.2	0.0492	0.0492	0.0492								
Thorium-230	rad	5	2	0.4	3	0.6	0.0368	0.0606	0.0724								
Thorium-232	rad	5	5	1	0	0											
Tritium	rad	61	49	0.8033	12	0.1967	0.26	2.6	76.63	0	0	0.00013	0.003832	20000	EPA-2	4	0
Uranium-234	rad	24	5	0.2083	19	0.7917	0.115	0.272	7.8	0	0	0.0136	0.39	20	DOE	5	0
Uranium-235	rad	24	22	0.9167	2	0.08333	0.0318	0.1594	0.287	0	0	0.006642	0.01196	24	DOE	5	0
Uranium-238	rad	24	7	0.2917	17	0.7083	0.0881	0.127	5.31	0	0	0.005292	0.2213	24	DOE	5	0
Uranium-234/238 (TIMS isotopic ratio)	rad	1	0	0	1	1	9.39E-05	9.39E-05	9.39E-05								
Uranium-238/233 (TIMS isotopic ratio)	rad	1	0	0	1	1	157.5	157.5	157.5								
Uranium-238/235 (TIMS isotopic ratio)	rad	1	0	0	1	1	137.8	137.8	137.8								

Table B-120
Nonfiltered Organics of Pajarito Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Amino-2,6-dinitrotoluene[4-]	HEXP	35	33	0.9429	2	0.05714	0.22	0.32	0.42								
Amino-4,6-dinitrotoluene[2-]	HEXP	35	34	0.9714	1	0.02857	0.51	0.51	0.51								
Dinitrobenzene[1,3-]	HEXP	34	32	0.9412	2	0.05882	0.22	0.23	0.24	0	0	0.06301	0.06575	3.65	EPA-4	2	0
Dinitrotoluene[2,4-]	HEXP	44	43	0.9773	1	0.02273	0.3	0.3	0.3	0	0	0.00411	0.00411	73	EPA-4	3	0
Dinitrotoluene[2,6-]	HEXP	44	44	1	0	0				0	0			37	EPA-4	3	0
DNX	HEXP	4	4	1	0	0											
HMX	HEXP	35	34	0.9714	1	0.02857	1.3	1.3	1.3	0	0	0.0007123	0.0007123	1825	EPA-4	3	0
MNX	HEXP	4	4	1	0	0											
Nitrobenzene	HEXP	44	43	0.9773	1	0.02273	0.41	0.41	0.41	12	0	0.1206	0.1206	3.4	EPA-4	3	2
Nitrotoluene[2-]	HEXP	34	34	1	0	0											
Nitrotoluene[3-]	HEXP	34	34	1	0	0				0	0			60.83	EPA-4	2	0
Nitrotoluene[4-]	HEXP	34	34	1	0	0				0	0			60.83	EPA-4	2	0
PETN	HEXP	1	1	1	0	0											
RDX	HEXP	35	33	0.9429	2	0.05714	0.12	0.23	0.34	11	0	0.3763	0.5563	0.61	EPA-4	3	2
Tetryl	HEXP	34	34	1	0	0				0	0			365	EPA-4	2	0
TNX	HEXP	4	4	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	28	28	1	0	0				0	0			1095	EPA-4	2	0
Trinitrotoluene[2,4,6-]	HEXP	34	34	1	0	0				0	0			18.25	EPA-4	2	0
Aroclor-1016	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1221	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1232	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1242	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1248	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1254	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1260	PCB	21	20	0.9524	1	0.04762	0.11	0.11	0.11	12	0	0.22	0.22	0.5	EPA-2	1	1
Aroclor-1262	PCB	5	5	1	0	0				0	0			0.5	EPA-2	1	0
Aldrin	PEST	16	16	1	0	0				12	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	16	16	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	16	16	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	16	16	1	0	0											
BHC[gamma-]	PEST	17	16	0.9412	1	0.05882	0.013	0.013	0.013	0	0	0.065	0.065	0.2	EPA-2	2	0
Chlordane[alpha-]	PEST	16	16	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	16	16	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	16	16	1	0	0				0	0			2.8	EPA-4	1	0
DDE[4,4'-]	PEST	16	16	1	0	0				0	0			2	EPA-4	1	0
DDT[4,4'-]	PEST	22	16	0.7273	6	0.2727	0.008	0.0185	0.024	0	0	0.00925	0.012	2	EPA-4	2	0
Dieldrin	PEST	16	16	1	0	0				13	0			0.042	EPA-4	1	1
Endosulfan I	PEST	16	16	1	0	0				0	0			220	EPA-4	1	0
Endosulfan II	PEST	16	16	1	0	0				0	0			220	EPA-4	1	0

Table B-120 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Endosulfan Sulfate	PEST	16	16	1	0	0				0	0			220	EPA-4	1	0
Endrin	PEST	16	16	1	0	0				0	0			0.2	EPA-1	1	0
EndrinRe	PEST	16	16	1	0	0				0	0			2	EPA-2	1	0
Endrin Aldehyde	PEST	16	16	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	16	16	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	16	16	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	16	16	1	0	0				0	0			2	EPA-2	1	0
Heptachlor	PEST	16	16	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	16	16	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	16	16	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	16	16	1	0	0				11	0			3	EPA-2	1	1
Acenaphthene	SVOC	28	26	0.9286	2	0.07143	0.42	0.86	1.3	0	0	0.002324	0.003514	370	EPA-4	3	0
Acenaphthylene	SVOC	28	26	0.9286	2	0.07143	0.4	0.575	0.75	0	0	0.001554	0.002027	370	EPA-4	3	0
Aniline	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.1067	0.1067	120	EPA-4	3	0
Anthracene	SVOC	28	26	0.9286	2	0.07143	0.36	0.5675	0.775	0	0	0.0003153	0.0004306	1800	EPA-4	3	0
Azobenzene	SVOC	16	15	0.9375	1	0.0625	12.8	12.8	12.8	14	1	2.098	2.098	6.1	EPA-4	1	1
Benzidine	SVOC	22	22	1	0	0				22	0			0.0029	EPA-4	3	3
Benzo(a)anthracene	SVOC	27	26	0.963	1	0.03704	1.3	1.3	1.3	26	1	1.413	1.413	0.92	EPA-4	3	3
Benzo(a)pyrene	SVOC	28	26	0.9286	2	0.07143	0.24	0.77	1.3	26	2	3.85	6.5	0.2	EPA-2	3	3
Benzo(b)fluoranthene	SVOC	28	26	0.9286	2	0.07143	0.41	0.5725	0.735	26	0	0.6223	0.7989	0.92	EPA-4	3	3
Benzo(g,h,i)perylene	SVOC	27	26	0.963	1	0.03704	1.3	1.3	1.3	0	0	0.007222	0.007222	180	EPA-4	3	0
Benzo(k)fluoranthene	SVOC	28	26	0.9286	2	0.07143	0.38	0.84	1.3	12	0	0.0913	0.1413	9.2	EPA-4	3	1
Benzoic Acid	SVOC	25	20	0.8	5	0.2	3	11	25.6	0	0	7.33E-05	0.0001707	150000	EPA-4	2	0
Benzyl Alcohol	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.001164	0.001164	11000	EPA-4	3	0
Bis(2-chloroethoxy)methane	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8								
Bis(2-chloroethyl)ether	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	130.6	130.6	0.098	EPA-4	3	3
Bis(2-ethylhexyl)phthalate	SVOC	30	24	0.8	6	0.2	0.17	1.65	4.4	20	0	0.275	0.7333	6	EPA-2	3	3
Bromophenyl-phenylether[4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8								
Butylbenzylphthalate	SVOC	28	26	0.9286	2	0.07143	9.8	11.3	12.8	0	0	0.001548	0.001753	7300	EPA-4	3	0
Carbazole	SVOC	11	11	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Chloroaniline[4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.08533	0.08533	150	EPA-4	3	0
Chloronaphthalene[2-]	SVOC	28	26	0.9286	2	0.07143	0.46	0.88	1.3	0	0	0.001796	0.002653	490	EPA-4	3	0
Chlorophenol[2-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Chlorophenyl-phenyl[4-] Ether	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8								
Chrysene	SVOC	27	26	0.963	1	0.03704	1.3	1.3	1.3	0	0	0.01413	0.01413	92	EPA-4	3	0
Dibenz(a,h)anthracene	SVOC	27	26	0.963	1	0.03704	1.3	1.3	1.3	26	1	14.13	14.13	0.092	EPA-4	3	3
Dibenzofuran	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.5333	0.5333	24	EPA-4	3	0
Dichlorobenzidine[3,3'-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	8.533	8.533	1.5	EPA-4	3	3

Table B-120 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorophenol[2,4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Diethylphthalate	SVOC	28	26	0.9286	2	0.07143	1.3	7.05	12.8	0	0	0.0002431	0.0004414	29000	EPA-4	3	0
Dimethyl Phthalate	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	3.46E-05	3.46E-05	370000	EPA-4	3	0
Dimethylphenol[2,4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.01753	0.01753	730	EPA-4	3	0
Di-n-butylphthalate	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.003459	0.003459	3700	EPA-4	3	0
Dinitro-2-methylphenol[4,6-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8								
Dinitrophenol[2,4-]	SVOC	27	26	0.963	1	0.03704	25.6	25.6	25.6	0	0	0.3507	0.3507	73	EPA-4	3	0
Di-n-octylphthalate	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.01753	0.01753	730	EPA-4	3	0
Diphenylamine	SVOC	15	14	0.9333	1	0.06667	12.8	12.8	12.8	0	0	0.01407	0.01407	910	EPA-4	3	0
Diphenylhydrazine[1,2-]	SVOC	11	11	1	0	0											
Fluoranthene	SVOC	28	26	0.9286	2	0.07143	0.38	0.57	0.76	0	0	0.00038	0.0005067	1500	EPA-4	3	0
Fluorene	SVOC	28	26	0.9286	2	0.07143	0.42	0.86	1.3	0	0	0.003583	0.005417	240	EPA-4	3	0
Hexachlorobenzene	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	12.8	12.8	1	EPA-2	3	3
Hexachlorobutadiene	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	5	1	1.753	1.753	7.3	EPA-4	3	2
Hexachlorocyclopentadiene	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	1	0	0.256	0.256	50	EPA-2	3	0
Hexachloroethane	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.3459	0.3459	37	EPA-4	3	0
Indeno(1,2,3-cd)pyrene	SVOC	27	26	0.963	1	0.03704	1.3	1.3	1.3	26	1	1.413	1.413	0.92	EPA-4	3	3
Isophorone	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.01803	0.01803	710	EPA-4	3	0
Methylnaphthalene[2-]	SVOC	28	26	0.9286	2	0.07143	0.42	0.86	1.3	0	0	0.02867	0.04333	30	WQCC-11	3	0
Methylphenol[2-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Methylphenol[4-]	SVOC	30	26	0.8667	4	0.1333	12.8	52	210	0	1	0.2889	1.167	180	EPA-4	3	0
Methylpyridine[2-]	SVOC	11	11	1	0	0											
Naphthalene	SVOC	27	25	0.9259	2	0.07407	0.33	0.815	1.3	0	0	0.02717	0.04333	30	WQCC-11	3	0
Nitroaniline[2-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	5.818	5.818	2.2	EPA-4	3	3
Nitroaniline[3-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	5.818	5.818	2.2	EPA-4	3	3
Nitroaniline[4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	5.818	5.818	2.2	EPA-4	3	3
Nitrophenol[2-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Nitrophenol[4-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Nitrosodimethylamine[N-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	984.6	984.6	0.013	EPA-4	3	3
Nitroso-di-n-propylamine[N-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	133.3	133.3	0.096	EPA-4	3	3
Nitrosodiphenylamine[N-]	SVOC	12	12	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8								
Pentachlorophenol	SVOC	28	26	0.9286	2	0.07143	6.2	9.5	12.8	26	2	9.5	12.8	1	EPA-2	3	3
Phenanthrene	SVOC	29	26	0.8966	3	0.1034	0.14	0.4	0.79	0	0	0.0002222	0.0004389	1800	EPA-4	3	0
Phenol	SVOC	29	26	0.8966	3	0.1034	12.8	19	32	26	3	3.8	6.4	5	WQCC-12	3	3
Pyrene	SVOC	28	26	0.9286	2	0.07143	0.49	0.6275	0.765	0	0	0.003486	0.00425	180	EPA-4	3	0
Pyridine	SVOC	26	25	0.9615	1	0.03846	12.8	12.8	12.8	0	0	0.3459	0.3459	37	EPA-4	3	0
Trichlorophenol[2,4,5-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3
Trichlorophenol[2,4,6-]	SVOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	26	1	2.56	2.56	5	WQCC-12	3	3

Table B-120 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	40	22	0.55	18	0.45	2.5	13.05	2020	0	1	0.02139	3.311	610	EPA-4	4	0
Acrolein	VOC	10	10	1	0	0											
Acrylonitrile	VOC	10	10	1	0	0											
Benzene	VOC	31	25	0.8065	6	0.1935	0.22	0.84	1.4	11	0	0.168	0.28	5	EPA-2	4	0
Bromobenzene	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.04348	0.04348	23	EPA-4	4	0
Bromochloromethane	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Bromodichloromethane	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01	0.01	100	EPA-2	4	0
Bromoform	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01	0.01	100	EPA-2	4	0
Bromomethane	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.1149	0.1149	8.7	EPA-4	4	1
Butanone[2-]	VOC	34	29	0.8529	5	0.1471	1.6	6.9	8.9	0	0	0.003632	0.004684	1900	EPA-4	4	0
Butylbenzene[n-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01639	0.01639	61	EPA-4	4	0
Butylbenzene[sec-]	VOC	30	29	0.9667	1	0.03333	1	1	1	0	0	0.01639	0.01639	61	EPA-4	4	0
Butylbenzene[tert-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01639	0.01639	61	EPA-4	4	0
Carbon Disulfide	VOC	31	30	0.9677	1	0.03226	5	5	5	0	0	0.005	0.005	1000	EPA-4	4	0
Carbon Tetrachloride	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Chlorobenzene	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01	0.01	100	EPA-2	4	0
Chlorodibromomethane	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01	0.01	100	EPA-2	4	0
Chloroethane	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.02564	0.02564	39	EPA-4	4	0
Chloroethyl vinyl ether[2-]	VOC	2	2	1	0	0											
Chloroform	VOC	32	30	0.9375	2	0.0625	0.94	0.97	1	0	0	0.0097	0.01	100	WQCC-11	4	0
Chloromethane	VOC	31	29	0.9355	2	0.06452	1	1.4	1.8	0	0	0.09333	0.12	15	EPA-4	4	0
Chlorotoluene[2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.008333	0.008333	120	EPA-4	4	0
Chlorotoluene[4-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.008333	0.008333	120	EPA-4	4	0
Dibromo-3-Chloropropane[1,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1								
Dibromoethane[1,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	30	1	20	20	0.05	EPA-2	4	4
Dibromomethane	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01639	0.01639	61	EPA-4	4	0
Dichlorobenzene[1,2-]	VOC	32	31	0.9688	1	0.03125	1	1	1	0	0	0.001667	0.001667	600	EPA-2	5	0
Dichlorobenzene[1,3-]	VOC	32	31	0.9688	1	0.03125	1	1	1	0	0	0.05556	0.05556	18	EPA-4	5	0
Dichlorobenzene[1,4-]	VOC	35	31	0.8857	4	0.1143	0.16	0.22	1	0	0	0.002933	0.01333	75	EPA-2	5	0
Dichlorodifluoromethane	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.002564	0.002564	390	EPA-4	4	0
Dichloroethane[1,1-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.04	0.04	25	WQCC-11	4	0
Dichloroethane[1,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Dichloroethene[1,1-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	WQCC-11	4	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											
Dichloroethene[cis-1,2-]	VOC	20	19	0.95	1	0.05	1	1	1	0	0	0.01429	0.01429	70	EPA-2	3	0
Dichloroethene[trans-1,2-]	VOC	30	29	0.9667	1	0.03333	1	1	1	0	0	0.01	0.01	100	EPA-2	4	0
Dichloropropane[1,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Dichloropropane[1,3-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Dichloropropane[2,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0

Table B-120 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichloropropene[1,1-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.25	0.25	4	EPA-4	4	1
Dichloropropene[cis-1,3-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.25	0.25	4	EPA-4	4	1
Dichloropropene[trans-1,3-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.25	0.25	4	EPA-4	4	1
Ethylbenzene	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.001429	0.001429	700	EPA-2	4	0
Hexanone[2-]	VOC	31	30	0.9677	1	0.03226	5	5	5	0	0	0.002632	0.002632	1900	EPA-4	4	0
Iodomethane	VOC	31	30	0.9677	1	0.03226	5	5	5	0	0	0.5747	0.5747	8.7	EPA-4	4	0
Isopropylbenzene	VOC	34	29	0.8529	5	0.1471	0.16	0.54	1	0	0	0.0008182	0.001515	660	EPA-4	4	0
Isopropyltoluene[4-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.001515	0.001515	660	EPA-4	4	0
Methyl-2-pentanone[4-]	VOC	31	30	0.9677	1	0.03226	5	5	5	0	0	0.03125	0.03125	160	EPA-4	4	0
Methylene Chloride	VOC	33	28	0.8485	5	0.1515	0.62	2.7	5	23	1	0.54	1	5	EPA-2	4	0
Propylbenzene[1-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01639	0.01639	61	EPA-4	4	0
Styrene	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01	0.01	100	EPA-2	4	0
Tetrachloroethane[1,1,1,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2326	0.2326	4.3	EPA-4	4	1
Tetrachloroethane[1,1,2,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.1	0.1	10	WQCC-11	4	0
Tetrachloroethene	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Toluene	VOC	36	26	0.7222	10	0.2778	0.2	0.67	11.3	0	0	0.0008933	0.01507	750	WQCC-11	4	0
Trichloro-1,2,2-trifluoroethane	VOC	15	14	0.9333	1	0.06667	5	5	5								
Trichloro-1,2,2-trifluoroethane[1,1,2-]	VOC	5	5	1	0	0				0	0			59000	EPA-4	2	0
Trichlorobenzene[1,2,3-]	VOC	11	11	1	0	0				0	0			70	EPA-2	1	0
Trichlorobenzene[1,2,4-]	VOC	27	26	0.963	1	0.03704	12.8	12.8	12.8	0	0	0.1829	0.1829	70	EPA-2	3	0
Trichloroethane[1,1,1-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.01667	0.01667	60	WQCC-11	4	0
Trichloroethane[1,1,2-]	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Trichloroethene	VOC	31	30	0.9677	1	0.03226	1	1	1	11	0	0.2	0.2	5	EPA-2	4	0
Trichlorofluoromethane	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.0007692	0.0007692	1300	EPA-4	4	0
Trichloropropane[1,2,3-]	VOC	31	30	0.9677	1	0.03226	1	1	1	30	1	62.5	62.5	0.016	EPA-4	4	4
Trichlorotrifluoroethane	VOC	11	11	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	30	29	0.9667	1	0.03333	1	1	1	0	0	0.08333	0.08333	12	EPA-4	4	0
Trimethylbenzene[1,3,5-]	VOC	31	30	0.9677	1	0.03226	1	1	1	0	0	0.08333	0.08333	12	EPA-4	4	0
Vinyl Chloride	VOC	31	30	0.9677	1	0.03226	1	1	1	30	1	1	1	1	WQCC-11	4	1
Xylene (Total)	VOC	23	22	0.9565	1	0.04348	2	2	2	0	0	0.003226	0.003226	620	WQCC-11	2	0
Xylene[1,2-]	VOC	29	28	0.9655	1	0.03448	1	1	1	0	0	0.0007143	0.0007143	1400	EPA-4	4	0
Xylene[1,3-]+Xylene[1,4-]	VOC	16	16	1	0	0				0	0			620	WQCC-11	4	0

Table B-121
Nonfiltered Miscellaneous Constituents of Pajarito Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	20	9	0.45	11	0.55	210	500	900								
Ammonia (as N)	ANION	28	10	0.3571	18	0.6429	310	820	1800								
Bromide	ANION	39	39	1	0	0											
Chloride	ANION	57	0	0	57	1	1605	2600	10200	0	0	0.0104	0.0408	250000	WQCC-12	3	0
Fluoride	ANION	63	2	0.03175	61	0.9683	160	362.5	800	0	0	0.2266	0.5	1600	WQCC-11	3	0
Nitrate	ANION	65	26	0.4	39	0.6	10	320	720	0	0	0.032	0.072	10000	EPA-4	3	0
Oxalate	ANION	23	22	0.9565	1	0.04348	758	758	758								
Perchlorate	ANION	56	56	1	0	0				13	0			3.7	EPA-4	3	3
Sulfate	ANION	57	16	0.2807	41	0.7193	257	2270	47750	0	0	0.003783	0.07958	600000	WQCC-12	3	0
Calcium	GENINORG	52	0	0	52	1	3200	12000	66300								
Hardness	GENINORG	18	0	0	18	1	12200	41000	239000								
Magnesium	GENINORG	52	0	0	52	1	877	4490	17800								
Potassium	GENINORG	52	4	0.07692	48	0.9231	1200	2950	10000								
Sodium	GENINORG	52	0	0	52	1	9000	15650	131000								
Deuterium Ratio	STABLE_ISOTOPES	40	0	0	40	1	-86	-77	-10.7								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	14	0	0	14	1	-1.4	1.75	9								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	40	0	0	40	1	-76	-11	-10.5								
pH	WATER_QUAL	18	0	0	18	1	6.88	7.595	8.91								
Specific Conductance	WATER_QUAL	18	0	0	18	1	97	118	459								
Suspended Sediment Concentration	WATER_QUAL	10	4	0.4	6	0.6	400	8085	47000								
Total Dissolved Solids	WATER_QUAL	12	0	0	12	1	134000	170500	367000	0	0	0.1705	0.367	1000000	WQCC-12	3	0
Total Organic Carbon	WATER_QUAL	42	5	0.119	37	0.881	4.9	4140	23000								
Total Suspended Solids	WATER_QUAL	8	5	0.625	3	0.375	1000	1000	1600								

Table B-122
Filtered Inorganics of Pajarito Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	2	2	1	0	0				0	0			87	WQCC-6	1	0
AluminumRe	METALS	2	2	1	0	0				0	0			5000	WQCC-4	1	0
Antimony	METALS	2	2	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	2	2	1	0	0				0	0			10	EPA-2	1	0
Barium	METALS	2	0	0	2	1	39	39.5	40	0	0	0.0395	0.04	1000	WQCC-11	1	0
Beryllium	METALS	2	1	0.5	1	0.5	0.665	0.665	0.665	0	0	0.1662	0.1662	4	EPA-2	1	0
Boron	METALS	2	1	0.5	1	0.5	28	28	28	0	0	0.008485	0.008485	3300	EPA-4	1	0
Cadmium	METALS	2	1	0.5	1	0.5	0.337	0.337	0.337	0	0	0.1506	0.1506	2.24	WQCC-6	1	0
CadmiumRe	METALS	2	1	0.5	1	0.5	0.337	0.337	0.337	0	0	0.0674	0.0674	5	EPA-2	1	0
Chromium	METALS	2	0	0	2	1	4.1	4.1	4.1	0	0	0.082	0.082	50	WQCC-11	1	0
Cobalt	METALS	2	2	1	0	0				0	0			1000	WQCC-4	1	0
Copper	METALS	2	2	1	0	0				0	0			8.96	WQCC-6	1	0
CopperRe	METALS	2	2	1	0	0				0	0			500	WQCC-4	1	0
Iron	METALS	2	2	1	0	0				0	0			1000	WQCC-12	1	0
Lead	METALS	2	1	0.5	1	0.5	2.58	2.58	2.58	0	1	1.025	1.025	2.52	WQCC-6	1	0
LeadRe	METALS	2	1	0.5	1	0.5	2.58	2.58	2.58	0	0	0.172	0.172	15	EPA-2	1	0
Manganese	METALS	2	2	1	0	0				0	0			200	WQCC-12	1	0
Mercury	METALS	2	2	1	0	0				0	0			2	WQCC-11	1	0
Nickel	METALS	2	1	0.5	1	0.5	1.6	1.6	1.6	0	0	0.03077	0.03077	52.01	WQCC-6	1	0
NickelRe	METALS	2	1	0.5	1	0.5	1.6	1.6	1.6	0	0	0.016	0.016	100	EPA-2	1	0
Selenium	METALS	2	2	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	2	2	1	0	0				0	0			50	WQCC-4	1	0
Silver	METALS	2	2	1	0	0				0	0			3.45	WQCC-2	1	0
SilverRe	METALS	2	2	1	0	0				0	0			50	WQCC-11	1	0
Thallium	METALS	2	2	1	0	0				0	0			2	EPA-2	1	0
Uranium	URANIUM	2	0	0	2	1	0.368	0.6175	0.867	0	0	0.02058	0.0289	30	EPA-2	1	0
Vanadium	METALS	2	0	0	2	1	7.2	7.25	7.3	0	0	0.0725	0.073	100	WQCC-4	1	0
Zinc	METALS	2	1	0.5	1	0.5	1.1	1.1	1.1	0	0	0.009387	0.009387	117.19	WQCC-2	1	0
ZincRe	METALS	2	1	0.5	1	0.5	1.1	1.1	1.1	0	0	0.00011	0.00011	10000	WQCC-12	1	0

Table B-123
Filtered Miscellaneous Constituents of Pajarito Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	2	0	0	2	1	19000	19000	19000								
Magnesium	GENINORG	2	0	0	2	1	4300	4350	4400								
Potassium	GENINORG	2	0	0	2	1	2200	2250	2300								
Sodium	GENINORG	2	0	0	2	1	11000	11000	11000								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	152000	152000	152000	0	0	0.152	0.152	1000000	WQCC-12	1	0

Table B-124
Nonfiltered Inorganics of Pajarito Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	1	0	0	1	1	914	914	914	0	0	0.0247	0.0247	37000	EPA-4	1	0
Antimony	METALS	1	1	1	0	0				1	0			6	EPA-2	1	1
Arsenic	METALS	1	0	0	1	1	1.1	1.1	1.1	0	1	2.444	2.444	0.45	EPA-4	1	0
Barium	METALS	1	0	0	1	1	79.4	79.4	79.4	0	0	0.0794	0.0794	1000	WQCC-11	1	0
Beryllium	METALS	1	1	1	0	0				0	0			4	EPA-2	1	0
Cadmium	METALS	1	1	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	1	0	0	1	1	4.6	4.6	4.6	0	0	0.092	0.092	50	WQCC-11	1	0
Cobalt	METALS	1	0	0	1	1	7.1	7.1	7.1								
Copper	METALS	1	0	0	1	1	4.7	4.7	4.7	0	0	0.0047	0.0047	1000	WQCC-12	1	0
Iron	METALS	1	0	0	1	1	2750	2750	2750	0	1	2.75	2.75	1000	WQCC-12	1	0
Lead	METALS	1	0	0	1	1	3	3	3	0	0	0.2	0.2	15	EPA-2	1	0
Manganese	METALS	1	0	0	1	1	287	287	287	0	1	1.435	1.435	200	WQCC-12	1	0
Mercury	METALS	1	1	1	0	0				1	0			0.012	WQCC-7	1	1
MercuryRe		1	1	1	0	0				0	0			0.77	WQCC-8	1	0
Nickel	METALS	1	1	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	1	0	0	1	1	2.4	2.4	2.4	0	0	0.48	0.48	5	WQCC-8	1	0
Silver	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Thallium	METALS	1	1	1	0	0				0	0			2	EPA-2	1	0
Uranium		1	0	0	1	1	0.164	0.164	0.164	0	0	0.005467	0.005467	30	EPA-2	1	0
Vanadium	METALS	1	1	1	0	0				0	0			260	EPA-4	1	0
Zinc	METALS	1	0	0	1	1	12.9	12.9	12.9	0	0	0.00129	0.00129	10000	WQCC-12	1	0

Table B-125
Nonfiltered Radionuclides of Pajarito Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Tritium	rad	2	2	1	0	0				0	0			20000	EPA-2	1	0

Table B-126
Nonfiltered Organics of Pajarito Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Diethylphthalate	SVOC	1	0	0	1	1	3	3	3	0	0	0.0001034	0.0001034	29000	EPA-4	1	0
HMX	HEXP	7	5	0.7143	2	0.2857	0.448	2.374	4.3	0	0	0.001301	0.002356	1825	EPA-4	4	0
RDX	HEXP	7	5	0.7143	2	0.2857	0.57	3.535	6.5	4	1	5.784	10.63	0.6112	EPA-4	4	3
Amino-2,6-dinitrotoluene[4-]	HEXP	7	6	0.8571	1	0.1429	0.24	0.24	0.24								
Amino-4,6-dinitrotoluene[2-]	HEXP	7	6	0.8571	1	0.1429	0.11	0.11	0.11								
Trinitrobenzene[1,3,5-]	HEXP	7	6	0.8571	1	0.1429	0.74	0.74	0.74	0	0	0.0006758	0.0006758	1095	EPA-4	4	0
Dinitrobenzene[1,3-]	HEXP	7	7	1	0	0				0	0			3.65	EPA-4	4	0
Dinitrotoluene[2,4-]	HEXP	7	7	1	0	0				0	0			73	EPA-4	4	0
Dinitrotoluene[2,6-]	HEXP	7	7	1	0	0				0	0			37	EPA-4	4	0
Nitrobenzene	HEXP	7	7	1	0	0				0	0			3.4	EPA-4	4	0
Nitrotoluene[2-]	HEXP	7	7	1	0	0											
Nitrotoluene[3-]	HEXP	7	7	1	0	0				0	0			60.833	EPA-4	4	0
Nitrotoluene[4-]	HEXP	7	7	1	0	0				0	0			60.833	EPA-4	4	0
PETN	HEXP	6	6	1	0	0											
Tetryl	HEXP	7	7	1	0	0				0	0			365	EPA-4	4	0
Trinitrotoluene[2,4,6-]	HEXP	7	7	1	0	0				0	0			18.25	EPA-4	4	0
Acenaphthene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	1	1	1	0	0				0	0			370	EPA-4	1	0
Aniline	SVOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzo(a)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	SVOC	1	1	1	0	0				1	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzoic Acid	SVOC	1	1	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	1	1	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	1	1	1	0	0											
Bis(2-chloroethyl)ether	SVOC	1	1	1	0	0				1	0			0.098	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	1	1	1	0	0				0	0			6	EPA-2	1	0
Bromophenyl-phenylether[4-]	SVOC	1	1	1	0	0											
Butylbenzylphthalate	SVOC	1	1	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	1	1	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	1	1	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	1	1	1	0	0											
Chrysene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	SVOC	1	1	1	0	0				1	0			0.09	EPA-4	1	1

Table B-126 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibenzofuran	SVOC	1	1	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzene[1,2-]	SVOC	1	1	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	SVOC	1	1	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	SVOC	1	1	1	0	0				0	0			75	EPA-2	1	0
Dichlorobenzidine[3,3'-]	SVOC	1	1	1	0	0				1	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	1	1	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	1	1	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			73	EPA-4	1	0
Di-n-octylphthalate	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	1	1	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	SVOC	1	1	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	1	1	1	0	0				1	0			0.01	WQCC-9	1	1
Hexachlorobutadiene	SVOC	1	1	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	1	1	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Isophorone	SVOC	1	1	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Nitroaniline[2-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitrophenol[2-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				1	0			0.01	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	1	1	1	0	0				1	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
Phenanthrene	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Pyrene	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Trichlorobenzene[1,2,4-]	SVOC	1	1	1	0	0				0	0			70	EPA-2	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				1	0			5	WQCC-12	1	1

Table B-127
Nonfiltered Miscellaneous Constituents of Pajarito Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	2	2	1	0	0											
Bromide	ANION	2	2	1	0	0											
Chloride	ANION	3	0	0	3	1	4270	5100	6300	0	0	0.0204	0.0252	250000	WQCC-12	2	0
Fluoride	ANION	3	0	0	3	1	150	389	400	0	0	0.2431	0.25	1600	WQCC-11	2	0
Nitrate	ANION	3	1	0.3333	2	0.6667	810	860	910	0	0	0.086	0.091	10000	EPA-4	2	0
Perchlorate	ANION	1	0	0	1	1	11.5	11.5	11.5	0	1	3.108	3.108	3.7	EPA-4	1	0
Sulfate	ANION	3	0	0	3	1	4900	5100	5500	0	0	0.0085	0.009167	600000	WQCC-12	2	0
Calcium	GENINORG	2	0	0	2	1	11000	11350	11700								
Hardness	GENINORG	1	0	0	1	1	43200	43200	43200								
Magnesium	GENINORG	2	0	0	2	1	3320	3610	3900								
Potassium	GENINORG	2	0	0	2	1	3200	3505	3810								
Sodium	GENINORG	2	0	0	2	1	10000	11950	13900								
Deuterium Ratio	STABLE_ISOTOPES	2	0	0	2	1	-78	-76.5	-75								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	1	0	0	1	1	-1.2	-1.2	-1.2								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-10.6	-10.6	-10.6								
pH	WATER_QUAL	1	0	0	1	1	6.6	6.6	6.6								
Specific Conductance	WATER_QUAL	1	0	0	1	1	140	140	140								

Table B-128
Filtered Inorganics of Pajarito Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	25	13	0.52	12	0.48	14.7	629.5	1300	5	11	7.236	14.94	87	WQCC-6	8	4
AluminumRe	METALS	25	13	0.52	12	0.48	14.7	629.5	1300	0	0	0.1259	0.26	5000	WQCC-4	8	0
Antimony	METALS	24	22	0.9167	2	0.08333	3	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	7	0
Arsenic	METALS	28	28	1	0	0				0	0			24.2	WQCC-9	10	0
Barium	METALS	27	8	0.2963	19	0.7037	37.2	41.3	705	0	0	0.01588	0.27	2600	EPA-4	9	0
Beryllium	METALS	27	23	0.8519	4	0.1481	0.014	1.526	3	0	0	0.2879	0.566	5.3	WQCC-6	9	0
BerylliumRe	METALS	27	23	0.8519	4	0.1481	0.014	1.526	3	0	0	0.0209	0.04	73	EPA-4	9	0
Boron	METALS	27	20	0.7407	7	0.2593	10	28.1	56.2	0	0	0.00562	0.01	5000	WQCC-4	9	0
Cadmium	METALS	25	25	1	0	0				10	0			2.24	WQCC-6	8	6
CadmiumRe	METALS	25	25	1	0	0				0	0			50	WQCC-4	8	0
Chromium	METALS	27	26	0.963	1	0.03704	1.3	1.3	1.3	0	0	0.01754	0.02	74.12	WQCC-6	9	0
ChromiumRe	METALS	27	26	0.963	1	0.03704	1.3	1.3	1.3	0	0	0.0013	0.0013	1000	WQCC-4	9	0
Cobalt	METALS	25	25	1	0	0				0	0			1000	WQCC-4	8	0
Copper	METALS	25	23	0.92	2	0.08	2	5.5	9	9	1	0.6141	1.005	8.96	WQCC-6	8	6
CopperRe	METALS	25	23	0.92	2	0.08	2	5.5	9	0	0	0.011	0.018	500	WQCC-4	8	0
Cyanide (Total)	CN	1	0	0	1	1	10	10	10								
Iron	METALS	25	11	0.44	14	0.56	40	163.5	500	0	0	0.01486	0.05	11000	EPA-4	8	0
Lead	METALS	27	24	0.8889	3	0.1111	0.073	0.137	10.2	13	1	0.05444	4.05	2.52	WQCC-6	10	7
LeadRe	METALS	27	24	0.8889	3	0.1111	0.073	0.137	10.2	0	0	0.00137	0.102	100	WQCC-4	10	0
Lithium	METALS	7	5	0.7143	2	0.2857	17.6	23.8	30	0	0	0.0326	0.04	730	EPA-4	4	0
Manganese	METALS	24	16	0.6667	8	0.3333	1.4	36.3	223	0	0	0.02135	0.13	1700	EPA-4	7	0
Mercury	METALS	18	11	0.6111	7	0.3889	0.14	0.2	1.8	0	0	0.01818	0.16	11	EPA-4	6	0
Molybdenum	METALS	24	23	0.9583	1	0.04167	2.3	2.3	2.3	0	0	0.01278	0.01	180	EPA-4	7	0
Nickel	METALS	24	22	0.9167	2	0.08333	3.68	3.94	4.2	0	0	0.07576	0.08	52.01	WQCC-6	7	0
NickelRe	METALS	24	22	0.9167	2	0.08333	3.68	3.94	4.2	0	0	0.0008565	0.000913	4600	WQCC-9	7	0
Selenium	METALS	16	15	0.9375	1	0.0625	7	7	7	0	0	0.14	0.14	50	WQCC-4	6	0
Silver	METALS	24	24	1	0	0				10	0			3.45	WQCC-2	7	5
SilverRe	METALS	24	24	1	0	0				0	0			180	EPA-4	7	0
Strontium	METALS	25	0	0	25	1	17	117.1	400	0	0	0.005323	0.02	22000	EPA-4	8	0
Thallium	METALS	25	22	0.88	3	0.12	0.263	3	3	6	0	0.4762	0.48	6.3	WQCC-9	8	4
Tin	METALS	24	24	1	0	0				0	0			22000	EPA-4	7	0
Titanium	METALS	10	3	0.3	7	0.7	0.921	4	17.7								
Uranium	URANIUM	9	4	0.4444	5	0.5556	0.713	1.13	4.78								
Vanadium	METALS	25	17	0.68	8	0.32	9	9.95	14	0	0	0.0995	0.14	100	WQCC-4	8	0
Zinc	METALS	26	21	0.8077	5	0.1923	2.8	7.39	40	0	0	0.06306	0.34	117.19	WQCC-2	9	0
ZincRe	METALS	26	21	0.8077	5	0.1923	2.8	7.39	40	0	0	0.0002956	0.0016	25000	WQCC-4	9	0

Table B-129
Filtered Radionuclides of Pajarito Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	9	7	0.7778	2	0.2222	0.0124	0.0246	0.0368	0	0	0.0205	0.03067	1.2	DOE	3	0
Cesium-137	rad	8	8	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	9	9	1	0	0				0	0			200	DOE	3	0
Gross alpha	rad	16	15	0.9375	1	0.0625	1.9	1.9	1.9								
Gross beta	rad	16	7	0.4375	9	0.5625	2.56	3.54	13.7								
Plutonium-238	rad	10	7	0.7	3	0.3	0.0312	0.0425	0.08	0	0	0.02656	0.05	1.6	DOE	3	0
Plutonium-239	rad	10	8	0.8	2	0.2	0.0239	0.0246	0.0253	0	0	0.0205	0.02108	1.2	DOE	3	0
Radium-226	rad	8	6	0.75	2	0.25	0.173	0.4085	0.644								
Radium-228	rad	8	8	1	0	0											
Strontium-90	rad	12	6	0.5	6	0.5	0.251	0.942	2.46	0	0	0.02355	0.0615	40	DOE	4	0
Thorium-228	rad	8	7	0.875	1	0.125	0.0617	0.0617	0.0617								
Thorium-230	rad	8	5	0.625	3	0.375	0.0502	0.0585	0.0741								
Thorium-232	rad	8	4	0.5	4	0.5	0.01	0.0173	0.0357								
Tritium	rad	1	1	1	0	0				0	0			80000	DOE	1	0
Uranium-234	rad	9	2	0.2222	7	0.7778	0.0306	0.14	1.31	0	0	0.007	0.0655	20	DOE	3	0
Uranium-235	rad	9	6	0.6667	3	0.3333	0.0426	0.0432	0.0677	0	0	0.0018	0.002821	24	DOE	3	0
Uranium-238	rad	8	2	0.25	6	0.75	0.0139	0.2345	1.62	0	0	0.009771	0.0675	24	DOE	2	0

Table B-130
Filtered Miscellaneous Constituents of Pajarito Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	25	0	0	25	1	5800	16300	59300								
Hardness	GENINORG	16	0	0	16	1	33800	67650	202000								
Magnesium	GENINORG	26	0	0	26	1	1200	4275	14800								
Potassium	GENINORG	24	0	0	24	1	600	2688	9930								
Sodium	GENINORG	25	0	0	25	1	3880	13000	34400								
Dissolved Oxygen	WATER_QUAL	4	0	0	4	1	7000	10000	11000								
pH	WATER_QUAL	31	0	0	31	1	6	7.3	8.3								
Specific Conductance	WATER_QUAL	26	0	0	26	1	67	155.5	241								
Total Dissolved Solids	WATER_QUAL	35	0	0	35	1	68000	170000	620000								
Total Suspended Solids	WATER_QUAL	6	4	0.6667	2	0.3333	24000	217000	410000								

Table B-131
Nonfiltered Inorganics of Pajarito Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	23	4	0.1739	19	0.8261	32.9	1140	12900	0	0	0.03081	0.3486	37000	EPA-4	12	0
Antimony	METALS	23	23	1	0	0				2	0			15	EPA-4	12	2
Arsenic	METALS	25	18	0.72	7	0.28	1.2	3.1	20	18	7	6.889	44.44	0.45	EPA-4	13	9
Barium	METALS	24	0	0	24	1	28.4	76.85	700	0	0	0.02956	0.2692	2600	EPA-4	12	0
Beryllium	METALS	24	18	0.75	6	0.25	0.03	0.3275	5	0	0	0.004486	0.06849	73	EPA-4	12	0
Boron	METALS	16	9	0.5625	7	0.4375	7.71	29	55.7	0	0	0.008788	0.01688	3300	EPA-4	5	0
Cadmium	METALS	23	20	0.8696	3	0.1304	0.072	0.078	0.89	0	0	0.004333	0.04944	18	EPA-4	12	0
Chromium	METALS	24	16	0.6667	8	0.3333	0.58	6	30	0	0	0.0001091	0.0005455	55000	EPA-4	12	0
Cobalt	METALS	23	21	0.913	2	0.08696	2.7	8.35	14								
Copper	METALS	23	14	0.6087	9	0.3913	1.28	2.72	36.7	0	0	0.001943	0.02621	1400	EPA-4	12	0
Cyanide (Total)	CN	24	16	0.6667	8	0.3333	3.02	9.625	10	8	6	1.851	1.923	5.2	WQCC-7	8	6
Cyanide, Amenable	CN	10	10	1	0	0				0	0			5.2	WQCC-8	4	0
Iron	METALS	23	0	0	23	1	20.9	704	18000	0	1	0.064	1.636	11000	EPA-4	12	0
Lead	METALS	25	13	0.52	12	0.48	0.2	2.27	48								
Lithium	METALS	2	0	0	2	1	4	15.5	27	0	0	0.02123	0.03699	730	EPA-4	2	0
Manganese	METALS	23	2	0.08696	21	0.913	1.1	84.7	2100	0	1	0.04982	1.235	1700	EPA-4	12	0
Mercury	METALS	37	24	0.6486	13	0.3514	0.1	0.2	1.1	24	13	16.67	91.67	0.012	WQCC-7	18	11
MercuryRe	METALS	37	24	0.6486	13	0.3514	0.1	0.2	1.1	0	1	0.2597	1.429	0.77	WQCC-8	18	0
Molybdenum	METALS	14	13	0.9286	1	0.07143	0.916	0.916	0.916	0	0	0.005089	0.005089	180	EPA-4	5	0
Nickel	METALS	23	15	0.6522	8	0.3478	0.736	2.6	6	0	0	0.003562	0.008219	730	EPA-4	12	0
Selenium	METALS	35	31	0.8857	4	0.1143	3	3.9	5.33	6	1	0.78	1.066	5	WQCC-8	17	0
Silver	METALS	23	20	0.8696	3	0.1304	0.51	0.903	6	0	0	0.005017	0.03333	180	EPA-4	12	0
Strontium	METALS	13	0	0	13	1	74.9	120	398	0	0	0.005455	0.01809	22000	EPA-4	4	0
Thallium	METALS	24	19	0.7917	5	0.2083	0.051	5.6	9.5								
Tin	METALS	13	12	0.9231	1	0.07692	63	63	63	0	0	0.002864	0.002864	22000	EPA-4	4	0
Titanium	METALS	8	1	0.125	7	0.875	1.25	12.4	82.1								
Uranium	METALS	20	3	0.15	17	0.85	0.1112	0.9412	4.9								
Vanadium	METALS	23	13	0.5652	10	0.4348	1.74	5.055	12.8	0	0	0.01944	0.04923	260	EPA-4	12	0
Zinc	METALS	23	7	0.3043	16	0.6957	0.72	9.315	120	0	0	0.0008468	0.01091	11000	EPA-4	12	0

Table B-132
Nonfiltered Radionuclides of Pajarito Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	22	17	0.7727	5	0.2273	0.0302	0.034	0.0392	0	0	0.02833	0.03267	1.2	DOE	4	0
Cesium-137	rad	25	24	0.96	1	0.04	8.43	8.43	8.43	0	0	0.07025	0.07025	120	DOE	8	0
Cobalt-60	rad	21	21	1	0	0				0	0			200	DOE	7	0
Gross alpha	rad	23	19	0.8261	4	0.1739	1.42	2.35	3.08								
Gross beta	rad	23	12	0.5217	11	0.4783	3.8	6.81	14.8								
Gross gamma	rad	5	5	1	0	0											
Plutonium-238	rad	22	20	0.9091	2	0.09091	0.0159	0.06995	0.124	0	0	0.04372	0.0775	1.6	DOE	4	0
Plutonium-239	rad	22	19	0.8636	3	0.1364	0.0171	0.0253	0.0965	0	0	0.02108	0.08042	1.2	DOE	4	0
Radium-226	rad	9	5	0.5556	4	0.4444	0.378	0.434	0.677								
Radium-228	rad	8	8	1	0	0											
Strontium-90	rad	25	18	0.72	7	0.28	0.292	1.31	2.47	0	0	0.03275	0.06175	40	DOE	7	0
Thorium-228	rad	9	8	0.8889	1	0.1111	0.0761	0.0761	0.0761								
Thorium-230	rad	9	4	0.4444	5	0.5556	0.0386	0.0765	0.213								
Thorium-232	rad	9	6	0.6667	3	0.3333	0.0225	0.065	0.0758								
Tritium	rad	23	23	1	0	0				0	0			20000	WQCC-5	5	0
Uranium-234	rad	15	1	0.06667	14	0.9333	0.0605	0.2618	1.23	0	0	0.01309	0.0615	20	DOE	6	0
Uranium-235	rad	15	13	0.8667	2	0.1333	0.0539	0.06885	0.0838	0	0	0.002869	0.003492	24	DOE	6	0
Uranium-238	rad	15	3	0.2	12	0.8	0.0408	0.308	1.47	0	0	0.01283	0.06125	24	DOE	6	0

Table B-133
Nonfiltered Organics of Pajarito Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	25	20	0.8	5	0.2	0.12	1.7	4	0	0	0.02881	0.0678	59	WQCC-9	9	0
HMX	HEXP	24	21	0.875	3	0.125	1.09	1.2	4.4	0	0	0.0006575	0.002411	1825	EPA-4	11	0
Acetone	VOC	9	8	0.8889	1	0.1111	14	14	14	0	0	0.02295	0.02295	610	EPA-4	5	0
RDX	HEXP	24	22	0.9167	2	0.08333	0.158	0.584	1.01	6	1	0.9555	1.652	0.61	EPA-4	11	5
Dichlorobenzene[1,4-]	VOC	28	26	0.9286	2	0.07143	0.21	14.6	29	0	0	0.005615	0.01115	2600	WQCC-9	10	0
Chloroethane	VOC	23	22	0.9565	1	0.04348	55	55	55	0	1	1.41	1.41	39	EPA-4	7	0
Chloromethane	VOC	23	22	0.9565	1	0.04348	2	2	2	0	0	0.1333	0.1333	15	EPA-4	7	0
Dichloroethane[1,2-]	VOC	23	22	0.9565	1	0.04348	2	2	2	0	0	0.00202	0.00202	990	WQCC-9	7	0
Methylene Chloride	VOC	23	22	0.9565	1	0.04348	1.8	1.8	1.8	0	0	0.0001125	0.0001125	16000	WQCC-9	7	0
Benzoic Acid	SVOC	24	23	0.9583	1	0.04167	13.5	13.5	13.5	0	0	9.00E-05	9.00E-05	150000	EPA-4	9	0
Acenaphthene	SVOC	25	24	0.96	1	0.04	37	37	37	0	0	0.0137	0.0137	2700	WQCC-9	9	0
Chloro-3-methylphenol[4-]	SVOC	25	24	0.96	1	0.04	69	69	69								
Chlorophenol[2-]	SVOC	25	24	0.96	1	0.04	76	76	76	0	0	0.19	0.19	400	WQCC-9	9	0
Di-n-butylphthalate	SVOC	25	24	0.96	1	0.04	2	2	2	0	0	0.0001667	0.0001667	12000	WQCC-9	9	0
Nitrophenol[4-]	SVOC	25	24	0.96	1	0.04	67	67	67	0	0	0.231	0.231	290	EPA-4	9	0
Nitroso-di-n-propylamine[N-]	SVOC	25	24	0.96	1	0.04	39	39	39	0	1	2.786	2.786	14	WQCC-9	9	0
Pentachlorophenol	SVOC	25	24	0.96	1	0.04	76	76	76	10	1	5.067	5.067	15	WQCC-7	9	6
PentachlorophenolRe	PEST	25	24	0.96	1	0.04	76	76	76	0	0	0.9268	0.9268	82	WQCC-9	9	0
Phenol	SVOC	25	24	0.96	1	0.04	79	79	79	0	0	1.72E-05	1.72E-05	4600000	WQCC-9	9	0
Pyrene	SVOC	25	24	0.96	1	0.04	51	51	51	0	0	0.004636	0.004636	11000	WQCC-9	9	0
Trichlorobenzene[1,2,4-]	VOC	25	24	0.96	1	0.04	31	31	31	0	0	0.03298	0.03298	940	WQCC-9	9	0
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	8	8	1	0	0											
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	8	8	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0				8	0			1.40E-07	WQCC-9	2	2
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Amino-2,6-dinitrotoluene[4-]	HEXP	22	22	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	22	22	1	0	0											
Amino-DNTs	HEXP	1	1	1	0	0											
Dinitrobenzene[1,3-]	HEXP	22	22	1	0	0				0	0			3.65	EPA-4	10	0
Nitrotoluene[2-]	HEXP	22	22	1	0	0											
Nitrotoluene[3-]	HEXP	22	22	1	0	0				0	0			60.83	EPA-4	10	0
Nitrotoluene[4-]	HEXP	22	22	1	0	0				0	0			60.83	EPA-4	10	0
Tetryl	HEXP	22	22	1	0	0				0	0			365	EPA-4	10	0
Trinitrobenzene[1,3,5-]	HEXP	19	19	1	0	0				0	0			1095	EPA-4	9	0
Trinitrotoluene[2,4,6-]	HEXP	24	24	1	0	0				0	0			18.25	EPA-4	11	0
Aroclor-1016	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4
Aroclor-1221	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4

Table B-133 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1232	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4
Aroclor-1242	PCB	20	20	1	0	0				20	0			0.0017	WQCC-9	4	4
Aroclor-1248	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4
Aroclor-1254	PCB	20	20	1	0	0				20	0			0.0017	WQCC-9	4	4
Aroclor-1260	PCB	20	20	1	0	0				20	0			0.0017	WQCC-9	4	4
Aroclor-1262	PCB	14	14	1	0	0				14	0			0.0017	WQCC-9	4	4
Acenaphthylene	SVOC	25	25	1	0	0				0	0			2700	WQCC-9	9	0
Aniline	SVOC	24	24	1	0	0				0	0			120	EPA-4	9	0
Anthracene	SVOC	25	25	1	0	0				0	0			110000	WQCC-9	9	0
Azobenzene	SVOC	12	12	1	0	0				12	0			6.1	EPA-4	7	7
Benzidine	SVOC	22	22	1	0	0				22	0			0.01	WQCC-9	7	7
Benzo(a)anthracene	SVOC	24	24	1	0	0				20	0			0.49	WQCC-9	8	8
Benzo(a)pyrene	SVOC	25	25	1	0	0				21	0			0.49	WQCC-9	9	9
Benzo(b)fluoranthene	SVOC	25	25	1	0	0				21	0			0.49	WQCC-9	9	9
Benzo(g,h,i)perylene	SVOC	25	25	1	0	0				0	0			11000	WQCC-9	9	0
Benzo(k)fluoranthene	SVOC	24	24	1	0	0				20	0			0.49	WQCC-9	9	9
Benzyl Alcohol	SVOC	25	25	1	0	0				0	0			11000	EPA-4	9	0
Bis(2-chloroethoxy)methane	SVOC	25	25	1	0	0											
Bis(2-chloroethyl)ether	SVOC	25	25	1	0	0				0	0			14	WQCC-9	9	0
Bromophenyl-phenylether[4-]	SVOC	25	25	1	0	0											
Butylbenzylphthalate	SVOC	25	25	1	0	0				0	0			5200	WQCC-9	9	0
Carbazole	SVOC	4	4	1	0	0				0	0			34	EPA-4	4	0
Chloroaniline[4-]	SVOC	25	25	1	0	0				0	0			150	EPA-4	9	0
Chloronaphthalene[2-]	SVOC	25	25	1	0	0				0	0			4300	WQCC-9	9	0
Chlorophenyl-phenyl[4-] Ether	SVOC	25	25	1	0	0											
Chrysene	SVOC	25	25	1	0	0				21	0			0.49	WQCC-9	9	9
Dibenz(a,h)anthracene	SVOC	25	25	1	0	0				21	0			0.49	WQCC-9	9	9
Dibenzofuran	SVOC	25	25	1	0	0				2	0			24	EPA-4	9	2
Dichlorobenzidine[3,3'-]	SVOC	25	25	1	0	0				23	0			0.77	WQCC-9	9	9
Dichlorophenol[2,4-]	SVOC	25	25	1	0	0				0	0			790	WQCC-9	9	0
Diethylphthalate	SVOC	25	25	1	0	0				0	0			120000	WQCC-9	9	0
Dimethyl Phthalate	SVOC	24	24	1	0	0				0	0			2900000	WQCC-9	9	0
Dimethylphenol[2,4-]	SVOC	25	25	1	0	0				0	0			2300	WQCC-9	9	0
Dinitro-2-methylphenol[4,6-]	SVOC	25	25	1	0	0				0	0			765	WQCC-9	9	0
Dinitrophenol[2,4-]	SVOC	25	25	1	0	0				0	0			14000	WQCC-9	9	0
Dinitrotoluene[2,4-]	SVOC	30	30	1	0	0				0	0			91	WQCC-9	11	0
Dinitrotoluene[2,6-]	SVOC	30	30	1	0	0				0	0			37	EPA-4	11	0
Di-n-octylphthalate	SVOC	25	25	1	0	0				0	0			730	EPA-4	9	0
Diphenylamine	SVOC	12	12	1	0	0				0	0			910	EPA-4	4	0
Diphenylhydrazine[1,2-]	SVOC	12	12	1	0	0											
Fluoranthene	SVOC	25	25	1	0	0				0	0			370	WQCC-9	9	0
Fluorene	SVOC	25	25	1	0	0				0	0			14000	WQCC-9	9	0
Hexachlorobenzene	SVOC	25	25	1	0	0				25	0			0.01	WQCC-9	9	9

Table B-133 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexachlorobutadiene	SVOC	25	25	1	0	0				0	0			500	WQCC-9	9	0
Hexachlorocyclopentadiene	SVOC	25	25	1	0	0				0	0			17000	WQCC-9	9	0
Hexachloroethane	SVOC	25	25	1	0	0				0	0			89	WQCC-9	9	0
Indeno(1,2,3-cd)pyrene	SVOC	25	25	1	0	0				21	0			0.49	WQCC-9	9	9
Isophorone	SVOC	25	25	1	0	0				0	0			26000	WQCC-9	9	0
Methylnaphthalene[2-]	SVOC	25	25	1	0	0				13	0			6.2	EPA-4	9	7
Methylphenol[2-]	SVOC	25	25	1	0	0				0	0			1800	EPA-4	9	0
Methylphenol[4-]	SVOC	24	24	1	0	0				0	0			180	EPA-4	9	0
Methylpyridine[2-]	SVOC	12	12	1	0	0											
Naphthalene	SVOC	25	25	1	0	0				12	0			6.2	EPA-4	9	6
Nitroaniline[2-]	SVOC	25	25	1	0	0				21	0			2.2	EPA-4	9	9
Nitroaniline[3-]	SVOC	25	25	1	0	0				21	0			2.2	EPA-4	9	9
Nitroaniline[4-]	SVOC	25	25	1	0	0				21	0			2.2	EPA-4	9	9
Nitrobenzene	SVOC	30	30	1	0	0				0	0			1900	WQCC-9	11	0
Nitrophenol[2-]	SVOC	25	25	1	0	0				0	0			290	EPA-4	9	0
Nitrosodimethylamine[N-]	SVOC	24	24	1	0	0				0	0			81	WQCC-9	9	0
Nitrosodiphenylamine[N-]	SVOC	13	13	1	0	0				0	0			160	WQCC-9	7	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	17	17	1	0	0				0	0			170000	WQCC-9	9	0
Phenanthrene	SVOC	25	25	1	0	0				0	0			110000	WQCC-9	9	0
Pyridine	SVOC	20	20	1	0	0				0	0			37	EPA-4	7	0
Trichlorophenol[2,4,5-]	SVOC	25	25	1	0	0				0	0			3700	EPA-4	9	0
Trichlorophenol[2,4,6-]	SVOC	25	25	1	0	0				0	0			65	WQCC-9	9	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	23	23	1	0	0				0	0			710	WQCC-9	7	0
Bromobenzene	VOC	8	8	1	0	0				0	0			23	EPA-4	4	0
Bromochloromethane	VOC	8	8	1	0	0				0	0			16000	WQCC-9	4	0
Bromodichloromethane	VOC	23	23	1	0	0				0	0			460	WQCC-9	7	0
Bromoform	VOC	23	23	1	0	0				0	0			3600	WQCC-9	7	0
Bromomethane	VOC	23	23	1	0	0				0	0			4000	WQCC-9	7	0
Butanone[2-]	VOC	10	10	1	0	0				0	0			1900	EPA-4	5	0
Butylbenzene[n-]	VOC	8	8	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[sec-]	VOC	8	8	1	0	0				0	0			61	EPA-4	4	0
Butylbenzene[tert-]	VOC	8	8	1	0	0				0	0			61	EPA-4	4	0
Carbon Disulfide	VOC	10	10	1	0	0				0	0			1000	EPA-4	5	0
Carbon Tetrachloride	VOC	23	23	1	0	0				0	0			44	WQCC-9	7	0
Chlorobenzene	VOC	23	23	1	0	0				0	0			21000	WQCC-9	7	0
Chlorodibromomethane	VOC	23	23	1	0	0				0	0			340	WQCC-9	7	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	23	23	1	0	0				0	0			4700	WQCC-9	7	0
Chlorotoluene[2-]	VOC	8	8	1	0	0				0	0			120	EPA-4	4	0
Chlorotoluene[4-]	VOC	8	8	1	0	0				0	0			120	EPA-4	4	0
Dibromo-3-Chloropropane[1,2-]	VOC	9	9	1	0	0											

Table B-133 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibromoethane[1,2-]	VOC	10	10	1	0	0				10	0			0.01	EPA-4	5	5
Dibromomethane	VOC	8	8	1	0	0				0	0			61	EPA-4	4	0
Dichlorobenzene[1,2-]	VOC	28	28	1	0	0				0	0			17000	WQCC-9	10	0
Dichlorobenzene[1,3-]	VOC	28	28	1	0	0				0	0			2600	WQCC-9	10	0
Dichlorodifluoromethane	VOC	10	10	1	0	0				0	0			390	EPA-4	5	0
Dichloroethane[1,1-]	VOC	23	23	1	0	0				0	0			810	EPA-4	7	0
Dichloroethene[1,1-]	VOC	23	23	1	0	0				0	0			32	WQCC-9	7	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											
Dichloroethene[cis-1,2-]	VOC	7	7	1	0	0				0	0			61	EPA-4	4	0
Dichloroethene[trans-1,2-]	VOC	22	22	1	0	0				0	0			140000	WQCC-9	7	0
Dichloropropane[1,2-]	VOC	23	23	1	0	0				0	0			390	WQCC-9	7	0
Dichloropropane[1,3-]	VOC	8	8	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropane[2,2-]	VOC	8	8	1	0	0				0	0			390	WQCC-9	4	0
Dichloropropene[1,1-]	VOC	8	8	1	0	0				0	0			1700	WQCC-9	4	0
Dichloropropene[cis-1,3-]	VOC	23	23	1	0	0				0	0			1700	WQCC-9	7	0
Dichloropropene[trans-1,3-]	VOC	23	23	1	0	0				0	0			1700	WQCC-9	7	0
Ethylbenzene	VOC	23	23	1	0	0				0	0			29000	WQCC-9	7	0
Hexanone[2-]	VOC	10	10	1	0	0				0	0			1900	EPA-4	5	0
Iodomethane	VOC	9	9	1	0	0				0	0			4000	WQCC-9	5	0
Isopropylbenzene	VOC	8	8	1	0	0				0	0			660	EPA-4	4	0
Isopropyltoluene[4-]	VOC	8	8	1	0	0				0	0			660	EPA-4	4	0
Methyl tert-Butyl Ether	VOC	1	1	1	0	0											
Methyl-2-pentanone[4-]	VOC	10	10	1	0	0				0	0			160	EPA-4	5	0
Propylbenzene[1-]	VOC	8	8	1	0	0				0	0			61	EPA-4	4	0
Styrene	VOC	10	10	1	0	0				0	0			1600	EPA-4	5	0
Tetrachloroethane[1,1,1,2-]	VOC	9	9	1	0	0				7	0			4.3	EPA-4	5	5
Tetrachloroethane[1,1,2,2-]	VOC	21	21	1	0	0				0	0			110	WQCC-9	6	0
Tetrachloroethene	VOC	23	23	1	0	0				0	0			88.5	WQCC-9	7	0
Toluene	VOC	23	23	1	0	0				0	0			200000	WQCC-9	7	0
Trichloro-1,2,2-trifluoroethane	VOC	3	3	1	0	0											
Trichloro-1,2,2-trifluoroethane[1,1,2-]	VOC	1	1	1	0	0				0	0			59000	EPA-4	1	0
Trichlorobenzene[1,2,3-]	VOC	1	1	1	0	0				0	0			940	WQCC-9	1	0
Trichloroethane[1,1,1-]	VOC	23	23	1	0	0				0	0			790	EPA-4	7	0
Trichloroethane[1,1,2-]	VOC	23	23	1	0	0				0	0			420	WQCC-9	7	0
Trichloroethene	VOC	23	23	1	0	0				0	0			810	WQCC-9	7	0
Trichlorofluoromethane	VOC	23	23	1	0	0				0	0			1300	EPA-4	7	0
Trichloropropane[1,2,3-]	VOC	9	9	1	0	0				9	0			0.02	EPA-4	5	5
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	8	8	1	0	0				0	0			12	EPA-4	4	0
Trimethylbenzene[1,3,5-]	VOC	8	8	1	0	0				0	0			12	EPA-4	4	0
Vinyl acetate	VOC	1	1	1	0	0											
Vinyl Chloride	VOC	23	23	1	0	0				0	0			5250	WQCC-9	7	0
Xylene (Total)	VOC	9	9	1	0	0				0	0			1400	EPA-4	4	0

Table B-133 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Xylene[1,2-]	VOC	4	4	1	0	0				0	0			1400	EPA-4	3	0
Xylene[1,3-]	VOC	1	1	1	0	0											
Xylene[1,3-]+Xylene[1,4-]	VOC	3	3	1	0	0				0	0			1400	EPA-4	2	0

Table B-134
Nonfiltered Miscellaneous Constituents of Pajarito Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	9	8	0.8889	1	0.1111	110	110	110								
Ammonia (as N)	ANION	8	7	0.875	1	0.125	70	70	70								
Chloride	ANION	31	0	0	31	1	800	6000	58300								
Fluoride	ANION	20	4	0.2	16	0.8	90	400	500	0	0	0.1818	0.2273	2200	EPA-4	5	0
Nitrate	ANION	32	4	0.125	28	0.875	10	695	29000	0	1	0.0695	2.9	10000	EPA-4	8	0
Perchlorate	ANION	13	13	1	0	0				0	0			3.7	EPA-4	4	0
Sulfate	ANION	31	1	0.03226	30	0.9677	2400	7600	50000								
Calcium	GENINORG	15	0	0	15	1	8500	15000	29000								
Hardness	GENINORG	4	0	0	4	1	56000	70950	75000								
Loss on Ignition	GENINORG	8	0	0	8	1	37000	68000	100000								
Magnesium	GENINORG	23	0	0	23	1	2640	4500	14700								
Potassium	GENINORG	15	0	0	15	1	1500	2800	11000								
Sodium	GENINORG	16	1	0.0625	15	0.9375	4340	12900	27000								
Chemical Oxygen Demand	WATER_QUAL	8	3	0.375	5	0.625	12700	28500	41600								
pH	WATER_QUAL	6	0	0	6	1	6	7.8	8.6								
Specific Conductance	WATER_QUAL	13	0	0	13	1	81.6	197	429								
Specific Gravity	WATER_QUAL	8	0	0	8	1	0.964	0.9895	1.02								
Suspended Sediment Concentration	WATER_QUAL	1	1	1	0	0											
Total Organic Carbon	WATER_QUAL	1	0	0	1	1	3820	3820	3820								
Total Suspended Solids	WATER_QUAL	22	6	0.2727	16	0.7273	909	24150	1800000								

Table B-135
Filtered Inorganics of Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	97	20	0.2062	77	0.7938	11	391	79700	0	5	0.01057	2.154	37000	EPA-4	8	0
Antimony	METALS	93	64	0.6882	29	0.3118	0.26	0.745	5.8	7	0	0.1242	0.9667	6	EPA-2	8	4
Arsenic	METALS	95	61	0.6421	34	0.3579	0.36	2.125	16	0	3	0.2125	1.6	10	EPA-2	8	0
Barium	METALS	93	0	0	93	1	85.9	5000	13000	0	70	5	13	1000	WQCC-11	8	0
Beryllium	METALS	97	81	0.8351	16	0.1649	0.02	0.22	6.5	9	2	0.055	1.625	4	EPA-2	8	0
Boron	METALS	93	22	0.2366	71	0.7634	7.01	38.9	2250	0	0	0.01179	0.6818	3300	EPA-4	8	0
Cadmium	METALS	97	55	0.567	42	0.433	0.079	0.54	5.9	8	1	0.108	1.18	5	EPA-2	8	2
Cesium	METALS	5	0	0	5	1	700	1000	1300								
Chromium	METALS	97	49	0.5052	48	0.4948	0.34	2.04	48	0	0	0.0408	0.96	50	WQCC-11	8	0
Cobalt	METALS	97	39	0.4021	58	0.5979	0.24	2.95	19.5								
Copper	METALS	97	55	0.567	42	0.433	0.71	3.95	41.3	0	0	0.00395	0.0413	1000	WQCC-12	8	0
Cyanide (Total)	CN	12	11	0.9167	1	0.08333	10	10	10	0	0	0.05	0.05	200	WQCC-11	5	0
Iron	METALS	97	16	0.1649	81	0.8351	21	319	61000	0	26	0.319	61	1000	WQCC-12	8	0
Lead	METALS	97	54	0.5567	43	0.4433	0.066	1.1	31	0	2	0.07333	2.067	15	EPA-2	8	0
Lithium	METALS	11	0	0	11	1	3.5	5.3	16.8	0	0	0.00726	0.02301	730	EPA-4	5	0
Manganese	METALS	97	5	0.05155	92	0.9485	1.19	39.8	3340	0	32	0.199	16.7	200	WQCC-12	8	0
Mercury	METALS	97	88	0.9072	9	0.09278	0.03	0.075	0.25	0	0	0.0375	0.125	2	WQCC-11	8	0
Molybdenum	METALS	11	9	0.8182	2	0.1818	5.5	7.85	10.2	0	0	0.04361	0.05667	180	EPA-4	5	0
Nickel	METALS	97	45	0.4639	52	0.5361	0.6	4.2	33.6	0	0	0.042	0.336	100	EPA-2	8	0
Rubidium	METALS	5	1	0.2	4	0.8	600	800	900								
Selenium	METALS	97	69	0.7113	28	0.2887	0.411	1.605	12	0	2	0.1605	1.2	10	EPA-1	8	0
SeleniumRe	METALS	97	69	0.7113	28	0.2887	0.411	1.605	12	0	0	0.0321	0.24	50	WQCC-11	8	0
Silver	METALS	97	78	0.8041	19	0.1959	0.04	0.26	7.5	0	0	0.0052	0.15	50	WQCC-11	8	0
Strontium	METALS	11	0	0	11	1	121	141	172	0	0	0.006409	0.007818	22000	EPA-4	5	0
Thallium	METALS	97	73	0.7526	24	0.2474	0.0128	0.0632	7.6	38	1	0.0316	3.8	2	EPA-2	8	8
Uranium	URANIUM	11	11	1	0	0				11	0			30	EPA-2	5	5
Vanadium	METALS	97	44	0.4536	53	0.5464	0.26	1.96	78	0	0	0.007538	0.3	260	EPA-4	8	0
Zinc	METALS	97	22	0.2268	75	0.7732	0.98	15.9	630	0	0	0.00159	0.063	10000	WQCC-12	8	0

Table B-136
Filtered Organics of Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
HMX	HEXP	15	3	0.2	12	0.8	1.2	11.15	192								
RDX	HEXP	15	5	0.3333	10	0.6667	2.8	11.45	97.4								
Acetone	VOC	9	3	0.3333	6	0.6667	27	29.5	41	0	0	0.04836	0.06721	610	EPA-4	5	0
Amino-2,6-dinitrotoluene[4-]	HEXP	10	6	0.6	4	0.4	0.138	3.54	6.7								
Amino-x,6-dinitrotoluene[x-]	HEXP	5	3	0.6	2	0.4	0.8	4.15	7.5								
Amino-4,6-dinitrotoluene[2-]	HEXP	10	7	0.7	3	0.3	0.086	3.2	3.34								
Nitrobenzene	SVOC	15	13	0.8667	2	0.1333	1	3	5	1	1	0.8824	1.471	3.4	EPA-4	5	1
Dinitrobenzene[1,3-]	HEXP	15	15	1	0	0											
Nitrotoluene[2-]	HEXP	15	15	1	0	0											
Nitrotoluene[3-]	HEXP	15	15	1	0	0											
Nitrotoluene[4-]	HEXP	15	15	1	0	0											
Tetryl	HEXP	15	15	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	15	15	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	15	15	1	0	0											
Acenaphthene	SVOC	9	9	1	0	0				0	0			370	EPA-4	5	0
Acenaphthylene	SVOC	9	9	1	0	0				0	0			370	EPA-4	5	0
Aniline	SVOC	9	9	1	0	0				0	0			120	EPA-4	5	0
Anthracene	SVOC	9	9	1	0	0				0	0			1800	EPA-4	5	0
Azobenzene	SVOC	9	9	1	0	0				9	0			6.1	EPA-4	5	5
Benzo(a)anthracene	SVOC	9	9	1	0	0				9	0			0.92	EPA-4	5	5
Benzo(a)pyrene	SVOC	9	9	1	0	0				9	0			0.2	EPA-2	5	5
Benzo(b)fluoranthene	SVOC	9	9	1	0	0				9	0			0.92	EPA-4	5	5
Benzo(g,h,i)perylene	SVOC	9	9	1	0	0				0	0			180	EPA-4	5	0
Benzo(k)fluoranthene	SVOC	9	9	1	0	0				9	0			9.2	EPA-4	5	5
Benzoic Acid	SVOC	9	9	1	0	0				0	0			150000	EPA-4	5	0
Benzyl Alcohol	SVOC	9	9	1	0	0				0	0			11000	EPA-4	5	0
Bis(2-chloroethoxy)methane	SVOC	9	9	1	0	0											
Bis(2-chloroethyl)ether	SVOC	9	9	1	0	0				9	0			0.098	EPA-4	5	5
Bis(2-ethylhexyl)phthalate	SVOC	9	9	1	0	0				9	0			6	EPA-2	5	5
Bromophenyl-phenylether[4-]	SVOC	9	9	1	0	0											
Butylbenzylphthalate	SVOC	9	9	1	0	0				0	0			7300	EPA-4	5	0
Chloro-3-methylphenol[4-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Chloroaniline[4-]	SVOC	9	9	1	0	0				0	0			150	EPA-4	5	0
Chloronaphthalene[2-]	SVOC	9	9	1	0	0				0	0			490	EPA-4	5	0
Chlorophenol[2-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Chlorophenyl-phenyl[4-] Ether	SVOC	9	9	1	0	0											
Chrysene	SVOC	9	9	1	0	0				0	0			92	EPA-4	5	0
Dibenz(a,h)anthracene	SVOC	9	9	1	0	0				9	0			0.092	EPA-4	5	5

Table B-136 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibenzofuran	SVOC	9	9	1	0	0				0	0			24	EPA-4	5	0
Dichlorobenzidine[3,3'-]	SVOC	9	9	1	0	0				9	0			1.5	EPA-4	5	5
Dichlorophenol[2,4-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Diethylphthalate	SVOC	9	9	1	0	0				0	0			29000	EPA-4	5	0
Dimethyl Phthalate	SVOC	9	9	1	0	0				0	0			370000	EPA-4	5	0
Dimethylphenol[2,4-]	SVOC	9	9	1	0	0				0	0			730	EPA-4	5	0
Di-n-butylphthalate	SVOC	9	9	1	0	0				0	0			3700	EPA-4	5	0
Dinitro-2-methylphenol[4,6-]	SVOC	9	9	1	0	0											
Dinitrophenol[2,4-]	SVOC	9	9	1	0	0				0	0			73	EPA-4	5	0
Dinitrotoluene[2,4-]	SVOC	15	15	1	0	0				0	0			73	EPA-4	5	0
Dinitrotoluene[2,6-]	SVOC	15	15	1	0	0				0	0			37	EPA-4	5	0
Di-n-octylphthalate	SVOC	9	9	1	0	0				0	0			730	EPA-4	5	0
Fluoranthene	SVOC	9	9	1	0	0				0	0			1500	EPA-4	5	0
Fluorene	SVOC	9	9	1	0	0				0	0			240	EPA-4	5	0
Hexachlorobenzene	SVOC	9	9	1	0	0				9	0			1	EPA-2	5	5
Hexachlorobutadiene	SVOC	9	9	1	0	0				9	0			7.3	EPA-4	5	5
Hexachlorocyclopentadiene	SVOC	9	9	1	0	0				0	0			50	EPA-2	5	0
Hexachloroethane	SVOC	9	9	1	0	0				0	0			37	EPA-4	5	0
Indeno(1,2,3-cd)pyrene	SVOC	9	9	1	0	0				9	0			0.92	EPA-4	5	5
Isophorone	SVOC	9	9	1	0	0				0	0			710	EPA-4	5	0
Methylnaphthalene[2-]	SVOC	9	9	1	0	0				0	0			30	WQCC-11	5	0
Methylphenol[2-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Methylphenol[4-]	SVOC	9	9	1	0	0				0	0			180	EPA-4	5	0
Naphthalene	SVOC	9	9	1	0	0				0	0			30	WQCC-11	5	0
Nitroaniline[2-]	SVOC	9	9	1	0	0				9	0			2.2	EPA-4	5	5
Nitroaniline[3-]	SVOC	9	9	1	0	0				9	0			2.2	EPA-4	5	5
Nitroaniline[4-]	SVOC	9	9	1	0	0				9	0			2.2	EPA-4	5	5
Nitrophenol[2-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Nitrophenol[4-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Nitrosodimethylamine[N-]	SVOC	9	9	1	0	0				9	0			0.013	EPA-4	5	5
Nitroso-di-n-propylamine[N-]	SVOC	9	9	1	0	0				9	0			0.096	EPA-4	5	5
Nitrosodiphenylamine[N-]	SVOC	9	9	1	0	0				0	0			140	EPA-4	5	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	9	9	1	0	0											
Pentachlorophenol	SVOC	9	9	1	0	0				9	0			1	EPA-2	5	5
Phenanthrene	SVOC	9	9	1	0	0				0	0			1800	EPA-4	5	0
Phenol	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Pyrene	SVOC	9	9	1	0	0				0	0			180	EPA-4	5	0
Trichlorophenol[2,4,5-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5

Table B-136 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichlorophenol[2,4,6-]	SVOC	9	9	1	0	0				9	0			5	WQCC-12	5	5
Benzene	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Bromobenzene	VOC	9	9	1	0	0				0	0			23	EPA-4	5	0
Bromochloromethane	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Bromodichloromethane	VOC	9	9	1	0	0				0	0			100	EPA-2	5	0
Bromoform	VOC	9	9	1	0	0				0	0			100	EPA-2	5	0
Bromomethane	VOC	9	9	1	0	0				9	0			8.7	EPA-4	5	5
Butanone[2-]	VOC	9	9	1	0	0				0	0			1900	EPA-4	5	0
Butylbenzene[n-]	VOC	9	9	1	0	0				0	0			61	EPA-4	5	0
Butylbenzene[sec-]	VOC	9	9	1	0	0				0	0			61	EPA-4	5	0
Butylbenzene[tert-]	VOC	9	9	1	0	0				0	0			61	EPA-4	5	0
Carbon Disulfide	VOC	9	9	1	0	0				0	0			1000	EPA-4	5	0
Carbon Tetrachloride	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Chlorobenzene	VOC	9	9	1	0	0				0	0			100	EPA-2	5	0
Chlorodibromomethane	VOC	9	9	1	0	0				0	0			100	EPA-2	5	0
Chloroethane	VOC	9	9	1	0	0				0	0			39	EPA-4	5	0
Chloroform	VOC	9	9	1	0	0				0	0			100	WQCC-11	5	0
Chloromethane	VOC	9	9	1	0	0				0	0			15	EPA-4	5	0
Chlorotoluene[2-]	VOC	9	9	1	0	0				0	0			120	EPA-4	5	0
Chlorotoluene[4-]	VOC	9	9	1	0	0				0	0			120	EPA-4	5	0
Dibromo-3-Chloropropane[1,2-]	VOC	9	9	1	0	0											
Dibromoethane[1,2-]	VOC	9	9	1	0	0				9	0			0.05	EPA-2	5	5
Dibromomethane	VOC	9	9	1	0	0				0	0			61	EPA-4	5	0
Dichlorobenzene[1,2-]	VOC	9	9	1	0	0				0	0			600	EPA-2	5	0
Dichlorobenzene[1,3-]	VOC	9	9	1	0	0				0	0			18	EPA-4	5	0
Dichlorobenzene[1,4-]	VOC	9	9	1	0	0				0	0			75	EPA-2	5	0
Dichlorodifluoromethane	VOC	9	9	1	0	0				0	0			390	EPA-4	5	0
Dichloroethane[1,1-]	VOC	9	9	1	0	0				0	0			25	WQCC-11	5	0
Dichloroethane[1,2-]	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Dichloroethene[1,1-]	VOC	9	9	1	0	0				9	0			5	WQCC-11	5	0
Dichloroethene[cis-1,2-]	VOC	9	9	1	0	0				0	0			70	EPA-2	5	0
Dichloroethene[trans-1,2-]	VOC	9	9	1	0	0				0	0			100	EPA-2	5	0
Dichloropropane[1,2-]	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Dichloropropane[1,3-]	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Dichloropropane[2,2-]	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Dichloropropene[1,1-]	VOC	9	9	1	0	0				9	0			4	EPA-4	5	5
Dichloropropene[cis-1,3-]	VOC	9	9	1	0	0				9	0			4	EPA-4	5	5
Dichloropropene[trans-1,3-]	VOC	9	9	1	0	0				9	0			4	EPA-4	5	5

Table B-136 (continued)

Filtered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ethylbenzene	VOC	9	9	1	0	0				0	0			700	EPA-2	5	0
Hexanone[2-]	VOC	9	9	1	0	0				0	0			1900	EPA-4	5	0
Iodomethane	VOC	9	9	1	0	0				0	0			8.7	EPA-4	5	0
Isopropylbenzene	VOC	9	9	1	0	0				0	0			660	EPA-4	5	0
Isopropyltoluene[4-]	VOC	9	9	1	0	0				0	0			660	EPA-4	5	0
Methyl-2-pentanone[4-]	VOC	9	9	1	0	0				0	0			160	EPA-4	5	0
Methylene Chloride	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Propylbenzene[1-]	VOC	9	9	1	0	0				0	0			61	EPA-4	5	0
Styrene	VOC	9	9	1	0	0				0	0			100	EPA-2	5	0
Tetrachloroethane[1,1,1,2-]	VOC	9	9	1	0	0				9	0			4.3	EPA-4	5	5
Tetrachloroethane[1,1,2,2-]	VOC	9	9	1	0	0				0	0			10	WQCC-11	5	0
Tetrachloroethene	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Toluene	VOC	9	9	1	0	0				0	0			750	WQCC-11	5	0
Trichloro-1,2,2-trifluoroethane	VOC	9	9	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	9	9	1	0	0				0	0			70	EPA-2	5	0
Trichloroethane[1,1,1-]	VOC	9	9	1	0	0				0	0			60	WQCC-11	5	0
Trichloroethane[1,1,2-]	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Trichloroethene	VOC	9	9	1	0	0				9	0			5	EPA-2	5	0
Trichlorofluoromethane	VOC	9	9	1	0	0				0	0			1300	EPA-4	5	0
Trichloropropane[1,2,3-]	VOC	9	9	1	0	0				9	0			0.016	EPA-4	5	5
Trimethylbenzene[1,2,4-]	VOC	9	9	1	0	0				0	0			12	EPA-4	5	0
Trimethylbenzene[1,3,5-]	VOC	9	9	1	0	0				0	0			12	EPA-4	5	0
Vinyl Chloride	VOC	9	9	1	0	0				9	0			1	WQCC-11	5	5
Xylene (Total)	VOC	9	9	1	0	0				0	0			620	WQCC-11	5	0

Table B-137
Filtered Miscellaneous Constituents Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Filtered WGA Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	97	0	0	97	1	6070	17600	34000								
Magnesium	GENINORG	97	5	0.05155	92	0.9485	1660	5105	11100								
Potassium	GENINORG	97	3	0.03093	94	0.9691	1400	3400	18100								
Sodium	GENINORG	97	2	0.02062	95	0.9794	8180	18800	190000								
Total Organic Carbon	WATER_QUAL	8	2	0	8	1	3000	6000	15000								

Table B-138
Nonfiltered Inorganics of Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	112	0	0	112	1	200	6200	530000	0	10	0.1676	14.32	37000	EPA-4	8	0
Antimony	METALS	108	72	0.6667	36	0.3333	0.24	1.14	10.9	5	1	0.19	1.817	6	EPA-2	8	4
Arsenic	METALS	110	37	0.3364	73	0.6636	0.31	3.7	132	0	11	0.37	13.2	10	EPA-2	8	0
Barium	METALS	108	0	0	108	1	148	6415	38000	0	86	6.415	38	1000	WQCC-11	8	0
Beryllium	METALS	111	42	0.3784	69	0.6216	0.05	0.68	78	7	9	0.17	19.5	4	EPA-2	8	0
Boron	METALS	102	24	0.2353	78	0.7647	4.1	44.9	2180	0	0	0.01361	0.6606	3300	EPA-4	8	0
Cadmium	METALS	112	46	0.4107	66	0.5893	0.166	1.47	70	7	13	0.294	14	5	EPA-2	8	2
Cesium	METALS	5	0	0	5	1	800	800	1000								
Chromium	METALS	112	22	0.1964	90	0.8036	0.96	6.72	1200	0	7	0.1344	24	50	WQCC-11	8	0
Cobalt	METALS	112	31	0.2768	81	0.7232	0.261	3.9	125								
Copper	METALS	112	34	0.3036	78	0.6964	0.64	9.89	860	0	0	0.00989	0.86	1000	WQCC-12	8	0
Cyanide (Total)	CN	12	12	1	0	0				0	0			200	WQCC-11	5	0
Iron	METALS	112	4	0.03571	108	0.9643	290	6220	1100000	4	103	6.22	1100	1000	WQCC-12	8	4
Lead	METALS	112	8	0.07143	104	0.9286	0.825	8.4	995	0	37	0.56	66.33	15	EPA-2	8	0
Lithium	METALS	11	1	0.09091	10	0.9091	6.5	16.1	34.2	0	0	0.02205	0.04685	730	EPA-4	5	0
Manganese	METALS	112	1	0.008929	111	0.9911	17	390	37000	1	69	1.95	185	200	WQCC-12	8	1
Mercury	METALS	112	85	0.7589	27	0.2411	0.03	0.17	4.4	1	3	0.085	2.2	2	WQCC-11	8	0
Molybdenum	METALS	11	6	0.5455	5	0.4545	5.3	6.1	8.3	0	0	0.03389	0.04611	180	EPA-4	5	0
Nickel	METALS	112	31	0.2768	81	0.7232	1.02	6.7	450	0	2	0.067	4.5	100	EPA-2	8	0
Rubidium	METALS	5	1	0.2	4	0.8	500	550	600								
Selenium	METALS	112	72	0.6429	40	0.3571	0.7	2.24	29.6	0	4	0.224	2.96	10	EPA-1	8	0
SeleniumRe	METALS	112	72	0.6429	40	0.3571	0.7	2.24	29.6	0	0	0.0448	0.592	50	WQCC-11	8	0
Silver	METALS	112	66	0.5893	46	0.4107	0.112	1.2	28	1	0	0.024	0.56	50	WQCC-11	8	1
Strontium	METALS	11	0	0	11	1	143	168	220	0	0	0.007636	0.01	22000	EPA-4	5	0
Thallium	METALS	112	76	0.6786	36	0.3214	0.0251	0.0871	6.16	47	5	0.04355	3.08	2	EPA-2	8	8
Uranium	URANIUM	38	11	0.2895	27	0.7105	0.081	0.79	20.4	11	0	0.02633	0.68	30	EPA-2	8	5
Vanadium	METALS	112	15	0.1339	97	0.8661	1.1	7.4	1100	0	2	0.02846	4.231	260	EPA-4	8	0
Zinc	METALS	112	12	0.1071	100	0.8929	7.8	69.1	6600	0	0	0.00691	0.66	10000	WQCC-12	8	0

Table B-139
Nonfiltered Radionuclides of Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Tritium	rad	63	7	0.1111	56	0.8889	34	97.92	197.8	0	0	0.004896	0.00989	20000	WQCC-5	8	0

Table B-140
Nonfiltered Organics of Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acenaphthene	SVOC	23	23	1	0	0				0	0			370	EPA-4	7	0
Acenaphthylene	SVOC	23	23	1	0	0				0	0			370	EPA-4	7	0
Acetone	VOC	85	70	0.8235	15	0.1765	2.9	26	42	0	0	0.04262	0.06885	610	EPA-4	8	0
Acrolein	VOC	2	2	1	0	0											
Acrylonitrile	VOC	2	2	1	0	0											
Amino-2,6-dinitrotoluene[4-]		83	56	0.6747	27	0.3253	0.12	3.3	20.8								
Amino-4,6-dinitrotoluene[2-]		83	63	0.759	20	0.241	0.15	3.175	11.1								
Amino-x,6-dinitrotoluene[x-]		22	12	0.5455	10	0.4545	0.66	5.7	19								
Aniline	SVOC	23	23	1	0	0				0	0			120	EPA-4	7	0
Anthracene	SVOC	23	23	1	0	0				0	0			1800	EPA-4	7	0
Azobenzene	SVOC	23	23	1	0	0				23	0			6.1	EPA-4	7	7
Benzene	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Benzidine	SVOC	6	6	1	0	0				6	0			0.0029	EPA-4	4	4
Benzo(a)anthracene	SVOC	23	23	1	0	0				23	0			0.92	EPA-4	7	7
Benzo(a)pyrene	SVOC	23	23	1	0	0				23	0			0.2	EPA-2	7	7
Benzo(b)fluoranthene	SVOC	23	23	1	0	0				23	0			0.92	EPA-4	7	7
Benzo(g,h,i)perylene	SVOC	23	23	1	0	0				0	0			180	EPA-4	7	0
Benzo(k)fluoranthene	SVOC	23	23	1	0	0				23	0			9.2	EPA-4	7	7
Benzoic Acid	SVOC	23	23	1	0	0				0	0			150000	EPA-4	7	0
Benzyl Alcohol	SVOC	23	23	1	0	0				0	0			11000	EPA-4	7	0
Bis(2-chloroethoxy)methane	SVOC	23	23	1	0	0											
Bis(2-chloroethyl)ether	SVOC	23	23	1	0	0				23	0			0.10	EPA-4	7	7
Bis(2-ethylhexyl)phthalate	SVOC	23	23	1	0	0				20	0			6	EPA-2	7	7
Bromobenzene	VOC	89	89	1	0	0				0	0			23	EPA-4	8	0
Bromochloromethane	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Bromodichloromethane	VOC	89	89	1	0	0				0	0			100	EPA-2	8	0
Bromoform	VOC	89	89	1	0	0				0	0			100	EPA-2	8	0
Bromomethane	VOC	89	89	1	0	0				52	0			8.7	EPA-4	8	6
Bromophenyl-phenylether[4-]	SVOC	23	23	1	0	0											
Butanone[2-]	VOC	85	84	0.9882	1	0.01176	3.7	3.7	3.7	0	0	0.001947	0.001947	1900	EPA-4	7	0
Butylbenzene[n-]	VOC	89	89	1	0	0				0	0			61	EPA-4	8	0
Butylbenzene[sec-]	VOC	82	82	1	0	0				0	0			61	EPA-4	7	0
Butylbenzene[tert-]	VOC	89	89	1	0	0				0	0			61	EPA-4	8	0
Butylbenzylphthalate	SVOC	23	23	1	0	0				0	0			7300	EPA-4	7	0
Carbazole	SVOC	7	7	1	0	0				0	0			34	EPA-4	4	0
Carbon Disulfide	VOC	89	86	0.9663	3	0.03371	1	1.4	2	0	0	0.0014	0.002	1000	EPA-4	8	0
Carbon Tetrachloride	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Chloro-3-methylphenol[4-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Chloroaniline[4-]	SVOC	23	23	1	0	0				0	0			150	EPA-4	7	0
Chlorobenzene	VOC	89	89	1	0	0				0	0			100	EPA-2	8	0
Chlorodibromomethane	VOC	89	89	1	0	0				0	0			100	EPA-2	8	0

Table B-140 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chloroethane	VOC	87	87	1	0	0				0	0			39	EPA-4	8	0
Chloroethyl vinyl ether[2-]	VOC	2	2	1	0	0											
Chloroform	VOC	89	89	1	0	0				0	0			100	WQCC-11	8	0
Chlorohexane[1-]		2	2	1	0	0											
Chloromethane	VOC	89	85	0.9551	4	0.04494	0.3	1.36	44	0	1	0.09067	2.933	15	EPA-4	8	0
Chloronaphthalene[2-]	SVOC	23	23	1	0	0				0	0			490	EPA-4	7	0
Chlorophenol[2-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Chlorophenyl-phenyl[4-] Ether	SVOC	23	23	1	0	0											
Chlorotoluene[2-]	VOC	89	89	1	0	0				0	0			120	EPA-4	8	0
Chlorotoluene[4-]	VOC	89	89	1	0	0				0	0			120	EPA-4	8	0
Chrysene	SVOC	23	23	1	0	0				0	0			92	EPA-4	7	0
Dibenz(a,h)anthracene	SVOC	23	23	1	0	0				23	0			0.09	EPA-4	7	7
Dibenzofuran	SVOC	23	23	1	0	0				0	0			24	EPA-4	7	0
Dibromo-3-Chloropropane[1,2-]	VOC	89	89	1	0	0											
Dibromoethane[1,2-]	VOC	89	89	1	0	0				89	0			0.05	EPA-2	8	8
Dibromomethane	VOC	89	89	1	0	0				0	0			61	EPA-4	8	0
Dichlorobenzene[1,2-]	VOC	89	89	1	0	0				0	0			600	EPA-2	8	0
Dichlorobenzene[1,3-]	VOC	89	89	1	0	0				0	0			18	EPA-4	8	0
Dichlorobenzene[1,4-]	VOC	89	89	1	0	0				0	0			75	EPA-2	8	0
Dichlorobenzidine[3,3'-]	SVOC	23	23	1	0	0				23	0			1.5	EPA-4	7	7
Dichlorodifluoromethane	VOC	89	89	1	0	0				0	0			390	EPA-4	8	0
Dichloroethane[1,1-]	VOC	89	89	1	0	0				0	0			25	WQCC-11	8	0
Dichloroethane[1,2-]	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Dichloroethene[1,1-]	VOC	89	89	1	0	0				52	0			5	WQCC-11	8	0
Dichloroethene[cis/trans-1,2-]	VOC	19	19	1	0	0											
Dichloroethene[cis-1,2-]	VOC	70	70	1	0	0				0	0			70	EPA-2	7	0
Dichloroethene[trans-1,2-]	VOC	70	70	1	0	0				0	0			100	EPA-2	7	0
Dichlorophenol[2,4-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Dichloropropane[1,2-]	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Dichloropropane[1,3-]	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Dichloropropane[2,2-]	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Dichloropropene[1,1-]	VOC	89	89	1	0	0				52	0			4	EPA-4	8	6
Dichloropropene[cis-1,3-]	VOC	89	89	1	0	0				52	0			4	EPA-4	8	6
Dichloropropene[trans-1,3-]	VOC	89	89	1	0	0				52	0			4	EPA-4	8	6
Diethylphthalate	SVOC	23	23	1	0	0				0	0			29000	EPA-4	7	0
Dimethyl Phthalate	SVOC	23	23	1	0	0				0	0			370000	EPA-4	7	0
Dimethylphenol[2,4-]	SVOC	23	23	1	0	0				0	0			730	EPA-4	7	0
Di-n-butylphthalate	SVOC	23	22	0.9565	1	0.04348	2	2	2	0	0	0.0005405	0.0005405	3700	EPA-4	7	0
Dinitro-2-methylphenol[4,6-]	SVOC	23	23	1	0	0											
Dinitrobenzene[1,3-]		102	101	0.9902	1	0.009804	12	12	12								
Dinitrophenol[2,4-]	SVOC	23	23	1	0	0				0	0			73	EPA-4	7	0
Dinitrotoluene[2,4-]	SVOC	104	103	0.9904	1	0.009615	0.36	0.36	0.36	0	0	0.004932	0.004932	73	EPA-4	8	0
Dinitrotoluene[2,6-]	SVOC	104	103	0.9904	1	0.009615	0.21	0.21	0.21	0	0	0.005676	0.005676	37	EPA-4	8	0
Di-n-octylphthalate	SVOC	23	23	1	0	0				0	0			730	EPA-4	7	0

Table B-140 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
DNX		13	10	0.7692	3	0.2308	0.096	0.21	0.39								
Ethylbenzene	VOC	88	88	1	0	0				0	0			700	EPA-2	8	0
Fluoranthene	SVOC	23	23	1	0	0				0	0			1500	EPA-4	7	0
Fluorene	SVOC	23	23	1	0	0				0	0			240	EPA-4	7	0
Hexachlorobenzene	SVOC	23	23	1	0	0				23	0			1	EPA-2	7	7
Hexachlorobutadiene	SVOC	45	45	1	0	0				16	0			7.3	EPA-4	7	7
Hexachlorocyclopentadiene	SVOC	23	23	1	0	0				7	0			50	EPA-2	7	0
Hexachloroethane	SVOC	23	23	1	0	0				0	0			37	EPA-4	7	0
Hexanone[2-]	VOC	89	89	1	0	0				0	0			1900	EPA-4	8	0
HMX		104	37	0.3558	67	0.6442	0.15	15.5	610								
Indeno(1,2,3-cd)pyrene	SVOC	23	23	1	0	0				23	0			0.92	EPA-4	7	7
Iodomethane	VOC	89	89	1	0	0				0	0			8.70	EPA-4	8	0
Isophorone	SVOC	23	23	1	0	0				0	0			710	EPA-4	7	0
Isopropylbenzene	VOC	89	89	1	0	0				0	0			660	EPA-4	8	0
Isopropyltoluene[4-]	VOC	89	89	1	0	0				0	0			660	EPA-4	8	0
Methyl tert-Butyl Ether		2	2	1	0	0											
Methyl-2-pentanone[4-]	VOC	89	89	1	0	0				0	0			160	EPA-4	8	0
Methylene Chloride	VOC	89	89	1	0	0				57	0			5	EPA-2	8	6
Methylnaphthalene[2-]	SVOC	23	23	1	0	0				0	0			30	WQCC-11	7	0
Methylphenol[2-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Methylphenol[4-]	SVOC	23	23	1	0	0				0	0			180	EPA-4	7	0
MNX		13	9	0.6923	4	0.3077	0.1	0.36	0.65								
Naphthalene	SVOC	45	45	1	0	0				0	0			30	WQCC-11	7	0
Nitroaniline[2-]	SVOC	23	23	1	0	0				23	0			2.20	EPA-4	7	7
Nitroaniline[3-]	SVOC	23	23	1	0	0				23	0			2.20	EPA-4	7	7
Nitroaniline[4-]	SVOC	23	23	1	0	0				23	0			2.20	EPA-4	7	7
Nitrobenzene	SVOC	104	102	0.9808	2	0.01923	0.36	0.68	1	18	0	0.2	0.2941	3.40	EPA-4	8	7
Nitroglycerin		26	26	1	0	0											
Nitrophenol[2-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Nitrophenol[4-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Nitrosodimethylamine[N-]	SVOC	23	23	1	0	0				23	0			0.01	EPA-4	7	7
Nitroso-di-n-propylamine[N-]	SVOC	23	23	1	0	0				23	0			0.10	EPA-4	7	7
Nitrosodiphenylamine[N-]	SVOC	23	23	1	0	0				0	0			140	EPA-4	7	0
Nitrotoluene[2-]		104	104	1	0	0											
Nitrotoluene[3-]		103	103	1	0	0											
Nitrotoluene[4-]		102	102	1	0	0											
Oxybis(1-chloropropane)[2,2'-]	SVOC	23	23	1	0	0											
Pentachlorophenol	SVOC	23	23	1	0	0				23	0			1	EPA-2	7	7
PETN		27	27	1	0	0											
Phenanthrene	SVOC	23	23	1	0	0				0	0			1800	EPA-4	7	0
Phenol	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Propylbenzene[1-]	VOC	89	89	1	0	0				0	0			61	EPA-4	8	0
Pyrene	SVOC	23	23	1	0	0				0	0			180	EPA-4	7	0
Pyridine	SVOC	7	7	1	0	0				0	0			37	EPA-4	4	0

Table B-140 (continued)

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
RDX		106	38	0.3585	68	0.6415	0.23	10.25	759								
Styrene	VOC	88	88	1	0	0				0	0			100	EPA-2	8	0
Tetrachloroethane[1,1,1,2-]	VOC	89	89	1	0	0				52	0			4.30	EPA-4	8	6
Tetrachloroethane[1,1,2,2-]	VOC	89	89	1	0	0				0	0			10	WQCC-11	8	0
Tetrachloroethene	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Tetryl		104	104	1	0	0											
TNX		13	11	0.8462	2	0.1538	0.054	0.262	0.47								
Toluene	VOC	89	87	0.9775	2	0.02247	1.4	4.05	6.7	0	0	0.0054	0.008933	750	WQCC-11	8	0
Trichloro-1,2,2-trifluoroethane	VOC	67	67	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	29	29	1	0	0				0	0			70	EPA-2	6	0
Trichlorobenzene[1,2,4-]	VOC	45	45	1	0	0				0	0			70	EPA-2	7	0
Trichloroethane[1,1,1-]	VOC	89	89	1	0	0				0	0			60	WQCC-11	8	0
Trichloroethane[1,1,2-]	VOC	89	89	1	0	0				52	0			5	EPA-2	8	0
Trichloroethene	VOC	89	83	0.9326	6	0.06742	0.34	1	1.1	49	0	0.2	0.22	5	EPA-2	8	0
Trichlorofluoromethane	VOC	89	89	1	0	0				0	0			1300	EPA-4	8	0
Trichlorophenol[2,4,5-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Trichlorophenol[2,4,6-]	SVOC	23	23	1	0	0				23	0			5	WQCC-12	7	7
Trichloropropane[1,2,3-]	VOC	89	89	1	0	0				89	0			0.02	EPA-4	8	8
Trichlorotrifluoroethane	VOC	22	22	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	82	82	1	0	0				0	0			12	EPA-4	7	0
Trimethylbenzene[1,3,5-]	VOC	89	89	1	0	0				0	0			12	EPA-4	8	0
Trinitrobenzene[1,3,5-]		103	101	0.9806	2	0.01942	0.75	0.925	1.1								
Trinitrotoluene[2,4,6-]		104	99	0.9519	5	0.04808	0.11	8.7	46.6								
Vinyl acetate		2	2	1	0	0											
Vinyl Chloride	VOC	89	89	1	0	0				86	0			1	WQCC-11	8	8
Xylene (Total)	VOC	74	74	1	0	0				0	0			620	WQCC-11	8	0
Xylene[1,2-]	VOC	43	43	1	0	0				0	0			1400	EPA-4	7	0
Xylene[1,3-]+Xylene[1,4-]	VOC	15	15	1	0	0				0	0			620	WQCC-11	5	0

Table B-141
Nonfiltered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Alluvial Groundwater

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	106	76	0.717	30	0.283	167	240	2000								
Chlorate	ANION	5	4	0.8	1	0.2	100	100	100								
Chloride	ANION	106	0	0	106	1	5830	16000	43100	0	0	0.064	0.1724	250000	WQCC-12	8	0
Fluoride	ANION	106	6	0.0566	100	0.9434	100	265.5	1180	0	0	0.1659	0.7375	1600	WQCC-11	8	0
Nitrate	ANION	109	33	0.3028	76	0.6972	30	584	7330	0	0	0.0584	0.733	10000	EPA-4	8	0
Nitrite	ANION	28	28	1	0	0				0	0			1000	EPA-4	5	0
Oxalate	ANION	66	66	1	0	0											
Perchlorate	ANION	72	66	0.9167	6	0.08333	6.27	10.1	19.1	66	6	2.73	5.162	3.7	EPA-4	8	8
Sulfate	ANION	106	0	0	106	1	3180	10000	109000	0	0	0.01667	0.1817	600000	WQCC-12	8	0
Calcium	GENINORG	112	0	0	112	1	7400	19650	130000								
Magnesium	GENINORG	112	5	0.04464	107	0.9554	2520	6120	80000								
Potassium	GENINORG	112	2	0.01786	110	0.9821	1230	4995	82000								
Sodium	GENINORG	112	3	0.02679	109	0.9732	10600	19500	170000								
Total Phosphorus	GENINORG	7	0	0	7	1	71	110	400								
Deuterium Ratio	STABLE_ISOTOPES	3	0	0	3	1	-75	-72	-68								
Iodide	STABLE_ISOTOPES	15	13	0.8667	2	0.1333	70	385	700								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	3	0	0	3	1	-10.9	-10	-9.9								
Total Organic Carbon	WATER_QUAL	9	0	0	9	1	3000	11000	24000								

Table B-142
Filtered Inorganics of Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	13	4	0.3077	9	0.6923	76.8	262	2790	0	0	0.007081	0.07541	37000	EPA-4	2	0
Antimony	METALS	13	6	0.4615	7	0.5385	0.17	0.632	5.7	1	0	0.1053	0.95	6	EPA-2	2	1
Arsenic	METALS	13	6	0.4615	7	0.5385	1.9	2.9	8.8	0	0	0.29	0.88	10	EPA-2	2	0
Barium	METALS	13	1	0.07692	12	0.9231	2.42	8.43	152	0	0	0.00843	0.152	1000	WQCC-11	2	0
Beryllium	METALS	13	7	0.5385	6	0.4615	0.025	0.0675	0.299	1	0	0.01688	0.07475	4	EPA-2	2	0
Boron	METALS	12	0	0	12	1	200	492	1640	0	0	0.1491	0.497	3300	EPA-4	2	0
Cadmium	METALS	13	8	0.6154	5	0.3846	0.078	0.136	1.2	1	0	0.0272	0.24	5	EPA-2	2	0
Chromium	METALS	13	1	0.07692	12	0.9231	0.67	1.615	3.1	0	0	0.0323	0.062	50	WQCC-11	2	0
Cobalt	METALS	13	10	0.7692	3	0.2308	1.7	4.1	5.11								
Copper	METALS	12	4	0.3333	8	0.6667	3.8	6.4	20.4	0	0	0.0064	0.0204	1000	WQCC-12	2	0
Iron	METALS	13	5	0.3846	8	0.6154	27	185	1500	0	1	0.185	1.5	1000	WQCC-12	2	0
Lead	METALS	13	8	0.6154	5	0.3846	0.107	0.95	2	0	0	0.06333	0.1333	15	EPA-2	2	0
Manganese	METALS	13	0	0	13	1	6.9	16	730	0	1	0.08	3.65	200	WQCC-12	2	0
Mercury	METALS	12	12	1	0	0				0	0			2	WQCC-11	2	0
Molybdenum	METALS	8	3	0.375	5	0.625	1.35	13	21	0	0	0.07222	0.1167	180	EPA-4	1	0
Nickel	METALS	13	0	0	13	1	1.7	7.63	460	0	4	0.0763	4.6	100	EPA-2	2	0
Selenium	METALS	13	12	0.9231	1	0.07692	1.5	1.5	1.5	0	0	0.15	0.15	10	EPA-1	2	0
SeleniumRe	METALS	13	12	0.9231	1	0.07692	1.5	1.5	1.5	0	0	0.03	0.03	50	WQCC-11	2	0
Silver	METALS	13	12	0.9231	1	0.07692	0.9	0.9	0.9	0	0	0.018	0.018	50	WQCC-11	2	0
Strontium	METALS	8	0	0	8	1	29	82.5	130	0	0	0.00375	0.005909	22000	EPA-4	1	0
Thallium	METALS	13	12	0.9231	1	0.07692	0.22	0.22	0.22	5	0	0.11	0.11	2	EPA-2	2	1
Titanium	METALS	1	1	1	0	0											
Uranium	URANIUM	8	1	0.125	7	0.875	0.32	1.25	3.62	0	0	0.04167	0.1207	30	EPA-2	1	0
Vanadium	METALS	13	2	0.1538	11	0.8462	0.5	2.5	9.1	0	0	0.009615	0.035	260	EPA-4	2	0
Zinc	METALS	13	3	0.2308	10	0.7692	2.8	9.6	18	0	0	0.00096	0.0018	10000	WQCC-12	2	0

Table B-143
Filtered Radionuclides Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	2	2	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	2	2	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	2	2	1	0	0				0	0			100	EPA-2	1	0
Plutonium-238	rad	2	2	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	2	2	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	2	2	1	0	0				0	0			8	EPA-2	1	0
Uranium-234	rad	8	0	0	8	1	0.222	0.6	2.13	0	0	0.03	0.1065	20	DOE	1	0
Uranium-235	rad	8	6	0.75	2	0.25	0.0381	0.1	0.162	0	0	0.004167	0.00675	24	DOE	1	0
Uranium-238	rad	8	0	0	8	1	0.116	0.3725	1.3	0	0	0.01552	0.05417	24	DOE	1	0

Table B-144
Filtered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	13	0	0	13	1	200	22000	30900								
Magnesium	GENINORG	13	0	0	13	1	1200	5800	7190								
Potassium	GENINORG	13	1	0.07692	12	0.9231	1320	3600	7000								
Sodium	GENINORG	13	0	0	13	1	9400	26600	108000								
Total Phosphorus	GENINORG	8	1	0.125	7	0.875	81	9700	19000								
Humic, Hydrophilic Acids	HUMIC_ACID	4	1	0.25	3	0.75	200	300	1100								
Humic, Hydrophilic Bases	HUMIC_ACID	4	2	0.5	2	0.5	100	150	200								
Humic, Hydrophilic Neutrals	HUMIC_ACID	4	0	0	4	1	200	500	800								
Humic, Hydrophilic Total	HUMIC_ACID	4	0	0	4	1	400	1000	1500								
Humic, Hydrophobic Acids	HUMIC_ACID	4	0	0	4	1	400	550	1000								
Humic, Hydrophobic Bases	HUMIC_ACID	4	4	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	4	0	0	4	1	400	500	1000								
Humic, Hydrophobic Total	HUMIC_ACID	4	0	0	4	1	800	1000	2000								
Dissolved Organic Carbon	WATER_QUAL	4	0	0	4	1	1500	1900	3400								
pH	WATER_QUAL	2	0	0	2	1	6.9	7.35	7.8								
Specific Conductance	WATER_QUAL	2	0	0	2	1	200	250	300								

Table B-145
Nonfiltered Inorganics of Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	18	4	0.2222	14	0.7778	62	3820	111000	0	4	0.1032	3	37000	EPA-4	3	0
Antimony	METALS	17	8	0.4706	9	0.5294	0.18	0.704	20.1	2	1	0.1173	3.35	6	EPA-2	3	2
Arsenic	METALS	18	7	0.3889	11	0.6111	1.6	6.32	76.5	0	4	0.632	7.65	10	EPA-2	3	0
Barium	METALS	19	1	0.05263	18	0.9474	3.9	10.05	1790	0	1	0.01005	1.79	1000	WQCC-11	4	0
Beryllium	METALS	18	5	0.2778	13	0.7222	0.051	0.57	51	0	4	0.1425	12.75	4	EPA-2	3	0
Boron	METALS	16	0	0	16	1	160	483.5	1630	0	0	0.1465	0.4939	3300	EPA-4	2	0
Cadmium	METALS	18	8	0.4444	10	0.5556	0.075	1.5	18.2	0	2	0.3	3.64	5	EPA-2	3	0
Chromium	METALS	18	0	0	18	1	3.2	18.25	380	0	4	0.365	7.6	50	WQCC-11	3	0
Cobalt	METALS	18	7	0.3889	11	0.6111	0.79	5	1140								
Copper	METALS	17	4	0.2353	13	0.7647	0.41	16	20200	0	2	0.016	20.2	1000	WQCC-12	3	0
Cyanide (Total)		11	11	1	0	0				0	0			200	WQCC-11	2	0
Iron	METALS	18	2	0.1111	16	0.8889	635	1455	600000	0	10	1.455	600	1000	WQCC-12	3	0
Lead	METALS	18	7	0.3889	11	0.6111	1.14	9.5	711	0	4	0.6333	47.4	15	EPA-2	3	0
Manganese	METALS	18	0	0	18	1	2.2	84.5	11000	0	4	0.4225	55	200	WQCC-12	3	0
Mercury	METALS	17	14	0.8235	3	0.1765	0.12	0.18	0.21	0	0	0.09	0.105	2	WQCC-11	3	0
Molybdenum	METALS	11	4	0.3636	7	0.6364	1.58	18	23	0	0	0.1	0.1278	180	EPA-4	1	0
Nickel	METALS	18	0	0	18	1	4.4	22.05	4070	0	7	0.2205	40.7	100	EPA-2	3	0
Selenium	METALS	18	13	0.7222	5	0.2778	1.7	5.9	348	1	1	0.59	34.8	10	EPA-1	3	1
SeleniumRe	METALS	18	13	0.7222	5	0.2778	1.7	5.9	348	0	1	0.118	6.96	50	WQCC-11	3	0
Silver	METALS	18	17	0.9444	1	0.05556	3000	3000	3000	0	1	60	60	50	WQCC-11	3	0
Strontium	METALS	11	0	0	11	1	33	112	210	0	0	0.005091	0.009545	22000	EPA-4	1	0
Thallium	METALS	18	13	0.7222	5	0.2778	0.15	6.2	290	3	4	3.1	145	2	EPA-2	3	1
Tin		2	2	1	0	0				0	0			22000	EPA-4	1	0
Titanium		1	1	1	0	0											
Uranium	URANIUM	10	1	0.1	9	0.9	1.2	1.49	10.53	0	0	0.04967	0.351	30	EPA-2	2	0
Vanadium	METALS	18	2	0.1111	16	0.8889	2.41	8.55	140	0	0	0.03288	0.5385	260	EPA-4	3	0
Zinc	METALS	18	4	0.2222	14	0.7778	3.3	23	23900	0	1	0.0023	2.39	10000	WQCC-12	3	0

Table B-146
Nonfiltered Radionuclides of Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	2	2	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	4	4	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	4	4	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	4	2	0.5	2	0.5	3.2	4.8	6.4	0	0	0.32	0.4267	15	EPA-2	1	0
Gross alpha/beta	rad	2	0	0	2	1	1.31	3.775	6.24								
Gross beta	rad	6	2	0.3333	4	0.6667	1.15	5.16	5.4	0	0	0.1032	0.108	50	EPA-2	1	0
Gross gamma	rad	4	0	0	4	1	146	164	178								
Plutonium-238	rad	2	2	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	2	2	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	2	2	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	13	7	0.5385	6	0.4615	48.21	53.8	103.4	0	0	0.00269	0.00517	20000	EPA-2	3	0
Uranium-234	rad	8	0	0	8	1	0.35	0.725	2.47	0	0	0.03625	0.1235	20	DOE	1	0
Uranium-235	rad	8	7	0.875	1	0.125	0.153	0.153	0.153	0	0	0.006375	0.006375	24	DOE	1	0
Uranium-238	rad	8	1	0.125	7	0.875	0.413	0.54	1.51	0	0	0.0225	0.06292	24	DOE	1	0

Table B-147
Nonfiltered Organics of Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acenaphthene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	SVOC	2	2	1	0	0				0	0			370	EPA-4	1	0
Acetone	VOC	16	13	0.8125	3	0.1875	3	11.8	51	0	0	0.01934	0.08361	610	EPA-4	3	0
Acrolein	VOC	2	2	1	0	0											
Acrylonitrile	VOC	2	2	1	0	0											
Amino-2,6-dinitrotoluene[4-]	HEXP	17	10	0.5882	7	0.4118	0.35	1.7	15								
Amino-4,6-dinitrotoluene[2-]	HEXP	17	11	0.6471	6	0.3529	0.49	2.92	8								
Amino-x,6-dinitrotoluene[x-]	HEXP	1	0	0	1	1	11	11	11								
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Benzene	VOC	16	16	1	0	0				11	0			5	EPA-2	3	0
Benzidine	SVOC	2	2	1	0	0				2	0			0.0029	EPA-4	1	1
Benzo(a)anthracene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(a)pyrene	SVOC	2	2	1	0	0				2	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Benzo(g,h,i)perylene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	SVOC	2	2	1	0	0				0	0			9.2	EPA-4	1	0
Benzoic Acid	SVOC	1	1	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.098	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	2	2	1	0	0				0	0			6	EPA-2	1	0
Bromobenzene	VOC	16	16	1	0	0				0	0			23	EPA-4	3	0
Bromochloromethane	VOC	16	16	1	0	0				12	0			5	EPA-2	3	0
Bromodichloromethane	VOC	16	16	1	0	0				0	0			100	EPA-2	3	0
Bromoform	VOC	16	16	1	0	0				0	0			100	EPA-2	3	0
Bromomethane	VOC	16	16	1	0	0				11	0			8.7	EPA-4	3	3
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butanone[2-]	VOC	16	16	1	0	0				0	0			1900	EPA-4	3	0
Butylbenzene[n-]	VOC	16	16	1	0	0				0	0			61	EPA-4	3	0
Butylbenzene[sec-]	VOC	16	16	1	0	0				0	0			61	EPA-4	3	0
Butylbenzene[tert-]	VOC	16	16	1	0	0				0	0			61	EPA-4	3	0
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			7300	EPA-4	1	0
Carbon Disulfide	VOC	16	13	0.8125	3	0.1875	1.5	2.5	4.9	0	0	0.0025	0.0049	1000	EPA-4	3	0
Carbon Tetrachloride	VOC	16	16	1	0	0				11	0			5	EPA-2	3	0
Chloro-3-methylphenol[4-]	SVOC	2	1	0.5	1	0.5	12.5	12.5	12.5	1	1	2.5	2.5	5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	1	0
Chlorobenzene	VOC	16	15	0.9375	1	0.0625	0.89	0.89	0.89	0	0	0.0089	0.0089	100	EPA-2	3	0

Table B-147 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chlorodibromomethane	VOC	16	16	1	0	0				0	0			100	EPA-2	3	0
Chloroethane	VOC	16	16	1	0	0				0	0			39	EPA-4	3	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	16	16	1	0	0				0	0			100	WQCC-11	3	0
Chloromethane	VOC	16	16	1	0	0				0	0			15	EPA-4	3	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Chlorotoluene[2-]	VOC	16	16	1	0	0				0	0			120	EPA-4	3	0
Chlorotoluene[4-]	VOC	15	15	1	0	0				0	0			120	EPA-4	3	0
Chrysene	SVOC	2	2	1	0	0				0	0			92	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	2	2	1	0	0				2	0			0.092	EPA-4	1	1
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	16	16	1	0	0											
Dibromoethane[1,2-]	VOC	16	16	1	0	0				16	0			0.05	EPA-2	3	3
Dibromomethane	VOC	16	16	1	0	0				0	0			61	EPA-4	3	0
Dichlorobenzene[1,2-]	VOC	16	16	1	0	0				0	0			600	EPA-2	3	0
Dichlorobenzene[1,3-]	VOC	16	16	1	0	0				0	0			18	EPA-4	3	0
Dichlorobenzene[1,4-]	VOC	16	16	1	0	0				0	0			75	EPA-2	3	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			1.5	EPA-4	1	1
Dichlorodifluoromethane	VOC	16	16	1	0	0				0	0			390	EPA-4	3	0
Dichloroethane[1,1-]	VOC	16	16	1	0	0				0	0			25	WQCC-11	3	0
Dichloroethane[1,2-]	VOC	16	14	0.875	2	0.125	2	2.6	3.2	10	0	0.52	0.64	5	EPA-2	3	0
Dichloroethene[1,1-]	VOC	16	16	1	0	0				11	0			5	WQCC-11	3	0
Dichloroethene[cis-1,2-]	VOC	14	14	1	0	0				0	0			70	EPA-2	3	0
Dichloroethene[trans-1,2-]	VOC	16	16	1	0	0				0	0			100	EPA-2	3	0
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Dichloropropane[1,2-]	VOC	16	16	1	0	0				11	0			5	EPA-2	3	0
Dichloropropane[1,3-]	VOC	16	16	1	0	0				12	0			5	EPA-2	3	0
Dichloropropane[2,2-]	VOC	16	16	1	0	0				12	0			5	EPA-2	3	0
Dichloropropene[1,1-]	VOC	16	16	1	0	0				12	0			4	EPA-4	3	3
Dichloropropene[cis-1,3-]	VOC	16	16	1	0	0				11	0			4	EPA-4	3	3
Dichloropropene[trans-1,3-]	VOC	16	16	1	0	0				11	0			4	EPA-4	3	3
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0											

Table B-147 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dinitrobenzene[1,3-]	HEXP	18	18	1	0	0											
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	18	15	0.8333	3	0.1667	0.39	0.56	4.03	0	0	0.007671	0.05521	73	EPA-4	4	0
Dinitrotoluene[2,6-]	SVOC	18	17	0.9444	1	0.05556	1.1	1.1	1.1	0	0	0.02973	0.02973	37	EPA-4	4	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	2	2	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	2	2	1	0	0											
DNX	HEXP	3	2	0.6667	1	0.3333	0.15	0.15	0.15								
Ethylbenzene	VOC	16	16	1	0	0				0	0			700	EPA-2	3	0
Fluoranthene	SVOC	2	2	1	0	0				0	0			1500	EPA-4	1	0
Fluorene	SVOC	2	2	1	0	0				0	0			240	EPA-4	1	0
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Hexachlorobutadiene	SVOC	12	12	1	0	0				0	0			7.3	EPA-4	2	0
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Hexanone[2-]	VOC	16	16	1	0	0				0	0			1900	EPA-4	3	0
HMX	HEXP	18	5	0.2778	13	0.7222	2.3	7.7	21								
Indeno(1,2,3-cd)pyrene	SVOC	2	2	1	0	0				2	0			0.92	EPA-4	1	1
Iodomethane	VOC	16	16	1	0	0				0	0			8.7	EPA-4	3	0
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	1	0
Isopropylbenzene	VOC	16	16	1	0	0				0	0			660	EPA-4	3	0
Isopropyltoluene[4-]	VOC	16	16	1	0	0				0	0			660	EPA-4	3	0
Methyl-2-pentanone[4-]	VOC	16	16	1	0	0				0	0			160	EPA-4	3	0
Methylene Chloride	VOC	16	13	0.8125	3	0.1875	0.53	0.68	1.6	8	0	0.136	0.32	5	EPA-2	3	2
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				0	0			30	WQCC-11	1	0
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
MNX	HEXP	3	2	0.6667	1	0.3333	0.27	0.27	0.27								
Naphthalene	SVOC	12	12	1	0	0				0	0			30	WQCC-11	2	0
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	18	18	1	0	0				4	0			3.4	EPA-4	4	2
Nitroglycerin	HEXP	2	2	1	0	0											
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	1	1

Table B-147 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.096	EPA-4	1	1
Nitrotoluene[2-]	HEXP	18	17	0.9444	1	0.05556	1.6	1.6	1.6								
Nitrotoluene[3-]	HEXP	18	18	1	0	0											
Nitrotoluene[4-]	HEXP	18	18	1	0	0											
Oxybis(1-chloropropane)[2,2'-]	SVOC	2	2	1	0	0											
Pentachlorophenol	SVOC	1	1	1	0	0				1	0			1	EPA-2	1	1
PETN	HEXP	2	2	1	0	0											
Phenanthrene	SVOC	2	2	1	0	0				0	0			1800	EPA-4	1	0
Phenol	SVOC	2	1	0.5	1	0.5	12.5	12.5	12.5	1	1	2.5	2.5	5	WQCC-12	1	1
Propylbenzene[1-]	VOC	16	16	1	0	0				0	0			61	EPA-4	3	0
Pyrene	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
RDX	HEXP	17	3	0.1765	14	0.8235	0.86	50.1	2490								
Styrene	VOC	16	15	0.9375	1	0.0625	1	1	1	0	0	0.01	0.01	100	EPA-2	3	0
Tetrachloroethane[1,1,1,2-]	VOC	16	16	1	0	0				12	0			4.3	EPA-4	3	3
Tetrachloroethane[1,1,2,2-]	VOC	16	16	1	0	0				0	0			10	WQCC-11	3	0
Tetrachloroethene	VOC	16	9	0.5625	7	0.4375	0.38	1.1	1.3	7	0	0.22	0.26	5	EPA-2	3	0
Tetryl	HEXP	18	18	1	0	0											
TNX	HEXP	3	2	0.6667	1	0.3333	0.23	0.23	0.23								
Toluene	VOC	16	14	0.875	2	0.125	0.18	7.59	15	0	0	0.01012	0.02	750	WQCC-11	3	0
Trichloro-1,2,2-trifluoroethane	VOC	11	11	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	10	10	1	0	0				0	0			70	EPA-2	2	0
Trichlorobenzene[1,2,4-]	VOC	12	12	1	0	0				0	0			70	EPA-2	2	0
Trichloroethane[1,1,1-]	VOC	16	16	1	0	0				0	0			60	WQCC-11	3	0
Trichloroethane[1,1,2-]	VOC	16	16	1	0	0				11	0			5	EPA-2	3	0
Trichloroethene	VOC	16	5	0.3125	11	0.6875	0.39	1.7	15	3	3	0.34	3	5	EPA-2	3	0
Trichlorofluoromethane	VOC	16	16	1	0	0				0	0			1300	EPA-4	3	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Trichloropropane[1,2,3-]	VOC	16	16	1	0	0				16	0			0.016	EPA-4	3	3
Trichlorotrifluoroethane	VOC	4	4	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	16	16	1	0	0				0	0			12	EPA-4	3	0
Trimethylbenzene[1,3,5-]	VOC	16	16	1	0	0				0	0			12	EPA-4	3	0
Trinitrobenzene[1,3,5-]	HEXP	18	15	0.8333	3	0.1667	0.13	0.35	0.7								
Trinitrotoluene[2,4,6-]	HEXP	18	12	0.6667	6	0.3333	0.36	1.335	4.3								
Vinyl acetate	VOC	1	1	1	0	0											
Vinyl Chloride	VOC	16	16	1	0	0				16	0			1	WQCC-11	3	3
Xylene (Total)	VOC	14	14	1	0	0				0	0			620	WQCC-11	3	0

Table B-147 (continued)

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Xylene[1,2-]	VOC	14	14	1	0	0				0	0			1400	EPA-4	2	0
Xylene[1,3-]+Xylene[1,4-]	VOC	4	4	1	0	0				0	0			620	WQCC-11	1	0

Table B-148
Nonfiltered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	13	11	0.8462	2	0.1538	100	650	1200								
Ammonia (as N)	ANION	2	2	1	0	0											
Bromide	ANION	14	13	0.9286	1	0.07143	149	149	149								
Chlorate	ANION	1	1	1	0	0											
Chloride	ANION	16	0	0	16	1	9890	11500	22000	0	0	0.046	0.088	250000	WQCC-12	2	0
Fluoride	ANION	16	1	0.0625	15	0.9375	74	177.5	560	0	0	0.1109	0.35	1600	WQCC-11	2	0
Iodide	ANION	1	1	1	0	0											
Nitrate	ANION	17	7	0.4118	10	0.5882	848	1100	3800	0	0	0.11	0.38	10000	EPA-4	2	0
Nitrite	ANION	2	2	1	0	0				0	0			1000	EPA-4	1	0
Oxalate	ANION	3	3	1	0	0											
Perchlorate	ANION	12	12	1	0	0				2	0			3.7	EPA-4	2	1
Sulfate	ANION	16	0	0	16	1	9420	12500	23000	0	0	0.02083	0.03833	600000	WQCC-12	2	0
Calcium	GENINORG	18	0	0	18	1	7100	26250	76400								
Hardness	GENINORG	2	0	0	2	1	32100	60750	89400								
Magnesium	GENINORG	18	0	0	18	1	32	5900	20100								
Potassium	GENINORG	18	0	0	18	1	1300	3850	78000								
Sodium	GENINORG	18	0	0	18	1	9500	25850	112000								
Total Phosphorus	GENINORG	4	1	0.25	3	0.75	280	10000	10500								
Deuterium Ratio	STABLE_ISOTOPES	9	0	0	9	1	-85	-81	-79								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	6	0	0	6	1	1.8	5.05	9.7								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	9	0	0	9	1	-11.9	-11.8	-11.4								
pH	WATER_QUAL	2	0	0	2	1	7.14	7.425	7.71								
Specific Conductance	WATER_QUAL	2	0	0	2	1	197	317.5	438								
Suspended Sediment Concentration	WATER_QUAL	2	0	0	2	1	1300	14200	27100								
Total Dissolved Solids	WATER_QUAL	2	0	0	2	1	182000	279000	376000	0	0	0.279	0.376	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	8	2	0.25	6	0.75	1080	2450	6630								

Table B-149
Filtered Inorganics of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	62	54	0.871	8	0.129	15.3	33	350	0	0	0.0008919	0.009459	37000	EPA-4	3	0
Antimony	METALS	62	49	0.7903	13	0.2097	0.084	0.315	0.468	0	0	0.0525	0.078	6	EPA-2	3	0
Arsenic	METALS	62	49	0.7903	13	0.2097	1.6	2.6	3.8	0	0	0.26	0.38	10	EPA-2	3	0
Barium	METALS	62	0	0	62	1	8.1	22.1	218	0	0	0.0221	0.218	1000	WQCC-11	3	0
Beryllium	METALS	62	49	0.7903	13	0.2097	0.008	0.027	10.1	0	1	0.00675	2.525	4	EPA-2	3	0
Boron	METALS	35	10	0.2857	25	0.7143	3.44	80	140	0	0	0.02424	0.04242	3300	EPA-4	2	0
Cadmium	METALS	62	59	0.9516	3	0.04839	0.069	0.146	1.28	0	0	0.0292	0.256	5	EPA-2	3	0
Chromium	METALS	62	38	0.6129	24	0.3871	0.24	0.8885	4.2	0	0	0.01777	0.084	50	WQCC-11	3	0
Cobalt	METALS	62	48	0.7742	14	0.2258	0.31	0.735	2.26								
Copper	METALS	62	60	0.9677	2	0.03226	0.43	0.765	1.1	0	0	0.000765	0.0011	1000	WQCC-12	3	0
Iron	METALS	62	24	0.3871	38	0.6129	14.1	831.5	17200	0	17	0.8315	17.2	1000	WQCC-12	3	0
Lead	METALS	62	44	0.7097	18	0.2903	0.031	0.102	2.57	0	0	0.0068	0.1713	15	EPA-2	3	0
Manganese	METALS	62	0	0	62	1	0.54	167	3720	0	29	0.835	18.6	200	WQCC-12	3	0
Mercury	METALS	62	61	0.9839	1	0.01613	0.055	0.055	0.055	0	0	0.0275	0.0275	2	WQCC-11	3	0
Molybdenum	METALS	26	10	0.3846	16	0.6154	0.3	2.075	9.87	0	0	0.01153	0.05483	180	EPA-4	2	0
Nickel	METALS	62	35	0.5645	27	0.4355	1	2.5	17.8	0	0	0.025	0.178	100	EPA-2	3	0
Selenium	METALS	62	57	0.9194	5	0.08065	2.6	3.04	3.23	0	0	0.304	0.323	10	EPA-1	3	0
SeleniumRe	METALS	62	57	0.9194	5	0.08065	2.6	3.04	3.23	0	0	0.0608	0.0646	50	WQCC-11	3	0
Silver	METALS	62	57	0.9194	5	0.08065	0.311	0.446	0.588	0	0	0.00892	0.01176	50	WQCC-11	3	0
Strontium	METALS	26	0	0	26	1	55.8	135	524	0	0	0.006136	0.02382	22000	EPA-4	2	0
Thallium	METALS	62	45	0.7258	17	0.2742	0.014	0.114	0.622	1	0	0.057	0.311	2	EPA-2	3	1
Uranium	URANIUM	34	4	0.1176	30	0.8824	0.019	0.5195	14.5	0	0	0.01732	0.4833	30	EPA-2	2	0
Vanadium	METALS	62	32	0.5161	30	0.4839	0.49	3.6	8.12	0	0	0.01385	0.03123	260	EPA-4	3	0
Zinc	METALS	62	27	0.4355	35	0.5645	1.1	3.7	15.1	0	0	0.00037	0.00151	10000	WQCC-12	3	0

Table B-150
Filtered Radionuclides of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	10	10	1	0	0				0	0			1.2	DOE	2	0
Cesium-137	rad	4	4	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	4	4	1	0	0				0	0			100	EPA-2	1	0
Plutonium-238	rad	10	10	1	0	0				0	0			1.6	DOE	2	0
Plutonium-239	rad	10	10	1	0	0				0	0			1.2	DOE	2	0
Strontium-90	rad	10	10	1	0	0				0	0			8	EPA-2	2	0
Uranium-234	rad	23	4	0.1739	19	0.8261	0.176	0.42	1.59	0	0	0.021	0.0795	20	DOE	2	0
Uranium-235	rad	23	21	0.913	2	0.08696	0.0197	0.02865	0.0376	0	0	0.001194	0.001567	24	DOE	2	0
Uranium-238	rad	23	2	0.08696	21	0.913	0.097	0.185	1.43	0	0	0.007708	0.05958	24	DOE	2	0

Table B-151
Filtered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	62	0	0	62	1	7750	11600	140000								
Magnesium	GENINORG	62	0	0	62	1	1950	3120	6150								
Potassium	GENINORG	62	3	0.04839	59	0.9516	631	1760	3000								
Sodium	GENINORG	61	0	0	61	1	7900	13900	37000								
Humic, Hydrophilic Acids	HUMIC_ACID	9	3	0.3333	6	0.6667	200	400	500								
Humic, Hydrophilic Bases	HUMIC_ACID	9	7	0.7778	2	0.2222	100	200	300								
Humic, Hydrophilic Neutrals	HUMIC_ACID	9	1	0.1111	8	0.8889	100	200	400								
Humic, Hydrophilic Total	HUMIC_ACID	9	0	0	9	1	300	600	700								
Humic, Hydrophobic Acids	HUMIC_ACID	9	0	0	9	1	100	400	1600								
Humic, Hydrophobic Bases	HUMIC_ACID	9	9	1	0	0											
Humic, Hydrophobic Neutrals	HUMIC_ACID	9	0	0	9	1	400	600	1300								
Humic, Hydrophobic Total	HUMIC_ACID	9	0	0	9	1	600	1200	2700								
Dissolved Organic Carbon	WATER_QUAL	9	0	0	9	1	1100	1600	3400								
pH	WATER_QUAL	5	0	0	5	1	5.9	6.6	7								
Specific Conductance	WATER_QUAL	4	0	0	4	1	107	182.5	600								
Total Organic Carbon	WATER_QUAL	7	0	0	7	1	450	670	910								

Table B-152
Nonfiltered Inorganics of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	67	45	0.6716	22	0.3284	12	107	4000	0	0	0.002892	0.1081	37000	EPA-4	3	0
Antimony	METALS	66	57	0.8636	9	0.1364	0.079	0.26	0.6	0	0	0.04333	0.1	6	EPA-2	3	0
Arsenic	METALS	67	52	0.7761	15	0.2239	1.9	2.8	7.62	0	0	0.28	0.762	10	EPA-2	3	0
Barium	METALS	67	2	0.02985	65	0.9701	8.5	22.6	237	0	0	0.0226	0.237	1000	WQCC-11	3	0
Beryllium	METALS	67	48	0.7164	19	0.2836	0.005	0.029	1.99	0	0	0.00725	0.4975	4	EPA-2	3	0
Boron	METALS	40	8	0.2	32	0.8	3.78	40.3	164	0	0	0.01221	0.0497	3300	EPA-4	2	0
Cadmium	METALS	67	59	0.8806	8	0.1194	0.041	0.0765	0.191	0	0	0.0153	0.0382	5	EPA-2	3	0
Chromium	METALS	67	13	0.194	54	0.806	0.854	4.19	139	0	1	0.0838	2.78	50	WQCC-11	3	0
Cobalt	METALS	67	55	0.8209	12	0.1791	0.41	0.772	2.4								
Copper	METALS	65	58	0.8923	7	0.1077	0.62	1.04	12	0	0	0.00104	0.012	1000	WQCC-12	3	0
Cyanide (Total)	CN	28	26	0.9286	2	0.07143	4.88	9.64	14.4	0	0	0.0482	0.072	200	WQCC-11	2	0
Iron	METALS	67	11	0.1642	56	0.8358	17.1	427	21800	0	18	0.427	21.8	1000	WQCC-12	3	0
Lead	METALS	67	35	0.5224	32	0.4776	0.041	0.155	18.1	0	1	0.01033	1.207	15	EPA-2	3	0
Manganese	METALS	67	3	0.04478	64	0.9552	0.94	160.5	3790	0	30	0.8025	18.95	200	WQCC-12	3	0
Mercury	METALS	66	65	0.9848	1	0.01515	0.049	0.049	0.049	0	0	0.0245	0.0245	2	WQCC-11	3	0
Molybdenum	METALS	31	11	0.3548	20	0.6452	0.3	4.13	23.8	0	0	0.02294	0.1322	180	EPA-4	2	0
Nickel	METALS	67	21	0.3134	46	0.6866	0.803	4.5	91.6	0	0	0.045	0.916	100	EPA-2	3	0
Selenium	METALS	67	61	0.9104	6	0.08955	1.9	2.6	3.07	1	0	0.26	0.307	10	EPA-1	3	0
SeleniumRe	METALS	67	61	0.9104	6	0.08955	1.9	2.6	3.07	0	0	0.052	0.0614	50	WQCC-11	3	0
Silver	METALS	67	64	0.9552	3	0.04478	0.594	0.65	0.943	0	0	0.013	0.01886	50	WQCC-11	3	0
Strontium	METALS	31	1	0.03226	30	0.9677	59.6	136.5	590	0	0	0.006205	0.02682	22000	EPA-4	2	0
Thallium	METALS	67	44	0.6567	23	0.3433	0.017	0.162	0.597	1	0	0.081	0.2985	2	EPA-2	3	1
Tin	METALS	5	5	1	0	0				0	0			22000	EPA-4	1	0
Uranium	URANIUM	34	3	0.08824	31	0.9118	0.02	0.539	5.23	0	0	0.01797	0.1743	30	EPA-2	2	0
Vanadium	METALS	67	37	0.5522	30	0.4478	0.47	4.075	8.68	0	0	0.01567	0.03338	260	EPA-4	3	0
Zinc	METALS	67	17	0.2537	50	0.7463	1.3	7.285	81	0	0	0.0007285	0.0081	10000	WQCC-12	3	0

Table B-153
Nonfiltered Radionuclides of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	4	4	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	4	4	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	15	14	0.9333	1	0.06667	1.17	1.17	1.17	0	0	0.078	0.078	15	EPA-2	2	0
Gross alpha/beta	rad	8	8	1	0	0											
Gross beta	rad	23	17	0.7391	6	0.2609	1.67	2.55	4.65	0	0	0.051	0.093	50	EPA-2	2	0
Gross gamma	rad	15	4	0.2667	11	0.7333	58	153	186								
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	50	33	0.66	17	0.34	0.06386	7.504	38.32	0	0	0.0003752	0.001916	20000	EPA-2	3	0
Uranium-234	rad	17	1	0.05882	16	0.9412	0.177	0.48	1.08	0	0	0.024	0.054	20	DOE	1	0
Uranium-235	rad	17	16	0.9412	1	0.05882	0.0336	0.0336	0.0336	0	0	0.0014	0.0014	24	DOE	1	0
Uranium-238	rad	17	0	0	17	1	0.114	0.233	0.53	0	0	0.009708	0.02208	24	DOE	1	0

Table B-154
Nonfiltered Organics of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
RDX	HEXP	67	46	0.6866	21	0.3134	1.5	6.7	28	7	21	10.96	45.81	0.61	EPA-4	3	2
HMX	HEXP	67	49	0.7313	18	0.2687	0.17	1.35	4.1	0	0	0.0007397	0.002247	1825	EPA-4	3	0
Amino-2,6-dinitrotoluene[4-]	HEXP	67	51	0.7612	16	0.2388	0.29	1.3	4.5								
Amino-4,6-dinitrotoluene[2-]	HEXP	66	51	0.7727	15	0.2273	0.093	0.77	3								
DDT[4,4'-]	PEST	9	7	0.7778	2	0.2222	0.047	0.0485	0.05	0	0	0.02425	0.025	2	EPA-4	1	0
Toluene	VOC	43	34	0.7907	9	0.2093	0.18	0.71	3.6	0	0	0.0009467	0.0048	750	WQCC-11	3	0
Trinitrotoluene[2,4,6-]	HEXP	67	55	0.8209	12	0.1791	0.32	0.815	2.2	0	0	0.04466	0.1205	18.25	EPA-4	3	0
Bis(2-ethylhexyl)phthalate	SVOC	23	19	0.8261	4	0.1739	0.25	0.425	36.7	14	1	0.07083	6.117	6	EPA-2	3	3
Acetone	VOC	43	36	0.8372	7	0.1628	3.4	17	48.9	0	0	0.02787	0.08016	610	EPA-4	3	0
Dinitrotoluene[2,4-]	SVOC	67	60	0.8955	7	0.1045	0.073	0.13	0.17	0	0	0.001781	0.002329	73	EPA-4	3	0
Trichloroethene	VOC	43	39	0.907	4	0.09302	0.71	0.95	1.2	16	0	0.19	0.24	5	EPA-2	3	0
Trinitrobenzene[1,3,5-]	HEXP	67	61	0.9104	6	0.08955	0.04	0.091	0.17	0	0	8.31E-05	0.0001553	1095	EPA-4	3	0
Phenanthrene	PAH	23	21	0.913	2	0.08696	0.16	0.98	1.8	0	0	0.0005444	0.001	1800	EPA-4	3	0
Pyrene	PAH	23	21	0.913	2	0.08696	0.75	2.375	4	0	0	0.01319	0.02222	180	EPA-4	3	0
MNX	HEXP	14	13	0.9286	1	0.07143	0.21	0.21	0.21								
Chlorobenzene	VOC	43	41	0.9535	2	0.04651	0.73	1.515	2.3	0	0	0.01515	0.023	100	EPA-2	3	0
Tetrachloroethene	VOC	43	41	0.9535	2	0.04651	0.83	0.915	1	18	0	0.183	0.2	5	EPA-2	3	0
Chloro-3-methylphenol[4-]	SVOC	22	21	0.9545	1	0.04545	11.1	11.1	11.1	21	1	2.22	2.22	5	WQCC-12	3	3
Phenol	SVOC	22	21	0.9545	1	0.04545	11.1	11.1	11.1	21	1	2.22	2.22	5	WQCC-12	3	3
Trichlorophenol[2,4,6-]	SVOC	22	21	0.9545	1	0.04545	1.4	1.4	1.4	21	0	0.28	0.28	5	WQCC-12	3	3
Nitrotoluene[2-]	HEXP	67	64	0.9552	3	0.04478	0.2	1.1	1.1								
Nitrotoluene[3-]	HEXP	67	64	0.9552	3	0.04478	0.18	0.56	1.8	0	0	0.009205	0.02959	60.83	EPA-4	3	0
Fluoranthene	PAH	23	22	0.9565	1	0.04348	0.8	0.8	0.8	0	0	0.0005333	0.0005333	1500	EPA-4	3	0
Diethylphthalate	SVOC	23	22	0.9565	1	0.04348	5.4	5.4	5.4	0	0	0.0001862	0.0001862	29000	EPA-4	3	0
Dimethylphenol[2,4-]	SVOC	23	22	0.9565	1	0.04348	88.7	88.7	88.7	0	0	0.1215	0.1215	730	EPA-4	3	0
Di-n-butylphthalate	SVOC	23	22	0.9565	1	0.04348	3.7	3.7	3.7	0	0	0.001	0.001	3700	EPA-4	3	0
Pyridine	SVOC	23	22	0.9565	1	0.04348	12.6	12.6	12.6	0	0	0.3405	0.3405	37	EPA-4	3	0
Dichlorobenzene[1,4-]	VOC	43	42	0.9767	1	0.02326	0.21	0.21	0.21	0	0	0.0028	0.0028	75	EPA-2	3	0
Methylene Chloride	VOC	43	42	0.9767	1	0.02326	0.85	0.85	0.85	30	0	0.17	0.17	5	EPA-2	3	1
Styrene	VOC	43	42	0.9767	1	0.02326	0.51	0.51	0.51	0	0	0.0051	0.0051	100	EPA-2	3	0
Tetryl	HEXP	65	64	0.9846	1	0.01538	1.6	1.6	1.6	0	0	0.004384	0.004384	365	EPA-4	3	0
Dinitrobenzene[1,3-]	HEXP	67	67	1	0	0				0	0			3.65	EPA-4	3	0
DNX	HEXP	14	14	1	0	0											
Nitrotoluene[4-]	HEXP	67	67	1	0	0				0	0			60.83	EPA-4	3	0
TNX	HEXP	14	14	1	0	0											
Acenaphthene	PAH	23	23	1	0	0				0	0			370	EPA-4	3	0
Acenaphthylene	PAH	23	23	1	0	0				0	0			370	EPA-4	3	0
Anthracene	PAH	23	23	1	0	0				0	0			1800	EPA-4	3	0
Benzo(a)anthracene	PAH	23	23	1	0	0				23	0			0.92	EPA-4	3	3
Benzo(a)pyrene	PAH	23	23	1	0	0				23	0			0.2	EPA-2	3	3

Table B-154 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzo(b)fluoranthene	PAH	23	23	1	0	0				23	0			0.92	EPA-4	3	3
Benzo(g,h,i)perylene	PAH	23	23	1	0	0				0	0			180	EPA-4	3	0
Benzo(k)fluoranthene	PAH	23	23	1	0	0				3	0			9.2	EPA-4	3	1
Chrysene	PAH	23	23	1	0	0				0	0			92	EPA-4	3	0
Dibenz(a,h)anthracene	PAH	23	23	1	0	0				23	0			0.092	EPA-4	3	3
Fluorene	PAH	23	23	1	0	0				0	0			240	EPA-4	3	0
Indeno(1,2,3-cd)pyrene	PAH	23	23	1	0	0				23	0			0.92	EPA-4	3	3
Naphthalene	PAH	38	38	1	0	0				0	0			30	WQCC-11	3	0
Aroclor-1016	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aroclor-1221	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aroclor-1232	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aroclor-1242	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aroclor-1248	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aroclor-1254	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aroclor-1260	PCB	9	9	1	0	0				4	0			0.5	EPA-2	1	1
Aldrin	PEST	9	9	1	0	0				3	0			0.04	EPA-4	1	1
BHC[alpha-]	PEST	9	9	1	0	0				0	0			0.11	EPA-4	1	0
BHC[beta-]	PEST	9	9	1	0	0				0	0			0.37	EPA-4	1	0
BHC[delta-]	PEST	9	9	1	0	0											
BHC[gamma-]	PEST	9	9	1	0	0				0	0			0.2	EPA-2	1	0
Chlordane[alpha-]	PEST	9	9	1	0	0				0	0			2	EPA-2	1	0
Chlordane[gamma-]	PEST	9	9	1	0	0				0	0			2	EPA-2	1	0
DDD[4,4'-]	PEST	9	9	1	0	0				0	0			2.8	EPA-4	1	0
DDE[4,4'-]	PEST	9	9	1	0	0				0	0			2	EPA-4	1	0
Dieldrin	PEST	9	9	1	0	0				8	0			0.042	EPA-4	1	1
Endosulfan I	PEST	9	9	1	0	0				0	0			220	EPA-4	1	0
Endosulfan II	PEST	9	9	1	0	0				0	0			220	EPA-4	1	0
Endosulfan Sulfate	PEST	9	9	1	0	0				0	0			220	EPA-4	1	0
Endrin	PEST	9	9	1	0	0				0	0			0.2	EPA-1	1	0
Endrin Aldehyde	PEST	9	9	1	0	0				0	0			0.2	EPA-1	1	0
Endrin AldehydeRe	PEST	9	9	1	0	0				0	0			2	EPA-2	1	0
Endrin Ketone	PEST	9	9	1	0	0				0	0			0.2	EPA-1	1	0
Endrin KetoneRe	PEST	9	9	1	0	0				0	0			2	EPA-2	1	0
EndrinRe	PEST	9	9	1	0	0				0	0			2	EPA-2	1	0
Heptachlor	PEST	9	9	1	0	0				0	0			0.4	EPA-2	1	0
Heptachlor Epoxide	PEST	9	9	1	0	0				0	0			0.2	EPA-2	1	0
Methoxychlor[4,4'-]	PEST	9	9	1	0	0				0	0			40	EPA-2	1	0
Toxaphene (Technical Grade)	PEST	9	9	1	0	0				3	0			3	EPA-2	1	1
Aniline	SVOC	23	23	1	0	0				0	0			120	EPA-4	3	0
Azobenzene	SVOC	18	18	1	0	0				3	0			6.1	EPA-4	2	1

Table B-154 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzidine	SVOC	7	7	1	0	0				7	0			0.0029	EPA-4	2	2
Benzoic Acid	SVOC	21	21	1	0	0				0	0			150000	EPA-4	3	0
Benzyl Alcohol	SVOC	22	22	1	0	0				0	0			11000	EPA-4	3	0
Bis(2-chloroethoxy)methane	SVOC	23	23	1	0	0											
Bis(2-chloroethyl)ether	SVOC	23	23	1	0	0				23	0			0.098	EPA-4	3	3
Bromophenyl-phenylether[4-]	SVOC	23	23	1	0	0											
Butylbenzylphthalate	SVOC	23	23	1	0	0				0	0			7300	EPA-4	3	0
Carbazole	SVOC	3	3	1	0	0				0	0			34	EPA-4	1	0
Chloroaniline[4-]	SVOC	23	23	1	0	0				0	0			150	EPA-4	3	0
Chloronaphthalene[2-]	SVOC	23	23	1	0	0				0	0			490	EPA-4	3	0
Chlorophenol[2-]	SVOC	22	22	1	0	0				22	0			5	WQCC-12	3	3
Chlorophenyl-phenyl[4-] Ether	SVOC	23	23	1	0	0											
Dibenzofuran	SVOC	23	23	1	0	0				0	0			24	EPA-4	3	0
Dichlorobenzidine[3,3'-]	SVOC	23	23	1	0	0				23	0			1.5	EPA-4	3	3
Dichlorophenol[2,4-]	SVOC	22	22	1	0	0				22	0			5	WQCC-12	3	3
Dimethyl Phthalate	SVOC	23	23	1	0	0				0	0			370000	EPA-4	3	0
Dinitro-2-methylphenol[4,6-]	SVOC	22	22	1	0	0											
Dinitrophenol[2,4-]	SVOC	22	22	1	0	0				0	0			73	EPA-4	3	0
Dinitrotoluene[2,6-]	SVOC	67	67	1	0	0				0	0			37	EPA-4	3	0
Di-n-octylphthalate	SVOC	23	23	1	0	0				0	0			730	EPA-4	3	0
Diphenylamine	SVOC	14	14	1	0	0				0	0			910	EPA-4	3	0
Diphenylhydrazine[1,2-]	SVOC	5	5	1	0	0											
Hexachlorobenzene	SVOC	23	23	1	0	0				23	0			1	EPA-2	3	3
Hexachlorobutadiene	SVOC	38	38	1	0	0				15	0			7.3	EPA-4	3	2
Hexachlorocyclopentadiene	SVOC	23	23	1	0	0				0	0			50	EPA-2	3	0
Hexachloroethane	SVOC	23	23	1	0	0				0	0			37	EPA-4	3	0
Isophorone	SVOC	23	23	1	0	0				0	0			710	EPA-4	3	0
Methylnaphthalene[2-]	SVOC	23	23	1	0	0				0	0			30	WQCC-11	3	0
Methylphenol[2-]	SVOC	22	22	1	0	0				22	0			5	WQCC-12	3	3
Methylphenol[4-]	SVOC	22	22	1	0	0				0	0			180	EPA-4	3	0
Methylpyridine[2-]	SVOC	5	5	1	0	0											
Nitroaniline[2-]	SVOC	23	23	1	0	0				23	0			2.2	EPA-4	3	3
Nitroaniline[3-]	SVOC	23	23	1	0	0				23	0			2.2	EPA-4	3	3
Nitroaniline[4-]	SVOC	23	23	1	0	0				23	0			2.2	EPA-4	3	3
Nitrobenzene	SVOC	67	67	1	0	0				0	0			3.4	EPA-4	3	0
Nitrophenol[2-]	SVOC	22	22	1	0	0				22	0			5	WQCC-12	3	3
Nitrophenol[4-]	SVOC	22	22	1	0	0				22	0			5	WQCC-12	3	3
Nitrosodimethylamine[N-]	SVOC	23	23	1	0	0				23	0			0.013	EPA-4	3	3
Nitroso-di-n-propylamine[N-]	SVOC	23	23	1	0	0				23	0			0.096	EPA-4	3	3
Nitrosodiphenylamine[N-]	SVOC	9	9	1	0	0				0	0			140	EPA-4	2	0

Table B-154 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Oxybis(1-chloropropane)[2,2'-]	SVOC	23	23	1	0	0											
Pentachlorophenol	SVOC	21	21	1	0	0				21	0			1	EPA-2	3	3
Trichlorophenol[2,4,5-]	SVOC	22	22	1	0	0				22	0			5	WQCC-12	3	3
Acrolein	VOC	5	5	1	0	0											
Acrylonitrile	VOC	5	5	1	0	0											
Benzene	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Bromobenzene	VOC	43	43	1	0	0				0	0			23	EPA-4	3	0
Bromochloromethane	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Bromodichloromethane	VOC	43	43	1	0	0				0	0			100	EPA-2	3	0
Bromoform	VOC	43	43	1	0	0				0	0			100	EPA-2	3	0
Bromomethane	VOC	43	43	1	0	0				18	0			8.7	EPA-4	3	2
Butanone[2-]	VOC	43	43	1	0	0				0	0			1900	EPA-4	3	0
Butylbenzene[n-]	VOC	43	43	1	0	0				0	0			61	EPA-4	3	0
Butylbenzene[sec-]	VOC	43	43	1	0	0				0	0			61	EPA-4	3	0
Butylbenzene[tert-]	VOC	43	43	1	0	0				0	0			61	EPA-4	3	0
Carbon Disulfide	VOC	43	43	1	0	0				0	0			1000	EPA-4	3	0
Carbon Tetrachloride	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Chlorodibromomethane	VOC	43	43	1	0	0				0	0			100	EPA-2	3	0
Chloroethane	VOC	43	43	1	0	0				0	0			39	EPA-4	3	0
Chloroform	VOC	43	43	1	0	0				0	0			100	WQCC-11	3	0
Chloromethane	VOC	43	43	1	0	0				0	0			15	EPA-4	3	0
Chlorotoluene[2-]	VOC	43	43	1	0	0				0	0			120	EPA-4	3	0
Chlorotoluene[4-]	VOC	43	43	1	0	0				0	0			120	EPA-4	3	0
Dibromo-3-Chloropropane[1,2-]	VOC	43	43	1	0	0											
Dibromoethane[1,2-]	VOC	43	43	1	0	0				43	0			0.05	EPA-2	3	3
Dibromomethane	VOC	43	43	1	0	0				0	0			61	EPA-4	3	0
Dichlorobenzene[1,2-]	VOC	43	43	1	0	0				0	0			600	EPA-2	3	0
Dichlorobenzene[1,3-]	VOC	43	43	1	0	0				0	0			18	EPA-4	3	0
Dichlorodifluoromethane	VOC	43	43	1	0	0				0	0			390	EPA-4	3	0
Dichloroethane[1,1-]	VOC	43	43	1	0	0				0	0			25	WQCC-11	3	0
Dichloroethane[1,2-]	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Dichloroethene[1,1-]	VOC	43	43	1	0	0				18	0			5	WQCC-11	3	0
Dichloroethene[cis-1,2-]	VOC	38	38	1	0	0				0	0			70	EPA-2	3	0
Dichloroethene[trans-1,2-]	VOC	43	43	1	0	0				0	0			100	EPA-2	3	0
Dichloropropane[1,2-]	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Dichloropropane[1,3-]	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Dichloropropane[2,2-]	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Dichloropropene[1,1-]	VOC	43	43	1	0	0				18	0			4	EPA-4	3	2
Dichloropropene[cis-1,3-]	VOC	43	43	1	0	0				18	0			4	EPA-4	3	2
Dichloropropene[trans-1,3-]	VOC	43	43	1	0	0				18	0			4	EPA-4	3	2

Table B-154 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ethylbenzene	VOC	43	43	1	0	0				0	0			700	EPA-2	3	0
Hexanone[2-]	VOC	43	43	1	0	0				0	0			1900	EPA-4	3	0
Iodomethane	VOC	43	43	1	0	0				0	0			8.7	EPA-4	3	0
Isopropylbenzene	VOC	43	43	1	0	0				0	0			660	EPA-4	3	0
Isopropyltoluene[4-]	VOC	43	43	1	0	0				0	0			660	EPA-4	3	0
Methyl-2-pentanone[4-]	VOC	43	43	1	0	0				0	0			160	EPA-4	3	0
Propylbenzene[1-]	VOC	43	43	1	0	0				0	0			61	EPA-4	3	0
Tetrachloroethane[1,1,1,2-]	VOC	43	43	1	0	0				18	0			4.3	EPA-4	3	2
Tetrachloroethane[1,1,2,2-]	VOC	43	43	1	0	0				0	0			10	WQCC-11	3	0
Trichloro-1,2,2-trifluoroethane	VOC	18	18	1	0	0											
Trichloro-1,2,2-trifluoroethane[1,1,2-]	VOC	10	10	1	0	0				0	0			59000	EPA-4	3	0
Trichlorobenzene[1,2,3-]	VOC	18	18	1	0	0				0	0			70	EPA-2	2	0
Trichlorobenzene[1,2,4-]	VOC	38	38	1	0	0				0	0			70	EPA-2	3	0
Trichloroethane[1,1,1-]	VOC	43	43	1	0	0				0	0			60	WQCC-11	3	0
Trichloroethane[1,1,2-]	VOC	43	43	1	0	0				18	0			5	EPA-2	3	0
Trichlorofluoromethane	VOC	43	43	1	0	0				0	0			1300	EPA-4	3	0
Trichloropropane[1,2,3-]	VOC	43	43	1	0	0				43	0			0.016	EPA-4	3	3
Trichlorotrifluoroethane	VOC	15	15	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	43	43	1	0	0				0	0			12	EPA-4	3	0
Trimethylbenzene[1,3,5-]	VOC	43	43	1	0	0				0	0			12	EPA-4	3	0
Vinyl Chloride	VOC	43	43	1	0	0				43	0			1	WQCC-11	3	2
Xylene (Total)	VOC	23	23	1	0	0				0	0			620	WQCC-11	2	0
Xylene[1,2-]	VOC	43	43	1	0	0				0	0			1400	EPA-4	3	0
Xylene[1,3-]+Xylene[1,4-]	VOC	25	25	1	0	0				0	0			620	WQCC-11	3	0

Table B-155
Nonfiltered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	61	57	0.9344	4	0.06557	77	104	125								
Chloride	ANION	71	0	0	71	1	1.76	2150	8640	0	0	0.0086	0.03456	250000	WQCC-12	3	0
Fluoride	ANION	72	16	0.2222	56	0.7778	0.208	182	648	0	0	0.1138	0.405	1600	WQCC-11	3	0
Nitrate	ANION	86	36	0.4186	50	0.5814	0.35	280	1000	0	0	0.028	0.1	10000	EPA-4	3	0
Oxalate	ANION	39	39	1	0	0											
Perchlorate	ANION	34	33	0.9706	1	0.02941	1.07	1.07	1.07	8	0	0.2892	0.2892	3.7	EPA-4	2	2
Sulfate	ANION	72	9	0.125	63	0.875	0.361	1800	280000	0	0	0.003	0.4667	600000	WQCC-12	3	0
Calcium	GENINORG	67	0	0	67	1	7670	12000	140000								
Hardness	GENINORG	5	0	0	5	1	39400	60700	85700								
Magnesium	GENINORG	67	0	0	67	1	1990	3150	6200								
Potassium	GENINORG	67	1	0.01493	66	0.9851	664	1800	3400								
Sodium	GENINORG	66	0	0	66	1	7900	13000	39000								
Deuterium Ratio	STABLE_ISOTOPES	46	0	0	46	1	-90	-82	-75								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	24	0	0	24	1	-0.2	5.35	10.5								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	46	0	0	46	1	-12	-11.8	12								
pH	WATER_QUAL	5	0	0	5	1	6.82	7.33	8.22								
Specific Conductance	WATER_QUAL	5	0	0	5	1	101	145	201								
Total Dissolved Solids	WATER_QUAL	5	0	0	5	1	112000	147000	178000	0	0	0.147	0.178	1000000	WQCC-12	1	0
Total Organic Carbon	WATER_QUAL	52	6	0.1154	46	0.8846	0.458	1340	15000								
Total Suspended Solids	WATER_QUAL	5	2	0.4	3	0.6	2830	7610	7800								

Table B-156
Filtered Inorganics of Water Canyon/Cañon de Valle Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	136	56	0.4118	80	0.5882	9	359.5	10800	24	59	4.132	124.1	87	WQCC-6	8	5
AluminumRe	METALS	136	56	0.4118	80	0.5882	9	359.5	10800	0	3	0.0719	2.16	5000	WQCC-4	8	0
Antimony	METALS	128	109	0.8516	19	0.1484	0.16	0.614	4.05	19	0	0.1023	0.675	6	EPA-2	7	6
Arsenic	METALS	131	99	0.7557	32	0.2443	0.35	1.32	30	4	4	0.132	3	10	EPA-2	7	0
Barium	METALS	133	1	0.007519	132	0.9925	12	210	3400	0	5	0.21	3.4	1000	WQCC-11	8	0
Beryllium	METALS	133	123	0.9248	10	0.07519	0.01	0.245	0.93	19	0	0.06125	0.2325	4	EPA-2	8	5
Boron	METALS	126	32	0.254	94	0.746	4.01	49.4	2840	0	0	0.01497	0.8606	3300	EPA-4	8	0
Cadmium	METALS	132	105	0.7955	27	0.2045	0.05	0.23	1.2	19	0	0.1028	0.5362	2.24	WQCC-6	7	6
CadmiumRe	METALS	132	105	0.7955	27	0.2045	0.05	0.23	1.2	16	0	0.046	0.24	5	EPA-2	7	0
Cesium	METALS	5	2	0.4	3	0.6	500	700	800								
Chromium	METALS	133	67	0.5038	66	0.4962	0.34	1.3	34.6	0	0	0.026	0.692	50	WQCC-11	8	0
Cobalt	METALS	132	93	0.7045	39	0.2955	0.267	1.4	11	0	0	0.0014	0.011	1000	WQCC-4	7	0
Copper	METALS	132	103	0.7803	29	0.2197	0.5	1.4	7.7	16	0	0.1563	0.8598	8.96	WQCC-6	7	6
CopperRe	METALS	132	103	0.7803	29	0.2197	0.5	1.4	7.7	0	0	0.0028	0.0154	500	WQCC-4	7	0
Cyanide (Total)	CN	12	12	1	0	0				0	0			200	WQCC-11	5	0
Iron	METALS	136	52	0.3824	84	0.6176	16	176	6360	0	11	0.176	6.36	1000	WQCC-12	8	0
Lead	METALS	133	104	0.782	29	0.218	0.02	1	5.04	6	7	0.3974	2.003	2.52	WQCC-6	8	6
LeadRe	METALS	133	104	0.782	29	0.218	0.02	1	5.04	0	0	0.06667	0.336	15	EPA-2	8	0
Lithium	METALS	18	5	0.2778	13	0.7222	3.5	6.9	20	0	0	0.009452	0.0274	730	EPA-4	6	0
Manganese	METALS	136	43	0.3162	93	0.6838	0.92	6.6	2700	0	2	0.033	13.5	200	WQCC-12	8	0
Mercury	METALS	135	119	0.8815	16	0.1185	0.03	0.2	0.76	0	0	0.1	0.38	2	WQCC-11	7	0
Molybdenum	METALS	19	17	0.8947	2	0.1053	3	4.25	5.5	0	0	0.02361	0.03056	180	EPA-4	7	0
Nickel	METALS	132	80	0.6061	52	0.3939	0.67	1.7	4.8	0	0	0.03269	0.0923	52.01	WQCC-6	7	0
NickelRe	METALS	132	80	0.6061	52	0.3939	0.67	1.7	4.8	0	0	0.017	0.048	100	EPA-2	7	0
Rubidium	METALS	5	3	0.6	2	0.4	700	3850	7000								
Selenium	METALS	131	97	0.7405	34	0.2595	0.65	1.42	6	0	0	0.142	0.6	10	EPA-1	6	0
SeleniumRe	METALS	131	97	0.7405	34	0.2595	0.65	1.42	6	0	0	0.0284	0.12	50	WQCC-4	6	0
Silver	METALS	132	116	0.8788	16	0.1212	0.0273	0.34	3.6	38	1	0.09855	1.043	3.45	WQCC-2	7	6
SilverRe	METALS	132	116	0.8788	16	0.1212	0.0273	0.34	3.6	0	0	0.0068	0.072	50	WQCC-11	7	0
Strontium	METALS	23	2	0.08696	21	0.913	39.5	110	158	0	0	0.005	0.007182	22000	EPA-4	8	0
Thallium	METALS	132	101	0.7652	31	0.2348	0.0164	0.039	4.1	62	3	0.0195	2.05	2	EPA-2	7	6
Tin	METALS	7	6	0.8571	1	0.1429	20	20	20	0	0	0.0009091	0.0009091	22000	EPA-4	7	0
Uranium	URANIUM	12	12	1	0	0				12	0			30	EPA-2	5	5
Vanadium	METALS	133	37	0.2782	96	0.7218	0.58	3.25	25	0	0	0.0325	0.25	100	WQCC-4	8	0
Zinc	METALS	133	68	0.5113	65	0.4887	1.3	7	130	0	1	0.05973	1.109	117.19	WQCC-2	8	0
ZincRe	METALS	133	68	0.5113	65	0.4887	1.3	7	130	0	0	0.0007	0.013	10000	WQCC-12	8	0

Table B-157
Filtered Radionuclides of Water Canyon/Cañon de Valle Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	1	1	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	1	1	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	1	1	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	6	6	1	0	0				0	0			15	EPA-2	6	0
Gross beta	rad	6	1	0.1667	5	0.8333	1.49	4.6	5.87	0	0	0.092	0.1174	50	EPA-2	6	0
Plutonium-238	rad	1	1	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	1	0	0	1	1	0.0138	0.0138	0.0138	0	0	0.0115	0.0115	1.2	DOE	1	0
Strontium-90	rad	1	1	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0
Uranium-234	rad	1	0	0	1	1	0.0876	0.0876	0.0876	0	0	0.00438	0.00438	20	DOE	1	0
Uranium-235	rad	3	2	0.6667	1	0.3333	0.0293	0.0293	0.0293	0	0	0.001221	0.001221	24	DOE	3	0
Uranium-238	rad	1	0	0	1	1	0.0417	0.0417	0.0417	0	0	0.001738	0.001738	24	DOE	1	0

Table B-158
Filtered Organics of Water Canyon/Cañon de Valle Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
RDX	HEXP	27	1	0.03704	26	0.963	1	20.5	160	1	26	33.54	261.8	0.6112	EPA-4	5	1
Acetone	VOC	8	3	0.375	5	0.625	21	25	28	0	0	0.04098	0.0459	610	EPA-4	5	0
HMX	HEXP	27	11	0.4074	16	0.5926	0.514	2.18	16.6	0	0	0.001195	0.009096	1825	EPA-4	5	0
Amino-2,6-dinitrotoluene[4-]	HEXP	20	11	0.55	9	0.45	0.062	0.663	2.6								
Amino-4,6-dinitrotoluene[2-]	HEXP	20	11	0.55	9	0.45	0.085	0.3	1.98								
Trinitrobenzene[1,3,5-]	HEXP	27	18	0.6667	9	0.3333	0.14	0.535	2.3	0	0	0.0004886	0.0021	1095	EPA-4	5	0
Amino-x,6-dinitrotoluene[x-]	HEXP	7	5	0.7143	2	0.2857	0.89	3.745	6.6								
Trinitrotoluene[2,4,6-]	HEXP	27	23	0.8519	4	0.1481	0.051	0.6015	1.3	0	0	0.03296	0.07123	18.25	EPA-4	5	0
Dinitrotoluene[2,4-]	SVOC	27	23	0.8519	4	0.1481	0.039	0.0695	0.103	0	0	0.0009521	0.001411	73	EPA-4	5	0
Dichloroethene[cis-1,2-]	VOC	8	7	0.875	1	0.125	9	9	9	0	0	0.1475	0.1475	61	EPA-4	5	0
Tetrachloroethene	VOC	8	7	0.875	1	0.125	10	10	10	7	1	2	2	5	EPA-2	5	0
Nitrotoluene[3-]	HEXP	27	26	0.963	1	0.03704	0.111	0.111	0.111	0	0	0.001825	0.001825	60.833	EPA-4	5	0
Dinitrobenzene[1,3-]	HEXP	27	27	1	0	0				1	0			3.65	EPA-4	5	1
Nitrotoluene[2-]	HEXP	27	27	1	0	0											
Nitrotoluene[4-]	HEXP	27	27	1	0	0				0	0			60.833	EPA-4	5	0
Tetryl	HEXP	27	27	1	0	0				0	0			365	EPA-4	5	0
Acenaphthene	PAH	18	18	1	0	0				0	0			370	EPA-4	5	0
Acenaphthylene	PAH	18	18	1	0	0				0	0			370	EPA-4	5	0
Anthracene	PAH	18	18	1	0	0				0	0			1800	EPA-4	5	0
Benzo(a)anthracene	PAH	18	18	1	0	0				18	0			0.49	WQCC-9	5	5
Benzo(a)pyrene	PAH	18	18	1	0	0				18	0			0.2	EPA-2	5	5
Benzo(b)fluoranthene	PAH	18	18	1	0	0				18	0			0.49	WQCC-9	5	5
Benzo(g,h,i)perylene	PAH	18	18	1	0	0				0	0			180	EPA-4	5	0
Benzo(k)fluoranthene	PAH	15	15	1	0	0				15	0			0.49	WQCC-9	5	5
Chrysene	PAH	18	18	1	0	0				18	0			0.49	WQCC-9	5	5
Dibenz(a,h)anthracene	PAH	18	18	1	0	0				18	0			0.092	EPA-4	5	5
Fluoranthene	PAH	18	18	1	0	0				0	0			370	WQCC-9	5	0
Fluorene	PAH	18	18	1	0	0				0	0			240	EPA-4	5	0
Indeno(1,2,3-cd)pyrene	PAH	18	18	1	0	0				18	0			0.49	WQCC-9	5	5
Naphthalene	PAH	18	18	1	0	0				18	0			6.2	EPA-4	5	5
Phenanthrene	PAH	18	18	1	0	0				0	0			1800	EPA-4	5	0
Pyrene	PAH	18	18	1	0	0				0	0			180	EPA-4	5	0
Aniline	SVOC	18	18	1	0	0				0	0			120	EPA-4	5	0
Azobenzene	SVOC	18	18	1	0	0				18	0			6.1	EPA-4	5	5
Benzidine	SVOC	3	3	1	0	0				3	0			0.0029	EPA-4	3	3
Benzoic Acid	SVOC	18	18	1	0	0				0	0			150000	EPA-4	5	0
Benzyl Alcohol	SVOC	18	18	1	0	0				0	0			11000	EPA-4	5	0
Bis(2-chloroethoxy)methane	SVOC	18	18	1	0	0											
Bis(2-chloroethyl)ether	SVOC	18	18	1	0	0				18	0			0.098	EPA-4	5	5
Bis(2-ethylhexyl)phthalate	SVOC	18	18	1	0	0				18	0			6	EPA-2	5	5

Table B-158 (continued)

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromophenyl-phenylether[4-]	SVOC	18	18	1	0	0											
Butylbenzylphthalate	SVOC	18	18	1	0	0				0	0			5200	WQCC-9	5	0
Carbazole	SVOC	3	3	1	0	0				0	0			34	EPA-4	3	0
Chloro-3-methylphenol[4-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Chloroaniline[4-]	SVOC	18	18	1	0	0				0	0			150	EPA-4	5	0
Chloronaphthalene[2-]	SVOC	18	18	1	0	0				0	0			490	EPA-4	5	0
Chlorophenol[2-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Chlorophenyl-phenyl[4-] Ether	SVOC	18	18	1	0	0											
Dibenzofuran	SVOC	18	18	1	0	0				0	0			24	EPA-4	5	0
Dichlorobenzidine[3,3'-]	SVOC	18	18	1	0	0				18	0			0.77	WQCC-9	5	5
Dichlorophenol[2,4-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Diethylphthalate	SVOC	18	18	1	0	0				0	0			29000	EPA-4	5	0
Dimethyl Phthalate	SVOC	18	18	1	0	0				0	0			370000	EPA-4	5	0
Dimethylphenol[2,4-]	SVOC	18	18	1	0	0				0	0			730	EPA-4	5	0
Di-n-butylphthalate	SVOC	18	18	1	0	0				0	0			3700	EPA-4	5	0
Dinitro-2-methylphenol[4,6-]	SVOC	18	18	1	0	0				0	0			765	WQCC-9	5	0
Dinitrophenol[2,4-]	SVOC	18	18	1	0	0				0	0			73	EPA-4	5	0
Dinitrotoluene[2,6-]	SVOC	27	27	1	0	0				0	0			37	EPA-4	5	0
Di-n-octylphthalate	SVOC	18	18	1	0	0				0	0			730	EPA-4	5	0
Hexachlorobenzene	SVOC	18	18	1	0	0				18	0			0.0077	WQCC-9	5	5
Hexachlorobutadiene	SVOC	18	18	1	0	0				18	0			7.3	EPA-4	5	5
Hexachlorocyclopentadiene	SVOC	18	18	1	0	0				0	0			50	EPA-2	5	0
Hexachloroethane	SVOC	18	18	1	0	0				0	0			37	EPA-4	5	0
Isophorone	SVOC	18	18	1	0	0				0	0			710	EPA-4	5	0
Methylnaphthalene[2-]	SVOC	18	18	1	0	0				18	0			6.2	EPA-4	5	5
Methylphenol[2-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Methylphenol[4-]	SVOC	18	18	1	0	0				0	0			180	EPA-4	5	0
Nitroaniline[2-]	SVOC	18	18	1	0	0				18	0			2.2	EPA-4	5	5
Nitroaniline[3-]	SVOC	18	18	1	0	0				18	0			2.2	EPA-4	5	5
Nitroaniline[4-]	SVOC	18	18	1	0	0				18	0			2.2	EPA-4	5	5
Nitrobenzene	SVOC	27	27	1	0	0				4	0			3.4	EPA-4	5	2
Nitrophenol[2-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Nitrophenol[4-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Nitrosodimethylamine[N-]	SVOC	18	18	1	0	0				18	0			0.013	EPA-4	5	5
Nitroso-di-n-propylamine[N-]	SVOC	18	18	1	0	0				18	0			0.096	EPA-4	5	5
Nitrosodiphenylamine[N-]	SVOC	18	18	1	0	0				0	0			140	EPA-4	5	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	18	18	1	0	0				0	0			170000	WQCC-9	5	0
Pentachlorophenol	SVOC	18	18	1	0	0				18	0			1	EPA-2	5	5
Phenol	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Pyridine	SVOC	3	3	1	0	0				0	0			37	EPA-4	3	0

Table B-158 (continued)

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichlorophenol[2,4,5-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Trichlorophenol[2,4,6-]	SVOC	18	18	1	0	0				18	0			5	WQCC-12	5	5
Benzene	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Bromobenzene	VOC	8	8	1	0	0				0	0			23	EPA-4	5	0
Bromochloromethane	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Bromodichloromethane	VOC	8	8	1	0	0				0	0			100	EPA-2	5	0
Bromoform	VOC	8	8	1	0	0				0	0			100	EPA-2	5	0
Bromomethane	VOC	8	8	1	0	0				8	0			8.7	EPA-4	5	5
Butanone[2-]	VOC	8	8	1	0	0				0	0			1900	EPA-4	5	0
Butylbenzene[n-]	VOC	8	8	1	0	0				0	0			61	EPA-4	5	0
Butylbenzene[sec-]	VOC	8	8	1	0	0				0	0			61	EPA-4	5	0
Butylbenzene[tert-]	VOC	8	8	1	0	0				0	0			61	EPA-4	5	0
Carbon Disulfide	VOC	8	8	1	0	0				0	0			1000	EPA-4	5	0
Carbon Tetrachloride	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Chlorobenzene	VOC	8	8	1	0	0				0	0			100	EPA-2	5	0
Chlorodibromomethane	VOC	8	8	1	0	0				0	0			100	EPA-2	5	0
Chloroethane	VOC	8	8	1	0	0				0	0			39	EPA-4	5	0
Chloroform	VOC	8	8	1	0	0				0	0			100	WQCC-11	5	0
Chloromethane	VOC	8	8	1	0	0				0	0			15	EPA-4	5	0
Chlorotoluene[2-]	VOC	8	8	1	0	0				0	0			120	EPA-4	5	0
Chlorotoluene[4-]	VOC	8	8	1	0	0				0	0			120	EPA-4	5	0
Dibromo-3-Chloropropane[1,2-]	VOC	8	8	1	0	0											
Dibromoethane[1,2-]	VOC	8	8	1	0	0				8	0			0.0076	EPA-4	5	5
Dibromomethane	VOC	8	8	1	0	0				0	0			61	EPA-4	5	0
Dichlorobenzene[1,2-]	VOC	19	19	1	0	0				0	0			600	EPA-2	5	0
Dichlorobenzene[1,3-]	VOC	19	19	1	0	0				0	0			18	EPA-4	5	0
Dichlorobenzene[1,4-]	VOC	19	19	1	0	0				0	0			75	EPA-2	5	0
Dichlorodifluoromethane	VOC	8	8	1	0	0				0	0			390	EPA-4	5	0
Dichloroethane[1,1-]	VOC	8	8	1	0	0				0	0			25	WQCC-11	5	0
Dichloroethane[1,2-]	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Dichloroethene[1,1-]	VOC	8	8	1	0	0				8	0			5	WQCC-11	5	0
Dichloroethene[trans-1,2-]	VOC	8	8	1	0	0				0	0			100	EPA-2	5	0
Dichloropropane[1,2-]	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Dichloropropane[1,3-]	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Dichloropropane[2,2-]	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Dichloropropene[1,1-]	VOC	8	8	1	0	0				8	0			4	EPA-4	5	5
Dichloropropene[cis-1,3-]	VOC	8	8	1	0	0				8	0			4	EPA-4	5	5
Dichloropropene[trans-1,3-]	VOC	8	8	1	0	0				8	0			4	EPA-4	5	5
Ethylbenzene	VOC	8	8	1	0	0				0	0			700	EPA-2	5	0
Hexanone[2-]	VOC	8	8	1	0	0				0	0			1900	EPA-4	5	0

Table B-158 (continued)

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Iodomethane	VOC	8	8	1	0	0				0	0			8.7	EPA-4	5	0
Isopropylbenzene	VOC	8	8	1	0	0				0	0			660	EPA-4	5	0
Isopropyltoluene[4-]	VOC	8	8	1	0	0				0	0			660	EPA-4	5	0
Methyl-2-pentanone[4-]	VOC	8	8	1	0	0				0	0			160	EPA-4	5	0
Methylene Chloride	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Propylbenzene[1-]	VOC	8	8	1	0	0				0	0			61	EPA-4	5	0
Styrene	VOC	8	8	1	0	0				0	0			100	EPA-2	5	0
Tetrachloroethane[1,1,1,2-]	VOC	8	8	1	0	0				8	0			4.3	EPA-4	5	5
Tetrachloroethane[1,1,2,2-]	VOC	8	8	1	0	0				0	0			10	WQCC-11	5	0
Toluene	VOC	8	8	1	0	0				0	0			750	WQCC-11	5	0
Trichloro-1,2,2-trifluoroethane	VOC	8	8	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	18	18	1	0	0				0	0			70	EPA-2	5	0
Trichloroethane[1,1,1-]	VOC	8	8	1	0	0				0	0			60	WQCC-11	5	0
Trichloroethane[1,1,2-]	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Trichloroethene	VOC	8	8	1	0	0				8	0			5	EPA-2	5	0
Trichlorofluoromethane	VOC	8	8	1	0	0				0	0			1300	EPA-4	5	0
Trichloropropane[1,2,3-]	VOC	8	8	1	0	0				8	0			0.016	EPA-4	5	5
Trimethylbenzene[1,2,4-]	VOC	8	8	1	0	0				0	0			12	EPA-4	5	0
Trimethylbenzene[1,3,5-]	VOC	8	8	1	0	0				0	0			12	EPA-4	5	0
Vinyl Chloride	VOC	8	8	1	0	0				8	0			1	WQCC-11	5	5
Xylene (Total)	VOC	8	8	1	0	0				0	0			620	WQCC-11	5	0

Table B-159
Filtered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	136	2	0.01471	134	0.9853	4000	19000	42800								
Hardness	GENINORG	1	0	0	1	1	24900	24900	24900								
Magnesium	GENINORG	136	4	0.02941	132	0.9706	1000	5320	10000								
Potassium	GENINORG	135	4	0.02963	131	0.9704	1390	3000	11500								
Sodium	GENINORG	136	2	0.01471	134	0.9853	4870	17950	50200								
Conductivity	WATER_QUAL	9	0	0	9	1	170	200	339								
pH	WATER_QUAL	45	0	0	45	1	6	7	8								
Specific Conductance	WATER_QUAL	39	0	0	39	1	60.8	206	280000								
Total Dissolved Solids	WATER_QUAL	43	0	0	43	1	49000	151000	250000	0	0	0.151	0.25	1000000	WQCC-12	8	0
Total Organic Carbon	WATER_QUAL	9	0	0	9	1	2000	2000	14000								
Total Suspended Solids	WATER_QUAL	17	11	0.6471	6	0.3529	9000	48500	460000								
Turbidity	WATER_QUAL	9	0	0	9	1	3.8	7.4	22								

Table B-160
Nonfiltered Inorganics of Water Canyon/Cañon de Valle Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	139	15	0.1079	124	0.8921	23	809	22700	0	0	0.02186	0.6135	37000	EPA-4	7	0
Antimony	METALS	135	118	0.8741	17	0.1259	0.05	0.32	4.7	16	0	0.05333	0.7833	6	EPA-2	7	5
Arsenic	METALS	137	96	0.7007	41	0.2993	0.46	2.3	27	93	41	5.111	60	0.45	EPA-4	7	6
Barium	METALS	136	0	0	136	1	7	240	3000	0	7	0.24	3	1000	WQCC-11	7	0
Beryllium	METALS	139	115	0.8273	24	0.1727	0.01	0.272	1.4	17	0	0.068	0.35	4	EPA-2	7	0
Boron	METALS	123	33	0.2683	90	0.7317	3.35	51.85	2750	0	0	0.01571	0.8333	3300	EPA-4	6	0
Cadmium	METALS	139	109	0.7842	30	0.2158	0.01	0.335	7	17	1	0.067	1.4	5	EPA-2	7	1
Cesium	METALS	5	3	0.6	2	0.4	500	600	700								
Chromium	METALS	139	56	0.4029	83	0.5971	0.49	1.8	32.7	0	0	0.036	0.654	50	WQCC-11	7	0
Cobalt	METALS	139	107	0.7698	32	0.2302	0.0882	1.4	20								
Copper	METALS	139	86	0.6187	53	0.3813	0.42	2.6	43.1	0	0	0.0026	0.0431	1000	WQCC-12	7	0
Cyanide (Total)	CN	23	19	0.8261	4	0.1739	1.92	6.6	10	16	2	1.269	1.923	5.2	WQCC-7	6	6
Cyanide (Total)Re	CN	23	19	0.8261	4	0.1739	1.92	6.6	10	0	0	0.033	0.05	200	WQCC-11	6	0
Iron	METALS	139	21	0.1511	118	0.8489	27	499.5	17700	1	40	0.4995	17.7	1000	WQCC-12	7	1
Lead	METALS	139	85	0.6115	54	0.3885	0.03	1.75	21.3	2	3	0.1167	1.42	15	EPA-2	7	1
Lithium	METALS	13	0	0	13	1	5	8.6	25.8	0	0	0.01178	0.03534	730	EPA-4	6	0
Manganese	METALS	139	27	0.1942	112	0.8058	0.77	10.75	3200	0	12	0.05375	16	200	WQCC-12	7	0
Mercury	METALS	139	128	0.9209	11	0.07914	0.015	0.1	1	115	11	8.333	83.33	0.012	WQCC-7	7	6
MercuryRe	METALS	139	128	0.9209	11	0.07914	0.015	0.1	1	0	1	0.1299	1.299	0.77	WQCC-8	7	0
Molybdenum	METALS	17	13	0.7647	4	0.2353	4.8	6.35	30	0	0	0.03528	0.1667	180	EPA-4	6	0
Nickel	METALS	139	74	0.5324	65	0.4676	0.46	2.5	20	0	0	0.025	0.2	100	EPA-2	7	0
Rubidium	METALS	5	3	0.6	2	0.4	600	600	600								
Selenium	METALS	139	97	0.6978	42	0.3022	0.76	2.225	14.4	12	4	0.445	2.88	5	WQCC-8	7	0
Silver	METALS	139	112	0.8058	27	0.1942	0.02	0.85	1380	0	2	0.017	27.6	50	WQCC-11	7	0
Strontium	METALS	17	0	0	17	1	13	109	157	0	0	0.004955	0.007136	22000	EPA-4	6	0
Thallium	METALS	139	106	0.7626	33	0.2374	0.0174	0.0969	7.1	69	4	0.04845	3.55	2	EPA-2	7	7
Tin	METALS	5	4	0.8	1	0.2	30	30	30	0	0	0.001364	0.001364	22000	EPA-4	1	0
Uranium	URANIUM	69	18	0.2609	51	0.7391	0.055	0.934	60	14	1	0.03113	2	30	EPA-2	7	6
Vanadium	METALS	139	36	0.259	103	0.741	0.34	4.1	33.1	0	0	0.01577	0.1273	260	EPA-4	7	0
Zinc	METALS	139	57	0.4101	82	0.5899	0.58	7.95	80	0	0	0.000795	0.008	10000	WQCC-12	7	0

Table B-161
Nonfiltered Radionuclides of Water Canyon/Cañon de Valle Watershed Springs

Unfiltered WGS Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	8	8	1	0	0				0	0			1.2	DOE	3	0
Cesium-137	rad	8	8	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	6	5	0.8333	1	0.1667	26.46	26.46	26.46	0	0	0.2646	0.2646	100	EPA-2	3	0
Gross alpha	rad	8	8	1	0	0				0	0			15	EPA-2	3	0
Gross beta	rad	8	6	0.75	2	0.25	3.87	4.435	5	0	0	0.0887	0.1	50	EPA-2	3	0
Gross gamma	rad	4	3	0.75	1	0.25	190.8	190.8	190.8								
Plutonium-238	rad	10	10	1	0	0				0	0			1.6	DOE	4	0
Plutonium-239	rad	10	10	1	0	0				0	0			1.2	DOE	4	0
Strontium-90	rad	9	9	1	0	0				0	0			8	EPA-2	4	0
Tritium	rad	76	16	0.2105	60	0.7895	30	93.76	209.3	0	0	0.004688	0.01046	20000	WQCC-5	7	0
Uranium-234	rad	1	0	0	1	1	0.14	0.14	0.14	0	0	0.007	0.007	20	DOE	1	0
Uranium-235	rad	2	2	1	0	0				0	0			24	DOE	2	0
Uranium-238	rad	1	0	0	1	1	0.1055	0.1055	0.1055	0	0	0.004396	0.004396	24	DOE	1	0

Table B-162
Nonfiltered Organics of Water Canyon/Cañon de Valle Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
RDX	HEXP	136	12	0.08824	124	0.9118	0.27	36.2	330	12	122	59.23	539.9	0.611195767	EPA-4	8	7
HMX	HEXP	133	30	0.2256	103	0.7744	0.57	3.8	32	0	0	0.002082	0.01753	1825	EPA-4	8	0
Amino-x,6-dinitrotoluene[x-]	HEXP	29	12	0.4138	17	0.5862	0.45	1.5	9.4								
Amino-2,6-dinitrotoluene[4-]	HEXP	100	48	0.48	52	0.52	0.15	0.9045	7.8								
Trichloroethene	VOC	92	46	0.5	46	0.5	0.25	1.9	10	42	1	0.38	2	5	EPA-2	7	0
Amino-4,6-dinitrotoluene[2-]	HEXP	99	51	0.5152	48	0.4848	0.11	0.545	3								
Trinitrobenzene[1,3,5-]	HEXP	130	79	0.6077	51	0.3923	0.068	0.6	2.1	0	0	0.0005479	0.001918	1095	EPA-4	6	0
Tetrachloroethene	VOC	92	59	0.6413	33	0.3587	0.41	2	42	49	3	0.4	8.4	5	EPA-2	7	0
MNX	HEXP	14	9	0.6429	5	0.3571	0.1	0.27	0.43								
Amino-DNTs	HEXP	6	4	0.6667	2	0.3333	2.3	2.8	3.3								
Acetone	VOC	84	56	0.6667	28	0.3333	2.9	25	78	0	0	0.04098	0.1279	610	EPA-4	7	0
DNX	HEXP	14	10	0.7143	4	0.2857	0.091	0.255	0.45								
TNX	HEXP	14	10	0.7143	4	0.2857	0.14	0.3	0.43								
Butanone[2-]	VOC	90	80	0.8889	10	0.1111	2	2.2	8.1	0	0	0.001158	0.004263	1900	EPA-4	7	0
Chloromethane	VOC	92	84	0.913	8	0.08696	2	11.5	30	0	2	0.7667	2	15	EPA-4	7	0
Trinitrotoluene[2,4,6-]	HEXP	135	125	0.9259	10	0.07407	0.051	0.679	3	2	0	0.03721	0.1644	18.25	EPA-4	8	2
Dichloroethane[1,2-]	VOC	92	86	0.9348	6	0.06522	0.9	4.5	8	58	3	0.9	1.6	5	EPA-2	7	1
Dinitrotoluene[2,4-]	SVOC	131	124	0.9466	7	0.05344	0.046	0.098	1.3	0	0	0.001342	0.01781	73	EPA-4	7	0
Bis(2-ethylhexyl)phthalate	SVOC	38	36	0.9474	2	0.05263	0.14	0.87	1.6	33	0	0.145	0.2667	6	EPA-2	7	7
Dichloroethene[cis/trans-1,2-]	VOC	21	20	0.9524	1	0.04762	21	21	21								
Dichloroethene[cis-1,2-]	VOC	70	67	0.9571	3	0.04286	9	19	27	0	0	0.3115	0.4426	61	EPA-4	6	0
Dinitrobenzene[1,3-]	HEXP	134	129	0.9627	5	0.03731	0.074	0.57	0.84	7	0	0.1562	0.2301	3.65	EPA-4	7	3
Trichloro-1,2,2-trifluoroethane	VOC	70	68	0.9714	2	0.02857	2	3.5	5								
Trichlorobenzene[1,2,3-]	VOC	36	35	0.9722	1	0.02778	0.9	0.9	0.9	0	0	0.01286	0.01286	70	EPA-2	6	0
Di-n-butylphthalate	SVOC	37	36	0.973	1	0.02703	1	1	1	0	0	0.0002703	0.0002703	3700	EPA-4	7	0
Nitrobenzene	SVOC	136	133	0.9779	3	0.02206	0.52	0.61	2.4	33	0	0.1794	0.7059	3.4	EPA-4	8	5
Bromomethane	VOC	92	90	0.9783	2	0.02174	4	5.5	7	63	0	0.6322	0.8046	8.7	EPA-4	7	7
Naphthalene	PAH	62	61	0.9839	1	0.01613	0.7	0.7	0.7	26	0	0.1129	0.1129	6.2	EPA-4	7	6
Tetryl	HEXP	134	132	0.9851	2	0.01493	0.072	0.3775	0.683	0	0	0.001034	0.001871	365	EPA-4	7	0
Carbon Tetrachloride	VOC	92	91	0.9891	1	0.01087	7	7	7	64	1	1.4	1.4	5	EPA-2	7	0
Toluene	VOC	92	91	0.9891	1	0.01087	0.55	0.55	0.55	0	0	0.0007333	0.0007333	750	WQCC-11	7	0
Trichloroethane[1,1,1-]	VOC	92	91	0.9891	1	0.01087	0.28	0.28	0.28	0	0	0.004667	0.004667	60	WQCC-11	7	0
Trichlorofluoromethane	VOC	92	91	0.9891	1	0.01087	1	1	1	0	0	0.0007692	0.0007692	1300	EPA-4	7	0
Dichlorobenzene[1,4-]	VOC	94	93	0.9894	1	0.01064	0.41	0.41	0.41	0	0	0.005467	0.005467	75	EPA-2	7	0
Dinitrotoluene[2,6-]	SVOC	131	130	0.9924	1	0.007634	0.2	0.2	0.2	0	0	0.005405	0.005405	37	EPA-4	7	0
Nitroglycerin	HEXP	53	53	1	0	0											
Nitrotoluene[2-]	HEXP	134	134	1	0	0											
Nitrotoluene[3-]	HEXP	134	134	1	0	0				4	0			60.83333333	EPA-4	7	2
Nitrotoluene[4-]	HEXP	134	134	1	0	0				5	0			60.83333333	EPA-4	7	3
PETN	HEXP	55	55	1	0	0											

Table B-162 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acenaphthene	PAH	37	37	1	0	0				0	0			370	EPA-4	7	0
Acenaphthylene	PAH	39	39	1	0	0				0	0			370	EPA-4	7	0
Anthracene	PAH	39	39	1	0	0				0	0			1800	EPA-4	7	0
Benzo(a)anthracene	PAH	39	39	1	0	0				37	0			0.49	WQCC-9	7	7
Benzo(a)pyrene	PAH	39	39	1	0	0				37	0			0.2	EPA-2	7	7
Benzo(b)fluoranthene	PAH	39	39	1	0	0				37	0			0.49	WQCC-9	7	7
Benzo(g,h,i)perylene	PAH	39	39	1	0	0				0	0			180	EPA-4	7	0
Benzo(k)fluoranthene	PAH	35	35	1	0	0				33	0			0.49	WQCC-9	7	7
Chrysene	PAH	39	39	1	0	0				37	0			0.49	WQCC-9	7	7
Dibenz(a,h)anthracene	PAH	39	39	1	0	0				37	0			0.092	EPA-4	7	7
Fluoranthene	PAH	37	37	1	0	0				0	0			370	WQCC-9	7	0
Fluorene	PAH	39	39	1	0	0				0	0			240	EPA-4	7	0
Indeno(1,2,3-cd)pyrene	PAH	39	39	1	0	0				37	0			0.49	WQCC-9	7	7
Phenanthrene	PAH	39	39	1	0	0				0	0			1800	EPA-4	7	0
Pyrene	PAH	39	39	1	0	0				0	0			180	EPA-4	7	0
Aroclor-1016	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1262	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aldrin	PEST	2	2	1	0	0				2	0			0.0014	WQCC-9	2	2
BHC[gamma-]	PEST	2	2	1	0	0				0	0			0.2	EPA-2	2	0
Chlordane[alpha-]	PEST	2	2	1	0	0				0	0			0.022	WQCC-9	2	0
Dieldrin	PEST	2	2	1	0	0				2	0			0.0014	WQCC-9	2	2
Endrin	PEST	2	2	1	0	0				2	0			0.036	WQCC-7	2	2
EndrinRe	PEST	2	2	1	0	0				0	0			0.81	WQCC-9	2	0
Heptachlor	PEST	2	2	1	0	0				2	0			0.0021	WQCC-9	2	2
Heptachlor Epoxide	PEST	2	2	1	0	0				2	0			0.0011	WQCC-9	2	2
Toxaphene (Technical Grade)	PEST	2	2	1	0	0				2	0			0.0002	WQCC-7	2	2
Toxaphene (Technical Grade)Re	PEST	2	2	1	0	0				2	0			0.0075	WQCC-9	2	2
Alachlor	SVOC	2	2	1	0	0											
Aniline	SVOC	37	37	1	0	0				0	0			120	EPA-4	7	0
Atrazine	SVOC	2	2	1	0	0											
Azobenzene	SVOC	36	36	1	0	0				36	0			6.1	EPA-4	7	7
Benzidine	SVOC	14	14	1	0	0				14	0			0.0029	EPA-4	6	6
Benzoic Acid	SVOC	37	37	1	0	0				0	0			150000	EPA-4	7	0
Benzyl Alcohol	SVOC	37	37	1	0	0				0	0			11000	EPA-4	7	0

Table B-162 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-chloroethoxy)methane	SVOC	37	37	1	0	0											
Bis(2-chloroethyl)ether	SVOC	37	37	1	0	0				37	0			0.098	EPA-4	7	7
Bis(2-ethylhexyl)adipate	SVOC	1	1	1	0	0											
Bromophenyl-phenylether[4-]	SVOC	37	37	1	0	0											
Butachlor	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	37	37	1	0	0				0	0			5200	WQCC-9	7	0
Carbazole	SVOC	14	14	1	0	0				0	0			34	EPA-4	5	0
Chlordane (Technical Grade)	SVOC	2	2	1	0	0											
Chloro-3-methylphenol[4-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Chloroaniline[4-]	SVOC	37	37	1	0	0				0	0			150	EPA-4	7	0
Chlorobiphenyl[2-]	SVOC	2	2	1	0	0											
Chloronaphthalene[2-]	SVOC	37	37	1	0	0				0	0			490	EPA-4	7	0
Chlorophenol[2-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Chlorophenyl-phenyl[4-] Ether	SVOC	37	37	1	0	0											
Dibenzofuran	SVOC	37	37	1	0	0				0	0			24	EPA-4	7	0
Dichlorobenzidine[3,3'-]	SVOC	37	37	1	0	0				37	0			0.77	WQCC-9	7	7
Dichlorobiphenyl[2,3-]	SVOC	2	2	1	0	0											
Dichlorophenol[2,4-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Diethylphthalate	SVOC	37	37	1	0	0				0	0			29000	EPA-4	7	0
Dimethyl Phthalate	SVOC	39	39	1	0	0				0	0			370000	EPA-4	7	0
Dimethylphenol[2,4-]	SVOC	37	37	1	0	0				0	0			730	EPA-4	7	0
Dinitro-2-methylphenol[4,6-]	SVOC	37	37	1	0	0				0	0			765	WQCC-9	7	0
Dinitrophenol[2,4-]	SVOC	37	37	1	0	0				1	0			73	EPA-4	7	1
Di-n-octylphthalate	SVOC	37	37	1	0	0				0	0			730	EPA-4	7	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Hexachlorobenzene	SVOC	39	39	1	0	0				39	0			0.0077	WQCC-9	7	7
Hexachlorobutadiene	SVOC	62	62	1	0	0				26	0			7.3	EPA-4	7	6
Hexachlorocyclopentadiene	SVOC	39	39	1	0	0				5	0			50	EPA-2	7	1
Hexachloroethane	SVOC	37	37	1	0	0				0	0			37	EPA-4	7	0
Isophorone	SVOC	37	37	1	0	0				0	0			710	EPA-4	7	0
Methano-1H-indene[4,7-]	SVOC	2	2	1	0	0											
Methylnaphthalene[2-]	SVOC	39	39	1	0	0				36	0			6.2	EPA-4	7	7
Methylphenol[2-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Methylphenol[4-]	SVOC	37	37	1	0	0				0	0			180	EPA-4	7	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
Metolaclor	SVOC	2	2	1	0	0											
Metribuzin	SVOC	2	2	1	0	0											
Nitroaniline[2-]	SVOC	37	37	1	0	0				37	0			2.2	EPA-4	7	7
Nitroaniline[3-]	SVOC	37	37	1	0	0				37	0			2.2	EPA-4	7	7

Table B-162 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroaniline[4-]	SVOC	37	37	1	0	0				37	0			2.2	EPA-4	7	7
Nitrophenol[2-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Nitrophenol[4-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Nitrosodimethylamine[N-]	SVOC	37	37	1	0	0				37	0			0.013	EPA-4	7	7
Nitroso-di-n-propylamine[N-]	SVOC	37	37	1	0	0				37	0			0.096	EPA-4	7	7
Nitrosodiphenylamine[N-]	SVOC	36	36	1	0	0				0	0			140	EPA-4	7	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	36	36	1	0	0				0	0			170000	WQCC-9	7	0
Pentachlorophenol	SVOC	39	39	1	0	0				37	0			1	EPA-2	7	7
Phenol	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Propachlor	SVOC	2	2	1	0	0											
Pyridine	SVOC	14	14	1	0	0				0	0			37	EPA-4	6	0
Simazine	SVOC	2	2	1	0	0											
Trichlorobiphenyl [2,4',5-]	SVOC	2	2	1	0	0											
Trichlorophenol[2,4,5-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Trichlorophenol[2,4,6-]	SVOC	37	37	1	0	0				37	0			5	WQCC-12	7	7
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	92	92	1	0	0				65	0			5	EPA-2	7	0
Bromobenzene	VOC	90	90	1	0	0				0	0			23	EPA-4	7	0
Bromochloromethane	VOC	92	92	1	0	0				65	0			5	EPA-2	7	0
Bromodichloromethane	VOC	90	90	1	0	0				0	0			100	EPA-2	7	0
Bromoform	VOC	92	92	1	0	0				0	0			100	EPA-2	7	0
Butylbenzene[n-]	VOC	90	90	1	0	0				0	0			61	EPA-4	7	0
Butylbenzene[sec-]	VOC	88	88	1	0	0				0	0			61	EPA-4	7	0
Butylbenzene[tert-]	VOC	90	90	1	0	0				0	0			61	EPA-4	7	0
Carbon Disulfide	VOC	85	85	1	0	0				0	0			1000	EPA-4	7	0
Chlorobenzene	VOC	92	92	1	0	0				0	0			100	EPA-2	7	0
Chlorodibromomethane	VOC	92	92	1	0	0				0	0			100	EPA-2	7	0
Chloroethane	VOC	91	91	1	0	0				0	0			39	EPA-4	7	0
Chloroethyl vinyl ether[2-]	VOC	2	2	1	0	0											
Chloroform	VOC	92	92	1	0	0				0	0			100	WQCC-11	7	0
Chlorotoluene[2-]	VOC	90	90	1	0	0				0	0			120	EPA-4	7	0
Chlorotoluene[4-]	VOC	90	90	1	0	0				0	0			120	EPA-4	7	0
Dibromo-3-Chloropropane[1,2-]	VOC	90	90	1	0	0											
Dibromoethane[1,2-]	VOC	92	92	1	0	0				92	0			0.0076	EPA-4	7	7
Dibromomethane	VOC	90	90	1	0	0				0	0			61	EPA-4	7	0
Dichlorobenzene[1,2-]	VOC	94	94	1	0	0				0	0			600	EPA-2	7	0
Dichlorobenzene[1,3-]	VOC	94	94	1	0	0				0	0			18	EPA-4	7	0
Dichlorodifluoromethane	VOC	90	90	1	0	0				0	0			390	EPA-4	7	0
Dichloroethane[1,1-]	VOC	92	92	1	0	0				0	0			25	WQCC-11	7	0

Table B-162 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichloroethene[1,1-]	VOC	92	92	1	0	0				65	0			5	WQCC-11	7	0
Dichloroethene[trans-1,2-]	VOC	81	81	1	0	0				0	0			100	EPA-2	7	0
Dichloropropane[1,2-]	VOC	92	92	1	0	0				65	0			5	EPA-2	7	0
Dichloropropane[1,3-]	VOC	85	85	1	0	0				65	0			5	EPA-2	7	0
Dichloropropane[2,2-]	VOC	90	90	1	0	0				65	0			5	EPA-2	7	0
Dichloropropene[1,1-]	VOC	89	89	1	0	0				65	0			4	EPA-4	7	7
Dichloropropene[cis-1,3-]	VOC	92	92	1	0	0				65	0			4	EPA-4	7	7
Dichloropropene[trans-1,3-]	VOC	91	91	1	0	0				64	0			4	EPA-4	7	6
Ethylbenzene	VOC	92	92	1	0	0				0	0			700	EPA-2	7	0
Hexanone[2-]	VOC	85	85	1	0	0				0	0			1900	EPA-4	7	0
Iodomethane	VOC	85	85	1	0	0				0	0			8.7	EPA-4	7	0
Isopropylbenzene	VOC	90	90	1	0	0				0	0			660	EPA-4	7	0
Isopropyltoluene[4-]	VOC	90	90	1	0	0				0	0			660	EPA-4	7	0
Methyl tert-Butyl Ether	VOC	7	7	1	0	0											
Methyl-2-pentanone[4-]	VOC	85	85	1	0	0				0	0			160	EPA-4	7	0
Methylene Chloride	VOC	91	91	1	0	0				64	0			5	EPA-2	7	4
Methylnaphthalene[1-]	VOC	2	2	1	0	0											
Propylbenzene[1-]	VOC	90	90	1	0	0				0	0			61	EPA-4	7	0
Styrene	VOC	90	90	1	0	0				0	0			100	EPA-2	7	0
Tetrachloroethane[1,1,1,2-]	VOC	92	92	1	0	0				65	0			4.3	EPA-4	7	7
Tetrachloroethane[1,1,2,2-]	VOC	83	83	1	0	0				0	0			10	WQCC-11	7	0
Tetrahydrofuran	VOC	5	5	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	62	62	1	0	0				0	0			70	EPA-2	7	0
Trichloroethane[1,1,2-]	VOC	92	92	1	0	0				65	0			5	EPA-2	7	0
Trichloropropane[1,2,3-]	VOC	90	90	1	0	0				90	0			0.016	EPA-4	7	7
Trichlorotrifluoroethane	VOC	16	16	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	88	88	1	0	0				0	0			12	EPA-4	7	0
Trimethylbenzene[1,3,5-]	VOC	90	90	1	0	0				0	0			12	EPA-4	7	0
Vinyl acetate	VOC	2	2	1	0	0											
Vinyl Chloride	VOC	92	92	1	0	0				85	0			1	WQCC-11	7	7
Xylene (Total)	VOC	81	81	1	0	0				0	0			620	WQCC-11	7	0
Xylene[1,2-]	VOC	41	41	1	0	0				0	0			1400	EPA-4	6	0
Xylene[1,3-]+Xylene[1,4-]	VOC	15	15	1	0	0				0	0			620	WQCC-11	5	0

Table B-163
Nonfiltered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	137	109	0.7956	28	0.2044	125	208	2420								
Chlorate	ANION	7	6	0.8571	1	0.1429	200	200	200								
Chloride	ANION	156	1	0.00641	155	0.9936	622	16400	39000	0	0	0.0656	0.156	250000	WQCC-12	9	0
Fluoride	ANION	156	11	0.07051	145	0.9295	30	223	900	0	0	0.1394	0.5625	1600	WQCC-11	9	0
Iodide	ANION	17	10	0.5882	7	0.4118	50	50	100								
Nitrate	ANION	141	15	0.1064	126	0.8936	57	1100	3800000	0	4	0.11	380	10000	EPA-4	8	0
Nitrite	ANION	26	26	1	0	0				0	0			1000	EPA-4	5	0
Oxalate	ANION	75	75	1	0	0											
Perchlorate	ANION	81	71	0.8765	10	0.1235	8.54	12.55	17.5	68	10	3.392	4.73	3.7	EPA-4	6	5
Sulfate	ANION	157	1	0.006369	156	0.9936	1050	10000	84000	0	0	0.01667	0.14	600000	WQCC-12	9	0
Calcium	GENINORG	141	3	0.02128	138	0.9787	2634	19500	44000								
Hardness	GENINORG	7	0	0	7	1	28100	31000	35500								
Magnesium	GENINORG	141	4	0.02837	137	0.9716	894	5610	10000								
Potassium	GENINORG	141	3	0.02128	138	0.9787	1321	3170	12400								
Sodium	GENINORG	141	3	0.02128	138	0.9787	2900	17400	48600								
Deuterium Ratio	STABLE_ISOTOPES	2	0	0	2	1	-83	-78.5	-74								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-11.7	-11.1	-10.5								
Conductivity	WATER_QUAL	9	0	0	9	1	180	200	335								
pH	WATER_QUAL	18	0	0	18	1	6.91	7.45	8.4								
Specific Conductance	WATER_QUAL	10	0	0	10	1	77	113.5	280000								
Total Dissolved Solids	WATER_QUAL	10	0	0	10	1	100000	160000	240000	0	0	0.16	0.24	1000000	WQCC-12	6	0
Total Organic Carbon	WATER_QUAL	9	1	0.1111	8	0.8889	1000	4000	22000								
Total Suspended Solids	WATER_QUAL	17	10	0.5882	7	0.4118	1000	2000	160000								
Turbidity	WATER_QUAL	9	0	0	9	1	1	9.5	42								

Table B-164
Filtered Inorganics of Water Canyon/Cañon de Valle Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	108	38	0.3519	70	0.6481	5	566.5	18100	18	58	6.511	208	87	WQCC-6	36	15
AluminumRe	METALS	108	38	0.3519	70	0.6481	5	566.5	18100	0	3	0.1133	3.62	5000	WQCC-4	36	0
Antimony	METALS	107	89	0.8318	18	0.1682	1	3.5	30	0	0	0.000814	0.006977	4300	WQCC-9	35	0
Arsenic	METALS	108	92	0.8519	16	0.1481	0.73	1.8	5.6	0	0	0.07438	0.2314	24.2	WQCC-9	36	0
Barium	METALS	108	2	0.01852	106	0.9815	11	505	12900	0	37	0.1942	4.962	2600	EPA-4	37	0
Beryllium	METALS	109	101	0.9266	8	0.07339	0.018	0.55	4	0	0	0.1038	0.7547	5.3	WQCC-6	37	0
BerylliumRe	METALS	109	101	0.9266	8	0.07339	0.018	0.55	4	0	0	0.007534	0.05479	73	EPA-4	37	0
Boron	METALS	94	38	0.4043	56	0.5957	6.97	38.45	2530	0	0	0.00769	0.506	5000	WQCC-4	34	0
Cadmium	METALS	108	101	0.9352	7	0.06481	0.054	0.21	3.6	22	1	0.09383	1.609	2.24	WQCC-6	36	18
CadmiumRe	METALS	108	101	0.9352	7	0.06481	0.054	0.21	3.6	0	0	0.0042	0.072	50	WQCC-4	36	0
Chromium	METALS	108	61	0.5648	47	0.4352	0.4	1.1	23.4	0	0	0.01484	0.3157	74.12	WQCC-6	36	0
ChromiumRe	METALS	108	61	0.5648	47	0.4352	0.4	1.1	23.4	0	0	0.0011	0.0234	1000	WQCC-4	36	0
Cobalt	METALS	108	61	0.5648	47	0.4352	0.26	1.5	7.8	0	0	0.0015	0.0078	1000	WQCC-4	36	0
Copper	METALS	108	72	0.6667	36	0.3333	0.46	3.85	75.3	12	7	0.4299	8.408	8.96	WQCC-6	36	9
CopperRe	METALS	108	72	0.6667	36	0.3333	0.46	3.85	75.3	0	0	0.0077	0.1506	500	WQCC-4	36	0
Cyanide (Total)	CN	5	5	1	0	0											
Iron	METALS	108	36	0.3333	72	0.6667	13.3	327	12200	0	1	0.02973	1.109	11000	EPA-4	36	0
Lead	METALS	108	83	0.7685	25	0.2315	0.057	1.9	21.1	7	8	0.755	8.384	2.52	WQCC-6	36	5
LeadRe	METALS	108	83	0.7685	25	0.2315	0.057	1.9	21.1	0	0	0.019	0.211	100	WQCC-4	36	0
Lithium	METALS	4	4	1	0	0				0	0			730	EPA-4	4	0
Manganese	METALS	108	24	0.2222	84	0.7778	0.19	9.05	2420	0	2	0.005324	1.424	1700	EPA-4	36	0
Mercury	METALS	100	97	0.97	3	0.03	0.014	0.04	0.2	0	0	0.003636	0.01818	11	EPA-4	32	0
Molybdenum	METALS	19	19	1	0	0				0	0			180	EPA-4	8	0
Nickel	METALS	108	69	0.6389	39	0.3611	0.42	1.6	40	0	0	0.03077	0.7691	52.01	WQCC-6	36	0
NickelRe	METALS	108	69	0.6389	39	0.3611	0.42	1.6	40	0	0	0.0003478	0.008696	4600	WQCC-9	36	0
Selenium	METALS	102	85	0.8333	17	0.1667	0.374	1.9	5	0	0	0.038	0.1	50	WQCC-4	34	0
Silver	METALS	108	104	0.963	4	0.03704	0.211	0.79	10	32	1	0.229	2.898	3.45	WQCC-2	36	22
SilverRe	METALS	108	104	0.963	4	0.03704	0.211	0.79	10	0	0	0.004389	0.05556	180	EPA-4	36	0
Strontium	METALS	19	0	0	19	1	50	86.8	172	0	0	0.003945	0.007818	22000	EPA-4	8	0
Thallium	METALS	107	94	0.8785	13	0.1215	0.017	0.044	3	4	0	0.006984	0.4762	6.3	WQCC-9	36	4
Tin	METALS	19	19	1	0	0				0	0			22000	EPA-4	8	0
Titanium	METALS	11	5	0.4545	6	0.5455	2.27	5.995	15.9								
Uranium	URANIUM	16	12	0.75	4	0.25	0.108	0.1695	0.203								
Vanadium	METALS	108	45	0.4167	63	0.5833	0.31	2.3	27.9	0	0	0.023	0.279	100	WQCC-4	36	0
Zinc	METALS	108	59	0.5463	49	0.4537	1.5	6.1	59.6	0	0	0.05205	0.5086	117.19	WQCC-2	36	0
ZincRe	METALS	108	59	0.5463	49	0.4537	1.5	6.1	59.6	0	0	0.000244	0.002384	25000	WQCC-4	36	0

Table B-165
Filtered Radionuclides of Water Canyon/Cañon de Valle Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	10	8	0.8	2	0.2	0.0239	0.0267	0.0295	0	0	0.02225	0.02458	1.2	DOE	3	0
Cesium-137	rad	10	10	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	10	10	1	0	0				0	0			200	DOE	3	0
Gross alpha	rad	14	14	1	0	0											
Gross beta	rad	14	9	0.6429	5	0.3571	2.08	3.26	3.62								
Plutonium-238	rad	10	10	1	0	0				0	0			1.6	DOE	3	0
Plutonium-239	rad	10	10	1	0	0				0	0			1.2	DOE	3	0
Radium-226	rad	10	6	0.6	4	0.4	0.339	0.5625	1.43								
Radium-228	rad	10	10	1	0	0											
Strontium-90	rad	10	7	0.7	3	0.3	0.211	0.346	0.362	0	0	0.00865	0.00905	40	DOE	3	0
Thorium-228	rad	10	10	1	0	0											
Thorium-230	rad	10	3	0.3	7	0.7	0.0279	0.0504	0.137								
Thorium-232	rad	10	7	0.7	3	0.3	0.0236	0.0314	0.0318								
Uranium-234	rad	10	4	0.4	6	0.6	0.0427	0.0618	0.12	0	0	0.00309	0.006	20	DOE	3	0
Uranium-235	rad	12	12	1	0	0				0	0			24	DOE	5	0
Uranium-238	rad	11	7	0.6364	4	0.3636	0.0181	0.0298	0.0593	0	0	0.001242	0.002471	24	DOE	4	0

Table B-166
Filtered Organics of Water Canyon/Cañon de Valle Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Amino-2,6-dinitrotoluene[4-]	HEXP	8	1	0.125	7	0.875	0.5	2.2	8.3								
Amino-4,6-dinitrotoluene[2-]	HEXP	8	1	0.125	7	0.875	0.37	1.9	9.5								
HMX	HEXP	13	2	0.1538	11	0.8462	4.8	27	43								
RDX	HEXP	13	2	0.1538	11	0.8462	21	60	160								
Amino-x,6-dinitrotoluene[x-]	HEXP	5	2	0.4	3	0.6	0.45	4.6	4.9								
Dinitrobenzene[1,3-]	HEXP	13	12	0.9231	1	0.07692	0.66	0.66	0.66								
Trinitrobenzene[1,3,5-]	HEXP	13	12	0.9231	1	0.07692	1	1	1								
Trinitrotoluene[2,4,6-]	HEXP	13	12	0.9231	1	0.07692	1.8	1.8	1.8								
Dinitrotoluene[2,6-]	SVOC	13	12	0.9231	1	0.07692	0.22	0.22	0.22	0	0	0.005946	0.005946	37	EPA-4	11	0
Nitrobenzene	SVOC	13	12	0.9231	1	0.07692	0.5	0.5	0.5	0	0	0.0002632	0.0002632	1900	WQCC-9	11	0
Nitrotoluene[2-]	HEXP	13	13	1	0	0											
Nitrotoluene[3-]	HEXP	13	13	1	0	0											
Nitrotoluene[4-]	HEXP	13	13	1	0	0											
Tetryl	HEXP	13	13	1	0	0											
Acenaphthene	SVOC	1	1	1	0	0				0	0			2700	WQCC-9	1	0
Acenaphthylene	SVOC	1	1	1	0	0				0	0			2700	WQCC-9	1	0
Aniline	SVOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Anthracene	SVOC	1	1	1	0	0				0	0			110000	WQCC-9	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzo(a)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(b)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	SVOC	1	1	1	0	0				0	0			11000	WQCC-9	1	0
Benzo(k)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzoic Acid	SVOC	1	1	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	1	1	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	1	1	1	0	0											
Bis(2-chloroethyl)ether	SVOC	1	1	1	0	0				0	0			14	WQCC-9	1	0
Bis(2-ethylhexyl)phthalate	SVOC	1	1	1	0	0				0	0			59	WQCC-9	1	0
Bromophenyl-phenylether[4-]	SVOC	1	1	1	0	0											
Butylbenzylphthalate	SVOC	1	1	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0											
Chloroaniline[4-]	SVOC	1	1	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	1	1	1	0	0				0	0			4300	WQCC-9	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				0	0			400	WQCC-9	1	0
Chlorophenyl-phenyl[4-] Ether	SVOC	1	1	1	0	0											
Chrysene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1

Table B-166 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibenzofuran	SVOC	1	1	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	1	1	1	0	0				1	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				0	0			790	WQCC-9	1	0
Diethylphthalate	SVOC	1	1	1	0	0				0	0			120000	WQCC-9	1	0
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			2900000	WQCC-9	1	0
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			2300	WQCC-9	1	0
Di-n-butylphthalate	SVOC	1	1	1	0	0				0	0			12000	WQCC-9	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	1	1	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			14000	WQCC-9	1	0
Dinitrotoluene[2,4-]	SVOC	13	13	1	0	0				0	0			91	WQCC-9	11	0
Di-n-octylphthalate	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Fluoranthene	SVOC	1	1	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	SVOC	1	1	1	0	0				0	0			14000	WQCC-9	1	0
Hexachlorobenzene	SVOC	1	1	1	0	0				1	0			0.0077	WQCC-9	1	1
Hexachlorobutadiene	SVOC	1	1	1	0	0				0	0			500	WQCC-9	1	0
Hexachlorocyclopentadiene	SVOC	1	1	1	0	0				0	0			17000	WQCC-9	1	0
Hexachloroethane	SVOC	1	1	1	0	0				0	0			89	WQCC-9	1	0
Indeno(1,2,3-cd)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Isophorone	SVOC	1	1	1	0	0				0	0			26000	WQCC-9	1	0
Methylnaphthalene[2-]	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	1	1	1	0	0				0	0			1800	EPA-4	1	0
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Naphthalene	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1
Nitroaniline[2-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	1	1	1	0	0				1	0			2.2	EPA-4	1	1
Nitrophenol[2-]	SVOC	1	1	1	0	0				0	0			290	EPA-4	1	0
Nitrophenol[4-]	SVOC	1	1	1	0	0				0	0			290	EPA-4	1	0
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				0	0			81	WQCC-9	1	0
Nitroso-di-n-propylamine[N-]	SVOC	1	1	1	0	0				0	0			14	WQCC-9	1	0
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			160	WQCC-9	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	1	1	1	0	0				0	0			82	WQCC-9	1	0
Phenanthrene	SVOC	1	1	1	0	0				0	0			110000	WQCC-9	1	0
Phenol	SVOC	1	1	1	0	0				0	0			4600000	WQCC-9	1	0
Pyrene	SVOC	1	1	1	0	0				0	0			11000	WQCC-9	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				0	0			3700	EPA-4	1	0
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				0	0			65	WQCC-9	1	0

Table B-166 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	1	1	1	0	0				0	0			610	EPA-4	1	0
Benzene	VOC	1	1	1	0	0				0	0			710	WQCC-9	1	0
Bromobenzene	VOC	1	1	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	1	1	1	0	0				0	0			16000	WQCC-9	1	0
Bromodichloromethane	VOC	1	1	1	0	0				0	0			460	WQCC-9	1	0
Bromoform	VOC	1	1	1	0	0				0	0			3600	WQCC-9	1	0
Bromomethane	VOC	1	1	1	0	0				0	0			4000	WQCC-9	1	0
Butanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	1	1	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	1	1	1	0	0				0	0			44	WQCC-9	1	0
Chlorobenzene	VOC	1	1	1	0	0				0	0			21000	WQCC-9	1	0
Chlorodibromomethane	VOC	1	1	1	0	0				0	0			340	WQCC-9	1	0
Chloroethane	VOC	1	1	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	1	1	1	0	0				0	0			4700	WQCC-9	1	0
Chloromethane	VOC	1	1	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	1	1	1	0	0											
Dibromoethane[1,2-]	VOC	1	1	1	0	0				1	0			0.0076	EPA-4	1	1
Dibromomethane	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	1	1	1	0	0				0	0			17000	WQCC-9	1	0
Dichlorobenzene[1,3-]	VOC	1	1	1	0	0				0	0			2600	WQCC-9	1	0
Dichlorobenzene[1,4-]	VOC	1	1	1	0	0				0	0			2600	WQCC-9	1	0
Dichlorodifluoromethane	VOC	1	1	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	1	1	1	0	0				0	0			810	EPA-4	1	0
Dichloroethane[1,2-]	VOC	1	1	1	0	0				0	0			990	WQCC-9	1	0
Dichloroethene[1,1-]	VOC	1	1	1	0	0				0	0			32	WQCC-9	1	0
Dichloroethene[cis-1,2-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	1	1	1	0	0				0	0			140000	WQCC-9	1	0
Dichloropropane[1,2-]	VOC	1	1	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropane[1,3-]	VOC	1	1	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropane[2,2-]	VOC	1	1	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropene[1,1-]	VOC	1	1	1	0	0				0	0			1700	WQCC-9	1	0
Dichloropropene[cis-1,3-]	VOC	1	1	1	0	0				0	0			1700	WQCC-9	1	0
Dichloropropene[trans-1,3-]	VOC	1	1	1	0	0				0	0			1700	WQCC-9	1	0

Table B-166 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ethylbenzene	VOC	1	1	1	0	0				0	0			29000	WQCC-9	1	0
Hexanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	1	1	1	0	0				0	0			4000	WQCC-9	1	0
Isopropylbenzene	VOC	1	1	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	1	1	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	1	1	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	1	1	1	0	0				0	0			16000	WQCC-9	1	0
Propylbenzene[1-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	1	1	1	0	0				0	0			1600	EPA-4	1	0
Tetrachloroethane[1,1,1,2-]	VOC	1	1	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	1	1	1	0	0				0	0			110	WQCC-9	1	0
Tetrachloroethene	VOC	1	1	1	0	0				0	0			88.5	WQCC-9	1	0
Toluene	VOC	1	1	1	0	0				0	0			200000	WQCC-9	1	0
Trichloro-1,2,2-trifluoroethane	VOC	1	1	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	1	1	1	0	0				0	0			940	WQCC-9	1	0
Trichloroethane[1,1,1-]	VOC	1	1	1	0	0				0	0			790	EPA-4	1	0
Trichloroethane[1,1,2-]	VOC	1	1	1	0	0				0	0			420	WQCC-9	1	0
Trichloroethene	VOC	1	1	1	0	0				0	0			810	WQCC-9	1	0
Trichlorofluoromethane	VOC	1	1	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	1	1	1	0	0				1	0			0.016	EPA-4	1	1
Trimethylbenzene[1,2,4-]	VOC	1	1	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	1	1	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	1	1	1	0	0				0	0			5250	WQCC-9	1	0
Xylene (Total)	VOC	1	1	1	0	0				0	0			1400	EPA-4	1	0

Table B-167
Filtered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	105	0	0	105	1	4180	17200	43300								
Hardness	GENINORG	20	0	0	20	1	32000	63750	136000								
Magnesium	GENINORG	108	5	0.0463	103	0.9537	1220	5090	9590								
Potassium	GENINORG	105	4	0.0381	101	0.9619	920	3280	10800								
Sodium	GENINORG	105	3	0.02857	102	0.9714	2220	15850	41800								
Dissolved Oxygen	WATER_QUAL	4	0	0	4	1	8000	8500	11000								
pH	WATER_QUAL	19	0	0	19	1	1.7	7.38	8								
Specific Conductance	WATER_QUAL	10	0	0	10	1	49	148.5	273								
Total Dissolved Solids	WATER_QUAL	23	0	0	23	1	56000	150000	312000								
Total Organic Carbon	WATER_QUAL	8	0	0	8	1	2100	2950	5200								
Total Suspended Solids	WATER_QUAL	3	2	0.6667	1	0.3333	3000	3000	3000								

Table B-168
Nonfiltered Inorganics of Water Canyon/Cañon de Valle Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	135	12	0.08889	123	0.9111	108	1310	390000	0	4	0.03541	10.54	37000	EPA-4	37	0
Antimony	METALS	134	126	0.9403	8	0.0597	0.351	2.5	5.3	19	0	0.1667	0.3533	15	EPA-4	36	15
Arsenic	METALS	134	102	0.7612	32	0.2388	0.28	3.6	80	98	31	8	177.8	0.45	EPA-4	37	32
Barium	METALS	134	0	0	134	1	16.8	2240	67000	0	64	0.8615	25.77	2600	EPA-4	37	0
Beryllium	METALS	135	102	0.7556	33	0.2444	0.03	0.33	24	0	0	0.004521	0.3288	73	EPA-4	37	0
Boron	METALS	89	30	0.3371	59	0.6629	3.06	40.3	2410	0	0	0.01221	0.7303	3300	EPA-4	30	0
Cadmium	METALS	135	120	0.8889	15	0.1111	0.044	0.879	5.9	0	0	0.04883	0.3278	18	EPA-4	37	0
Chromium	METALS	135	70	0.5185	65	0.4815	0.65	2.3	52.8	0	0	4.18E-05	0.00096	55000	EPA-4	37	0
Cobalt	METALS	135	90	0.6667	45	0.3333	0.386	2.1	136								
Copper	METALS	135	80	0.5926	55	0.4074	0.688	5.2	83	0	0	0.003714	0.05929	1400	EPA-4	37	0
Cyanide (Total)	CN	43	40	0.9302	3	0.06977	3	10	30	14	2	1.923	5.769	5.2	WQCC-7	8	7
Cyanide, Amenable	CN	10	9	0.9	1	0.1	3.46	3.46	3.46	0	0	0.6654	0.6654	5.2	WQCC-8	3	0
Iron	METALS	135	16	0.1185	119	0.8815	60	967	310000	1	8	0.08791	28.18	11000	EPA-4	37	1
Lead	METALS	135	70	0.5185	65	0.4815	0.23	3.28	520								
Lithium	METALS	2	0	0	2	1	5	119.5	234	0	0	0.1637	0.3205	730	EPA-4	2	0
Manganese	METALS	135	15	0.1111	120	0.8889	1.8	37.35	66800	0	4	0.02197	39.29	1700	EPA-4	37	0
Mercury	METALS	143	124	0.8671	19	0.1329	0.03	0.2	1.1	122	19	16.67	91.67	0.012	WQCC-7	41	37
MercuryRe	METALS	143	124	0.8671	19	0.1329	0.03	0.2	1.1	1	3	0.2597	1.429	0.77	WQCC-8	41	1
Molybdenum	METALS	15	12	0.8	3	0.2	0.844	1.3	10	0	0	0.007222	0.05556	180	EPA-4	7	0
Nickel	METALS	135	52	0.3852	83	0.6148	0.5	2.6	150	0	0	0.003562	0.2055	730	EPA-4	37	0
Selenium	METALS	140	119	0.85	21	0.15	0.476	2.1	38.3	15	1	0.42	7.66	5	WQCC-8	38	1
Silver	METALS	134	117	0.8731	17	0.1269	0.289	1.3	26.7	0	0	0.007222	0.1483	180	EPA-4	37	0
Strontium	METALS	13	0	0	13	1	69.5	111	1360	0	0	0.005045	0.06182	22000	EPA-4	5	0
Thallium	METALS	135	114	0.8444	21	0.1556	0.023	0.189	7.4								
Tin	METALS	12	12	1	0	0				0	0			22000	EPA-4	4	0
Titanium	METALS	10	1	0.1	9	0.9	10.4	23.4	141								
Uranium	URANIUM	70	15	0.2143	55	0.7857	0.04	0.351	86.5								
Vanadium	METALS	135	54	0.4	81	0.6	0.48	4.7	380	0	1	0.01808	1.462	260	EPA-4	37	0
Zinc	METALS	135	61	0.4519	74	0.5481	0.7	17.6	670	0	0	0.0016	0.06091	11000	EPA-4	37	0

Table B-169
Nonfiltered Radionuclides of Water Canyon/Cañon de Valle Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	17	12	0.7059	5	0.2941	0.018	0.053	0.289	0	0	0.04417	0.2408	1.2	DOE	4	0
Cesium-137	rad	38	37	0.9737	1	0.02632	8.79	8.79	8.79	0	0	0.07325	0.07325	120	DOE	5	0
Cobalt-60	rad	36	36	1	0	0				0	0			200	DOE	5	0
Gross alpha	rad	19	17	0.8947	2	0.1053	1.12	1.7	2.28								
Gross beta	rad	19	5	0.2632	14	0.7368	2.8	4.964	9								
Gross gamma	rad	6	4	0.6667	2	0.3333	173	207	241								
Plutonium-238	rad	17	16	0.9412	1	0.05882	0.0103	0.0103	0.0103	0	0	0.006438	0.006438	1.6	DOE	4	0
Plutonium-239	rad	17	15	0.8824	2	0.1176	0.0252	0.04045	0.0557	0	0	0.03371	0.04642	1.2	DOE	4	0
Radium-226	rad	10	5	0.5	5	0.5	0.344	0.55	0.883								
Radium-228	rad	10	10	1	0	0											
Strontium-90	rad	16	12	0.75	4	0.25	0.322	0.4185	0.574	0	0	0.01046	0.01435	40	DOE	4	0
Thorium-228	rad	10	6	0.6	4	0.4	0.103	0.232	0.362								
Thorium-230	rad	10	4	0.4	6	0.6	0.0377	0.1156	0.293								
Thorium-232	rad	10	6	0.6	4	0.4	0.0614	0.19	0.253								
Tritium	rad	43	20	0.4651	23	0.5349	4.406	39.68	326.4	0	0	0.001984	0.01632	20000	WQCC-5	11	0
Uranium-234	rad	16	7	0.4375	9	0.5625	0.0335	0.131	0.209	0	0	0.00655	0.01045	20	DOE	8	0
Uranium-235	rad	16	14	0.875	2	0.125	0.0196	0.0199	0.0202	0	0	0.0008292	0.0008417	24	DOE	8	0
Uranium-238	rad	15	9	0.6	6	0.4	0.0306	0.101	0.209	0	0	0.004208	0.008708	24	DOE	7	0

Table B-170
Nonfiltered Organics of Water Canyon/Cañon de Valle Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
RDX	HEXP	134	31	0.2313	103	0.7687	0.26	56	818								
HMX	HEXP	134	34	0.2537	100	0.7463	0.209	33.95	160								
Amino-2,6-dinitrotoluene[4-]	HEXP	122	60	0.4918	62	0.5082	0.051	5.77	53.2								
MNX	HEXP	12	6	0.5	6	0.5	0.18	0.235	0.97								
Amino-4,6-dinitrotoluene[2-]	HEXP	122	65	0.5328	57	0.4672	0.095	5.44	43.2								
DNX	HEXP	12	7	0.5833	5	0.4167	0.1	0.27	1.3								
Amino-x,6-dinitrotoluene[x-]	HEXP	10	6	0.6	4	0.4	1.1	3.5	4.9								
TNX	HEXP	12	8	0.6667	4	0.3333	0.051	0.285	0.58								
Trinitrotoluene[2,4,6-]	HEXP	125	102	0.816	23	0.184	0.063	0.539	7.41								
Dinitrotoluene[2,4-]	SVOC	139	119	0.8561	20	0.1439	0.04	0.06	0.324	0	0	0.0006593	0.00356	91	WQCC-9	40	0
Nitrotoluene[2-]	HEXP	127	109	0.8583	18	0.1417	0.169	0.5265	2.28								
Bis(2-ethylhexyl)phthalate	SVOC	58	52	0.8966	6	0.1034	0.14	2.25	13	0	0	0.03814	0.2203	59	WQCC-9	15	0
Acetone	VOC	58	53	0.9138	5	0.08621	8	17	89	0	0	0.02787	0.1459	610	EPA-4	12	0
Dichloroethane[1,2-]	VOC	72	69	0.9583	3	0.04167	4	6	7	0	0	0.006061	0.007071	990	WQCC-9	16	0
Methylene Chloride	VOC	72	69	0.9583	3	0.04167	1.1	2.3	6	0	0	0.0001438	0.000375	16000	WQCC-9	16	0
Nitroglycerin	HEXP	26	25	0.9615	1	0.03846	1.1	1.1	1.1								
Chloroform	VOC	71	69	0.9718	2	0.02817	0.57	0.935	1.3	0	0	0.0001989	0.0002766	4700	WQCC-9	16	0
Toluene	VOC	72	70	0.9722	2	0.02778	0.79	1.245	1.7	0	0	6.23E-06	8.50E-06	200000	WQCC-9	16	0
Trinitrobenzene[1,3,5-]	HEXP	109	106	0.9725	3	0.02752	0.11	0.207	0.49								
Chlorophenol[2-]	SVOC	58	57	0.9828	1	0.01724	10	10	10	0	0	0.025	0.025	400	WQCC-9	15	0
Dimethylphenol[2,4-]	SVOC	58	57	0.9828	1	0.01724	14	14	14	0	0	0.006087	0.006087	2300	WQCC-9	15	0
Di-n-butylphthalate	SVOC	58	57	0.9828	1	0.01724	2.1	2.1	2.1	0	0	0.000175	0.000175	12000	WQCC-9	15	0
Dinitro-2-methylphenol[4,6-]	SVOC	58	57	0.9828	1	0.01724	50	50	50	0	0	0.06536	0.06536	765	WQCC-9	15	0
Di-n-octylphthalate	SVOC	58	57	0.9828	1	0.01724	10	10	10	0	0	0.0137	0.0137	730	EPA-4	15	0
Butanone[2-]	VOC	61	60	0.9836	1	0.01639	4.3	4.3	4.3	0	0	0.002263	0.002263	1900	EPA-4	13	0
Methyl-2-pentanone[4-]	VOC	61	60	0.9836	1	0.01639	1.5	1.5	1.5	0	0	0.009375	0.009375	160	EPA-4	13	0
Nitrobenzene	SVOC	137	136	0.9927	1	0.007299	0.53	0.53	0.53	0	0	0.0002789	0.0002789	1900	WQCC-9	38	0
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	9	9	1	0	0											
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	9	9	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	9	9	1	0	0				9	0			1.40E-07	WQCC-9	3	3
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	9	9	1	0	0											
Dinitrobenzene[1,3-]	HEXP	111	111	1	0	0											
Nitrotoluene[3-]	HEXP	110	110	1	0	0											
Nitrotoluene[4-]	HEXP	110	110	1	0	0											
PETN	HEXP	27	27	1	0	0											
Tetryl	HEXP	113	113	1	0	0											
Aroclor-1016	PCB	14	14	1	0	0				14	0			0.0017	WQCC-9	4	4

Table B-170 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1221	PCB	14	14	1	0	0				14	0			0.0017	WQCC-9	4	4
Aroclor-1232	PCB	14	14	1	0	0				14	0			0.0017	WQCC-9	4	4
Aroclor-1242	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4
Aroclor-1248	PCB	14	14	1	0	0				14	0			0.0017	WQCC-9	4	4
Aroclor-1254	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4
Aroclor-1260	PCB	16	16	1	0	0				16	0			0.0017	WQCC-9	4	4
Aroclor-1262	PCB	13	13	1	0	0				13	0			0.0017	WQCC-9	4	4
Acenaphthene	SVOC	58	58	1	0	0				0	0			2700	WQCC-9	15	0
Acenaphthylene	SVOC	58	58	1	0	0				0	0			2700	WQCC-9	15	0
Aniline	SVOC	57	57	1	0	0				0	0			120	EPA-4	15	0
Anthracene	SVOC	58	58	1	0	0				0	0			110000	WQCC-9	15	0
Azobenzene	SVOC	46	46	1	0	0				46	0			6.1	EPA-4	12	12
Benzidine	SVOC	24	24	1	0	0				24	0			0.01	WQCC-9	12	12
Benzo(a)anthracene	SVOC	58	58	1	0	0				55	0			0.49	WQCC-9	15	15
Benzo(a)pyrene	SVOC	58	58	1	0	0				55	0			0.49	WQCC-9	15	15
Benzo(b)fluoranthene	SVOC	58	58	1	0	0				55	0			0.49	WQCC-9	15	15
Benzo(g,h,i)perylene	SVOC	58	58	1	0	0				0	0			11000	WQCC-9	15	0
Benzo(k)fluoranthene	SVOC	57	57	1	0	0				54	0			0.49	WQCC-9	15	15
Benzoic Acid	SVOC	56	56	1	0	0				0	0			150000	EPA-4	15	0
Benzyl Alcohol	SVOC	58	58	1	0	0				0	0			11000	EPA-4	15	0
Bis(2-chloroethoxy)methane	SVOC	58	58	1	0	0											
Bis(2-chloroethyl)ether	SVOC	58	58	1	0	0				2	0			14	WQCC-9	15	2
Bromophenyl-phenylether[4-]	SVOC	58	58	1	0	0											
Butylbenzylphthalate	SVOC	58	58	1	0	0				0	0			5200	WQCC-9	15	0
Carbazole	SVOC	32	32	1	0	0				0	0			34	EPA-4	9	0
Chloro-3-methylphenol[4-]	SVOC	58	58	1	0	0											
Chloroaniline[4-]	SVOC	58	58	1	0	0				0	0			150	EPA-4	15	0
Chloronaphthalene[2-]	SVOC	58	58	1	0	0				0	0			4300	WQCC-9	15	0
Chlorophenyl-phenyl[4-] Ether	SVOC	58	58	1	0	0											
Chrysene	SVOC	58	58	1	0	0				55	0			0.49	WQCC-9	15	15
Dibenz(a,h)anthracene	SVOC	58	58	1	0	0				55	0			0.49	WQCC-9	15	15
Dibenzofuran	SVOC	58	58	1	0	0				1	0			24	EPA-4	15	1
Dichlorobenzidine[3,3'-]	SVOC	58	58	1	0	0				58	0			0.77	WQCC-9	15	15
Dichlorophenol[2,4-]	SVOC	58	58	1	0	0				0	0			790	WQCC-9	15	0
Diethylphthalate	SVOC	58	58	1	0	0				0	0			120000	WQCC-9	15	0
Dimethyl Phthalate	SVOC	57	57	1	0	0				0	0			2900000	WQCC-9	15	0
Dinitrophenol[2,4-]	SVOC	58	58	1	0	0				0	0			14000	WQCC-9	15	0
Dinitrotoluene[2,6-]	SVOC	139	139	1	0	0				0	0			37	EPA-4	40	0
Diphenylamine	SVOC	11	11	1	0	0				0	0			910	EPA-4	4	0
Diphenylhydrazine[1,2-]	SVOC	11	11	1	0	0											
Fluoranthene	SVOC	58	58	1	0	0				0	0			370	WQCC-9	15	0
Fluorene	SVOC	58	58	1	0	0				0	0			14000	WQCC-9	15	0
Hexachlorobenzene	SVOC	58	58	1	0	0				58	0			0.0077	WQCC-9	15	15

Table B-170 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hexachlorobutadiene	SVOC	65	65	1	0	0				0	0			500	WQCC-9	15	0
Hexachlorocyclopentadiene	SVOC	58	58	1	0	0				0	0			17000	WQCC-9	15	0
Hexachloroethane	SVOC	58	58	1	0	0				0	0			89	WQCC-9	15	0
Indeno(1,2,3-cd)pyrene	SVOC	58	58	1	0	0				55	0			0.49	WQCC-9	15	15
Isophorone	SVOC	58	58	1	0	0				0	0			26000	WQCC-9	15	0
Methylnaphthalene[2-]	SVOC	58	58	1	0	0				47	0			6.2	EPA-4	15	12
Methylphenol[2-]	SVOC	58	58	1	0	0				0	0			1800	EPA-4	15	0
Methylphenol[4-]	SVOC	57	57	1	0	0				0	0			180	EPA-4	15	0
Methylpyridine[2-]	SVOC	11	11	1	0	0											
Naphthalene	SVOC	65	65	1	0	0				15	0			6.2	EPA-4	15	8
Nitroaniline[2-]	SVOC	58	58	1	0	0				55	0			2.2	EPA-4	15	15
Nitroaniline[3-]	SVOC	58	58	1	0	0				55	0			2.2	EPA-4	15	15
Nitroaniline[4-]	SVOC	58	58	1	0	0				55	0			2.2	EPA-4	15	15
Nitrophenol[2-]	SVOC	58	58	1	0	0				0	0			290	EPA-4	15	0
Nitrophenol[4-]	SVOC	58	58	1	0	0				0	0			290	EPA-4	15	0
Nitrosodimethylamine[N-]	SVOC	57	57	1	0	0				0	0			81	WQCC-9	15	0
Nitroso-di-n-propylamine[N-]	SVOC	58	58	1	0	0				2	0			14	WQCC-9	15	2
Nitrosodiphenylamine[N-]	SVOC	47	47	1	0	0				0	0			160	WQCC-9	12	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	53	53	1	0	0				0	0			170000	WQCC-9	15	0
Pentachlorophenol	SVOC	58	58	1	0	0				46	0			15	WQCC-7	15	12
Phenanthrene	SVOC	58	58	1	0	0				0	0			110000	WQCC-9	15	0
Phenol	SVOC	58	58	1	0	0				0	0			4600000	WQCC-9	15	0
Pyrene	SVOC	58	58	1	0	0				0	0			11000	WQCC-9	15	0
Pyridine	SVOC	46	46	1	0	0				0	0			37	EPA-4	13	0
Trichlorophenol[2,4,5-]	SVOC	58	58	1	0	0				0	0			3700	EPA-4	15	0
Trichlorophenol[2,4,6-]	SVOC	58	58	1	0	0				0	0			65	WQCC-9	15	0
Benzene	VOC	72	72	1	0	0				0	0			710	WQCC-9	16	0
Bromobenzene	VOC	59	59	1	0	0				0	0			23	EPA-4	12	0
Bromochloromethane	VOC	59	59	1	0	0				0	0			16000	WQCC-9	12	0
Bromodichloromethane	VOC	72	72	1	0	0				0	0			460	WQCC-9	16	0
Bromoform	VOC	72	72	1	0	0				0	0			3600	WQCC-9	16	0
Bromomethane	VOC	72	72	1	0	0				0	0			4000	WQCC-9	16	0
Butylbenzene[n-]	VOC	59	59	1	0	0				0	0			61	EPA-4	12	0
Butylbenzene[sec-]	VOC	56	56	1	0	0				0	0			61	EPA-4	12	0
Butylbenzene[tert-]	VOC	59	59	1	0	0				0	0			61	EPA-4	12	0
Carbon Disulfide	VOC	61	61	1	0	0				0	0			1000	EPA-4	13	0
Carbon Tetrachloride	VOC	72	72	1	0	0				0	0			44	WQCC-9	16	0
Chlorobenzene	VOC	72	72	1	0	0				0	0			21000	WQCC-9	16	0
Chlorodibromomethane	VOC	72	72	1	0	0				0	0			340	WQCC-9	16	0
Chloroethane	VOC	72	72	1	0	0				0	0			39	EPA-4	16	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloromethane	VOC	72	72	1	0	0				0	0			15	EPA-4	16	0
Chlorotoluene[2-]	VOC	59	59	1	0	0				0	0			120	EPA-4	12	0

Table B-170 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chlorotoluene[4-]	VOC	59	59	1	0	0				0	0			120	EPA-4	12	0
Dibromo-3-Chloropropane[1,2-]	VOC	60	60	1	0	0											
Dibromoethane[1,2-]	VOC	60	60	1	0	0				60	0			0.0076	EPA-4	13	13
Dibromomethane	VOC	59	59	1	0	0				0	0			61	EPA-4	12	0
Dichlorobenzene[1,2-]	VOC	72	72	1	0	0				0	0			17000	WQCC-9	15	0
Dichlorobenzene[1,3-]	VOC	72	72	1	0	0				0	0			2600	WQCC-9	15	0
Dichlorobenzene[1,4-]	VOC	72	72	1	0	0				0	0			2600	WQCC-9	15	0
Dichlorodifluoromethane	VOC	61	61	1	0	0				0	0			390	EPA-4	13	0
Dichloroethane[1,1-]	VOC	72	72	1	0	0				0	0			810	EPA-4	16	0
Dichloroethene[1,1-]	VOC	72	72	1	0	0				0	0			32	WQCC-9	16	0
Dichloroethene[cis/trans-1,2-]	VOC	7	7	1	0	0											
Dichloroethene[cis-1,2-]	VOC	52	52	1	0	0				0	0			61	EPA-4	12	0
Dichloroethene[trans-1,2-]	VOC	65	65	1	0	0				0	0			140000	WQCC-9	16	0
Dichloropropane[1,2-]	VOC	72	72	1	0	0				0	0			390	WQCC-9	16	0
Dichloropropane[1,3-]	VOC	59	59	1	0	0				0	0			390	WQCC-9	12	0
Dichloropropane[2,2-]	VOC	59	59	1	0	0				0	0			390	WQCC-9	12	0
Dichloropropene[1,1-]	VOC	59	59	1	0	0				0	0			1700	WQCC-9	12	0
Dichloropropene[cis-1,3-]	VOC	72	72	1	0	0				0	0			1700	WQCC-9	16	0
Dichloropropene[trans-1,3-]	VOC	71	71	1	0	0				0	0			1700	WQCC-9	16	0
Ethylbenzene	VOC	72	72	1	0	0				0	0			29000	WQCC-9	16	0
Hexanone[2-]	VOC	61	61	1	0	0				0	0			1900	EPA-4	13	0
Iodomethane	VOC	60	60	1	0	0				0	0			4000	WQCC-9	13	0
Isopropylbenzene	VOC	59	59	1	0	0				0	0			660	EPA-4	12	0
Isopropyltoluene[4-]	VOC	59	59	1	0	0				0	0			660	EPA-4	12	0
Propylbenzene[1-]	VOC	59	59	1	0	0				0	0			61	EPA-4	12	0
Styrene	VOC	61	61	1	0	0				0	0			1600	EPA-4	13	0
Tetrachloroethane[1,1,1,2-]	VOC	60	60	1	0	0				51	0			4.3	EPA-4	13	13
Tetrachloroethane[1,1,2,2-]	VOC	71	71	1	0	0				0	0			110	WQCC-9	15	0
Tetrachloroethene	VOC	72	72	1	0	0				0	0			88.5	WQCC-9	16	0
Trichloro-1,2,2-trifluoroethane	VOC	53	53	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	40	40	1	0	0				0	0			940	WQCC-9	11	0
Trichlorobenzene[1,2,4-]	VOC	65	65	1	0	0				0	0			940	WQCC-9	15	0
Trichloroethane[1,1,1-]	VOC	72	72	1	0	0				0	0			790	EPA-4	16	0
Trichloroethane[1,1,2-]	VOC	72	72	1	0	0				0	0			420	WQCC-9	16	0
Trichloroethene	VOC	72	72	1	0	0				0	0			810	WQCC-9	16	0
Trichlorofluoromethane	VOC	72	72	1	0	0				0	0			1300	EPA-4	16	0
Trichloropropane[1,2,3-]	VOC	60	60	1	0	0				60	0			0.016	EPA-4	13	13
Trichlorotrifluoroethane	VOC	6	6	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	56	56	1	0	0				0	0			12	EPA-4	12	0
Trimethylbenzene[1,3,5-]	VOC	59	59	1	0	0				0	0			12	EPA-4	12	0
Vinyl acetate	VOC	1	1	1	0	0											
Vinyl Chloride	VOC	72	72	1	0	0				0	0			5250	WQCC-9	16	0
Xylene (Total)	VOC	56	56	1	0	0				0	0			1400	EPA-4	13	0

Table B-170 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Xylene[1,2-]	VOC	41	41	1	0	0				0	0			1400	EPA-4	8	0
Xylene[1,3-]	VOC	2	2	1	0	0											
Xylene[1,3-]+Xylene[1,4-]	VOC	6	6	1	0	0				0	0			1400	EPA-4	5	0
Ethyl-4-nitrobenzene[1-]		1	1	1	0	0											
PentachlorophenolRe		58	58	1	0	0				1	0			82	WQCC-9	15	1

Table B-171
Nonfiltered Miscellaneous Constituents of Water Canyon/Cañon de Valle Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	89	77	0.8652	12	0.1348	20	207.5	1630								
Chlorate	ANION	12	12	1	0	0											
Chloride	ANION	110	0	0	110	1	200	15900	35800								
Fluoride	ANION	99	29	0.2929	70	0.7071	96	223	699	0	0	0.1014	0.3177	2200	EPA-4	31	0
Iodide	ANION	12	12	1	0	0											
Nitrate	ANION	144	54	0.375	90	0.625	10	544.5	49200	0	1	0.05445	4.92	10000	EPA-4	37	0
Nitrite	ANION	20	18	0.9	2	0.1	710	760	810	0	0	0.76	0.81	1000	EPA-4	13	0
Oxalate	ANION	49	47	0.9592	2	0.04082	214	254	294								
Perchlorate	ANION	68	63	0.9265	5	0.07353	6.29	11.3	14.1	52	5	3.054	3.811	3.7	EPA-4	28	22
Sulfate	ANION	110	0	0	110	1	1140	8350	70300								
Calcium	GENINORG	125	2	0.016	123	0.984	1770	17700	67000								
Hardness	GENINORG	10	0	0	10	1	47700	86000	140000								
Loss on Ignition	GENINORG	10	0	0	10	1	24000	48500	85000								
Magnesium	GENINORG	135	5	0.03704	130	0.963	1550	5230	16000								
Potassium	GENINORG	125	7	0.056	118	0.944	1000	3505	60000								
Sodium	GENINORG	125	3	0.024	122	0.976	2190	17500	43500								
Deuterium Ratio	STABLE_ISOTOPES	5	0	0	5	1	-89	-86	-76								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	3	0	0	3	1	-4.7	-3.8	-1.3								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	5	0	0	5	1	-12.2	-11.9	-11.3								
Chemical Oxygen Demand	WATER_QUAL	10	6	0.6	4	0.4	6200	12900	34300								
Conductivity	WATER_QUAL	1	0	0	1	1	160	160	160								
pH	WATER_QUAL	4	0	0	4	1	6.8	7.6	7.75								
Specific Conductance	WATER_QUAL	13	0	0	13	1	18.8	163	7560								
Specific Gravity	WATER_QUAL	10	0	0	10	1	0.973	0.99	1.01								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	150000	150000	150000								
Total Organic Carbon	WATER_QUAL	9	0	0	9	1	1600	3500	97000								
Total Suspended Solids	WATER_QUAL	18	2	0.1111	16	0.8889	1000	9445	181000								
Turbidity	WATER_QUAL	1	0	0	1	1	24	24	24								

Table B-172
Filtered Miscellaneous Constituents of Ancho Watershed Intermediate Perched Groundwater

Filtered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	1	0	0	1	1	37100	37100	37100								
Hardness	GENINORG	1	0	0	1	1	122000	122000	122000								
Magnesium	GENINORG	1	0	0	1	1	7300	7300	7300								
Potassium	GENINORG	1	0	0	1	1	9000	9000	9000								
Sodium	GENINORG	1	0	0	1	1	28400	28400	28400								
pH	WATER_QUAL	1	0	0	1	1	8	8	8								
Specific Conductance	WATER_QUAL	1	0	0	1	1	162	162	162								
Total Dissolved Solids	WATER_QUAL	1	0	0	1	1	100500	100500	100500	0	0	0.1005	0.1005	1000000	WQCC-12	1	0

Table B-173
Nonfiltered Miscellaneous Constituents of Ancho Watershed Intermediate Perched Groundwater

Unfiltered WGI Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chloride	ANION	2	0	0	2	1	900	1850	2800	0	0	0.0074	0.0112	250000	WQCC-12	1	0
Fluoride	ANION	1	0	0	1	1	330	330	330	0	0	0.2062	0.2062	1600	WQCC-11	1	0
Nitrate	ANION	1	1	1	0	0				0	0			10000	EPA-4	1	0
Sulfate	ANION	1	0	0	1	1	22100	22100	22100	0	0	0.03683	0.03683	600000	WQCC-12	1	0
Calcium	GENINORG	1	0	0	1	1	28900	28900	28900								
Hardness	GENINORG	1	0	0	1	1	158000	158000	158000								
Magnesium	GENINORG	1	0	0	1	1	20800	20800	20800								
Potassium	GENINORG	1	0	0	1	1	15200	15200	15200								
Sodium	GENINORG	1	0	0	1	1	23600	23600	23600								
pH	WATER_QUAL	1	0	0	1	1	9.4	9.4	9.4								
Specific Conductance	WATER_QUAL	1	0	0	1	1	174	174	174								
Total Suspended Solids	WATER_QUAL	2	0	0	2	1	2400000	5700000	9000000								

Table B-174
Filtered Inorganics of Ancho Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	1	1	1	0	0				0	0			37000	EPA-4	1	0
Antimony	METALS	2	2	1	0	0				1	0			6	EPA-2	1	1
Arsenic	METALS	1	1	1	0	0				0	0			10	EPA-2	1	0
Barium	METALS	3	1	0.3333	2	0.6667	25	62.5	100	0	0	0.0625	0.1	1000	WQCC-11	2	0
Beryllium	METALS	3	3	1	0	0				2	0			4	EPA-2	2	2
Boron	METALS	3	2	0.6667	1	0.3333	16	16	16	0	0	0.004848	0.004848	3300	EPA-4	2	0
Cadmium	METALS	1	1	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	3	2	0.6667	1	0.3333	11	11	11	0	0	0.22	0.22	50	WQCC-11	2	0
Cobalt	METALS	1	1	1	0	0											
Copper	METALS	1	1	1	0	0				0	0			1000	WQCC-12	1	0
Cyanide (Total)	CN	1	1	1	0	0				0	0			200	WQCC-11	1	0
Iron	METALS	1	1	1	0	0				0	0			1000	WQCC-12	1	0
Lead	METALS	4	2	0.5	2	0.5	6	7	8	0	0	0.4667	0.5333	15	EPA-2	3	0
Lithium	METALS	1	0	0	1	1	21	21	21	0	0	0.02877	0.02877	730	EPA-4	1	0
Manganese	METALS	1	1	1	0	0				0	0			200	WQCC-12	1	0
Mercury	METALS	1	0	0	1	1	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	1	0
Molybdenum	METALS	1	1	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	2	2	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	1	1	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Silver	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	1	0	0	1	1	50	50	50	0	0	0.002273	0.002273	22000	EPA-4	1	0
Thallium	METALS	1	1	1	0	0				1	0			2	EPA-2	1	0
Tin	METALS	1	0	0	1	1	61	61	61	0	0	0.002773	0.002773	22000	EPA-4	1	0
Uranium	URANIUM	2	0	0	2	1	0.4	0.45	0.5	0	0	0.015	0.01667	30	EPA-2	2	0
Vanadium	METALS	1	1	1	0	0				0	0			260	EPA-4	1	0
Zinc	METALS	3	0	0	3	1	200	210	220	0	0	0.021	0.022	10000	WQCC-12	2	0

Table B-175
Filtered Radionuclides of Ancho Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	1	1	1	0	0				0	0			1.2	DOE	1	0
Gross alpha	rad	4	4	1	0	0				0	0			15	EPA-2	3	0
Gross beta	rad	4	4	1	0	0				0	0			50	EPA-2	3	0
Plutonium-238	rad	3	3	1	0	0				0	0			1.6	DOE	3	0
Plutonium-239	rad	3	3	1	0	0				0	0			1.2	DOE	3	0
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0

Table B-176
Filtered Miscellaneous Constituents of Ancho Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	2	0	0	2	1	8700	8850	9000								
Magnesium	GENINORG	2	0	0	2	1	2600	2800	3000								
Potassium	GENINORG	2	0	0	2	1	1000	1300	1600								
Sodium	GENINORG	2	0	0	2	1	11000	11000	11000								
pH	WATER_QUAL	5	0	0	5	1	7.9	8	8								
Specific Conductance	WATER_QUAL	5	0	0	5	1	100	112	133								
Total Dissolved Solids	WATER_QUAL	19	0	0	19	1	13000	134000	188000	0	0	0.134	0.188	1000000	WQCC-12	3	0
Total Suspended Solids	WATER_QUAL	5	3	0.6	2	0.4	3000	5000	7000								

Table B-177
Nonfiltered Inorganics of Ancho Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	23	17	0.7391	6	0.2609	51.2	73.3	141	0	0	0.001981	0.003811	37000	EPA-4	3	0
Antimony	METALS	23	22	0.9565	1	0.04348	4	4	4	0	0	0.6667	0.67	6	EPA-2	3	0
Arsenic	METALS	23	21	0.913	2	0.08696	3	3.5	4	0	0	0.35	0.4	10	EPA-2	3	0
Barium	METALS	23	1	0.04348	22	0.9565	6.4	15.45	26.8	0	0	0.01545	0.03	1000	WQCC-11	3	0
Beryllium	METALS	23	23	1	0	0				0	0			4	EPA-2	3	0
Boron	METALS	23	16	0.6957	7	0.3043	20.7	25.6	41	0	0	0.007758	0.01	3300	EPA-4	3	0
Cadmium	METALS	23	23	1	0	0				10	0			5	EPA-2	3	3
Chromium	METALS	23	22	0.9565	1	0.04348	62.9	62.9	62.9	0	1	1.258	1.258	50	WQCC-11	3	0
Cobalt	METALS	23	22	0.9565	1	0.04348	21.7	21.7	21.7								
Copper	METALS	23	21	0.913	2	0.08696	13	16.5	20	0	0	0.0165	0.02	1000	WQCC-12	3	0
Cyanide (Total)	CN	23	20	0.8696	3	0.1304	10	10	10	0	0	0.05	0.05	200	WQCC-11	3	0
Cyanide, Amenable	CN	2	2	1	0	0				0	0			200	EPA-2	2	0
Iron	METALS	23	5	0.2174	18	0.7826	45	117	1437	0	1	0.117	1.44	1000	WQCC-12	3	0
Lead	METALS	24	16	0.6667	8	0.3333	3.7	4	11	1	0	0.2667	0.73	15	EPA-2	3	1
Lithium	METALS	2	0	0	2	1	20	20	20	0	0	0.0274	0.03	730	EPA-4	2	0
Manganese	METALS	23	20	0.8696	3	0.1304	4.1	4.5	54.6	0	0	0.0225	0.27	200	WQCC-12	3	0
Mercury	METALS	19	14	0.7368	5	0.2632	0.2	0.2	0.2	1	0	0.1	0.1	2	WQCC-11	3	1
Molybdenum	METALS	23	22	0.9565	1	0.04348	7	7	7	0	0	0.03889	0.04	180	EPA-4	3	0
Nickel	METALS	23	22	0.9565	1	0.04348	29.7	29.7	29.7	0	0	0.297	0.30	100	EPA-2	3	0
Selenium	METALS	23	23	1	0	0				0	0			10	EPA-1	3	0
SeleniumRe	METALS	23	23	1	0	0				0	0			50	WQCC-11	3	0
Silver	METALS	23	23	1	0	0				0	0			50	WQCC-11	3	0
Strontium	METALS	23	0	0	23	1	36.1	47.9	53.7	0	0	0.002177	0.002441	22000	EPA-4	3	0
Thallium	METALS	23	23	1	0	0				15	0			2	EPA-2	3	3
Tin	METALS	23	21	0.913	2	0.08696	37.2	37.7	38.2	0	0	0.001714	0.001736	22000	EPA-4	3	0
Uranium	URANIUM	15	1	0.06667	14	0.9333	0.33	0.455	0.74	0	0	0.01517	0.02	30	EPA-2	3	0
Vanadium	METALS	23	13	0.5652	10	0.4348	5	7.97	14.9	0	0	0.03065	0.06	260	EPA-4	3	0
Zinc	METALS	23	0	0	23	1	59.4	191	1537	0	0	0.0191	0.15	10000	WQCC-12	3	0

Table B-178
Nonfiltered Radionuclides of Ancho Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	23	23	1	0	0				0	0			1.2	DOE	3	0
Cesium-137	rad	22	22	1	0	0				0	0			120	DOE	3	0
Cobalt-60	rad	15	12	0.8	3	0.2	28.5	38.5	42.8	0	0	0.385	0.428	100	EPA-2	3	0
Gross alpha	rad	24	24	1	0	0				0	0			15	EPA-2	3	0
Gross beta	rad	24	22	0.9167	2	0.08333	3.2	5.35	7.5	0	0	0.107	0.15	50	EPA-2	3	0
Gross gamma	rad	8	6	0.75	2	0.25	159.7	159.8	160								
Plutonium-238	rad	24	23	0.9583	1	0.04167	0.0415	0.0415	0.0415	0	0	0.02594	0.02594	1.6	DOE	3	0
Plutonium-239	rad	24	24	1	0	0				0	0			1.2	DOE	3	0
Strontium-90	rad	29	29	1	0	0				0	0			8	EPA-2	3	0
Tritium	rad	23	23	1	0	0				0	0			20000	EPA-2	3	0
Uranium-234	rad	8	1	0.125	7	0.875	0.148	0.203	0.535	0	0	0.01015	0.02675	20	DOE	3	0
Uranium-235	rad	8	8	1	0	0				0	0			24	DOE	3	0
Uranium-238	rad	8	2	0.25	6	0.75	0.0794	0.135	0.225	0	0	0.005625	0.009375	24	DOE	3	0

Table B-179
Nonfiltered Organics of Ancho Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Toluene	VOC	14	12	0.8571	2	0.1429	0.19	4.595	9	0	0	0.006127	0.012	750	WQCC-11	3	0
Acetone	VOC	9	8	0.8889	1	0.1111	4.65	4.65	4.65	0	0	0.007623	0.007623	610	EPA-4	3	0
Trimethylbenzene[1,2,4-]	VOC	13	12	0.9231	1	0.07692	3	3	3	0	0	0.25	0.25	12	EPA-4	3	0
Bis(2-ethylhexyl)phthalate	SVOC	14	13	0.9286	1	0.07143	0.615	0.615	0.615	8	0	0.1025	0.1025	6	EPA-2	3	3
Dichlorobenzene[1,4-]	VOC	15	14	0.9333	1	0.06667	0.25	0.25	0.25	0	0	0.003333	0.003333	75	EPA-2	3	0
Methylene Chloride	VOC	15	14	0.9333	1	0.06667	0.67	0.67	0.67	12	0	0.134	0.134	5	EPA-2	3	0
HMX	HEXP	28	27	0.9643	1	0.03571	0.33	0.33	0.33	0	0	0.0001808	0.0001808	1825	EPA-4	3	0
Amino-2,6-dinitrotoluene[4-]	HEXP	29	29	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	29	29	1	0	0											
Dinitrobenzene[1,3-]	HEXP	29	29	1	0	0				0	0			3.65	EPA-4	3	0
Nitrotoluene[2-]	HEXP	29	29	1	0	0											
Nitrotoluene[3-]	HEXP	29	29	1	0	0				0	0			60.83	EPA-4	3	0
Nitrotoluene[4-]	HEXP	29	29	1	0	0				0	0			60.83	EPA-4	3	0
PETN	HEXP	3	3	1	0	0											
RDX	HEXP	29	29	1	0	0				7	0			0.61	EPA-4	3	3
Tetryl	HEXP	29	29	1	0	0				0	0			365	EPA-4	3	0
Trinitrobenzene[1,3,5-]	HEXP	6	6	1	0	0				0	0			1095	EPA-4	3	0
Trinitrotoluene[2,4,6-]	HEXP	29	29	1	0	0				0	0			18.25	EPA-4	3	0
Aroclor-1016	PCB	9	9	1	0	0				3	0			0.5	EPA-2	3	3
Aroclor-1221	PCB	9	9	1	0	0				3	0			0.5	EPA-2	3	3
Aroclor-1232	PCB	9	9	1	0	0				3	0			0.5	EPA-2	3	3
Aroclor-1242	PCB	15	15	1	0	0				9	0			0.5	EPA-2	3	3
Aroclor-1248	PCB	9	9	1	0	0				3	0			0.5	EPA-2	3	3
Aroclor-1254	PCB	15	15	1	0	0				9	0			0.5	EPA-2	3	3
Aroclor-1260	PCB	15	15	1	0	0				9	0			0.5	EPA-2	3	3
Aroclor-1262	PCB	4	4	1	0	0				3	0			0.5	EPA-2	3	3
Acenaphthene	SVOC	15	15	1	0	0				0	0			370	EPA-4	3	0
Acenaphthylene	SVOC	15	15	1	0	0				0	0			370	EPA-4	3	0
Aniline	SVOC	15	15	1	0	0				0	0			120	EPA-4	3	0
Anthracene	SVOC	15	15	1	0	0				0	0			1800	EPA-4	3	0
Azobenzene	SVOC	12	12	1	0	0				12	0			6.1	EPA-4	3	3
Benzidine	SVOC	15	15	1	0	0				15	0			0.0029	EPA-4	3	3
Benzo(a)anthracene	SVOC	15	15	1	0	0				13	0			0.92	EPA-4	3	3
Benzo(a)pyrene	SVOC	15	15	1	0	0				13	0			0.2	EPA-2	3	3
Benzo(b)fluoranthene	SVOC	15	15	1	0	0				13	0			0.92	EPA-4	3	3
Benzo(g,h,i)perylene	SVOC	15	15	1	0	0				0	0			180	EPA-4	3	0
Benzo(k)fluoranthene	SVOC	12	12	1	0	0				9	0			9.2	EPA-4	3	3
Benzoic Acid	SVOC	15	15	1	0	0				0	0			150000	EPA-4	3	0
Benzyl Alcohol	SVOC	15	15	1	0	0				0	0			11000	EPA-4	3	0
Bis(2-chloroethoxy)methane	SVOC	15	15	1	0	0											
Bis(2-chloroethyl)ether	SVOC	15	15	1	0	0				15	0			0.098	EPA-4	3	3

Table B-179 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromophenyl-phenylether[4-]	SVOC	15	15	1	0	0											
Butylbenzylphthalate	SVOC	15	15	1	0	0				0	0			7300	EPA-4	3	0
Carbazole	SVOC	4	4	1	0	0				0	0			34	EPA-4	3	0
Chloro-3-methylphenol[4-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Chloroaniline[4-]	SVOC	15	15	1	0	0				0	0			150	EPA-4	3	0
Chloronaphthalene[2-]	SVOC	15	15	1	0	0				0	0			490	EPA-4	3	0
Chlorophenol[2-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Chlorophenyl-phenyl[4-] Ether	SVOC	15	15	1	0	0											
Chrysene	SVOC	15	15	1	0	0				0	0			92	EPA-4	3	0
Dibenz(a,h)anthracene	SVOC	15	15	1	0	0				15	0			0.092	EPA-4	3	3
Dibenzofuran	SVOC	15	15	1	0	0				0	0			24	EPA-4	3	0
Dichlorobenzidine[3,3'-]	SVOC	15	15	1	0	0				13	0			1.5	EPA-4	3	3
Dichlorophenol[2,4-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Diethylphthalate	SVOC	15	15	1	0	0				0	0			29000	EPA-4	3	0
Dimethyl Phthalate	SVOC	15	15	1	0	0				0	0			370000	EPA-4	3	0
Dimethylphenol[2,4-]	SVOC	15	15	1	0	0				0	0			730	EPA-4	3	0
Di-n-butylphthalate	SVOC	15	15	1	0	0				0	0			3700	EPA-4	3	0
Dinitro-2-methylphenol[4,6-]	SVOC	15	15	1	0	0											
Dinitrophenol[2,4-]	SVOC	15	15	1	0	0				0	0			73	EPA-4	3	0
Dinitrotoluene[2,4-]	SVOC	31	31	1	0	0				0	0			73	EPA-4	3	0
Dinitrotoluene[2,6-]	SVOC	31	31	1	0	0				0	0			37	EPA-4	3	0
Di-n-octylphthalate	SVOC	15	15	1	0	0				0	0			730	EPA-4	3	0
Diphenylamine	SVOC	3	3	1	0	0				0	0			910	EPA-4	3	0
Diphenylhydrazine[1,2-]	SVOC	3	3	1	0	0											
Fluoranthene	SVOC	15	15	1	0	0				0	0			1500	EPA-4	3	0
Fluorene	SVOC	15	15	1	0	0				0	0			240	EPA-4	3	0
Hexachlorobenzene	SVOC	15	15	1	0	0				13	0			1	EPA-2	3	3
Hexachlorobutadiene	SVOC	15	15	1	0	0				11	0			7.3	EPA-4	3	3
Hexachlorocyclopentadiene	SVOC	15	15	1	0	0				0	0			50	EPA-2	3	0
Hexachloroethane	SVOC	15	15	1	0	0				0	0			37	EPA-4	3	0
Indeno(1,2,3-cd)pyrene	SVOC	15	15	1	0	0				13	0			0.92	EPA-4	3	3
Isophorone	SVOC	15	15	1	0	0				0	0			710	EPA-4	3	0
Methylnaphthalene[2-]	SVOC	15	15	1	0	0				0	0			30	WQCC-11	3	0
Methylphenol[2-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Methylphenol[4-]	SVOC	15	15	1	0	0				0	0			180	EPA-4	3	0
Methylpyridine[2-]	SVOC	13	13	1	0	0											
Naphthalene	SVOC	15	15	1	0	0				0	0			30	WQCC-11	3	0
Nitroaniline[2-]	SVOC	15	15	1	0	0				13	0			2.2	EPA-4	3	3
Nitroaniline[3-]	SVOC	15	15	1	0	0				13	0			2.2	EPA-4	3	3
Nitroaniline[4-]	SVOC	15	15	1	0	0				13	0			2.2	EPA-4	3	3
Nitrobenzene	SVOC	31	31	1	0	0				5	0			3.4	EPA-4	3	3

Table B-179 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitrophenol[2-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Nitrophenol[4-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Nitrosodimethylamine[N-]	SVOC	15	15	1	0	0				15	0			0.013	EPA-4	3	3
Nitroso-di-n-propylamine[N-]	SVOC	15	15	1	0	0				15	0			0.096	EPA-4	3	3
Nitrosodiphenylamine[N-]	SVOC	12	12	1	0	0				0	0			140	EPA-4	3	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	3	3	1	0	0											
Pentachlorophenol	SVOC	15	15	1	0	0				15	0			1	EPA-2	3	3
Phenanthrene	SVOC	15	15	1	0	0				0	0			1800	EPA-4	3	0
Phenol	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Pyrene	SVOC	15	15	1	0	0				0	0			180	EPA-4	3	0
Pyridine	SVOC	15	15	1	0	0				0	0			37	EPA-4	3	0
Trichlorophenol[2,4,5-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Trichlorophenol[2,4,6-]	SVOC	15	15	1	0	0				13	0			5	WQCC-12	3	3
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Bromobenzene	VOC	13	13	1	0	0				0	0			23	EPA-4	3	0
Bromochloromethane	VOC	13	13	1	0	0				12	0			5	EPA-2	3	0
Bromodichloromethane	VOC	15	15	1	0	0				0	0			100	EPA-2	3	0
Bromoform	VOC	15	15	1	0	0				0	0			100	EPA-2	3	0
Bromomethane	VOC	15	15	1	0	0				12	0			8.7	EPA-4	3	3
Butanone[2-]	VOC	13	13	1	0	0				0	0			1900	EPA-4	3	0
Butylbenzene[n-]	VOC	13	13	1	0	0				0	0			61	EPA-4	3	0
Butylbenzene[sec-]	VOC	13	13	1	0	0				0	0			61	EPA-4	3	0
Butylbenzene[tert-]	VOC	13	13	1	0	0				0	0			61	EPA-4	3	0
Carbon Disulfide	VOC	13	13	1	0	0				0	0			1000	EPA-4	3	0
Carbon Tetrachloride	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Chlorobenzene	VOC	15	15	1	0	0				0	0			100	EPA-2	3	0
Chlorodibromomethane	VOC	15	15	1	0	0				0	0			100	EPA-2	3	0
Chloroethane	VOC	15	15	1	0	0				0	0			39	EPA-4	3	0
Chloroethyl vinyl ether[2-]	VOC	2	2	1	0	0											
Chloroform	VOC	15	15	1	0	0				0	0			100	WQCC-11	3	0
Chloromethane	VOC	15	15	1	0	0				0	0			15	EPA-4	3	0
Chlorotoluene[2-]	VOC	13	13	1	0	0				0	0			120	EPA-4	3	0
Chlorotoluene[4-]	VOC	13	13	1	0	0				0	0			120	EPA-4	3	0
Dibromo-3-Chloropropane[1,2-]	VOC	13	13	1	0	0											
Dibromoethane[1,2-]	VOC	13	13	1	0	0				13	0			0.05	EPA-2	3	3
Dibromomethane	VOC	13	13	1	0	0				0	0			61	EPA-4	3	0
Dichlorobenzene[1,2-]	VOC	15	15	1	0	0				0	0			600	EPA-2	3	0
Dichlorobenzene[1,3-]	VOC	15	15	1	0	0				0	0			18	EPA-4	3	0
Dichlorodifluoromethane	VOC	13	13	1	0	0				0	0			390	EPA-4	3	0

Table B-179 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichloroethane[1,1-]	VOC	15	15	1	0	0				0	0			25	WQCC-11	3	0
Dichloroethane[1,2-]	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Dichloroethene[1,1-]	VOC	15	15	1	0	0				12	0			5	WQCC-11	3	0
Dichloroethene[cis/trans-1,2-]	VOC	4	4	1	0	0											
Dichloroethene[cis-1,2-]	VOC	9	9	1	0	0				0	0			70	EPA-2	3	0
Dichloroethene[trans-1,2-]	VOC	15	15	1	0	0				0	0			100	EPA-2	3	0
Dichloropropane[1,2-]	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Dichloropropane[1,3-]	VOC	13	13	1	0	0				12	0			5	EPA-2	3	0
Dichloropropane[2,2-]	VOC	13	13	1	0	0				12	0			5	EPA-2	3	0
Dichloropropene[1,1-]	VOC	13	13	1	0	0				12	0			4	EPA-4	3	3
Dichloropropene[cis-1,3-]	VOC	15	15	1	0	0				12	0			4	EPA-4	3	3
Dichloropropene[trans-1,3-]	VOC	12	12	1	0	0				9	0			4	EPA-4	3	3
Ethylbenzene	VOC	15	15	1	0	0				0	0			700	EPA-2	3	0
Hexanone[2-]	VOC	13	13	1	0	0				0	0			1900	EPA-4	3	0
Iodomethane	VOC	13	13	1	0	0				0	0			8.7	EPA-4	3	0
Isopropylbenzene	VOC	13	13	1	0	0				0	0			660	EPA-4	3	0
Isopropyltoluene[4-]	VOC	13	13	1	0	0				0	0			660	EPA-4	3	0
Methyl tert-Butyl Ether	VOC	1	1	1	0	0											
Methyl-2-pentanone[4-]	VOC	13	13	1	0	0				0	0			160	EPA-4	3	0
Propylbenzene[1-]	VOC	13	13	1	0	0				0	0			61	EPA-4	3	0
Styrene	VOC	13	13	1	0	0				0	0			100	EPA-2	3	0
Tetrachloroethane[1,1,1,2-]	VOC	10	10	1	0	0				9	0			4.3	EPA-4	3	3
Tetrachloroethane[1,1,2,2-]	VOC	15	15	1	0	0				0	0			10	WQCC-11	3	0
Tetrachloroethene	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Trichloro-1,2,2-trifluoroethane	VOC	3	3	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	4	4	1	0	0				0	0			70	EPA-2	3	0
Trichlorobenzene[1,2,4-]	VOC	15	15	1	0	0				0	0			70	EPA-2	3	0
Trichloroethane[1,1,1-]	VOC	15	15	1	0	0				0	0			60	WQCC-11	3	0
Trichloroethane[1,1,2-]	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Trichloroethene	VOC	15	15	1	0	0				12	0			5	EPA-2	3	0
Trichlorofluoromethane	VOC	15	15	1	0	0				0	0			1300	EPA-4	3	0
Trichloropropane[1,2,3-]	VOC	13	13	1	0	0				13	0			0.016	EPA-4	3	3
Trichlorotrifluoroethane	VOC	2	2	1	0	0											
Trimethylbenzene[1,3,5-]	VOC	13	13	1	0	0				0	0			12	EPA-4	3	0
Vinyl acetate	VOC	1	1	1	0	0											
Vinyl Chloride	VOC	15	15	1	0	0				13	0			1	WQCC-11	3	3
Xylene (Total)	VOC	7	7	1	0	0				0	0			620	WQCC-11	3	0
Xylene[1,2-]	VOC	8	8	1	0	0				0	0			1400	EPA-4	3	0
Xylene[1,3-]+Xylene[1,4-]	VOC	8	8	1	0	0				0	0			620	WQCC-11	3	0

Table B-180
Nonfiltered Miscellaneous Constituents of Ancho Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	1	0	0	1	1	40	40	40								
Chloride	ANION	26	0	0	26	1	1400	2700	7140	0	0	0.0108	0.02856	250000	WQCC-12	3	0
Fluoride	ANION	25	1	0.04	24	0.96	220	260	551	0	0	0.1625	0.3444	1600	WQCC-11	3	0
Nitrate	ANION	25	1	0.04	24	0.96	120	320	420	0	0	0.032	0.042	10000	EPA-4	3	0
Nitrite	ANION	1	1	1	0	0				0	0			1000	EPA-4	1	0
Perchlorate	ANION	8	8	1	0	0				0	0			3.7	EPA-4	3	0
Sulfate	ANION	26	0	0	26	1	1000	2650	4200	0	0	0.004417	0.007	600000	WQCC-12	3	0
Calcium	GENINORG	23	0	0	23	1	6600	9610	11800								
Hardness	GENINORG	23	0	0	23	1	24300	34800	43900								
Magnesium	GENINORG	23	0	0	23	1	1900	2610	3570								
Potassium	GENINORG	23	10	0.4348	13	0.5652	900	1330	1800								
Sodium	GENINORG	23	0	0	23	1	5609	10300	12300								
pH	WATER_QUAL	21	0	0	21	1	7.005	7.9	8.3								
Specific Conductance	WATER_QUAL	23	0	0	23	1	3.28	115	132								
Total Dissolved Solids	WATER_QUAL	6	0	0	6	1	132000	137000	146000	0	0	0.137	0.146	1000000	WQCC-12	3	0
Total Suspended Solids	WATER_QUAL	23	17	0.7391	6	0.2609	400	1100	3000								

Table B-181
Filtered Inorganics of Ancho Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	6	6	1	0	0				2	0			87	WQCC-6	1	1
AluminumRe	METALS	6	6	1	0	0				0	0			5000	WQCC-4	1	0
Antimony	METALS	4	4	1	0	0				1	0			6	EPA-2	1	1
Arsenic	METALS	4	4	1	0	0				1	0			10	EPA-2	1	0
Barium	METALS	6	1	0.1667	5	0.8333	1.4	25.7	28.1	0	0	0.0257	0.0281	1000	WQCC-11	1	0
Beryllium	METALS	5	4	0.8	1	0.2	3	3	3	1	0	0.75	0.75	4	EPA-2	1	1
Boron	METALS	6	5	0.8333	1	0.1667	16	16	16	0	0	0.004848	0.004848	3300	EPA-4	1	0
Cadmium	METALS	5	5	1	0	0				3	0			2.24	WQCC-6	1	1
CadmiumRe	METALS	5	5	1	0	0				2	0			5	EPA-2	1	1
Chromium	METALS	5	5	1	0	0				0	0			50	WQCC-11	1	0
Cobalt	METALS	5	5	1	0	0				0	0			1000	WQCC-4	1	0
Copper	METALS	5	5	1	0	0				3	0			8.96	WQCC-6	1	1
CopperRe	METALS	5	5	1	0	0				0	0			500	WQCC-4	1	0
Iron	METALS	6	5	0.8333	1	0.1667	40	40	40	0	0	0.04	0.04	1000	WQCC-12	1	0
Lead	METALS	4	4	1	0	0				2	0			2.52	WQCC-6	1	1
LeadRe	METALS	4	4	1	0	0				1	0			15	EPA-2	1	1
Lithium	METALS	2	0	0	2	1	20	20	20	0	0	0.0274	0.0274	730	EPA-4	1	0
Manganese	METALS	6	5	0.8333	1	0.1667	11	11	11	0	0	0.055	0.055	200	WQCC-12	1	0
Mercury	METALS	2	1	0.5	1	0.5	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	1	0
Molybdenum	METALS	5	5	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	5	5	1	0	0				0	0			52.01	WQCC-6	1	0
NickelRe	METALS	5	5	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	2	2	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	2	2	1	0	0				0	0			50	WQCC-4	1	0
Silver	METALS	5	5	1	0	0				3	0			3.45	WQCC-2	1	1
SilverRe	METALS	5	5	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	6	0	0	6	1	4.2	57.35	63.9	0	0	0.002607	0.002905	22000	EPA-4	1	0
Thallium	METALS	4	4	1	0	0				2	0			2	EPA-2	1	1
Tin	METALS	5	5	1	0	0				0	0			22000	EPA-4	1	0
Uranium	URANIUM	2	0	0	2	1	0.23	0.2356	0.2412	0	0	0.007853	0.00804	30	EPA-2	1	0
Vanadium	METALS	5	3	0.6	2	0.4	6.72	6.745	6.77	0	0	0.06745	0.0677	100	WQCC-4	1	0
Zinc	METALS	5	5	1	0	0				0	0			117.19	WQCC-2	1	0
ZincRe	METALS	5	5	1	0	0				0	0			10000	WQCC-12	1	0

Table B-182
Filtered Radionuclides of Ancho Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Level		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	4	3	0.75	1	0.25	3.24	3.24	3.24	0	0	0.027	0.027	120	DOE	1	0
Cobalt-60	rad	4	4	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	7	7	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	7	4	0.5714	3	0.4286	2.87	3.66	3.95	0	0	0.0732	0.079	50	EPA-2	1	0
Gross gamma	rad	2	2	1	0	0											
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	4	3	0.75	1	0.25	0.3	0.3	0.3	0	0	0.0375	0.0375	8	EPA-2	1	0
Uranium-234	rad	2	0	0	2	1	0.191	0.2045	0.218	0	0	0.01023	0.0109	20	DOE	1	0
Uranium-235	rad	2	2	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	2	1	0.5	1	0.5	0.0802	0.0802	0.0802	0	0	0.003342	0.003342	24	DOE	1	0

Table B-183
Filtered Miscellaneous Constituents of Ancho Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	6	0	0	6	1	895	12390	13000								
Hardness	GENINORG	4	0	0	4	1	3000	43000	44700								
Magnesium	GENINORG	6	0	0	6	1	174.4	2930	3020								
Potassium	GENINORG	6	0	0	6	1	1000	1850	2000								
Sodium	GENINORG	6	0	0	6	1	770	10000	11100								
Dissolved Oxygen	WATER_QUAL	1	0	0	1	1	7000	7000	7000								
pH	WATER_QUAL	7	0	0	7	1	7	7.47	8								
Specific Conductance	WATER_QUAL	8	0	0	8	1	101	121.5	136								
Total Dissolved Solids	WATER_QUAL	9	0	0	9	1	67000	99000	164000	0	0	0.099	0.164	1000000	WQCC-12	1	0
Total Suspended Solids	WATER_QUAL	1	0	0	1	1	320000	320000	320000								

Table B-184
Nonfiltered Inorganics of Ancho Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	2	1	0.5	1	0.5	820	820	820	0	0	0.02216	0.02216	37000	EPA-4	1	0
Antimony	METALS	1	1	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	2	2	1	0	0				2	0			0.45	EPA-4	1	1
Barium	METALS	2	1	0.5	1	0.5	41	41	41	0	0	0.041	0.041	1000	WQCC-11	1	0
Beryllium	METALS	1	1	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	2	2	1	0	0				0	0			3300	EPA-4	1	0
Cadmium	METALS	1	1	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	1	0	0	1	1	7	7	7	0	0	0.14	0.14	50	WQCC-11	1	0
Cobalt	METALS	1	1	1	0	0											
Copper	METALS	1	1	1	0	0				0	0			1000	WQCC-12	1	0
Cyanide (Total)	CN	5	3	0.6	2	0.4	10	10	10	1	2	1.923	1.923	5.2	WQCC-7	1	1
Cyanide (Total)Re	CN	5	3	0.6	2	0.4	10	10	10	0	0	0.05	0.05	200	WQCC-11	1	0
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	2	1	0.5	1	0.5	330	330	330	0	0	0.33	0.33	1000	WQCC-12	1	0
Lead	METALS	1	1	1	0	0				0	0			15	EPA-2	1	0
Lithium	METALS	1	0	0	1	1	21	21	21	0	0	0.02877	0.02877	730	EPA-4	1	0
Manganese	METALS	1	0	0	1	1	44	44	44	0	0	0.22	0.22	200	WQCC-12	1	0
Mercury	METALS	3	1	0.3333	2	0.6667	0.1	0.15	0.2	1	2	12.5	16.67	0.012	WQCC-7	1	1
MercuryRe	METALS	3	1	0.3333	2	0.6667	0.1	0.15	0.2	0	0	0.1948	0.2597	0.77	WQCC-8	1	0
Molybdenum	METALS	1	1	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	1	1	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	3	3	1	0	0				0	0			5	WQCC-8	1	0
Silver	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	2	0	0	2	1	60	60.5	61	0	0	0.00275	0.00277	22000	EPA-4	1	0
Thallium	METALS	1	1	1	0	0				1	0			2	EPA-2	1	0
Tin	METALS	1	0	0	1	1	59	59	59	0	0	0.002682	0.00268	22000	EPA-4	1	0
Uranium	METALS	1	0	0	1	1	0.5	0.5	0.5	0	0	0.01667	0.01667	30	EPA-2	1	0
Vanadium	METALS	1	0	0	1	1	7	7	7	0	0	0.02692	0.02692	260	EPA-4	1	0
Zinc	METALS	1	1	1	0	0				0	0			10000	WQCC-12	1	0

Table B-185
Nonfiltered Radionuclides of Ancho Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	1	1	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	1	1	1	0	0				0	0			120	DOE	1	0
Gross alpha	rad	1	1	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	1	1	1	0	0				0	0			50	EPA-2	1	0
Plutonium-238	rad	1	1	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	1	1	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	2	2	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	5	5	1	0	0				0	0			20000	WQCC-5	1	0

Table B-186
Nonfiltered Organics of Ancho Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	2	1	0.5	1	0.5	1.2	1.2	1.2	1	0	0.2	0.2	6	EPA-2	1	1
Tetryl	HEXP	7	6	0.8571	1	0.1429	0.61	0.61	0.61	0	0	0.001671	0.001671	365	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	7	6	0.8571	1	0.1429	0.18	0.18	0.18	0	0	0.002466	0.002466	73	EPA-4	1	0
HMX	HEXP	8	7	0.875	1	0.125	4.9	4.9	4.9	0	0	0.002685	0.002685	1825	EPA-4	1	0
RDX	HEXP	8	7	0.875	1	0.125	23	23	23	3	1	37.63	37.63	0.61	EPA-4	1	1
Trinitrotoluene[2,4,6-]	HEXP	8	7	0.875	1	0.125	4.8	4.8	4.8	0	0	0.263	0.263	18.25	EPA-4	1	0
Amino-2,6-dinitrotoluene[4-]	HEXP	6	6	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	7	7	1	0	0											
Amino-DNTs	HEXP	1	1	1	0	0											
Dinitrobenzene[1,3-]	HEXP	7	7	1	0	0				1	0			3.65	EPA-4	1	1
Nitrotoluene[2-]	HEXP	7	7	1	0	0											
Nitrotoluene[3-]	HEXP	6	6	1	0	0				0	0			60.83	EPA-4	1	0
Nitrotoluene[4-]	HEXP	6	6	1	0	0				0	0			60.83	EPA-4	1	0
Trinitrobenzene[1,3,5-]	HEXP	2	2	1	0	0				0	0			1095	EPA-4	1	0
Acenaphthene	PAH	2	2	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	PAH	2	2	1	0	0				0	0			370	EPA-4	1	0
Anthracene	PAH	2	2	1	0	0				0	0			1800	EPA-4	1	0
Benzo(a)anthracene	PAH	2	2	1	0	0				2	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	PAH	2	2	1	0	0				2	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	PAH	2	2	1	0	0				2	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	PAH	2	2	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	PAH	2	2	1	0	0				2	0			0.49	WQCC-9	1	1
Chrysene	PAH	2	2	1	0	0				2	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	PAH	2	2	1	0	0				2	0			0.09	EPA-4	1	1
Fluoranthene	PAH	2	2	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	PAH	2	2	1	0	0				0	0			240	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	PAH	2	2	1	0	0				2	0			0.49	WQCC-9	1	1
Naphthalene	PAH	2	2	1	0	0				1	0			6.2	EPA-4	1	1
Phenanthrene	PAH	2	2	1	0	0				0	0			1800	EPA-4	1	0
Pyrene	PAH	2	2	1	0	0				0	0			180	EPA-4	1	0
Aroclor-1016	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1262	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1

Table B-186 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aniline	SVOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Benzidine	SVOC	1	1	1	0	0				1	0			0.0029	EPA-4	1	1
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.098	EPA-4	1	1
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	6	6	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			0.01	WQCC-9	1	1
Hexachlorobutadiene	SVOC	2	2	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				1	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	1	1	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	1	1	1	0	0											
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	1	1

Table B-186 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitrobenzene	SVOC	6	6	1	0	0				0	0			3.4	EPA-4	1	0
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				1	0			0.01	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Phenol	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Pyridine	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	1	1
Acetone	VOC	2	2	1	0	0				0	0			610	EPA-4	1	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Bromobenzene	VOC	2	2	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Bromodichloromethane	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	3	3	1	0	0				2	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	3	3	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	3	3	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Chlorobenzene	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	3	3	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	3	3	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	3	3	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	2	2	1	0	0											
Dibromoethane[1,2-]	VOC	2	2	1	0	0				2	0			0.01	EPA-4	1	1
Dibromomethane	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	3	3	1	0	0				0	0			600	EPA-2	1	0

Table B-186 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzene[1,3-]	VOC	3	3	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	3	3	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	3	3	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	3	3	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	3	3	1	0	0				2	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	3	3	1	0	0				2	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	3	3	1	0	0				2	0			4	EPA-4	1	1
Ethylbenzene	VOC	3	3	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	3	3	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	2	2	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	3	3	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	3	3	1	0	0				3	0			5	EPA-2	1	0
Propylbenzene[1-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	2	2	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	3	3	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Toluene	VOC	3	3	1	0	0				0	0			750	WQCC-11	1	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	3	3	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Trichloroethene	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	3	3	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	2	2	1	0	0				2	0			0.02	EPA-4	1	1
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	2	2	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	3	3	1	0	0				3	0			1	WQCC-11	1	1
Xylene (Total)	VOC	2	2	1	0	0				0	0			620	WQCC-11	1	0

Table B-187
Nonfiltered Miscellaneous Constituents of Ancho Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	2	2	1	0	0											
Chloride	ANION	7	0	0	7	1	1890	3480	5000	0	0	0.01392	0.02	250000	WQCC-12	1	0
Fluoride	ANION	7	1	0.1429	6	0.8571	290	325	400	0	0	0.2031	0.25	1600	WQCC-11	1	0
Nitrate	ANION	8	0	0	8	1	300	375	1000	0	0	0.0375	0.1	10000	EPA-4	1	0
Perchlorate	ANION	2	2	1	0	0				0	0			3.7	EPA-4	1	0
Sulfate	ANION	6	1	0.1667	5	0.8333	2050	2220	5900	0	0	0.0037	0.009833	600000	WQCC-12	1	0
Calcium	GENINORG	2	0	0	2	1	12000	12000	12000								
Hardness	GENINORG	1	0	0	1	1	42000	42000	42000								
Magnesium	GENINORG	2	0	0	2	1	3000	3000	3000								
Potassium	GENINORG	2	0	0	2	1	2000	2250	2500								
Sodium	GENINORG	2	0	0	2	1	9500	10250	11000								
pH	WATER_QUAL	2	0	0	2	1	7	7.4	7.8								
Specific Conductance	WATER_QUAL	2	0	0	2	1	120	126.5	133								
Total Suspended Solids	WATER_QUAL	5	1	0.2	4	0.8	2000	9100	13000								

Table B-188
Filtered Inorganics of Ancho Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	6	6	1	0	0				1	0			87	WQCC-6	2	1
AluminumRe	METALS	6	6	1	0	0				0	0			5000	WQCC-4	2	0
Antimony	METALS	6	5	0.8333	1	0.1667	3	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	2	0
Arsenic	METALS	6	6	1	0	0				0	0			24.2	WQCC-9	2	0
Barium	METALS	6	1	0.1667	5	0.8333	24.4	27.4	30	0	0	0.01054	0.01154	2600	EPA-4	2	0
Beryllium	METALS	6	5	0.8333	1	0.1667	3	3	3	0	0	0.566	0.566	5.3	WQCC-6	2	0
BerylliumRe	METALS	6	5	0.8333	1	0.1667	3	3	3	0	0	0.0411	0.0411	73	EPA-4	2	0
Boron	METALS	6	5	0.8333	1	0.1667	23.1	23.1	23.1	0	0	0.00462	0.00462	5000	WQCC-4	2	0
Cadmium	METALS	6	6	1	0	0				3	0			2.24	WQCC-6	2	2
CadmiumRe	METALS	6	6	1	0	0				0	0			50	WQCC-4	2	0
Chromium	METALS	6	6	1	0	0				0	0			74.12	WQCC-6	2	0
ChromiumRe	METALS	6	6	1	0	0				0	0			1000	WQCC-4	2	0
Cobalt	METALS	6	6	1	0	0				0	0			1000	WQCC-4	2	0
Copper	METALS	6	6	1	0	0				3	0			8.96	WQCC-6	2	2
CopperRe	METALS	6	6	1	0	0				0	0			500	WQCC-4	2	0
Cyanide (Total)	CN	1	0	0	1	1	10	10	10								
Iron	METALS	6	5	0.8333	1	0.1667	92	92	92	0	0	0.008364	0.008364	11000	EPA-4	2	0
Lead	METALS	6	6	1	0	0				4	0			2.52	WQCC-6	2	2
LeadRe	METALS	6	6	1	0	0				0	0			100	WQCC-4	2	0
Lithium	METALS	1	0	0	1	1	20	20	20	0	0	0.0274	0.0274	730	EPA-4	1	0
Manganese	METALS	6	5	0.8333	1	0.1667	2.1	2.1	2.1	0	0	0.001235	0.001235	1700	EPA-4	2	0
Mercury	METALS	3	2	0.6667	1	0.3333	0.2	0.2	0.2	0	0	0.01818	0.01818	11	EPA-4	1	0
Molybdenum	METALS	6	6	1	0	0				0	0			180	EPA-4	2	0
Nickel	METALS	6	6	1	0	0				0	0			52.01	WQCC-6	2	0
NickelRe	METALS	6	6	1	0	0				0	0			4600	WQCC-9	2	0
Selenium	METALS	2	2	1	0	0				0	0			50	WQCC-4	1	0
Silver	METALS	6	6	1	0	0				3	0			3.45	WQCC-2	2	2
SilverRe	METALS	6	6	1	0	0				0	0			180	EPA-4	2	0
Strontium	METALS	6	0	0	6	1	59.9	62.7	70.4	0	0	0.00285	0.0032	22000	EPA-4	2	0
Thallium	METALS	6	4	0.6667	2	0.3333	0.375	1.688	3	1	0	0.2679	0.4762	6.3	WQCC-9	2	1
Tin	METALS	6	6	1	0	0				0	0			22000	EPA-4	2	0
Titanium	METALS	1	0	0	1	1	1.67	1.67	1.67								
Uranium	URANIUM	1	0	0	1	1	0.21	0.21	0.21								
Vanadium	METALS	6	2	0.3333	4	0.6667	5.09	7.395	10	0	0	0.07395	0.1	100	WQCC-4	2	0
Zinc	METALS	5	5	1	0	0				0	0			117.19	WQCC-2	2	0
ZincRe	METALS	5	5	1	0	0				0	0			25000	WQCC-4	2	0

Table B-189
Filtered Radionuclides of Ancho Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Gross alpha	rad	1	1	1	0	0											
Gross beta	rad	1	1	1	0	0											
Strontium-90	rad	1	1	1	0	0				0	0			40	DOE	1	0

Table B-190
Filtered Miscellaneous Constituents of Ancho Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	6	0	0	6	1	12100	12850	15100								
Hardness	GENINORG	5	0	0	5	1	41300	45100	52800								
Magnesium	GENINORG	6	0	0	6	1	2700	3198	3770								
Potassium	GENINORG	6	0	0	6	1	1700	1945	3117								
Sodium	GENINORG	6	0	0	6	1	9800	10950	12200								
pH	WATER_QUAL	4	0	0	4	1	7.62	8.285	8.8								
Specific Conductance	WATER_QUAL	5	0	0	5	1	121	138	282								
Total Dissolved Solids	WATER_QUAL	8	0	0	8	1	135000	144500	189000								
Total Suspended Solids	WATER_QUAL	1	1	1	0	0											

Table B-191
Nonfiltered Inorganics of Ancho Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	2	1	0.5	1	0.5	205	205	205	0	0	0.005541	0.005541	37000	EPA-4	1	0
Antimony	METALS	2	2	1	0	0				0	0			15	EPA-4	1	0
Arsenic	METALS	2	0	0	2	1	3	3.5	4	0	2	7.778	8.889	0.45	EPA-4	1	0
Barium	METALS	2	0	0	2	1	30	31	32	0	0	0.01192	0.01231	2600	EPA-4	1	0
Beryllium	METALS	2	2	1	0	0				0	0			73	EPA-4	1	0
Boron	METALS	2	0	0	2	1	20	23.5	27	0	0	0.007121	0.008182	3300	EPA-4	1	0
Cadmium	METALS	2	1	0.5	1	0.5	4	4	4	0	0	0.2222	0.2222	18	EPA-4	1	0
Chromium	METALS	2	1	0.5	1	0.5	7	7	7	0	0	0.0001273	0.0001273	55000	EPA-4	1	0
Cobalt	METALS	2	2	1	0	0											
Copper	METALS	2	1	0.5	1	0.5	6	6	6	0	0	0.004286	0.004286	1400	EPA-4	1	0
Cyanide (Total)	CN	6	5	0.8333	1	0.1667	10	10	10	2	1	1.923	1.923	5.2	WQCC-7	1	1
Cyanide, Amenable	CN	2	2	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	2	1	0.5	1	0.5	165	165	165	0	0	0.015	0.015	11000	EPA-4	1	0
Lead	METALS	2	2	1	0	0											
Lithium	METALS	1	0	0	1	1	21.5	21.5	21.5	0	0	0.02945	0.02945	730	EPA-4	1	0
Manganese	METALS	2	1	0.5	1	0.5	32	32	32	0	0	0.01882	0.01882	1700	EPA-4	1	0
Mercury	METALS	7	4	0.5714	3	0.4286	0.2	0.2	0.2	4	3	16.67	16.67	0.012	WQCC-7	2	1
MercuryRe	METALS	7	4	0.5714	3	0.4286	0.2	0.2	0.2	0	0	0.2597	0.2597	0.77	WQCC-8	2	0
Molybdenum	METALS	2	1	0.5	1	0.5	13	13	13	0	0	0.07222	0.07222	180	EPA-4	1	0
Nickel	METALS	2	2	1	0	0				0	0			730	EPA-4	1	0
Selenium	METALS	7	7	1	0	0				1	0			5	WQCC-8	2	0
Silver	METALS	2	2	1	0	0				0	0			180	EPA-4	1	0
Strontium	METALS	2	0	0	2	1	68	69.5	71	0	0	0.003159	0.003227	22000	EPA-4	1	0
Thallium	METALS	2	2	1	0	0											
Tin	METALS	2	1	0.5	1	0.5	36	36	36	0	0	0.001636	0.001636	22000	EPA-4	1	0
Uranium	METALS	4	0	0	4	1	0.1312	0.2	0.3								
Vanadium	METALS	2	0	0	2	1	6	7.75	9.5	0	0	0.02981	0.03654	260	EPA-4	1	0
Zinc	METALS	2	0	0	2	1	24	49.5	75	0	0	0.0045	0.006818	11000	EPA-4	1	0

Table B-192
Nonfiltered Radionuclides of Ancho Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	7	7	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	7	7	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	5	4	0.8	1	0.2	12.2	12.2	12.2	0	0	0.061	0.061	200	DOE	1	0
Gross alpha	rad	7	7	1	0	0											
Gross beta	rad	7	5	0.7143	2	0.2857	2.16	2.165	2.17								
Gross gamma	rad	2	2	1	0	0											
Plutonium-238	rad	7	7	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	7	7	1	0	0				0	0			1.2	DOE	1	0
Radium-226	rad	1	1	1	0	0											
Strontium-90	rad	7	6	0.8571	1	0.1429	3.9	3.9	3.9	0	0	0.0975	0.0975	40	DOE	1	0
Thorium-228	rad	1	1	1	0	0											
Thorium-230	rad	1	1	1	0	0											
Thorium-232	rad	1	1	1	0	0											
Tritium	rad	7	7	1	0	0				0	0			20000	WQCC-5	1	0
Uranium-234	rad	3	0	0	3	1	0.061	0.0874	0.151	0	0	0.00437	0.00755	20	DOE	1	0
Uranium-235	rad	3	3	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	3	2	0.6667	1	0.3333	0.0851	0.0851	0.0851	0	0	0.003546	0.003546	24	DOE	1	0

Table B-193
Nonfiltered Organics of Ancho Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Amino-2,6-dinitrotoluene[4-]	HEXP	7	7	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	7	7	1	0	0											
Dinitrobenzene[1,3-]	HEXP	6	6	1	0	0				0	0			3.65	EPA-4	1	0
HMX	HEXP	7	7	1	0	0				0	0			1825	EPA-4	2	0
Nitrotoluene[2-]	HEXP	6	6	1	0	0											
Nitrotoluene[3-]	HEXP	6	6	1	0	0				0	0			60.83333333	EPA-4	1	0
Nitrotoluene[4-]	HEXP	6	6	1	0	0				0	0			60.83333333	EPA-4	1	0
RDX	HEXP	7	7	1	0	0				2	0			0.611195767	EPA-4	2	2
Tetryl	HEXP	7	7	1	0	0				0	0			365	EPA-4	2	0
Trinitrobenzene[1,3,5-]	HEXP	2	2	1	0	0				0	0			1095	EPA-4	1	0
Trinitrotoluene[2,4,6-]	HEXP	7	7	1	0	0				0	0			18.25	EPA-4	2	0
Acenaphthene	PAH	5	5	1	0	0				0	0			2700	WQCC-9	1	0
Acenaphthylene	PAH	5	5	1	0	0				0	0			2700	WQCC-9	1	0
Anthracene	PAH	5	5	1	0	0				0	0			110000	WQCC-9	1	0
Benzo(a)anthracene	PAH	5	5	1	0	0				5	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	PAH	5	5	1	0	0				5	0			0.49	WQCC-9	1	1
Benzo(b)fluoranthene	PAH	5	5	1	0	0				5	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	PAH	5	5	1	0	0				0	0			11000	WQCC-9	1	0
Benzo(k)fluoranthene	PAH	4	4	1	0	0				4	0			0.49	WQCC-9	1	1
Chrysene	PAH	5	5	1	0	0				5	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	PAH	5	5	1	0	0				5	0			0.49	WQCC-9	1	1
Fluoranthene	PAH	5	5	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	PAH	5	5	1	0	0				0	0			14000	WQCC-9	1	0
Indeno(1,2,3-cd)pyrene	PAH	5	5	1	0	0				5	0			0.49	WQCC-9	1	1
Naphthalene	PAH	5	5	1	0	0				4	0			6.2	EPA-4	1	1
Phenanthrene	PAH	5	5	1	0	0				0	0			110000	WQCC-9	1	0
Pyrene	PAH	5	5	1	0	0				0	0			11000	WQCC-9	1	0
Aroclor-1016	PCB	4	4	1	0	0				4	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	4	4	1	0	0				4	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	4	4	1	0	0				4	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	6	6	1	0	0				6	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	4	4	1	0	0				4	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	6	6	1	0	0				6	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	6	6	1	0	0				6	0			0.0017	WQCC-9	1	1
Aroclor-1262	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1
PentachlorophenolRe	PEST	5	5	1	0	0				0	0			82	WQCC-9	1	0
Aniline	SVOC	5	5	1	0	0				0	0			120	EPA-4	1	0
Azobenzene	SVOC	4	4	1	0	0				4	0			6.1	EPA-4	1	1

Table B-193 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzidine	SVOC	5	5	1	0	0				5	0			0.0054	WQCC-9	1	1
Benzoic Acid	SVOC	5	5	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	5	5	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	5	5	1	0	0											
Bis(2-chloroethyl)ether	SVOC	5	5	1	0	0				0	0			14	WQCC-9	1	0
Bromophenyl-phenylether[4-]	SVOC	5	5	1	0	0											
Butylbenzylphthalate	SVOC	5	5	1	0	0				0	0			5200	WQCC-9	1	0
Carbazole	SVOC	1	1	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	5	5	1	0	0											
Chloroaniline[4-]	SVOC	5	5	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	5	5	1	0	0				0	0			4300	WQCC-9	1	0
Chlorophenol[2-]	SVOC	5	5	1	0	0				0	0			400	WQCC-9	1	0
Chlorophenyl-phenyl[4-] Ether	SVOC	5	5	1	0	0											
Dibenzofuran	SVOC	5	5	1	0	0				1	0			24	EPA-4	1	1
Dichlorobenzidine[3,3'-]	SVOC	5	5	1	0	0				5	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	5	5	1	0	0				0	0			790	WQCC-9	1	0
Diethylphthalate	SVOC	5	5	1	0	0				0	0			120000	WQCC-9	1	0
Dimethyl Phthalate	SVOC	5	5	1	0	0				0	0			2900000	WQCC-9	1	0
Dimethylphenol[2,4-]	SVOC	5	5	1	0	0				0	0			2300	WQCC-9	1	0
Di-n-butylphthalate	SVOC	4	4	1	0	0				0	0			12000	WQCC-9	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	5	5	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	5	5	1	0	0				0	0			14000	WQCC-9	1	0
Dinitrotoluene[2,4-]	SVOC	7	7	1	0	0				0	0			91	WQCC-9	2	0
Dinitrotoluene[2,6-]	SVOC	7	7	1	0	0				0	0			37	EPA-4	2	0
Di-n-octylphthalate	SVOC	5	5	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Hexachlorobenzene	SVOC	5	5	1	0	0				5	0			0.0077	WQCC-9	1	1
Hexachlorobutadiene	SVOC	5	5	1	0	0				0	0			500	WQCC-9	1	0
Hexachlorocyclopentadiene	SVOC	5	5	1	0	0				0	0			17000	WQCC-9	1	0
Hexachloroethane	SVOC	5	5	1	0	0				0	0			89	WQCC-9	1	0
Isophorone	SVOC	5	5	1	0	0				0	0			26000	WQCC-9	1	0
Methylnaphthalene[2-]	SVOC	5	5	1	0	0				4	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	5	5	1	0	0				0	0			1800	EPA-4	1	0
Methylphenol[4-]	SVOC	5	5	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	4	4	1	0	0											
Nitroaniline[2-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	1	1

Table B-193 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroaniline[4-]	SVOC	5	5	1	0	0				5	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	6	6	1	0	0				0	0			1900	WQCC-9	1	0
Nitrophenol[2-]	SVOC	5	5	1	0	0				0	0			290	EPA-4	1	0
Nitrophenol[4-]	SVOC	5	5	1	0	0				0	0			290	EPA-4	1	0
Nitrosodimethylamine[N-]	SVOC	5	5	1	0	0				0	0			81	WQCC-9	1	0
Nitroso-di-n-propylamine[N-]	SVOC	5	5	1	0	0				0	0			14	WQCC-9	1	0
Nitrosodiphenylamine[N-]	SVOC	4	4	1	0	0				0	0			160	WQCC-9	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	5	5	1	0	0				3	0			15	WQCC-7	1	1
Phenol	SVOC	5	5	1	0	0				0	0			4600000	WQCC-9	1	0
Pyridine	SVOC	4	4	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	5	5	1	0	0				0	0			3700	EPA-4	1	0
Trichlorophenol[2,4,6-]	SVOC	5	5	1	0	0				0	0			65	WQCC-9	1	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	6	6	1	0	0				0	0			710	WQCC-9	1	0
Bromobenzene	VOC	4	4	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	4	4	1	0	0				0	0			16000	WQCC-9	1	0
Bromodichloromethane	VOC	6	6	1	0	0				0	0			460	WQCC-9	1	0
Bromoform	VOC	6	6	1	0	0				0	0			3600	WQCC-9	1	0
Bromomethane	VOC	6	6	1	0	0				0	0			4000	WQCC-9	1	0
Butanone[2-]	VOC	4	4	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	4	4	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	6	6	1	0	0				0	0			44	WQCC-9	1	0
Chlorobenzene	VOC	6	6	1	0	0				0	0			21000	WQCC-9	1	0
Chlorodibromomethane	VOC	6	6	1	0	0				0	0			340	WQCC-9	1	0
Chloroethane	VOC	6	6	1	0	0				0	0			39	EPA-4	1	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	6	6	1	0	0				0	0			4700	WQCC-9	1	0
Chlorotoluene[2-]	VOC	4	4	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	4	4	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	4	4	1	0	0											
Dibromoethane[1,2-]	VOC	4	4	1	0	0				4	0			0.0076	EPA-4	1	1
Dibromomethane	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	7	7	1	0	0				0	0			17000	WQCC-9	1	0

Table B-193 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzene[1,3-]	VOC	7	7	1	0	0				0	0			2600	WQCC-9	1	0
Dichlorobenzene[1,4-]	VOC	7	7	1	0	0				0	0			2600	WQCC-9	1	0
Dichlorodifluoromethane	VOC	4	4	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	6	6	1	0	0				0	0			810	EPA-4	1	0
Dichloroethane[1,2-]	VOC	6	6	1	0	0				0	0			990	WQCC-9	1	0
Dichloroethene[1,1-]	VOC	6	6	1	0	0				0	0			32	WQCC-9	1	0
Dichloroethene[cis-1,2-]	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	6	6	1	0	0				0	0			140000	WQCC-9	1	0
Dichloropropane[1,2-]	VOC	6	6	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropane[1,3-]	VOC	4	4	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropane[2,2-]	VOC	4	4	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropene[1,1-]	VOC	4	4	1	0	0				0	0			1700	WQCC-9	1	0
Dichloropropene[cis-1,3-]	VOC	6	6	1	0	0				0	0			1700	WQCC-9	1	0
Dichloropropene[trans-1,3-]	VOC	6	6	1	0	0				0	0			1700	WQCC-9	1	0
Ethylbenzene	VOC	6	6	1	0	0				0	0			29000	WQCC-9	1	0
Hexanone[2-]	VOC	4	4	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	4	4	1	0	0				0	0			4000	WQCC-9	1	0
Isopropylbenzene	VOC	4	4	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	4	4	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	4	4	1	0	0				0	0			160	EPA-4	1	0
Propylbenzene[1-]	VOC	4	4	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	4	4	1	0	0				0	0			1600	EPA-4	1	0
Tetrachloroethane[1,1,1,2-]	VOC	3	3	1	0	0				2	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	6	6	1	0	0				0	0			110	WQCC-9	1	0
Tetrachloroethene	VOC	6	6	1	0	0				0	0			88.5	WQCC-9	1	0
Toluene	VOC	6	6	1	0	0				0	0			200000	WQCC-9	1	0
Trichloro-1,2,2-trifluoroethane	VOC	1	1	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	5	5	1	0	0				0	0			940	WQCC-9	1	0
Trichloroethane[1,1,1-]	VOC	6	6	1	0	0				0	0			790	EPA-4	1	0
Trichloroethane[1,1,2-]	VOC	6	6	1	0	0				0	0			420	WQCC-9	1	0
Trichloroethene	VOC	6	6	1	0	0				0	0			810	WQCC-9	1	0
Trichlorofluoromethane	VOC	6	6	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	4	4	1	0	0				4	0			0.016	EPA-4	1	1
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	4	4	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	4	4	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	6	6	1	0	0				0	0			5250	WQCC-9	1	0
Xylene (Total)	VOC	3	3	1	0	0				0	0			1400	EPA-4	1	0

Table B-193 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Xylene[1,2-]	VOC	2	2	1	0	0				0	0			1400	EPA-4	1	0
Xylene[1,3-]+Xylene[1,4-]	VOC	2	2	1	0	0				0	0			1400	EPA-4	1	0
Chloromethane	VOC	6	5	0.8333	1	0.1667	0.79	0.79	0.79	0	0	0.05267	0.05267	15	EPA-4	1	0
Methylene Chloride	VOC	6	5	0.8333	1	0.1667	1	1	1	0	0	6.25E-05	6.25E-05	16000	WQCC-9	1	0
Bis(2-ethylhexyl)phthalate	SVOC	5	4	0.8	1	0.2	3	3	3	0	0	0.05085	0.05085	59	WQCC-9	1	0
Acetone	VOC	3	2	0.6667	1	0.3333	25	25	25	0	0	0.04098	0.04098	610	EPA-4	1	0

Table B-194
Nonfiltered Miscellaneous Constituents of Ancho Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	1	1	1	0	0											
Chloride	ANION	8	0	0	8	1	2290	2930	6100								
Fluoride	ANION	8	0	0	8	1	300	385	420	0	0	0.175	0.1909	2200	EPA-4	2	0
Nitrate	ANION	8	4	0.5	4	0.5	20	40	170	0	0	0.004	0.017	10000	EPA-4	2	0
Perchlorate	ANION	3	3	1	0	0				0	0			3.7	EPA-4	1	0
Sulfate	ANION	8	0	0	8	1	2070	3200	5800								
Calcium	GENINORG	2	0	0	2	1	13400	13450	13500								
Hardness	GENINORG	2	0	0	2	1	46500	47000	47500								
Magnesium	GENINORG	2	0	0	2	1	3250	3325	3400								
Potassium	GENINORG	2	0	0	2	1	1200	1800	2400								
Sodium	GENINORG	2	0	0	2	1	10350	10720	11100								
pH	WATER_QUAL	3	0	0	3	1	9.1	9.25	9.4								
Specific Conductance	WATER_QUAL	3	0	0	3	1	130	137	143								
Suspended Sediment Concentration	WATER_QUAL	1	0	0	1	1	12800	12800	12800								
Total Suspended Solids	WATER_QUAL	6	1	0.1667	5	0.8333	1000	2000	20000								

Table B-195
Filtered Inorganics of Chaquehui Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	5	5	1	0	0				1	0			87	WQCC-6	1	1
AluminumRe	METALS	5	5	1	0	0				0	0			5000	WQCC-4	1	0
Antimony	METALS	4	3	0.75	1	0.25	1.63	1.63	1.63	1	0	0.2717	0.2717	6	EPA-2	1	1
Arsenic	METALS	4	4	1	0	0				1	0			10	EPA-2	1	0
Barium	METALS	5	1	0.2	4	0.8	10	11	16.2	0	0	0.011	0.0162	1000	WQCC-11	1	0
Beryllium	METALS	5	4	0.8	1	0.2	3	3	3	1	0	0.75	0.75	4	EPA-2	1	1
Boron	METALS	5	2	0.4	3	0.6	10	15	23.3	0	0	0.004545	0.007061	3300	EPA-4	1	0
Cadmium	METALS	5	4	0.8	1	0.2	0.386	0.386	0.386	2	0	0.1725	0.1725	2.24	WQCC-6	1	1
CadmiumRe	METALS	5	4	0.8	1	0.2	0.386	0.386	0.386	2	0	0.0772	0.0772	5	EPA-2	1	1
Chromium	METALS	5	3	0.6	2	0.4	2.1	2.4	2.7	0	0	0.048	0.054	50	WQCC-11	1	0
Cobalt	METALS	5	5	1	0	0				0	0			1000	WQCC-4	1	0
Copper	METALS	5	4	0.8	1	0.2	10	10	10	1	1	1.117	1.117	8.96	WQCC-6	1	1
CopperRe	METALS	5	4	0.8	1	0.2	10	10	10	0	0	0.02	0.02	500	WQCC-4	1	0
Iron	METALS	5	4	0.8	1	0.2	40	40	40	0	0	0.04	0.04	1000	WQCC-12	1	0
Lead	METALS	4	4	1	0	0				1	0			2.52	WQCC-6	1	1
LeadRe	METALS	4	4	1	0	0				0	0			15	EPA-2	1	0
Lithium	METALS	1	0	0	1	1	20	20	20	0	0	0.0274	0.0274	730	EPA-4	1	0
Manganese	METALS	5	3	0.6	2	0.4	1.6	8.15	14.7	0	0	0.04075	0.0735	200	WQCC-12	1	0
Mercury	METALS	4	3	0.75	1	0.25	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	1	0
Molybdenum	METALS	3	3	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	5	4	0.8	1	0.2	1.1	1.1	1.1	0	0	0.02115	0.02115	52.01	WQCC-6	1	0
NickelRe	METALS	5	4	0.8	1	0.2	1.1	1.1	1.1	0	0	0.011	0.011	100	EPA-2	1	0
Selenium	METALS	4	4	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	4	4	1	0	0				0	0			50	WQCC-4	1	0
Silver	METALS	5	5	1	0	0				2	0			3.45	WQCC-2	1	1
SilverRe	METALS	5	5	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	3	0	0	3	1	50	51	60	0	0	0.002318	0.002727	22000	EPA-4	1	0
Thallium	METALS	4	3	0.75	1	0.25	0.501	0.501	0.501	1	0	0.2505	0.2505	2	EPA-2	1	1
Tin	METALS	3	2	0.6667	1	0.3333	20	20	20	0	0	0.0009091	0.0009091	22000	EPA-4	1	0
Uranium	URANIUM	2	0	0	2	1	0.31	0.4145	0.519	0	0	0.01382	0.0173	30	EPA-2	1	0
Vanadium	METALS	5	1	0.2	4	0.8	5.75	8.25	9.6	0	0	0.0825	0.096	100	WQCC-4	1	0
Zinc	METALS	5	2	0.4	3	0.6	2.6	3.8	20	0	0	0.03243	0.1707	117.19	WQCC-2	1	0
ZincRe	METALS	5	2	0.4	3	0.6	2.6	3.8	20	0	0	0.00038	0.002	10000	WQCC-12	1	0

Table B-196
Filtered Miscellaneous Constituents of Chaquehui Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	5	0	0	5	1	9000	10000	12300								
Hardness	GENINORG	2	0	0	2	1	38700	42050	45400								
Magnesium	GENINORG	5	0	0	5	1	2600	2948	3310								
pH	WATER_QUAL	4	0	0	4	1	7	7.995	8								
Potassium	GENINORG	5	0	0	5	1	1273	1600	2000								
Sodium	GENINORG	5	0	0	5	1	9000	10000	12500								
Specific Conductance	WATER_QUAL	5	0	0	5	1	101	124	140								
Total Dissolved Solids	WATER_QUAL	5	0	0	5	1	77000	124000	150000	0	0	0.124	0.15	1000000	WQCC-12	1	0
Total Suspended Solids	WATER_QUAL	1	1	1	0	0											

Table B-197
Nonfiltered Inorganics of Chaquehui Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	1	1	1	0	0				0	0			37000	EPA-4	1	0
Antimony	METALS	1	1	1	0	0				0	0			6	EPA-2	1	0
Arsenic	METALS	1	0	0	1	1	3	3	3	0	1	6.667	6.667	0.45	EPA-4	1	0
Barium	METALS	1	0	0	1	1	19	19	19	0	0	0.019	0.019	1000	WQCC-11	1	0
Beryllium	METALS	1	1	1	0	0				0	0			4	EPA-2	1	0
Boron	METALS	1	0	0	1	1	45	45	45	0	0	0.01364	0.01364	3300	EPA-4	1	0
Cadmium	METALS	1	1	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Cobalt	METALS	1	1	1	0	0											
Copper	METALS	1	1	1	0	0				0	0			1000	WQCC-12	1	0
Cyanide (Total)	CN	3	2	0.6667	1	0.3333	10	10	10	1	1	1.923	1.923	5.2	WQCC-7	1	1
Cyanide (Total)Re	CN	3	2	0.6667	1	0.3333	10	10	10	0	0	0.05	0.05	200	WQCC-11	1	0
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	1	1	1	0	0				0	0			1000	WQCC-12	1	0
Lead	METALS	1	1	1	0	0				0	0			15	EPA-2	1	0
Manganese	METALS	1	1	1	0	0				0	0			200	WQCC-12	1	0
Mercury	METALS	1	1	1	0	0				1	0			0.012	WQCC-7	1	1
MercuryRe	METALS	1	1	1	0	0				0	0			0.77	WQCC-8	1	0
Molybdenum	METALS	1	1	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	1	1	1	0	0				0	0			100	EPA-2	1	0
Selenium	METALS	1	1	1	0	0				1	0			5	WQCC-8	1	1
Silver	METALS	1	1	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	1	0	0	1	1	71	71	71	0	0	0.003227	0.003227	22000	EPA-4	1	0
Thallium	METALS	1	1	1	0	0				1	0			2	EPA-2	1	1
Tin	METALS	1	1	1	0	0				0	0			22000	EPA-4	1	0
Vanadium	METALS	1	0	0	1	1	10	10	10	0	0	0.03846	0.03846	260	EPA-4	1	0
Zinc	METALS	1	1	1	0	0				0	0			10000	WQCC-12	1	0

Table B-198
Nonfiltered Radionuclides of Chaquehui Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Tritium	rad	3	0	0	3	1	1.149	1.469	1.692	0	0	7.35E-05	8.46E-05	20000	EPA-2	1	0

Table B-199
Nonfiltered Miscellaneous Constituents of Chaquehui Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	2	1	0.5	1	0.5	1100	1100	1100								
Bromide	ANION	2	2	1	0	0											
Chloride	ANION	6	1	0.1667	5	0.8333	1830	2100	6200	0	0	0.0084	0.0248	250000	WQCC-12	1	0
Fluoride	ANION	6	1	0.1667	5	0.8333	390	500	560	0	0	0.3125	0.35	1600	WQCC-11	1	0
Nitrate	ANION	5	1	0.2	4	0.8	40	170	300	0	0	0.017	0.03	10000	EPA-4	1	0
Perchlorate	ANION	2	1	0.5	1	0.5	13.6	13.6	13.6	0	1	3.676	3.676	3.7	EPA-4	1	0
Sulfate	ANION	6	1	0.1667	5	0.8333	1750	2100	3200	0	0	0.0035	0.005333	600000	WQCC-12	1	0
Calcium	GENINORG	1	0	0	1	1	13600	13600	13600								
Hardness	GENINORG	1	0	0	1	1	49800	49800	49800								
Magnesium	GENINORG	1	0	0	1	1	3600	3600	3600								
Potassium	GENINORG	1	0	0	1	1	1100	1100	1100								
Sodium	GENINORG	1	0	0	1	1	12200	12200	12200								
Deuterium Ratio	STABLE_ISOTOPES	3	0	0	3	1	-81	-80	-79								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-1.9	0.35	2.6								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	3	0	0	3	1	-11	-10.9	-10.9								
pH	WATER_QUAL	1	0	0	1	1	8	8	8								
Specific Conductance	WATER_QUAL	1	0	0	1	1	150	150	150								
Total Suspended Solids	WATER_QUAL	3	0	0	3	1	1400	4000	4620								

Table B-200
Filtered Inorganics of Frijoles Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	6	5	0.8333	1	0.1667	460	460	460	2	1	5.287	5.287	87	WQCC-6	3	2
AluminumRe	METALS	6	5	0.8333	1	0.1667	460	460	460	0	0	0.092	0.092	5000	WQCC-4	3	0
Antimony	METALS	4	4	1	0	0				0	0			6	EPA-2	2	0
Arsenic	METALS	5	4	0.8	1	0.2	4	4	4	1	0	0.4	0.4	10	EPA-2	3	0
Barium	METALS	6	1	0.1667	5	0.8333	17.3	61.7	110	0	0	0.0617	0.11	1000	WQCC-11	3	0
Beryllium	METALS	5	3	0.6	2	0.4	0.05	1.525	3	0	0	0.3813	0.75	4	EPA-2	2	0
Boron	METALS	6	5	0.8333	1	0.1667	28.1	28.1	28.1	0	0	0.008515	0.008515	3300	EPA-4	3	0
Cadmium	METALS	5	5	1	0	0				1	0			2.24	WQCC-6	2	1
CadmiumRe	METALS	5	5	1	0	0				1	0			5	EPA-2	2	1
Chromium	METALS	5	4	0.8	1	0.2	0.5	0.5	0.5	0	0	0.01	0.01	50	WQCC-11	2	0
Cobalt	METALS	5	3	0.6	2	0.4	0.66	2.08	3.5	0	0	0.00208	0.0035	1000	WQCC-4	2	0
Copper	METALS	5	4	0.8	1	0.2	0.64	0.64	0.64	2	0	0.07146	0.07146	8.96	WQCC-6	2	1
CopperRe	METALS	5	4	0.8	1	0.2	0.64	0.64	0.64	0	0	0.00128	0.00128	500	WQCC-4	2	0
Iron	METALS	6	3	0.5	3	0.5	40	130	140	0	0	0.13	0.14	1000	WQCC-12	3	0
Lead	METALS	4	4	1	0	0				1	0			2.52	WQCC-6	2	1
LeadRe	METALS	4	4	1	0	0				0	0			15	EPA-2	2	0
Manganese	METALS	6	2	0.3333	4	0.6667	5	8.35	358	0	1	0.04175	1.79	200	WQCC-12	3	0
Mercury	METALS	4	4	1	0	0				0	0			2	WQCC-11	2	0
Molybdenum	METALS	3	2	0.6667	1	0.3333	4	4	4	0	0	0.02222	0.02222	180	EPA-4	1	0
Nickel	METALS	5	4	0.8	1	0.2	1.3	1.3	1.3	0	0	0.025	0.025	52.01	WQCC-6	2	0
NickelRe	METALS	5	4	0.8	1	0.2	1.3	1.3	1.3	0	0	0.013	0.013	100	EPA-2	2	0
Selenium	METALS	4	3	0.75	1	0.25	6.05	6.05	6.05	0	0	0.605	0.605	10	EPA-1	2	0
SeleniumRe	METALS	4	3	0.75	1	0.25	6.05	6.05	6.05	0	0	0.121	0.121	50	WQCC-4	2	0
Silver	METALS	5	4	0.8	1	0.2	0.81	0.81	0.81	2	0	0.2348	0.2348	3.45	WQCC-2	2	1
SilverRe	METALS	5	4	0.8	1	0.2	0.81	0.81	0.81	0	0	0.0162	0.0162	50	WQCC-11	2	0
Strontium	METALS	4	0	0	4	1	60	66.05	130	0	0	0.003002	0.005909	22000	EPA-4	2	0
Thallium	METALS	4	4	1	0	0				1	0			2	EPA-2	2	1
Tin	METALS	3	2	0.6667	1	0.3333	30	30	30	0	0	0.001364	0.001364	22000	EPA-4	1	0
Uranium	URANIUM	4	0	0	4	1	0.151	0.4431	1.01	0	0	0.01477	0.03367	30	EPA-2	2	0
Vanadium	METALS	5	0	0	5	1	3.1	9	10	0	0	0.09	0.1	100	WQCC-4	2	0
Zinc	METALS	5	3	0.6	2	0.4	1	1.5	2	0	0	0.0128	0.01707	117.19	WQCC-2	2	0
ZincRe	METALS	5	3	0.6	2	0.4	1	1.5	2	0	0	0.00015	0.0002	10000	WQCC-12	2	0

Table B-201
Filtered Radionuclides of Frijoles Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	3	3	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	3	3	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	2	2	1	0	0				0	0			100	EPA-2	1	0
Gross alpha	rad	2	2	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	2	2	1	0	0				0	0			50	EPA-2	1	0
Gross gamma	rad	1	1	1	0	0											
Plutonium-238	rad	3	3	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	3	3	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	3	3	1	0	0				0	0			8	EPA-2	1	0
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0
Uranium-234	rad	1	0	0	1	1	0.427	0.427	0.427	0	0	0.02135	0.02135	20	DOE	1	0
Uranium-235	rad	1	1	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	1	0	0	1	1	0.257	0.257	0.257	0	0	0.01071	0.01071	24	DOE	1	0

Table B-202
Filtered Miscellaneous Constituents of Frijoles Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	4	0	0	4	1	11000	15000	23600								
Hardness	GENINORG	2	0	0	2	1	45900	60450	75000								
Magnesium	GENINORG	4	0	0	4	1	2658	4150	6100								
Potassium	GENINORG	4	0	0	4	1	1337	3065	5500								
Sodium	GENINORG	4	0	0	4	1	8500	11680	36000								
pH	WATER_QUAL	1	0	0	1	1	7.94	7.94	7.94								
Specific Conductance	WATER_QUAL	2	0	0	2	1	144	148	152								
Total Dissolved Solids	WATER_QUAL	3	0	0	3	1	150000	166000	183000	0	0	0.166	0.183	1000000	WQCC-12	1	0

Table B-203
Nonfiltered Inorganics of Frijoles Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Cyanide (Total)	CN	3	2	0.6667	1	0.3333	10	10	10	1	1	1.923	1.923	5.2	WQCC-7	1	1
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Cyanide (Total)Re	CN	3	2	0.6667	1	0.3333	10	10	10	0	0	0.05	0.05	200	WQCC-11	1	0

Table B-204
Nonfiltered Radionuclides of Frijoles Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Gross alpha	rad	1	1	1	0	0				0	0			15	EPA-2	1	0
Gross beta	rad	1	1	1	0	0				0	0			50	EPA-2	1	0
Tritium	rad	4	2	0.5	2	0.5	33.53	34.96	36.4	0	0	0.001748	0.00182	20000	WQCC-5	2	0

Table B-205
Nonfiltered Organics of Frijoles Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Amino-2,6-dinitrotoluene[4-]	HEXP	3	3	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	3	3	1	0	0											
Dinitrobenzene[1,3-]	HEXP	3	3	1	0	0				0	0			3.65	EPA-4	1	0
HMX	HEXP	3	3	1	0	0				0	0			1825	EPA-4	1	0
Nitrotoluene[2-]	HEXP	3	3	1	0	0											
Nitrotoluene[3-]	HEXP	3	3	1	0	0				0	0			60.83	EPA-4	1	0
Nitrotoluene[4-]	HEXP	3	3	1	0	0				0	0			60.83	EPA-4	1	0
RDX	HEXP	3	3	1	0	0				0	0			0.61	EPA-4	1	0
Tetryl	HEXP	3	3	1	0	0				0	0			365	EPA-4	1	0
Trinitrobenzene[1,3,5-]	HEXP	1	1	1	0	0				0	0			1095	EPA-4	1	0
Trinitrotoluene[2,4,6-]	HEXP	3	3	1	0	0				0	0			18.25	EPA-4	1	0
Acenaphthene	PAH	2	2	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	PAH	2	2	1	0	0				0	0			370	EPA-4	1	0
Anthracene	PAH	2	2	1	0	0				0	0			1800	EPA-4	1	0
Benzo(a)anthracene	PAH	2	2	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	PAH	2	2	1	0	0				1	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	PAH	2	2	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	PAH	2	2	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	PAH	2	2	1	0	0				1	0			0.49	WQCC-9	1	1
Chrysene	PAH	2	2	1	0	0				1	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	PAH	2	2	1	0	0				2	0			0.09	EPA-4	1	1
Fluoranthene	PAH	2	2	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	PAH	2	2	1	0	0				0	0			240	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	PAH	2	2	1	0	0				1	0			0.49	WQCC-9	1	1
Naphthalene	PAH	2	2	1	0	0				1	0			6.2	EPA-4	1	1
Phenanthrene	PAH	2	2	1	0	0				0	0			1800	EPA-4	1	0
Pyrene	PAH	2	2	1	0	0				0	0			180	EPA-4	1	0
Aroclor-1016	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	1	1
Aroclor-1262	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	1	0
Azobenzene	SVOC	1	1	1	0	0				1	0			6.1	EPA-4	1	1
Benzidine	SVOC	2	2	1	0	0				2	0			0.0029	EPA-4	1	1
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	1	0

Table B-205 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	2	2	1	0	0				2	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	1	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				1	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	3	3	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	3	3	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			0.01	WQCC-9	1	1
Hexachlorobutadiene	SVOC	2	2	1	0	0				1	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	1	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				1	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	1	1	1	0	0											
Nitroaniline[2-]	SVOC	2	2	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	2	2	1	0	0				1	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	2	2	1	0	0				1	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	3	3	1	0	0				1	0			3.4	EPA-4	1	1
Nitrophenol[2-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	1	1

Table B-205 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	1	1
Phenol	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				1	0			5	WQCC-12	1	1
Benzene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Bromobenzene	VOC	1	1	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Bromodichloromethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	2	2	1	0	0				1	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	1	1	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Chlorobenzene	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	2	2	1	0	0				0	0			39	EPA-4	1	0
Chloroform	VOC	2	2	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	2	2	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	1	1	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	1	1	1	0	0											
Dibromoethane[1,2-]	VOC	1	1	1	0	0				1	0			0.0076	EPA-4	1	1
Dibromomethane	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	2	2	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	2	2	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	2	2	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	1	1	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	2	2	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	2	2	1	0	0				1	0			5	WQCC-11	1	0
Dichloroethene[cis-1,2-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0

Table B-205 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichloropropane[1,3-]	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	1	1	1	0	0				1	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	1	1	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	2	2	1	0	0				1	0			4	EPA-4	1	1
Ethylbenzene	VOC	2	2	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	1	1	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	1	1	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	1	1	1	0	0				0	0			660	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	1	1	1	0	0				0	0			160	EPA-4	1	0
Methylene Chloride	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Propylbenzene[1-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	1	1	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	1	1	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	2	2	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Toluene	VOC	2	2	1	0	0				0	0			750	WQCC-11	1	0
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	1	0
Trichloroethane[1,1,1-]	VOC	2	2	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Trichloroethene	VOC	2	2	1	0	0				1	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	2	2	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	1	1	1	0	0				1	0			0.02	EPA-4	1	1
Trimethylbenzene[1,2,4-]	VOC	1	1	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	1	1	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	2	2	1	0	0				1	0			1	WQCC-11	1	1
Xylene (Total)	VOC	1	1	1	0	0				0	0			620	WQCC-11	1	0

Table B-206
Nonfiltered Miscellaneous Constituents of Frijoles Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	2	2	1	0	0											
Chloride	ANION	5	0	0	5	1	2210	5500	71300	0	0	0.022	0.2852	250000	WQCC-12	2	0
Fluoride	ANION	5	1	0.2	4	0.8	127	445	529	0	0	0.2781	0.3306	1600	WQCC-11	2	0
Nitrate	ANION	5	0	0	5	1	320	390	600	0	0	0.039	0.06	10000	EPA-4	2	0
Perchlorate	ANION	2	1	0.5	1	0.5	12.3	12.3	12.3	0	1	3.324	3.324	3.7	EPA-4	2	0
Sulfate	ANION	5	0	0	5	1	2020	3900	5600	0	0	0.0065	0.009333	600000	WQCC-12	2	0
Calcium	GENINORG	1	0	0	1	1	14800	14800	14800								
Hardness	GENINORG	1	0	0	1	1	49100	49100	49100								
Magnesium	GENINORG	1	0	0	1	1	3000	3000	3000								
Potassium	GENINORG	1	0	0	1	1	400	400	400								
Sodium	GENINORG	1	0	0	1	1	10900	10900	10900								
Deuterium Ratio	STABLE_ISOTOPES	2	0	0	2	1	-89	-88.5	-88								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	1	0	0	1	1	-1.4	-1.4	-1.4								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-12.2	-12.05	-11.9								
pH	WATER_QUAL	1	0	0	1	1	8	8	8								
Specific Conductance	WATER_QUAL	1	0	0	1	1	161	161	161								
Total Suspended Solids	WATER_QUAL	3	1	0.3333	2	0.6667	86000	718000	1350000								

Table B-207
Filtered Inorganics of Frijoles Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	10	5	0.5	5	0.5	15.6	116	178	2	3	1.333	2.046	87	WQCC-6	4	2
AluminumRe	METALS	10	5	0.5	5	0.5	15.6	116	178	0	0	0.0232	0.0356	5000	WQCC-4	4	0
Antimony	METALS	9	8	0.8889	1	0.1111	3	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	4	0
Arsenic	METALS	10	10	1	0	0				0	0			24.2	WQCC-9	4	0
Barium	METALS	10	2	0.2	8	0.8	12	16.7	21.4	0	0	0.006423	0.008231	2600	EPA-4	4	0
Beryllium	METALS	10	9	0.9	1	0.1	3	3	3	0	0	0.566	0.566	5.3	WQCC-6	4	0
BerylliumRe	METALS	10	9	0.9	1	0.1	3	3	3	0	0	0.0411	0.0411	73	EPA-4	4	0
Boron	METALS	10	9	0.9	1	0.1	33.25	33.25	33.25	0	0	0.00665	0.00665	5000	WQCC-4	4	0
Cadmium	METALS	10	10	1	0	0				5	0			2.237972728	WQCC-6	4	4
CadmiumRe	METALS	10	10	1	0	0				0	0			50.00	WQCC-4	4	0
Chromium	METALS	10	10	1	0	0				0	0			74.11621856	WQCC-6	4	0
ChromiumRe	METALS	10	10	1	0	0				0	0			1000	WQCC-4	4	0
Cobalt	METALS	10	10	1	0	0				0	0			1000	WQCC-4	4	0
Copper	METALS	10	10	1	0	0				4	0			8.96	WQCC-6	4	4
CopperRe	METALS	10	10	1	0	0				0	0			500	WQCC-4	4	0
Cyanide (Total)	CN	2	1	0.5	1	0.5	10	10	10								
Iron	METALS	10	2	0.2	8	0.8	61.05	89.5	200	0	0	0.008136	0.01818	11000	EPA-4	4	0
Lead	METALS	10	10	1	0	0				6	0			2.52	WQCC-6	4	4
LeadRe	METALS	10	10	1	0	0				0	0			100	WQCC-4	4	0
Lithium	METALS	2	1	0.5	1	0.5	20	20	20	0	0	0.0274	0.0274	730	EPA-4	2	0
Manganese	METALS	10	5	0.5	5	0.5	3.3	12.1	16.9	0	0	0.007118	0.009941	1700	EPA-4	4	0
Mercury	METALS	5	3	0.6	2	0.4	0.2	0.2	0.2	0	0	0.01818	0.01818	11	EPA-4	2	0
Molybdenum	METALS	10	10	1	0	0				0	0			180	EPA-4	4	0
Nickel	METALS	10	10	1	0	0				0	0			52.01	WQCC-6	4	0
NickelRe	METALS	10	10	1	0	0				0	0			4600	WQCC-9	4	0
Selenium	METALS	5	5	1	0	0				0	0			50	WQCC-4	3	0
Silver	METALS	10	10	1	0	0				5	0			3.45	WQCC-2	4	4
SilverRe	METALS	10	10	1	0	0				0	0			180	EPA-4	4	0
Strontium	METALS	10	0	0	10	1	50	56.35	210	0	0	0.002561	0.009545	22000	EPA-4	4	0
Thallium	METALS	10	9	0.9	1	0.1	3	3	3	2	0	0.4762	0.4762	6.3	WQCC-9	4	2
Tin	METALS	10	9	0.9	1	0.1	10	10	10	0	0	0.0004545	0.0004545	22000	EPA-4	4	0
Titanium	METALS	2	2	1	0	0											
Vanadium	METALS	10	10	1	0	0				0	0			100	WQCC-4	4	0
Zinc	METALS	10	9	0.9	1	0.1	20	20	20	0	0	0.1707	0.1707	117.19	WQCC-2	4	0
ZincRe	METALS	10	9	0.9	1	0.1	20	20	20	0	0	0.0008	0.0008	25000	WQCC-4	4	0

Table B-208
Filtered Radionuclides of Frijoles Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Gross alpha	rad	2	2	1	0	0											
Gross beta	rad	2	2	1	0	0											
Strontium-90	rad	1	1	1	0	0				0	0			40	DOE	1	0

Table B-209
Filtered Miscellaneous Constituents of Frijoles Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	11	0	0	11	1	7600	9350	24000								
Hardness	GENINORG	6	0	0	6	1	30400	34000	40000								
Magnesium	GENINORG	11	0	0	11	1	2568	3000	4000								
Potassium	GENINORG	11	0	0	11	1	1758	2000	2450								
Sodium	GENINORG	11	0	0	11	1	9000	10000	11800								
pH	WATER_QUAL	6	0	0	6	1	7	7.645	8.12								
Specific Conductance	WATER_QUAL	8	0	0	8	1	96	109.5	198								
Total Dissolved Solids	WATER_QUAL	16	0	0	16	1	78000	131500	181600								
Total Suspended Solids	WATER_QUAL	1	1	1	0	0											

Table B-210
Nonfiltered Inorganics of Frijoles Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	5	2	0.4	3	0.6	150	340	1230	0	0	0.009189	0.03324	37000	EPA-4	2	0
Antimony	METALS	5	5	1	0	0				0	0			15	EPA-4	2	0
Arsenic	METALS	5	5	1	0	0				5	0			0.45	EPA-4	2	2
Barium	METALS	5	1	0.2	4	0.8	16	19	27	0	0	0.007308	0.01038	2600	EPA-4	2	0
Beryllium	METALS	5	5	1	0	0				0	0			73	EPA-4	2	0
Boron	METALS	5	3	0.6	2	0.4	17	17	17	0	0	0.005152	0.005152	3300	EPA-4	2	0
Cadmium	METALS	5	5	1	0	0				0	0			18	EPA-4	2	0
Chromium	METALS	5	4	0.8	1	0.2	6	6	6	0	0	0.0001091	0.0001091	55000	EPA-4	2	0
Cobalt	METALS	5	5	1	0	0											
Copper	METALS	5	4	0.8	1	0.2	13	13	13	0	0	0.009286	0.009286	1400	EPA-4	2	0
Cyanide (Total)	CN	10	9	0.9	1	0.1	10	10	10	5	1	1.923	1.923	5.2	WQCC-7	2	2
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	5	2	0.4	3	0.6	180	270	730	0	0	0.02455	0.06636	11000	EPA-4	2	0
Lead	METALS	5	5	1	0	0											
Lithium	METALS	3	0	0	3	1	10	16	23	0	0	0.02192	0.03151	730	EPA-4	2	0
Manganese	METALS	5	2	0.4	3	0.6	2	6	20	0	0	0.003529	0.01176	1700	EPA-4	2	0
Mercury	METALS	13	6	0.4615	7	0.5385	0.2	0.2	0.2	6	7	16.67	16.67	0.012	WQCC-7	4	2
MercuryRe	METALS	13	6	0.4615	7	0.5385	0.2	0.2	0.2	0	0	0.2597	0.2597	0.77	WQCC-8	4	0
Molybdenum	METALS	5	4	0.8	1	0.2	13	13	13	0	0	0.07222	0.07222	180	EPA-4	2	0
Nickel	METALS	5	5	1	0	0				0	0			730	EPA-4	2	0
Selenium	METALS	12	10	0.8333	2	0.1667	3	4.31	5.62	2	1	0.862	1.124	5	WQCC-8	3	0
Silver	METALS	5	5	1	0	0				0	0			180	EPA-4	2	0
Strontium	METALS	5	1	0.2	4	0.8	50	59	60	0	0	0.002682	0.002727	22000	EPA-4	2	0
Thallium	METALS	5	5	1	0	0											
Tin	METALS	5	4	0.8	1	0.2	35	35	35	0	0	0.001591	0.001591	22000	EPA-4	2	0
Uranium	METALS	8	5	0.625	3	0.375	0.2	0.3862	0.4								
Vanadium	METALS	5	2	0.4	3	0.6	4	11	13	0	0	0.04231	0.05	260	EPA-4	2	0
Zinc	METALS	5	4	0.8	1	0.2	42	42	42	0	0	0.003818	0.003818	11000	EPA-4	2	0

Table B-211
Nonfiltered Radionuclides of Frijoles Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	12	9	0.75	3	0.25	0.0214	0.171	0.172	0	0	0.1425	0.1433	1.2	DOE	2	0
Cesium-137	rad	12	12	1	0	0				0	0			120	DOE	2	0
Cobalt-60	rad	7	6	0.8571	1	0.1429	12.4	12.4	12.4	0	0	0.062	0.062	200	DOE	2	0
Gross alpha	rad	12	11	0.9167	1	0.08333	5.533	5.533	5.533								
Gross beta	rad	12	8	0.6667	4	0.3333	1.87	3.792	7.248								
Gross gamma	rad	3	3	1	0	0											
Plutonium-238	rad	12	12	1	0	0				0	0			1.6	DOE	2	0
Plutonium-239	rad	12	11	0.9167	1	0.08333	0.039	0.039	0.039	0	0	0.0325	0.0325	1.2	DOE	2	0
Radium-226	rad	1	0	0	1	1	0.548	0.548	0.548								
Strontium-90	rad	12	12	1	0	0				0	0			40	DOE	2	0
Thorium-228	rad	1	1	1	0	0											
Thorium-230	rad	1	1	1	0	0											
Thorium-232	rad	1	1	1	0	0											
Tritium	rad	12	12	1	0	0				0	0			20000	WQCC-5	2	0
Uranium-234	rad	4	1	0.25	3	0.75	0.0664	0.0903	0.1092	0	0	0.004515	0.00546	20	DOE	2	0
Uranium-235	rad	4	4	1	0	0				0	0			24	DOE	2	0
Uranium-238	rad	4	2	0.5	2	0.5	0.0611	0.0709	0.0807	0	0	0.002954	0.003363	24	DOE	2	0

Table B-212
Nonfiltered Organics of Frijoles Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	6	5	0.8333	1	0.1667	25	25	25	0	0	0.04098	0.04098	610	EPA-4	2	0
Trinitrotoluene[2,4,6-]	HEXP	7	6	0.8571	1	0.1429	1.442	1.442	1.442	1	0	0.07901	0.07901	18.25	EPA-4	2	1
Methylene Chloride	VOC	7	6	0.8571	1	0.1429	0.99	0.99	0.99	0	0	6.19E-05	6.19E-05	16000	WQCC-9	2	0
Bis(2-ethylhexyl)phthalate	SVOC	10	9	0.9	1	0.1	8	8	8	0	0	0.1356	0.1356	59	WQCC-9	2	0
Dinitrotoluene[2,4-]	SVOC	10	9	0.9	1	0.1	3.443	3.443	3.443	0	0	0.03784	0.03784	91	WQCC-9	2	0
Di-n-octylphthalate	SVOC	10	9	0.9	1	0.1	8	8	8	0	0	0.01096	0.01096	730	EPA-4	2	0
Bromomethane	VOC	10	9	0.9	1	0.1	2.1	2.1	2.1	0	0	0.000525	0.000525	4000	WQCC-9	2	0
Chloromethane	VOC	10	9	0.9	1	0.1	0.45	0.45	0.45	0	0	0.03	0.03	15	EPA-4	2	0
Amino-2,6-dinitrotoluene[4-]	HEXP	7	7	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	7	7	1	0	0											
Dinitrobenzene[1,3-]	HEXP	7	7	1	0	0				0	0			3.65	EPA-4	2	0
HMX	HEXP	7	7	1	0	0				0	0			1825	EPA-4	2	0
Nitrotoluene[2-]	HEXP	7	7	1	0	0											
Nitrotoluene[3-]	HEXP	7	7	1	0	0				0	0			60.83	EPA-4	2	0
Nitrotoluene[4-]	HEXP	7	7	1	0	0				0	0			60.83	EPA-4	2	0
RDX	HEXP	7	7	1	0	0				1	0			0.61	EPA-4	2	1
Tetryl	HEXP	7	7	1	0	0				0	0			365	EPA-4	2	0
Trinitrobenzene[1,3,5-]	HEXP	4	4	1	0	0				0	0			1095	EPA-4	2	0
Acenaphthene	PAH	10	10	1	0	0				0	0			2700	WQCC-9	2	0
Acenaphthylene	PAH	10	10	1	0	0				0	0			2700	WQCC-9	2	0
Anthracene	PAH	10	10	1	0	0				0	0			110000	WQCC-9	2	0
Benzo(a)anthracene	PAH	10	10	1	0	0				8	0			0.49	WQCC-9	2	2
Benzo(a)pyrene	PAH	10	10	1	0	0				8	0			0.49	WQCC-9	2	2
Benzo(b)fluoranthene	PAH	10	10	1	0	0				8	0			0.49	WQCC-9	2	2
Benzo(g,h,i)perylene	PAH	10	10	1	0	0				0	0			11000	WQCC-9	2	0
Benzo(k)fluoranthene	PAH	9	9	1	0	0				7	0			0.49	WQCC-9	2	2
Chrysene	PAH	10	10	1	0	0				8	0			0.49	WQCC-9	2	2
Dibenz(a,h)anthracene	PAH	10	10	1	0	0				8	0			0.49	WQCC-9	2	2
Fluoranthene	PAH	10	10	1	0	0				0	0			370	WQCC-9	2	0
Fluorene	PAH	10	10	1	0	0				0	0			14000	WQCC-9	2	0
Indeno(1,2,3-cd)pyrene	PAH	10	10	1	0	0				8	0			0.49	WQCC-9	2	2
Naphthalene	PAH	10	10	1	0	0				6	0			6.2	EPA-4	2	2
Phenanthrene	PAH	10	10	1	0	0				0	0			110000	WQCC-9	2	0
Pyrene	PAH	10	10	1	0	0				0	0			11000	WQCC-9	2	0
Aroclor-1016	PCB	7	7	1	0	0				7	0			0.0017	WQCC-9	2	2
Aroclor-1221	PCB	7	7	1	0	0				7	0			0.0017	WQCC-9	2	2
Aroclor-1232	PCB	7	7	1	0	0				7	0			0.0017	WQCC-9	2	2
Aroclor-1242	PCB	11	11	1	0	0				11	0			0.0017	WQCC-9	2	2
Aroclor-1248	PCB	7	7	1	0	0				7	0			0.0017	WQCC-9	2	2

Table B-212 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1254	PCB	11	11	1	0	0				11	0			0.0017	WQCC-9	2	2
Aroclor-1260	PCB	11	11	1	0	0				11	0			0.0017	WQCC-9	2	2
Aroclor-1262	PCB	4	4	1	0	0				4	0			0.0017	WQCC-9	2	2
PentachlorophenolRe	PEST	10	10	1	0	0				0	0			82	WQCC-9	2	0
Aniline	SVOC	10	10	1	0	0				0	0			120	EPA-4	2	0
Azobenzene	SVOC	6	6	1	0	0				6	0			6.1	EPA-4	2	2
Benzidine	SVOC	10	10	1	0	0				10	0			0.01	WQCC-9	2	2
Benzoic Acid	SVOC	10	10	1	0	0				0	0			150000	EPA-4	2	0
Benzyl Alcohol	SVOC	10	10	1	0	0				0	0			11000	EPA-4	2	0
Bis(2-chloroethoxy)methane	SVOC	10	10	1	0	0											
Bis(2-chloroethyl)ether	SVOC	10	10	1	0	0				0	0			14	WQCC-9	2	0
Bromophenyl-phenylether[4-]	SVOC	10	10	1	0	0											
Butylbenzylphthalate	SVOC	10	10	1	0	0				0	0			5200	WQCC-9	2	0
Carbazole	SVOC	1	1	1	0	0				0	0			34	EPA-4	1	0
Chloro-3-methylphenol[4-]	SVOC	10	10	1	0	0											
Chloroaniline[4-]	SVOC	10	10	1	0	0				0	0			150	EPA-4	2	0
Chloronaphthalene[2-]	SVOC	10	10	1	0	0				0	0			4300	WQCC-9	2	0
Chlorophenol[2-]	SVOC	10	10	1	0	0				0	0			400	WQCC-9	2	0
Chlorophenyl-phenyl[4-] Ether	SVOC	10	10	1	0	0											
Dibenzofuran	SVOC	10	10	1	0	0				2	0			24	EPA-4	2	2
Dichlorobenzidine[3,3'-]	SVOC	10	10	1	0	0				8	0			0.77	WQCC-9	2	2
Dichlorophenol[2,4-]	SVOC	10	10	1	0	0				0	0			790	WQCC-9	2	0
Diethylphthalate	SVOC	10	10	1	0	0				0	0			120000	WQCC-9	2	0
Dimethyl Phthalate	SVOC	10	10	1	0	0				0	0			2900000	WQCC-9	2	0
Dimethylphenol[2,4-]	SVOC	10	10	1	0	0				0	0			2300	WQCC-9	2	0
Di-n-butylphthalate	SVOC	10	10	1	0	0				0	0			12000	WQCC-9	2	0
Dinitro-2-methylphenol[4,6-]	SVOC	10	10	1	0	0				0	0			765	WQCC-9	2	0
Dinitrophenol[2,4-]	SVOC	10	10	1	0	0				0	0			14000	WQCC-9	2	0
Dinitrotoluene[2,6-]	SVOC	10	10	1	0	0				0	0			37	EPA-4	2	0
Diphenylamine	SVOC	4	4	1	0	0				0	0			910	EPA-4	2	0
Diphenylhydrazine[1,2-]	SVOC	4	4	1	0	0											
Hexachlorobenzene	SVOC	10	10	1	0	0				10	0			0.0077	WQCC-9	2	2
Hexachlorobutadiene	SVOC	10	10	1	0	0				0	0			500	WQCC-9	2	0
Hexachlorocyclopentadiene	SVOC	10	10	1	0	0				0	0			17000	WQCC-9	2	0
Hexachloroethane	SVOC	10	10	1	0	0				0	0			89	WQCC-9	2	0
Isophorone	SVOC	10	10	1	0	0				0	0			26000	WQCC-9	2	0
Methylnaphthalene[2-]	SVOC	10	10	1	0	0				6	0			6.2	EPA-4	2	2
Methylphenol[2-]	SVOC	10	10	1	0	0				0	0			1800	EPA-4	2	0
Methylphenol[4-]	SVOC	10	10	1	0	0				0	0			180	EPA-4	2	0

Table B-212 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Methylpyridine[2-]	SVOC	6	6	1	0	0											
Nitroaniline[2-]	SVOC	10	10	1	0	0				8	0			2.2	EPA-4	2	2
Nitroaniline[3-]	SVOC	10	10	1	0	0				8	0			2.2	EPA-4	2	2
Nitroaniline[4-]	SVOC	10	10	1	0	0				8	0			2.2	EPA-4	2	2
Nitrobenzene	SVOC	10	10	1	0	0				0	0			1900	WQCC-9	2	0
Nitrophenol[2-]	SVOC	10	10	1	0	0				0	0			290	EPA-4	2	0
Nitrophenol[4-]	SVOC	10	10	1	0	0				0	0			290	EPA-4	2	0
Nitrosodimethylamine[N-]	SVOC	10	10	1	0	0				0	0			81	WQCC-9	2	0
Nitroso-di-n-propylamine[N-]	SVOC	10	10	1	0	0				0	0			14	WQCC-9	2	0
Nitrosodiphenylamine[N-]	SVOC	6	6	1	0	0				0	0			160	WQCC-9	2	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	4	4	1	0	0				0	0			170000	WQCC-9	2	0
Pentachlorophenol	SVOC	10	10	1	0	0				4	0			15	WQCC-7	2	2
Phenol	SVOC	10	10	1	0	0				0	0			4600000	WQCC-9	2	0
Pyridine	SVOC	8	8	1	0	0				0	0			37	EPA-4	2	0
Trichlorophenol[2,4,5-]	SVOC	10	10	1	0	0				0	0			3700	EPA-4	2	0
Trichlorophenol[2,4,6-]	SVOC	10	10	1	0	0				0	0			65	WQCC-9	2	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	10	10	1	0	0				0	0			710	WQCC-9	2	0
Bromobenzene	VOC	7	7	1	0	0				0	0			23	EPA-4	2	0
Bromochloromethane	VOC	7	7	1	0	0				0	0			16000	WQCC-9	2	0
Bromodichloromethane	VOC	10	10	1	0	0				0	0			460	WQCC-9	2	0
Bromoform	VOC	10	10	1	0	0				0	0			3600	WQCC-9	2	0
Butanone[2-]	VOC	7	7	1	0	0				0	0			1900	EPA-4	2	0
Butylbenzene[n-]	VOC	7	7	1	0	0				0	0			61	EPA-4	2	0
Butylbenzene[sec-]	VOC	7	7	1	0	0				0	0			61	EPA-4	2	0
Butylbenzene[tert-]	VOC	7	7	1	0	0				0	0			61	EPA-4	2	0
Carbon Disulfide	VOC	7	7	1	0	0				0	0			1000	EPA-4	2	0
Carbon Tetrachloride	VOC	10	10	1	0	0				0	0			44	WQCC-9	2	0
Chlorobenzene	VOC	10	10	1	0	0				0	0			21000	WQCC-9	2	0
Chlorodibromomethane	VOC	10	10	1	0	0				0	0			340	WQCC-9	2	0
Chloroethane	VOC	10	10	1	0	0				0	0			39	EPA-4	2	0
Chloroethyl vinyl ether[2-]	VOC	2	2	1	0	0											
Chloroform	VOC	10	10	1	0	0				0	0			4700	WQCC-9	2	0
Chlorotoluene[2-]	VOC	7	7	1	0	0				0	0			120	EPA-4	2	0
Chlorotoluene[4-]	VOC	7	7	1	0	0				0	0			120	EPA-4	2	0
Dibromo-3-Chloropropane[1,2-]	VOC	7	7	1	0	0											
Dibromoethane[1,2-]	VOC	7	7	1	0	0				7	0			0.01	EPA-4	2	2
Dibromomethane	VOC	7	7	1	0	0				0	0			61	EPA-4	2	0

Table B-212 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzene[1,2-]	VOC	11	11	1	0	0				0	0			17000	WQCC-9	2	0
Dichlorobenzene[1,3-]	VOC	11	11	1	0	0				0	0			2600	WQCC-9	2	0
Dichlorobenzene[1,4-]	VOC	11	11	1	0	0				0	0			2600	WQCC-9	2	0
Dichlorodifluoromethane	VOC	7	7	1	0	0				0	0			390	EPA-4	2	0
Dichloroethane[1,1-]	VOC	10	10	1	0	0				0	0			810	EPA-4	2	0
Dichloroethane[1,2-]	VOC	10	10	1	0	0				0	0			990	WQCC-9	2	0
Dichloroethene[1,1-]	VOC	10	10	1	0	0				0	0			32	WQCC-9	2	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											
Dichloroethene[cis-1,2-]	VOC	5	5	1	0	0				0	0			61	EPA-4	2	0
Dichloroethene[trans-1,2-]	VOC	10	10	1	0	0				0	0			140000	WQCC-9	2	0
Dichloropropane[1,2-]	VOC	10	10	1	0	0				0	0			390	WQCC-9	2	0
Dichloropropane[1,3-]	VOC	7	7	1	0	0				0	0			390	WQCC-9	2	0
Dichloropropane[2,2-]	VOC	7	7	1	0	0				0	0			390	WQCC-9	2	0
Dichloropropene[1,1-]	VOC	7	7	1	0	0				0	0			1700	WQCC-9	2	0
Dichloropropene[cis-1,3-]	VOC	10	10	1	0	0				0	0			1700	WQCC-9	2	0
Dichloropropene[trans-1,3-]	VOC	9	9	1	0	0				0	0			1700	WQCC-9	2	0
Ethylbenzene	VOC	10	10	1	0	0				0	0			29000	WQCC-9	2	0
Hexanone[2-]	VOC	7	7	1	0	0				0	0			1900	EPA-4	2	0
Iodomethane	VOC	7	7	1	0	0				0	0			4000	WQCC-9	2	0
Isopropylbenzene	VOC	7	7	1	0	0				0	0			660	EPA-4	2	0
Isopropyltoluene[4-]	VOC	7	7	1	0	0				0	0			660	EPA-4	2	0
Methyl-2-pentanone[4-]	VOC	7	7	1	0	0				0	0			160	EPA-4	2	0
Propylbenzene[1-]	VOC	7	7	1	0	0				0	0			61	EPA-4	2	0
Styrene	VOC	7	7	1	0	0				0	0			1600	EPA-4	2	0
Tetrachloroethane[1,1,1,2-]	VOC	6	6	1	0	0				5	0			4.3	EPA-4	2	2
Tetrachloroethane[1,1,2,2-]	VOC	10	10	1	0	0				0	0			110	WQCC-9	2	0
Tetrachloroethene	VOC	10	10	1	0	0				0	0			88.5	WQCC-9	2	0
Toluene	VOC	10	10	1	0	0				0	0			200000	WQCC-9	2	0
Trichloro-1,2,2-trifluoroethane	VOC	2	2	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	1	1	1	0	0				0	0			940	WQCC-9	1	0
Trichlorobenzene[1,2,4-]	VOC	10	10	1	0	0				0	0			940	WQCC-9	2	0
Trichloroethane[1,1,1-]	VOC	10	10	1	0	0				0	0			790	EPA-4	2	0
Trichloroethane[1,1,2-]	VOC	10	10	1	0	0				0	0			420	WQCC-9	2	0
Trichloroethene	VOC	10	10	1	0	0				0	0			810	WQCC-9	2	0
Trichlorofluoromethane	VOC	10	10	1	0	0				0	0			1300	EPA-4	2	0
Trichloropropane[1,2,3-]	VOC	7	7	1	0	0				7	0			0.02	EPA-4	2	2
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	7	7	1	0	0				0	0			12	EPA-4	2	0
Trimethylbenzene[1,3,5-]	VOC	7	7	1	0	0				0	0			12	EPA-4	2	0

Table B-212 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Vinyl Chloride	VOC	10	10	1	0	0				0	0			5250	WQCC-9	2	0
Xylene (Total)	VOC	5	5	1	0	0				0	0			1400	EPA-4	2	0
Xylene[1,2-]	VOC	3	3	1	0	0				0	0			1400	EPA-4	2	0
Xylene[1,3-]+Xylene[1,4-]	VOC	3	3	1	0	0				0	0			1400	EPA-4	2	0

Table B-213
Nonfiltered Miscellaneous Constituents of Frijoles Watershed Base Flow

Unfiltered WGA Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	2	2	1	0	0											
Bromide	ANION	1	1	1	0	0											
Chloride	ANION	16	0	0	16	1	1880	3700	6200								
Fluoride	ANION	16	1	0.0625	15	0.9375	100	200	315	0	0	0.09091	0.1432	2200	EPA-4	5	0
Nitrate	ANION	15	2	0.1333	13	0.8667	10	50	600	0	0	0.005	0.06	10000	EPA-4	5	0
Nitrite	ANION	1	1	1	0	0				0	0			1000	EPA-4	1	0
Perchlorate	ANION	4	4	1	0	0				0	0			3.7	EPA-4	2	0
Sulfate	ANION	16	0	0	16	1	1410	3100	36000								
Calcium	GENINORG	5	1	0.2	4	0.8	8500	11100	808000								
Hardness	GENINORG	5	1	0.2	4	0.8	34700	35100	47000								
Magnesium	GENINORG	5	1	0.2	4	0.8	3000	3200	3500								
Potassium	GENINORG	5	1	0.2	4	0.8	600	1550	2600								
Sodium	GENINORG	5	1	0.2	4	0.8	7900	9800	12000								
pH	WATER_QUAL	7	0	0	7	1	7.4	8	8.4								
Specific Conductance	WATER_QUAL	7	0	0	7	1	108	115	360								
Suspended Sediment Concentration	WATER_QUAL	1	0	0	1	1	6600	6600	6600								
Total Suspended Solids	WATER_QUAL	11	1	0.09091	10	0.9091	2000	12350	371000								

Table B-214
Filtered Inorganics of Guaje Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	8	4	0.5	4	0.5	50	59.5	140	0	0	0.001608	0.003784	37000	EPA-4	4	0
Antimony	METALS	8	0	0	8	1	3	3	4	0	0	0.5	0.6667	6	EPA-2	4	0
Arsenic	METALS	8	8	1	0	0				0	0			10	EPA-2	4	0
Barium	METALS	8	0	0	8	1	6	9.333	15	0	0	0.009333	0.015	1000	WQCC-11	4	0
Beryllium	METALS	8	2	0.25	6	0.75	3	3	3	0	0	0.75	0.75	4	EPA-2	4	0
Boron	METALS	8	1	0.125	7	0.875	27.25	31	52	0	0	0.009394	0.01576	3300	EPA-4	4	0
Cadmium	METALS	8	6	0.75	2	0.25	7	7	7	6	2	1.4	1.4	5	EPA-2	4	3
Chromium	METALS	8	6	0.75	2	0.25	7	7	7	0	0	0.14	0.14	50	WQCC-11	4	0
Cobalt	METALS	8	4	0.5	4	0.5	8	8	8								
Copper	METALS	8	6	0.75	2	0.25	10	12.33	14.67	0	0	0.01233	0.01467	1000	WQCC-12	4	0
Iron	METALS	8	0	0	8	1	40	249.2	1300	0	1	0.2492	1.3	1000	WQCC-12	4	0
Lead	METALS	8	5	0.625	3	0.375	4	4.5	7	0	0	0.3	0.4667	15	EPA-2	4	0
Manganese	METALS	8	0	0	8	1	25.67	43.25	66.67	0	0	0.2162	0.3334	200	WQCC-12	4	0
Molybdenum	METALS	8	6	0.75	2	0.25	30	30	30	0	0	0.1667	0.1667	180	EPA-4	4	0
Nickel	METALS	8	6	0.75	2	0.25	20	20	20	0	0	0.2	0.2	100	EPA-2	4	0
Silver	METALS	8	6	0.75	2	0.25	10	10	10	0	0	0.2	0.2	50	WQCC-11	4	0
Strontium	METALS	8	0	0	8	1	63.2	76	102.5	0	0	0.003455	0.004659	22000	EPA-4	4	0
Thallium	METALS	8	1	0.125	7	0.875	3	3	3	1	7	1.5	1.5	2	EPA-2	4	1
Tin	METALS	8	6	0.75	2	0.25	30	30	30	0	0	0.001364	0.001364	22000	EPA-4	4	0
Uranium	URANIUM	8	0	0	8	1	0.5552	0.88	1.061	0	0	0.02933	0.03537	30	EPA-2	4	0
Vanadium	METALS	8	0	0	8	1	9	14.5	18	0	0	0.05577	0.06923	260	EPA-4	4	0
Zinc	METALS	8	5	0.625	3	0.375	50	66	80	0	0	0.0066	0.008	10000	WQCC-12	4	0

Table B-215
Filtered Radionuclides of Guaje Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	8	8	1	0	0				0	0			1.2	DOE	4	0
Cesium-137	rad	8	8	1	0	0				0	0			120	DOE	4	0
Cobalt-60	rad	8	4	0.5	4	0.5	29.8	32.67	45.71	0	0	0.3267	0.4571	100	EPA-2	4	0
Gross alpha	rad	8	8	1	0	0				0	0			15	EPA-2	4	0
Gross beta	rad	8	8	1	0	0				0	0			50	EPA-2	4	0
Gross gamma	rad	8	8	1	0	0											
Plutonium-238	rad	8	8	1	0	0				0	0			1.6	DOE	4	0
Plutonium-239	rad	8	8	1	0	0				0	0			1.2	DOE	4	0
Strontium-90	rad	8	8	1	0	0				0	0			8	EPA-2	4	0

Table B-216
Filtered Miscellaneous Constituents of Guaje Watershed Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	8	0	0	8	1	12600	15860	18670								
Hardness	GENINORG	8	0	0	8	1	35860	52440	62830								
Magnesium	GENINORG	8	0	0	8	1	1083	3052	3933								
Potassium	GENINORG	8	0	0	8	1	1000	1817	2760								
Sodium	GENINORG	8	0	0	8	1	12670	14560	18970								
Specific Conductance	WATER_QUAL	18	0	0	18	1	149	164.8	208								
Total Dissolved Solids	WATER_QUAL	44	0	0	44	1	79000	148000	294000	0	0	0.148	0.294	1000000	WQCC-12	10	0
pH	WATER_QUAL	16	0	0	16	1	7	8	8.522								

Table B-217
Nonfiltered Inorganics of Guaje Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	24	16	0.6667	8	0.3333	50	65.5	165	0	0	0.00177	0.004459	37000	EPA-4	10	0
Antimony	METALS	28	21	0.75	7	0.25	3	3	3	3	0	0.5	0.5	6	EPA-2	10	3
Arsenic	METALS	26	5	0.1923	21	0.8077	2	12	52	0	13	1.2	5.2	10	EPA-2	10	0
Barium	METALS	28	4	0.1429	24	0.8571	5	17.55	69	0	0	0.01755	0.069	1000	WQCC-11	10	0
Beryllium	METALS	28	22	0.7857	6	0.2143	3	3	6	0	1	0.75	1.5	4	EPA-2	10	0
Boron	METALS	24	10	0.4167	14	0.5833	12	35.65	247	0	0	0.0108	0.07485	3300	EPA-4	10	0
Cadmium	METALS	28	24	0.8571	4	0.1429	7	7	17	10	4	1.4	3.4	5	EPA-2	10	7
Chromium	METALS	29	18	0.6207	11	0.3793	2	7	29	0	0	0.14	0.58	50	WQCC-11	10	0
Cobalt	METALS	25	18	0.72	7	0.28	7	8	38								
Copper	METALS	25	20	0.8	5	0.2	6	10	31	0	0	0.01	0.031	1000	WQCC-12	10	0
Cyanide (Total)	CN	55	33	0.6	22	0.4	2.1	10	30	0	0	0.05	0.15	200	WQCC-11	10	0
Iron	METALS	24	14	0.5833	10	0.4167	40	43.5	378	0	0	0.0435	0.378	1000	WQCC-12	10	0
Lead	METALS	26	24	0.9231	2	0.07692	7	8	9	6	0	0.5333	0.6	15	EPA-2	10	6
Lithium	METALS	4	0	0	4	1	24	28.75	36	0	0	0.03938	0.04932	730	EPA-4	4	0
Manganese	METALS	25	19	0.76	6	0.24	2	2	45	0	0	0.01	0.225	200	WQCC-12	10	0
Mercury	METALS	28	11	0.3929	17	0.6071	0.2	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	10	0
Molybdenum	METALS	24	19	0.7917	5	0.2083	30	30	30	0	0	0.1667	0.1667	180	EPA-4	10	0
Nickel	METALS	28	24	0.8571	4	0.1429	20	20.5	22	0	0	0.205	0.22	100	EPA-2	10	0
Selenium	METALS	34	31	0.9118	3	0.08824	1.7	2.3	24	0	1	0.23	2.4	10	EPA-1	10	0
SeleniumRe	METALS	34	31	0.9118	3	0.08824	1.7	2.3	24	0	0	0.046	0.48	50	WQCC-11	10	0
Silver	METALS	25	15	0.6	10	0.4	3	10	56	0	3	0.2	1.12	50	WQCC-11	10	0
Strontium	METALS	24	0	0	24	1	50	75.25	101.5	0	0	0.00342	0.004614	22000	EPA-4	10	0
Thallium	METALS	28	20	0.7143	8	0.2857	3	3	6	16	8	1.5	3	2	EPA-2	10	8
Tin	METALS	24	23	0.9583	1	0.04167	34	34	34	0	0	0.001545	0.001545	22000	EPA-4	10	0
Uranium	URANIUM	35	2	0.05714	33	0.9429	0.39	0.7012	5.851	0	0	0.02337	0.195	30	EPA-2	10	0
Vanadium	METALS	24	1	0.04167	23	0.9583	11	35	118	0	0	0.1346	0.4538	260	EPA-4	10	0
Zinc	METALS	24	19	0.7917	5	0.2083	28	50	50	0	0	0.005	0.005	10000	WQCC-12	10	0

Table B-218
Nonfiltered Radionuclides of Guaje Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	48	42	0.875	6	0.125	0.0152	0.06405	0.099	0	0	0.05338	0.0825	1.2	DOE	10	0
Cesium-137	rad	48	48	1	0	0				0	0			120	DOE	10	0
Cobalt-60	rad	39	29	0.7436	10	0.2564	12.8	28.75	68.5	0	0	0.2875	0.685	100	EPA-2	10	0
Gross alpha	rad	48	46	0.9583	2	0.04167	1.38	1.43	1.48	0	0	0.09533	0.09867	15	EPA-2	10	0
Gross beta	rad	48	38	0.7917	10	0.2083	2.92	3.97	6.6	0	0	0.0794	0.132	50	EPA-2	10	0
Gross gamma	rad	30	29	0.9667	1	0.03333	176.5	176.5	176.5								
Plutonium-238	rad	50	49	0.98	1	0.02	0.00922	0.00922	0.00922	0	0	0.005762	0.005762	1.6	DOE	10	0
Plutonium-239	rad	49	49	1	0	0				0	0			1.2	DOE	10	0
Radium-226	rad	5	5	1	0	0											
Strontium-90	rad	79	77	0.9747	2	0.02532	3.9	4.55	5.2	0	0	0.5688	0.65	8	EPA-2	10	0
Thorium-228	rad	5	5	1	0	0											
Thorium-230	rad	5	5	1	0	0											
Thorium-232	rad	5	5	1	0	0											
Tritium	rad	59	59	1	0	0				0	0			20000	EPA-2	10	0
Uranium-234	rad	16	0	0	16	1	0.2447	0.445	0.594	0	0	0.02225	0.0297	20	DOE	5	0
Uranium-235	rad	16	15	0.9375	1	0.0625	0.0235	0.0235	0.0235	0	0	0.0009792	0.0009792	24	DOE	5	0
Uranium-238	rad	16	0	0	16	1	0.135	0.2355	0.346	0	0	0.009812	0.01442	24	DOE	5	0

Table B-219
Nonfiltered Organics of Guaje Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitrobenzene	SVOC	31	28	0.9032	3	0.09677	0.13	0.14	0.17	2	0	0.04118	0.05	3.4	EPA-4	8	2
Amino-2,6-dinitrotoluene[4-]	HEXP	29	29	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	29	29	1	0	0											
Dinitrobenzene[1,3-]	HEXP	29	29	1	0	0				0	0			3.65	EPA-4	8	0
HMX	HEXP	29	29	1	0	0				0	0			1825	EPA-4	8	0
Nitrotoluene[2-]	HEXP	29	29	1	0	0											
Nitrotoluene[3-]	HEXP	29	29	1	0	0				0	0			60.83	EPA-4	8	0
Nitrotoluene[4-]	HEXP	29	29	1	0	0				0	0			60.83	EPA-4	8	0
RDX	HEXP	29	29	1	0	0				11	0			0.61	EPA-4	8	8
Tetryl	HEXP	29	29	1	0	0				0	0			365	EPA-4	8	0
Trinitrobenzene[1,3,5-]	HEXP	21	21	1	0	0				0	0			1095	EPA-4	5	0
Trinitrotoluene[2,4,6-]	HEXP	29	29	1	0	0				0	0			18.25	EPA-4	8	0
Acenaphthene	PAH	2	2	1	0	0				0	0			370	EPA-4	2	0
Acenaphthylene	PAH	2	2	1	0	0				0	0			370	EPA-4	2	0
Anthracene	PAH	2	2	1	0	0				0	0			1800	EPA-4	2	0
Benzo(a)anthracene	PAH	2	2	1	0	0				2	0			0.92	EPA-4	2	2
Benzo(a)pyrene	PAH	2	2	1	0	0				2	0			0.2	EPA-2	2	2
Benzo(b)fluoranthene	PAH	2	2	1	0	0				2	0			0.92	EPA-4	2	2
Benzo(g,h,i)perylene	PAH	2	2	1	0	0				0	0			180	EPA-4	2	0
Benzo(k)fluoranthene	PAH	2	2	1	0	0				2	0			9.2	EPA-4	2	2
Chrysene	PAH	2	2	1	0	0				0	0			92	EPA-4	2	0
Dibenz(a,h)anthracene	PAH	2	2	1	0	0				2	0			0.09	EPA-4	2	2
Fluoranthene	PAH	2	2	1	0	0				0	0			1500	EPA-4	2	0
Fluorene	PAH	2	2	1	0	0				0	0			240	EPA-4	2	0
Indeno(1,2,3-cd)pyrene	PAH	2	2	1	0	0				2	0			0.92	EPA-4	2	2
Naphthalene	PAH	2	2	1	0	0				0	0			30	WQCC-11	2	0
Phenanthrene	PAH	2	2	1	0	0				0	0			1800	EPA-4	2	0
Pyrene	PAH	2	2	1	0	0				0	0			180	EPA-4	2	0
Aroclor-1016	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1221	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1232	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1242	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1248	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1254	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1260	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aroclor-1262	PCB	2	2	1	0	0				2	0			0.5	EPA-2	2	0
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Azobenzene	SVOC	2	2	1	0	0				2	0			6.1	EPA-4	2	2
Benzidine	SVOC	2	2	1	0	0				2	0			0.0029	EPA-4	2	2

Table B-219 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzoic Acid	SVOC	2	2	1	0	0				0	0			150000	EPA-4	2	0
Benzyl Alcohol	SVOC	2	2	1	0	0				0	0			11000	EPA-4	2	0
Bis(2-chloroethoxy)methane	SVOC	2	2	1	0	0											
Bis(2-chloroethyl)ether	SVOC	2	2	1	0	0				2	0			0.098	EPA-4	2	2
Bis(2-ethylhexyl)phthalate	SVOC	2	2	1	0	0				2	0			6	EPA-2	2	2
Bromophenyl-phenylether[4-]	SVOC	2	2	1	0	0											
Butylbenzylphthalate	SVOC	2	2	1	0	0				0	0			7300	EPA-4	2	0
Chloro-3-methylphenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Chloroaniline[4-]	SVOC	2	2	1	0	0				0	0			150	EPA-4	2	0
Chloronaphthalene[2-]	SVOC	2	2	1	0	0				0	0			490	EPA-4	2	0
Chlorophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Chlorophenyl-phenyl[4-] Ether	SVOC	2	2	1	0	0											
Dibenzofuran	SVOC	2	2	1	0	0				0	0			24	EPA-4	2	0
Dichlorobenzidine[3,3'-]	SVOC	2	2	1	0	0				2	0			1.5	EPA-4	2	2
Dichlorophenol[2,4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Diethylphthalate	SVOC	2	2	1	0	0				0	0			29000	EPA-4	2	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			370000	EPA-4	2	0
Dimethylphenol[2,4-]	SVOC	2	2	1	0	0				0	0			730	EPA-4	2	0
Di-n-butylphthalate	SVOC	2	2	1	0	0				0	0			3700	EPA-4	2	0
Dinitro-2-methylphenol[4,6-]	SVOC	2	2	1	0	0											
Dinitrophenol[2,4-]	SVOC	2	2	1	0	0				0	0			73	EPA-4	2	0
Dinitrotoluene[2,4-]	SVOC	31	31	1	0	0				0	0			73	EPA-4	8	0
Dinitrotoluene[2,6-]	SVOC	31	31	1	0	0				0	0			37	EPA-4	8	0
Di-n-octylphthalate	SVOC	2	2	1	0	0				0	0			730	EPA-4	2	0
Hexachlorobenzene	SVOC	2	2	1	0	0				2	0			1	EPA-2	2	2
Hexachlorobutadiene	SVOC	2	2	1	0	0				2	0			7.3	EPA-4	2	2
Hexachlorocyclopentadiene	SVOC	2	2	1	0	0				0	0			50	EPA-2	2	0
Hexachloroethane	SVOC	2	2	1	0	0				0	0			37	EPA-4	2	0
Isophorone	SVOC	2	2	1	0	0				0	0			710	EPA-4	2	0
Methylnaphthalene[2-]	SVOC	2	2	1	0	0				0	0			30	WQCC-11	2	0
Methylphenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	2	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
Nitroaniline[2-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	2	2
Nitroaniline[3-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	2	2
Nitroaniline[4-]	SVOC	2	2	1	0	0				2	0			2.2	EPA-4	2	2
Nitrophenol[2-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Nitrophenol[4-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				2	0			0.013	EPA-4	2	2

Table B-219 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroso-di-n-propylamine[N-]	SVOC	2	2	1	0	0				2	0			0.096	EPA-4	2	2
Nitrosodiphenylamine[N-]	SVOC	2	2	1	0	0				0	0			140	EPA-4	2	0
Pentachlorophenol	SVOC	2	2	1	0	0				2	0			1	EPA-2	2	2
Phenol	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	2	0
Trichlorophenol[2,4,5-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Trichlorophenol[2,4,6-]	SVOC	2	2	1	0	0				2	0			5	WQCC-12	2	2
Acetone	VOC	2	2	1	0	0				0	0			610	EPA-4	2	0
Benzene	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Bromobenzene	VOC	2	2	1	0	0				0	0			23	EPA-4	2	0
Bromochloromethane	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Bromodichloromethane	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Bromoform	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Bromomethane	VOC	2	2	1	0	0				2	0			8.7	EPA-4	2	2
Butanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	2	0
Butylbenzene[n-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Butylbenzene[sec-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Butylbenzene[tert-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Carbon Disulfide	VOC	2	2	1	0	0				0	0			1000	EPA-4	2	0
Carbon Tetrachloride	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Chlorobenzene	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Chlorodibromomethane	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Chloroethane	VOC	2	2	1	0	0				0	0			39	EPA-4	2	0
Chloroform	VOC	1	1	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	2	2	1	0	0				0	0			15	EPA-4	2	0
Chlorotoluene[2-]	VOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Chlorotoluene[4-]	VOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Dibromo-3-Chloropropane[1,2-]	VOC	2	2	1	0	0											
Dibromoethane[1,2-]	VOC	2	2	1	0	0				2	0			0.05	EPA-2	2	2
Dibromomethane	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Dichlorobenzene[1,2-]	VOC	2	2	1	0	0				0	0			600	EPA-2	2	0
Dichlorobenzene[1,3-]	VOC	2	2	1	0	0				0	0			18	EPA-4	2	0
Dichlorobenzene[1,4-]	VOC	2	2	1	0	0				0	0			75	EPA-2	2	0
Dichlorodifluoromethane	VOC	2	2	1	0	0				0	0			390	EPA-4	2	0
Dichloroethane[1,1-]	VOC	2	2	1	0	0				0	0			25	WQCC-11	2	0
Dichloroethane[1,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloroethene[1,1-]	VOC	2	2	1	0	0				2	0			5	WQCC-11	2	0
Dichloroethene[cis-1,2-]	VOC	2	2	1	0	0				0	0			70	EPA-2	2	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0

Table B-219 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichloropropane[1,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloropropane[1,3-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloropropane[2,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Dichloropropene[1,1-]	VOC	2	2	1	0	0				2	0			4	EPA-4	2	2
Dichloropropene[cis-1,3-]	VOC	2	2	1	0	0				2	0			4	EPA-4	2	2
Dichloropropene[trans-1,3-]	VOC	2	2	1	0	0				2	0			4	EPA-4	2	2
Ethylbenzene	VOC	2	2	1	0	0				0	0			700	EPA-2	2	0
Hexanone[2-]	VOC	2	2	1	0	0				0	0			1900	EPA-4	2	0
Iodomethane	VOC	2	2	1	0	0				0	0			8.7	EPA-4	2	0
Isopropylbenzene	VOC	2	2	1	0	0				0	0			660	EPA-4	2	0
Isopropyltoluene[4-]	VOC	2	2	1	0	0				0	0			660	EPA-4	2	0
Methyl-2-pentanone[4-]	VOC	2	2	1	0	0				0	0			160	EPA-4	2	0
Methylene Chloride	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Propylbenzene[1-]	VOC	2	2	1	0	0				0	0			61	EPA-4	2	0
Styrene	VOC	2	2	1	0	0				0	0			100	EPA-2	2	0
Tetrachloroethane[1,1,1,2-]	VOC	2	2	1	0	0				2	0			4.3	EPA-4	2	2
Tetrachloroethane[1,1,2,2-]	VOC	2	2	1	0	0				0	0			10	WQCC-11	2	0
Tetrachloroethene	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Toluene	VOC	2	2	1	0	0				0	0			750	WQCC-11	2	0
Trichloro-1,2,2-trifluoroethane	VOC	2	2	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			70	EPA-2	2	0
Trichloroethane[1,1,1-]	VOC	2	2	1	0	0				0	0			60	WQCC-11	2	0
Trichloroethane[1,1,2-]	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Trichloroethene	VOC	2	2	1	0	0				2	0			5	EPA-2	2	0
Trichlorofluoromethane	VOC	2	2	1	0	0				0	0			1300	EPA-4	2	0
Trichloropropane[1,2,3-]	VOC	2	2	1	0	0				2	0			0.02	EPA-4	2	2
Trimethylbenzene[1,2,4-]	VOC	2	2	1	0	0				0	0			12	EPA-4	2	0
Trimethylbenzene[1,3,5-]	VOC	2	2	1	0	0				0	0			12	EPA-4	2	0
Vinyl Chloride	VOC	2	2	1	0	0				2	0			1	WQCC-11	2	2
Xylene (Total)	VOC	2	2	1	0	0				0	0			620	WQCC-11	2	0

Table B-220
Nonfiltered Miscellaneous Constituents of Guaje Watershed Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chloride	ANION	49	0	0	49	1	1980	3360	5000	0	0	0.01344	0.02	250000	WQCC-12	10	0
Fluoride	ANION	55	0	0	55	1	190	345	970	0	0	0.2156	0.6062	1600	WQCC-11	10	0
Nitrate	ANION	57	0	0	57	1	340	480	9900	0	0	0.048	0.99	10000	EPA-4	10	0
Perchlorate	ANION	36	36	1	0	0				4	0			3.7	EPA-4	5	4
Sulfate	ANION	49	0	0	49	1	2880	4200	6000	0	0	0.007	0.01	600000	WQCC-12	10	0
Calcium	GENINORG	44	0	0	44	1	906	12450	18200								
Hardness	GENINORG	44	0	0	44	1	2500	35850	60700								
Magnesium	GENINORG	44	0	0	44	1	50	1059	3700								
Potassium	GENINORG	44	6	0.1364	38	0.8636	1000	2200	3000								
Sodium	GENINORG	44	0	0	44	1	3440	20900	34000								
pH	WATER_QUAL	43	0	0	43	1	6.9	8.26	8.6								
Specific Conductance	WATER_QUAL	43	0	0	43	1	90	164	423								
Suspended Sediment Concentration	WATER_QUAL	5	5	1	0	0											
Total Dissolved Solids	WATER_QUAL	9	0	0	9	1	136000	148000	177000	0	0	0.148	0.177	1000000	WQCC-12	5	0
Total Suspended Solids	WATER_QUAL	43	29	0.6744	14	0.3256	1000	2300	22200								

Table B-221
Filtered Inorganics of Guaje Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	4	4	1	0	0				1	0			87	WQCC-6	1	1
AluminumRe	METALS	4	4	1	0	0				0	0			5000	WQCC-4	1	0
Antimony	METALS	5	4	0.8	1	0.2	3	3	3	0	0	0.5	0.5	6	EPA-2	1	0
Arsenic	METALS	4	2	0.5	2	0.5	3.1	3.39	3.68	0	0	0.339	0.368	10	EPA-2	1	0
Barium	METALS	4	0	0	4	1	76	95.58	110	0	0	0.09558	0.11	1000	WQCC-11	1	0
Beryllium	METALS	5	3	0.6	2	0.4	0.02	0.02	0.02	0	0	0.005	0.005	4	EPA-2	1	0
Boron	METALS	4	1	0.25	3	0.75	18	37	42	0	0	0.01121	0.01273	3300	EPA-4	1	0
Cadmium	METALS	4	4	1	0	0				1	0			2.237972728	WQCC-6	1	1
CadmiumRe	METALS	4	4	1	0	0				0	0			5	EPA-2	1	0
Chromium	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Cobalt	METALS	4	4	1	0	0				0	0			1000	WQCC-4	1	0
Copper	METALS	4	4	1	0	0				0	0			8.955948281	WQCC-6	1	0
CopperRe	METALS	4	4	1	0	0				0	0			500	WQCC-4	1	0
Iron	METALS	4	4	1	0	0				0	0			1000	WQCC-12	1	0
Lead	METALS	5	5	1	0	0				2	0			2.516643724	WQCC-6	1	1
LeadRe	METALS	5	5	1	0	0				1	0			15	EPA-2	1	1
Manganese	METALS	4	1	0.25	3	0.75	4	11	20	0	0	0.055	0.1	200	WQCC-12	1	0
Mercury	METALS	2	2	1	0	0				0	0			2	WQCC-11	1	0
Molybdenum	METALS	2	2	1	0	0				0	0			180	EPA-4	1	0
Nickel	METALS	4	2	0.5	2	0.5	1.1	4.45	7.8	0	0	0.08557	0.15	52.0067739	WQCC-6	1	0
NickelRe	METALS	4	2	0.5	2	0.5	1.1	4.45	7.8	0	0	0.0445	0.078	100	EPA-2	1	0
Selenium	METALS	2	2	1	0	0				0	0			10	EPA-1	1	0
SeleniumRe	METALS	2	2	1	0	0				0	0			50	WQCC-4	1	0
Silver	METALS	4	4	1	0	0				1	0			3.450063787	WQCC-2	1	1
SilverRe	METALS	4	4	1	0	0				0	0			50	WQCC-11	1	0
Strontium	METALS	2	0	0	2	1	435	435	435	0	0	0.01977	0.01977	22000	EPA-4	1	0
Thallium	METALS	5	2	0.4	3	0.6	0.941	1.51	3	1	1	0.755	1.5	2	EPA-2	1	1
Tin	METALS	2	2	1	0	0				0	0			22000	EPA-4	1	0
Uranium	URANIUM	4	0	0	4	1	0.4	1.831	9.1	0	0	0.06103	0.3033	30	EPA-2	1	0
Vanadium	METALS	4	1	0.25	3	0.75	1.6	2.9	9.01	0	0	0.029	0.0901	100	WQCC-4	1	0
Zinc	METALS	4	4	1	0	0				0	0			117.1857987	WQCC-2	1	0
ZincRe	METALS	4	4	1	0	0				0	0			10000	WQCC-12	1	0

Table B-222
Filtered Radionuclides of Guaje Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	5	5	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	5	5	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	5	4	0.8	1	0.2	41.8	41.8	41.8	0	0	0.418	0.418	100	EPA-2	1	0
Gross alpha	rad	5	4	0.8	1	0.2	2.205	2.205	2.205	0	0	0.147	0.147	15	EPA-2	1	0
Gross beta	rad	5	1	0.2	4	0.8	2.55	4.668	14.1	0	0	0.09336	0.282	50	EPA-2	1	0
Gross gamma	rad	2	2	1	0	0											
Plutonium-238	rad	5	5	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	5	5	1	0	0				0	0			1.2	DOE	1	0
Strontium-90	rad	3	3	1	0	0				0	0			8	EPA-2	1	0
Thorium-228		1	1	1	0	0											
Thorium-230		1	0	0	1	1	0.0323	0.0323	0.0323								
Thorium-232		1	1	1	0	0											
Tritium	rad	1	1	1	0	0				0	0			20000	EPA-2	1	0
Uranium-234	rad	4	0	0	4	1	0.854	1.108	3.4	0	0	0.0554	0.17	20	DOE	1	0
Uranium-235	rad	4	2	0.5	2	0.5	0.0566	0.0763	0.096	0	0	0.003179	0.004	24	DOE	1	0
Uranium-238	rad	4	0	0	4	1	0.422	0.5118	2.14	0	0	0.02132	0.08917	24	DOE	1	0

Table B-223
Filtered Miscellaneous Constituents of Guaje Watershed Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	7	0	0	7	1	20000	29980	37700								
Hardness	GENINORG	5	0	0	5	1	71500	81300	101000								
Magnesium	GENINORG	7	1	0.1429	6	0.8571	340	1380	1640								
Potassium	GENINORG	7	0	0	7	1	2107	2580	3800								
Sodium	GENINORG	7	0	0	7	1	19420	22000	22300								
pH	WATER_QUAL	5	0	0	5	1	7	7.68	8.3								
Specific Conductance	WATER_QUAL	5	0	0	5	1	212	224.5	269								
Total Dissolved Solids	WATER_QUAL	9	0	0	9	1	162000	190000	345000	0	0	0.19	0.345	1000000	WQCC-12	2	0
Total Suspended Solids	WATER_QUAL	1	0	0	1	1	11000	11000	11000								

Table B-224
Nonfiltered Inorganics of Guaje Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	5	2	0.4	3	0.6	100	190	417	0	0	0.005135	0.01127	37000	EPA-4	2	0
Antimony	METALS	4	3	0.75	1	0.25	1	1	1	0	0	0.1667	0.1667	6	EPA-2	2	0
Arsenic	METALS	5	2	0.4	3	0.6	2.1	3	5	2	3	6.667	11.11	0.45	EPA-4	2	1
Barium	METALS	5	1	0.2	4	0.8	72.9	93.2	110	0	0	0.0932	0.11	1000	WQCC-11	2	0
Beryllium	METALS	4	3	0.75	1	0.25	13	13	13	0	1	3.25	3.25	4	EPA-2	2	0
Boron	METALS	5	1	0.2	4	0.8	30	41.1	60.6	0	0	0.01245	0.01836	3300	EPA-4	2	0
Cadmium	METALS	4	3	0.75	1	0.25	17	17	17	1	1	3.4	3.4	5	EPA-2	2	1
Chromium	METALS	5	4	0.8	1	0.2	3	3	3	0	0	0.06	0.06	50	WQCC-11	2	0
Cobalt	METALS	4	3	0.75	1	0.25	3	3	3								
Copper	METALS	5	4	0.8	1	0.2	14	14	14	0	0	0.014	0.014	1000	WQCC-12	2	0
Cyanide (Total)	CN	9	7	0.7778	2	0.2222	10	35	60	4	2	6.731	11.54	5.2	WQCC-7	2	2
Cyanide (Total)Re	CN	9	7	0.7778	2	0.2222	10	35	60	0	0	0.175	0.3	200	WQCC-11	2	0
Cyanide, Amenable	CN	1	1	1	0	0				0	0			5.2	WQCC-8	1	0
Iron	METALS	5	2	0.4	3	0.6	104	284	350	0	0	0.284	0.35	1000	WQCC-12	2	0
Lead	METALS	5	4	0.8	1	0.2	4	4	4	0	0	0.2667	0.2667	15	EPA-2	2	0
Lithium	METALS	2	0	0	2	1	30	30	30	0	0	0.0411	0.0411	730	EPA-4	2	0
Manganese	METALS	5	2	0.4	3	0.6	13.4	17	20	0	0	0.085	0.1	200	WQCC-12	2	0
Mercury	METALS	7	2	0.2857	5	0.7143	0.1	0.2	0.2	2	5	16.67	16.67	0.012	WQCC-7	2	1
MercuryRe	METALS	7	2	0.2857	5	0.7143	0.1	0.2	0.2	0	0	0.2597	0.2597	0.77	WQCC-8	2	0
Molybdenum	METALS	5	4	0.8	1	0.2	3	3	3	0	0	0.01667	0.01667	180	EPA-4	2	0
Nickel	METALS	4	3	0.75	1	0.25	13	13	13	0	0	0.13	0.13	100	EPA-2	2	0
Selenium	METALS	7	7	1	0	0				0	0			5	WQCC-8	2	0
Silver	METALS	4	4	1	0	0				0	0			50	WQCC-11	2	0
Strontium	METALS	4	1	0.25	3	0.75	360	464.6	500	0	0	0.02112	0.02273	22000	EPA-4	2	0
Thallium	METALS	4	4	1	0	0				3	0			2	EPA-2	2	1
Tin	METALS	4	4	1	0	0				0	0			22000	EPA-4	2	0
Uranium	URANIUM	4	0	0	4	1	0.32	0.895	2.2	0	0	0.02983	0.07333	30	EPA-2	2	0
Vanadium	METALS	4	1	0.25	3	0.75	6	11	13	0	0	0.04231	0.05	260	EPA-4	2	0
Zinc	METALS	4	3	0.75	1	0.25	150	150	150	0	0	0.015	0.015	10000	WQCC-12	2	0

Table B-225
Nonfiltered Radionuclides of Guaje Watershed Springs

Unfiltered WGS Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	4	3	0.75	1	0.25	0.057	0.057	0.057	0	0	0.0475	0.0475	1.2	DOE	2	0
Cesium-137	rad	4	4	1	0	0				0	0			120	DOE	2	0
Cobalt-60	rad	1	0	0	1	1	11.9	11.9	11.9	0	0	0.119	0.119	100	EPA-2	1	0
Gross alpha	rad	4	4	1	0	0				0	0			15	EPA-2	2	0
Gross beta	rad	4	2	0.5	2	0.5	3.3	6	8.7	0	0	0.12	0.174	50	EPA-2	2	0
Gross gamma	rad	1	1	1	0	0											
Plutonium-238	rad	4	4	1	0	0				0	0			1.6	DOE	2	0
Plutonium-239	rad	4	4	1	0	0				0	0			1.2	DOE	2	0
Strontium-90	rad	4	4	1	0	0				0	0			8	EPA-2	2	0
Tritium	rad	11	9	0.8182	2	0.1818	1.501	5.668	9.834	0	0	0.0002834	0.0004917	20000	WQCC-5	2	0

Table B-226
Nonfiltered Organics of Guaje Watershed Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Pyridine	SVOC	2	1	0.5	1	0.5	4.8	4.8	4.8	0	0	0.1297	0.1297	37	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	4	3	0.75	1	0.25	2	2	2	0	0	0.0125	0.0125	160	EPA-4	1	0
Methylene Chloride	VOC	4	3	0.75	1	0.25	16	16	16	3	1	3.2	3.2	5	EPA-2	1	0
Amino-2,6-dinitrotoluene[4-]	HEXP	2	2	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	2	2	1	0	0											
Dinitrobenzene[1,3-]	HEXP	2	2	1	0	0				0	0			3.65	EPA-4	1	0
HMX	HEXP	2	2	1	0	0				0	0			1825	EPA-4	1	0
Nitrotoluene[2-]	HEXP	2	2	1	0	0											
Nitrotoluene[3-]	HEXP	2	2	1	0	0				0	0			60.83	EPA-4	1	0
Nitrotoluene[4-]	HEXP	2	2	1	0	0				0	0			60.83	EPA-4	1	0
RDX	HEXP	2	2	1	0	0				1	0			0.61	EPA-4	1	1
Tetryl	HEXP	2	2	1	0	0				0	0			365	EPA-4	1	0
Trinitrobenzene[1,3,5-]	HEXP	1	1	1	0	0				0	0			1095	EPA-4	1	0
Trinitrotoluene[2,4,6-]	HEXP	2	2	1	0	0				0	0			18.25	EPA-4	1	0
Acenaphthene	PAH	3	3	1	0	0				0	0			370	EPA-4	1	0
Acenaphthylene	PAH	3	3	1	0	0				0	0			370	EPA-4	1	0
Anthracene	PAH	3	3	1	0	0				0	0			1800	EPA-4	1	0
Benzo(a)anthracene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	PAH	3	3	1	0	0				3	0			0.2	EPA-2	1	1
Benzo(b)fluoranthene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	PAH	3	3	1	0	0				0	0			180	EPA-4	1	0
Benzo(k)fluoranthene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Chrysene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Dibenz(a,h)anthracene	PAH	3	3	1	0	0				3	0			0.092	EPA-4	1	1
Fluoranthene	PAH	3	3	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	PAH	3	3	1	0	0				0	0			240	EPA-4	1	0
Indeno(1,2,3-cd)pyrene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	1	1
Naphthalene	PAH	3	3	1	0	0				2	0			6.2	EPA-4	1	1
Phenanthrene	PAH	3	3	1	0	0				0	0			1800	EPA-4	1	0
Pyrene	PAH	3	3	1	0	0				0	0			180	EPA-4	1	0
Aroclor-1016	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1

Table B-226 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aroclor-1260	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	1	1
Aroclor-1262	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aniline	SVOC	3	3	1	0	0				0	0			120	EPA-4	1	0
Azobenzene	SVOC	2	2	1	0	0				2	0			6.1	EPA-4	1	1
Benzidine	SVOC	3	3	1	0	0				3	0			0.0029	EPA-4	1	1
Benzoic Acid	SVOC	3	3	1	0	0				0	0			150000	EPA-4	1	0
Benzyl Alcohol	SVOC	3	3	1	0	0				0	0			11000	EPA-4	1	0
Bis(2-chloroethoxy)methane	SVOC	3	3	1	0	0											
Bis(2-chloroethyl)ether	SVOC	3	3	1	0	0				3	0			0.098	EPA-4	1	1
Bis(2-ethylhexyl)phthalate	SVOC	3	3	1	0	0				3	0			6	EPA-2	1	1
Bromophenyl-phenylether[4-]	SVOC	3	3	1	0	0											
Butylbenzylphthalate	SVOC	3	3	1	0	0				0	0			5200	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Chloroaniline[4-]	SVOC	3	3	1	0	0				0	0			150	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	3	3	1	0	0				0	0			490	EPA-4	1	0
Chlorophenol[2-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Chlorophenyl-phenyl[4-] Ether	SVOC	3	3	1	0	0											
Dibenzofuran	SVOC	3	3	1	0	0				1	0			24	EPA-4	1	1
Dichlorobenzidine[3,3'-]	SVOC	3	3	1	0	0				3	0			0.77	WQCC-9	1	1
Dichlorophenol[2,4-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Diethylphthalate	SVOC	3	3	1	0	0				0	0			29000	EPA-4	1	0
Dimethyl Phthalate	SVOC	3	3	1	0	0				0	0			370000	EPA-4	1	0
Dimethylphenol[2,4-]	SVOC	3	3	1	0	0				0	0			730	EPA-4	1	0
Di-n-butylphthalate	SVOC	3	3	1	0	0				0	0			3700	EPA-4	1	0
Dinitro-2-methylphenol[4,6-]	SVOC	3	3	1	0	0				0	0			765	WQCC-9	1	0
Dinitrophenol[2,4-]	SVOC	3	3	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,4-]	SVOC	5	5	1	0	0				0	0			73	EPA-4	1	0
Dinitrotoluene[2,6-]	SVOC	5	5	1	0	0				0	0			37	EPA-4	1	0
Di-n-octylphthalate	SVOC	3	3	1	0	0				0	0			730	EPA-4	1	0
Diphenylamine	SVOC	1	1	1	0	0				0	0			910	EPA-4	1	0
Diphenylhydrazine[1,2-]	SVOC	1	1	1	0	0											
Hexachlorobenzene	SVOC	3	3	1	0	0				3	0			0.01	WQCC-9	1	1
Hexachlorobutadiene	SVOC	3	3	1	0	0				2	0			7.3	EPA-4	1	1
Hexachlorocyclopentadiene	SVOC	3	3	1	0	0				0	0			50	EPA-2	1	0
Hexachloroethane	SVOC	3	3	1	0	0				0	0			37	EPA-4	1	0
Isophorone	SVOC	3	3	1	0	0				0	0			710	EPA-4	1	0

Table B-226 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Methylnaphthalene[2-]	SVOC	3	3	1	0	0				2	0			6.2	EPA-4	1	1
Methylphenol[2-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Methylphenol[4-]	SVOC	3	3	1	0	0				0	0			180	EPA-4	1	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
Nitroaniline[2-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	1	1
Nitroaniline[3-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	1	1
Nitroaniline[4-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	1	1
Nitrobenzene	SVOC	5	5	1	0	0				3	0			3.4	EPA-4	1	1
Nitrophenol[2-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Nitrophenol[4-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Nitrosodimethylamine[N-]	SVOC	3	3	1	0	0				3	0			0.013	EPA-4	1	1
Nitroso-di-n-propylamine[N-]	SVOC	3	3	1	0	0				3	0			0.10	EPA-4	1	1
Nitrosodiphenylamine[N-]	SVOC	2	2	1	0	0				0	0			140	EPA-4	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorophenol	SVOC	3	3	1	0	0				3	0			1	EPA-2	1	1
Phenol	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Trichlorophenol[2,4,5-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Trichlorophenol[2,4,6-]	SVOC	3	3	1	0	0				3	0			5	WQCC-12	1	1
Acetone	VOC	3	3	1	0	0				0	0			610	EPA-4	1	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Benzene	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Bromobenzene	VOC	3	3	1	0	0				0	0			23	EPA-4	1	0
Bromochloromethane	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Bromodichloromethane	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Bromoform	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Bromomethane	VOC	4	4	1	0	0				3	0			8.7	EPA-4	1	1
Butanone[2-]	VOC	4	4	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzene[n-]	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[sec-]	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Butylbenzene[tert-]	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Carbon Disulfide	VOC	4	4	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Chlorobenzene	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Chlorodibromomethane	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Chloroethane	VOC	3	3	1	0	0				0	0			39	EPA-4	1	0

Table B-226 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chloroform	VOC	4	4	1	0	0				0	0			100	WQCC-11	1	0
Chloromethane	VOC	4	4	1	0	0				0	0			15	EPA-4	1	0
Chlorotoluene[2-]	VOC	3	3	1	0	0				0	0			120	EPA-4	1	0
Chlorotoluene[4-]	VOC	3	3	1	0	0				0	0			120	EPA-4	1	0
Dibromo-3-Chloropropane[1,2-]	VOC	3	3	1	0	0											
Dibromoethane[1,2-]	VOC	3	3	1	0	0				3	0			0.01	EPA-4	1	1
Dibromomethane	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Dichlorobenzene[1,2-]	VOC	3	3	1	0	0				0	0			600	EPA-2	1	0
Dichlorobenzene[1,3-]	VOC	3	3	1	0	0				0	0			18	EPA-4	1	0
Dichlorobenzene[1,4-]	VOC	3	3	1	0	0				0	0			75	EPA-2	1	0
Dichlorodifluoromethane	VOC	4	4	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	4	4	1	0	0				0	0			25	WQCC-11	1	0
Dichloroethane[1,2-]	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Dichloroethene[1,1-]	VOC	4	4	1	0	0				3	0			5	WQCC-11	1	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											
Dichloroethene[cis-1,2-]	VOC	2	2	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	3	3	1	0	0				0	0			100	EPA-2	1	0
Dichloropropane[1,2-]	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Dichloropropane[1,3-]	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Dichloropropane[2,2-]	VOC	3	3	1	0	0				2	0			5	EPA-2	1	0
Dichloropropene[1,1-]	VOC	3	3	1	0	0				2	0			4	EPA-4	1	1
Dichloropropene[cis-1,3-]	VOC	4	4	1	0	0				3	0			4	EPA-4	1	1
Dichloropropene[trans-1,3-]	VOC	4	4	1	0	0				3	0			4	EPA-4	1	1
Ethylbenzene	VOC	4	4	1	0	0				0	0			700	EPA-2	1	0
Hexanone[2-]	VOC	4	4	1	0	0				0	0			1900	EPA-4	1	0
Iodomethane	VOC	3	3	1	0	0				0	0			8.7	EPA-4	1	0
Isopropylbenzene	VOC	3	3	1	0	0				0	0			660	EPA-4	1	0
Isopropyltoluene[4-]	VOC	3	3	1	0	0				0	0			660	EPA-4	1	0
Propylbenzene[1-]	VOC	3	3	1	0	0				0	0			61	EPA-4	1	0
Styrene	VOC	4	4	1	0	0				0	0			100	EPA-2	1	0
Tetrachloroethane[1,1,1,2-]	VOC	3	3	1	0	0				2	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	4	4	1	0	0				0	0			10	WQCC-11	1	0
Tetrachloroethene	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Toluene	VOC	4	4	1	0	0				0	0			750	WQCC-11	1	0
Trichloro-1,2,2-trifluoroethane	VOC	1	1	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	3	3	1	0	0				0	0			70	EPA-2	1	0

Table B-226 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloroethane[1,1,1-]	VOC	4	4	1	0	0				0	0			60	WQCC-11	1	0
Trichloroethane[1,1,2-]	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Trichloroethene	VOC	4	4	1	0	0				3	0			5	EPA-2	1	0
Trichlorofluoromethane	VOC	4	4	1	0	0				0	0			1300	EPA-4	1	0
Trichloropropane[1,2,3-]	VOC	3	3	1	0	0				3	0			0.016	EPA-4	1	1
Trichlorotrifluoroethane	VOC	1	1	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	3	3	1	0	0				0	0			12	EPA-4	1	0
Trimethylbenzene[1,3,5-]	VOC	3	3	1	0	0				0	0			12	EPA-4	1	0
Vinyl Chloride	VOC	4	4	1	0	0				4	0			1	WQCC-11	1	1
Xylene (Total)	VOC	4	4	1	0	0				0	0			620	WQCC-11	1	0
Xylene[1,2-]	VOC	1	1	1	0	0				0	0			1400	EPA-4	1	0
Xylene[1,3-]+Xylene[1,4-]	VOC	1	1	1	0	0				0	0			620	WQCC-11	1	0

Table B-227
Nonfiltered Miscellaneous Constituents of Guaje Watershed Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	3	3	1	0	0											
Bromide	ANION	4	3	0.75	1	0.25	60	60	60								
Chloride	ANION	11	0	0	11	1	1600	3000	28700	0	0	0.012	0.1148	250000	WQCC-12	2	0
Fluoride	ANION	11	0	0	11	1	410	447	580	0	0	0.2794	0.3625	1600	WQCC-11	2	0
Nitrate	ANION	11	2	0.1818	9	0.8182	20	195	780	0	0	0.0195	0.078	10000	EPA-4	2	0
Nitrite	ANION	3	3	1	0	0				0	0			1000	EPA-4	2	0
Perchlorate	ANION	4	4	1	0	0				0	0			3.7	EPA-4	1	0
Sulfate	ANION	11	0	0	11	1	4910	7200	8570	0	0	0.012	0.01428	600000	WQCC-12	2	0
Calcium	GENINORG	4	1	0.25	3	0.75	20200	24400	31900								
Hardness	GENINORG	4	1	0.25	3	0.75	52200	63300	91200								
Magnesium	GENINORG	4	1	0.25	3	0.75	500	600	2800								
Potassium	GENINORG	4	2	0.5	2	0.5	2300	2350	2400								
Sodium	GENINORG	4	1	0.25	3	0.75	21000	21800	25200								
Deuterium Ratio	STABLE_ISOTOPES	2	0	0	2	1	-87	-83.5	-80								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	1	0	0	1	1	-6.5	-6.5	-6.5								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	2	0	0	2	1	-11.7	-11.2	-10.7								
pH	WATER_QUAL	4	0	0	4	1	7	7.25	7.7								
Specific Conductance	WATER_QUAL	4	0	0	4	1	213	227	315								
Total Suspended Solids	WATER_QUAL	8	0	0	8	1	1300	4500	131600								

Table B-228
Filtered Inorganics of Guaje Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	8	4	0.5	4	0.5	84	387.5	486	1	3	4.454	5.586	87	WQCC-6	3	1
AluminumRe	METALS	8	4	0.5	4	0.5	84	387.5	486	0	0	0.0775	0.0972	5000	WQCC-4	3	0
Antimony	METALS	8	7	0.875	1	0.125	3	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	3	0
Arsenic	METALS	8	8	1	0	0				0	0			24.2	WQCC-9	3	0
Barium	METALS	8	2	0.25	6	0.75	10	21.85	31.7	0	0	0.008404	0.01219	2600	EPA-4	3	0
Beryllium	METALS	8	6	0.75	2	0.25	0.061	1.53	3	0	0	0.2887	0.566	5.3	WQCC-6	3	0
BerylliumRe	METALS	8	6	0.75	2	0.25	0.061	1.53	3	0	0	0.02096	0.0411	73	EPA-4	3	0
Boron	METALS	8	7	0.875	1	0.125	23	23	23	0	0	0.0046	0.0046	5000	WQCC-4	3	0
Cadmium	METALS	8	8	1	0	0				5	0			2.24	WQCC-6	3	2
CadmiumRe	METALS	8	8	1	0	0				0	0			50	WQCC-4	3	0
Chromium	METALS	7	7	1	0	0				0	0			74.12	WQCC-6	2	0
ChromiumRe	METALS	7	7	1	0	0				0	0			1000	WQCC-4	2	0
Cobalt	METALS	7	7	1	0	0				0	0			1000	WQCC-4	2	0
Copper	METALS	8	7	0.875	1	0.125	13	13	13	3	1	1.452	1.452	8.96	WQCC-6	3	2
CopperRe	METALS	8	7	0.875	1	0.125	13	13	13	0	0	0.026	0.026	500	WQCC-4	3	0
Cyanide (Total)	CN	1	1	1	0	0											
Iron	METALS	8	3	0.375	5	0.625	40	137	234	0	0	0.01245	0.02127	11000	EPA-4	3	0
Lead	METALS	8	8	1	0	0				6	0			2.52	WQCC-6	3	2
LeadRe	METALS	8	8	1	0	0				0	0			100	WQCC-4	3	0
Lithium	METALS	2	0	0	2	1	10	25	40	0	0	0.03425	0.05479	730	EPA-4	2	0
Manganese	METALS	8	5	0.625	3	0.375	7	143	318	0	0	0.08412	0.1871	1700	EPA-4	3	0
Mercury	METALS	4	3	0.75	1	0.25	0.2	0.2	0.2	0	0	0.01818	0.01818	11	EPA-4	2	0
Molybdenum	METALS	8	8	1	0	0				0	0			180	EPA-4	3	0
Nickel	METALS	8	8	1	0	0				0	0			52.01	WQCC-6	3	0
NickelRe	METALS	8	8	1	0	0				0	0			4600	WQCC-9	3	0
Selenium	METALS	4	3	0.75	1	0.25	7	7	7	0	0	0.14	0.14	50	WQCC-4	2	0
Silver	METALS	8	8	1	0	0				5	0			3.45	WQCC-2	3	2
SilverRe	METALS	8	8	1	0	0				0	0			180	EPA-4	3	0
Strontium	METALS	8	0	0	8	1	27	73.95	470	0	0	0.003361	0.02136	22000	EPA-4	3	0
Thallium	METALS	8	7	0.875	1	0.125	3	3	3	2	0	0.4762	0.4762	6.3	WQCC-9	3	2
Tin	METALS	8	8	1	0	0				0	0			22000	EPA-4	3	0
Titanium	METALS	1	1	1	0	0											
Uranium	URANIUM	1	1	1	0	0											
Vanadium	METALS	8	7	0.875	1	0.125	14	14	14	0	0	0.14	0.14	100	WQCC-4	3	0
Zinc	METALS	7	7	1	0	0				0	0			117.19	WQCC-2	3	0
ZincRe	METALS	7	7	1	0	0				0	0			25000	WQCC-4	3	0

Table B-229
Filtered Radionuclides of Guaje Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	1	1	1	0	0				0	0			1.2	DOE	1	0
Cesium-137	rad	1	1	1	0	0				0	0			120	DOE	1	0
Cobalt-60	rad	1	1	1	0	0				0	0			200	DOE	1	0
Gross alpha	rad	4	4	1	0	0											
Gross beta	rad	4	2	0.5	2	0.5	3.8	4.95	6.1								
Plutonium-238	rad	1	1	1	0	0				0	0			1.6	DOE	1	0
Plutonium-239	rad	1	1	1	0	0				0	0			1.2	DOE	1	0
Radium-226	rad	1	1	1	0	0											
Radium-228	rad	1	1	1	0	0											
Strontium-90	rad	2	2	1	0	0				0	0			40	DOE	2	0
Thorium-228	rad	1	1	1	0	0											
Thorium-230	rad	1	0	0	1	1	0.0871	0.0871	0.0871								
Thorium-232	rad	1	1	1	0	0											
Uranium-234	rad	1	1	1	0	0				0	0			20	DOE	1	0
Uranium-235	rad	1	1	1	0	0				0	0			24	DOE	1	0
Uranium-238	rad	1	1	1	0	0				0	0			24	DOE	1	0

Table B-230
Filtered Miscellaneous Constituents of Guaje Watershed Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	8	0	0	8	1	6048	13600	27000								
Hardness	GENINORG	6	0	0	6	1	23600	50350	64900								
Magnesium	GENINORG	8	0	0	8	1	1000	3128	5200								
Potassium	GENINORG	8	0	0	8	1	1700	2000	4970								
Sodium	GENINORG	8	0	0	8	1	5994	8120	16000								
Specific Conductance	WATER_QUAL	7	0	0	7	1	74	151	228								
Total Dissolved Solids	WATER_QUAL	11	0	0	11	1	88000	134000	180000								
Total Suspended Solids	WATER_QUAL	1	1	1	0	0											
pH	WATER_QUAL	8	0	0	8	1	7	7.305	8.06								

Table B-231
Nonfiltered Inorganics of Guaje Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	3	1	0.333	2	0.667	2280	4425	6570	0	0	0.1196	0.1776	37000	EPA-4	2	0
Antimony	METALS	3	3	1	0	0				0	0			15	EPA-4	2	0
Arsenic	METALS	3	3	1	0	0				3	0			0.45	EPA-4	2	2
Barium	METALS	3	0	0	3	1	20.8	30	117	0	0	0.01154	0.045	2600	EPA-4	2	0
Beryllium	METALS	3	2	0.667	1	0.333	0.654	0.654	0.654	0	0	0.008959	0.008959	73	EPA-4	2	0
Boron	METALS	3	3	1	0	0				0	0			3300	EPA-4	2	0
Cadmium	METALS	3	3	1	0	0				0	0			18	EPA-4	2	0
Chromium	METALS	3	3	1	0	0				0	0			55000	EPA-4	2	0
Cobalt	METALS	3	3	1	0	0											
Copper	METALS	3	2	0.667	1	0.333	4	4	4	0	0	0.002857	0.002857	1400	EPA-4	2	0
Cyanide (Total)	CN	6	2	0.333	4	0.667	3.94	10	30	1	3	1.923	5.769	5.2	WQCC-7	2	1
Cyanide, Amenable	CN	2	2	1	0	0				0	0			5.2	WQCC-8	2	0
Iron	METALS	3	0	0	3	1	281	1230	3810	0	0	0.1118	0.3464	11000	EPA-4	2	0
Lead	METALS	3	2	0.667	1	0.333	6.4	6.4	6.4								
Lithium	METALS	1	0	0	1	1	30	30	30	0	0	0.0411	0.0411	730	EPA-4	1	0
Manganese	METALS	3	0	0	3	1	20	35	368	0	0	0.02059	0.2165	1700	EPA-4	2	0
Mercury	METALS	9	4	0.444	5	0.556	0.1	0.2	0.2	4	5	16.67	16.67	0.012	WQCC-7	3	2
Molybdenum	METALS	3	3	1	0	0				0	0			180	EPA-4	2	0
Nickel	METALS	3	3	1	0	0				0	0			730	EPA-4	2	0
Selenium	METALS	8	7	0.875	1	0.125	6	6	6	1	1	1.2	1.2	5	WQCC-8	3	0
Silver	METALS	3	3	1	0	0				0	0			180	EPA-4	2	0
Strontium	METALS	3	0	0	3	1	59.4	70	95.6	0	0	0.003182	0.004345	22000	EPA-4	2	0
Thallium	METALS	3	3	1	0	0											
Tin	METALS	3	3	1	0	0				0	0			22000	EPA-4	2	0
Titanium	METALS	1	0	0	1	1	147	147	147								
Uranium	URANIUM	6	3	0.5	3	0.5	0.4	0.644	0.9712								
Vanadium	METALS	3	1	0.333	2	0.667	3	5.455	7.91	0	0	0.02098	0.03042	260	EPA-4	2	0
Zinc	METALS	3	1	0.333	2	0.667	21.2	41.65	62.1	0	0	0.003786	0.005645	11000	EPA-4	2	0
MercuryRe	METALS	9	4	0.444	5	0.556	0.1	0.2	0.2	0	0	0.2597	0.2597	0.77	WQCC-8	3	0

Table B-232
Nonfiltered Radionuclides of Guaje Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	8	8	1	0	0				0	0			1.2	DOE	2	0
Cesium-137	rad	8	8	1	0	0				0	0			120	DOE	2	0
Cobalt-60	rad	6	4	0.6667	2	0.3333	9.04	16.02	23	0	0	0.0801	0.115	200	DOE	2	0
Gross alpha	rad	8	8	1	0	0											
Gross beta	rad	8	4	0.5	4	0.5	2.77	3.935	4.67								
Gross gamma	rad	3	3	1	0	0											
Plutonium-238	rad	8	8	1	0	0				0	0			1.6	DOE	2	0
Plutonium-239	rad	8	8	1	0	0				0	0			1.2	DOE	2	0
Radium-226	rad	2	2	1	0	0											
Radium-228	rad	1	1	1	0	0											
Strontium-90	rad	7	7	1	0	0				0	0			40	DOE	2	0
Thorium-228	rad	2	1	0.5	1	0.5	0.341	0.341	0.341								
Thorium-230	rad	2	1	0.5	1	0.5	0.231	0.231	0.231								
Thorium-232	rad	2	1	0.5	1	0.5	0.218	0.218	0.218								
Tritium	rad	7	7	1	0	0				0	0			20000	WQCC-5	2	0
Uranium-234	rad	3	1	0.3333	2	0.6667	0.103	0.144	0.185	0	0	0.0072	0.00925	20	DOE	2	0
Uranium-235	rad	3	3	1	0	0				0	0			24	DOE	2	0
Uranium-238	rad	3	2	0.6667	1	0.3333	0.148	0.148	0.148	0	0	0.006167	0.006167	24	DOE	2	0

Table B-233
Nonfiltered Organics of Guaje Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	1	0	0	1	1	14	14	14	0	0	0.02295	0.02295	610	EPA-4	1	0
Methylene Chloride	VOC	3	2	0.6667	1	0.3333	2.6	2.6	2.6	0	0	0.0001625	0.0001625	16000	WQCC-9	2	0
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0				1	0			1.40E-07	WQCC-9	1	1
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Acenaphthene	PAH	3	3	1	0	0				0	0			2700	WQCC-9	2	0
Acenaphthylene	PAH	3	3	1	0	0				0	0			2700	WQCC-9	2	0
Anthracene	PAH	3	3	1	0	0				0	0			110000	WQCC-9	2	0
Benzo(a)anthracene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Benzo(a)pyrene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Benzo(b)fluoranthene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Benzo(g,h,i)perylene	PAH	3	3	1	0	0				0	0			11000	WQCC-9	2	0
Benzo(k)fluoranthene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Chrysene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Dibenz(a,h)anthracene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Fluoranthene	PAH	3	3	1	0	0				0	0			370	WQCC-9	2	0
Fluorene	PAH	3	3	1	0	0				0	0			14000	WQCC-9	2	0
Indeno(1,2,3-cd)pyrene	PAH	3	3	1	0	0				3	0			0.49	WQCC-9	2	2
Naphthalene	PAH	3	3	1	0	0				1	0			6.2	EPA-4	2	1
Phenanthrene	PAH	3	3	1	0	0				0	0			110000	WQCC-9	2	0
Pyrene	PAH	3	3	1	0	0				0	0			11000	WQCC-9	2	0
Aroclor-1016	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1221	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1232	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1242	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1248	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1254	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1260	PCB	3	3	1	0	0				3	0			0.0017	WQCC-9	2	2
Aroclor-1262	PCB	2	2	1	0	0				2	0			0.0017	WQCC-9	2	2
Aniline	SVOC	2	2	1	0	0				0	0			120	EPA-4	2	0
Benzidine	SVOC	2	2	1	0	0				2	0			0.0054	WQCC-9	2	2
Benzoic Acid	SVOC	3	3	1	0	0				0	0			150000	EPA-4	2	0
Benzyl Alcohol	SVOC	3	3	1	0	0				0	0			11000	EPA-4	2	0

Table B-233 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-chloroethoxy)methane	SVOC	3	3	1	0	0											
Bis(2-chloroethyl)ether	SVOC	3	3	1	0	0				0	0			14	WQCC-9	2	0
Bis(2-ethylhexyl)phthalate	SVOC	3	3	1	0	0				0	0			59	WQCC-9	2	0
Bromophenyl-phenylether[4-]	SVOC	3	3	1	0	0											
Butylbenzylphthalate	SVOC	3	3	1	0	0				0	0			5200	WQCC-9	2	0
Chloro-3-methylphenol[4-]	SVOC	3	3	1	0	0											
Chloroaniline[4-]	SVOC	3	3	1	0	0				0	0			150	EPA-4	2	0
Chloronaphthalene[2-]	SVOC	3	3	1	0	0				0	0			4300	WQCC-9	2	0
Chlorophenol[2-]	SVOC	3	3	1	0	0				0	0			400	WQCC-9	2	0
Chlorophenyl-phenyl[4-] Ether	SVOC	3	3	1	0	0											
Dibenzofuran	SVOC	3	3	1	0	0				0	0			24	EPA-4	2	0
Dichlorobenzidine[3,3'-]	SVOC	3	3	1	0	0				3	0			0.77	WQCC-9	2	2
Dichlorophenol[2,4-]	SVOC	3	3	1	0	0				0	0			790	WQCC-9	2	0
Diethylphthalate	SVOC	3	3	1	0	0				0	0			120000	WQCC-9	2	0
Dimethyl Phthalate	SVOC	2	2	1	0	0				0	0			2900000	WQCC-9	2	0
Dimethylphenol[2,4-]	SVOC	3	3	1	0	0				0	0			2300	WQCC-9	2	0
Di-n-butylphthalate	SVOC	3	3	1	0	0				0	0			12000	WQCC-9	2	0
Dinitro-2-methylphenol[4,6-]	SVOC	3	3	1	0	0				0	0			765	WQCC-9	2	0
Dinitrophenol[2,4-]	SVOC	3	3	1	0	0				0	0			14000	WQCC-9	2	0
Dinitrotoluene[2,4-]	SVOC	3	3	1	0	0				0	0			91	WQCC-9	2	0
Dinitrotoluene[2,6-]	SVOC	3	3	1	0	0				0	0			37	EPA-4	2	0
Di-n-octylphthalate	SVOC	3	3	1	0	0				0	0			730	EPA-4	2	0
Diphenylamine	SVOC	2	2	1	0	0				0	0			910	EPA-4	2	0
Diphenylhydrazine[1,2-]	SVOC	2	2	1	0	0											
Hexachlorobenzene	SVOC	3	3	1	0	0				3	0			0.0077	WQCC-9	2	2
Hexachlorobutadiene	SVOC	3	3	1	0	0				0	0			500	WQCC-9	2	0
Hexachlorocyclopentadiene	SVOC	3	3	1	0	0				0	0			17000	WQCC-9	2	0
Hexachloroethane	SVOC	3	3	1	0	0				0	0			89	WQCC-9	2	0
Isophorone	SVOC	3	3	1	0	0				0	0			26000	WQCC-9	2	0
Methylnaphthalene[2-]	SVOC	3	3	1	0	0				1	0			6.2	EPA-4	2	1
Methylphenol[2-]	SVOC	3	3	1	0	0				0	0			1800	EPA-4	2	0
Methylphenol[4-]	SVOC	2	2	1	0	0				0	0			180	EPA-4	2	0
Methylpyridine[2-]	SVOC	2	2	1	0	0											
Nitroaniline[2-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	2	2
Nitroaniline[3-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	2	2
Nitroaniline[4-]	SVOC	3	3	1	0	0				3	0			2.2	EPA-4	2	2
Nitrobenzene	SVOC	3	3	1	0	0				0	0			1900	WQCC-9	2	0
Nitrophenol[2-]	SVOC	3	3	1	0	0				0	0			290	EPA-4	2	0
Nitrophenol[4-]	SVOC	3	3	1	0	0				0	0			290	EPA-4	2	0
Nitrosodimethylamine[N-]	SVOC	2	2	1	0	0				0	0			81	WQCC-9	2	0

Table B-233 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroso-di-n-propylamine[N-]	SVOC	3	3	1	0	0				0	0			14	WQCC-9	2	0
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			160	WQCC-9	1	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	2	2	1	0	0				0	0			170000	WQCC-9	2	0
Pentachlorophenol	SVOC	3	3	1	0	0				1	0			15	WQCC-7	2	1
PentachlorophenolRe	SVOC	3	3	1	0	0				0	0			82	WQCC-9	2	0
Phenol	SVOC	3	3	1	0	0				0	0			4600000	WQCC-9	2	0
Pyridine	SVOC	2	2	1	0	0				0	0			37	EPA-4	2	0
Trichlorophenol[2,4,5-]	SVOC	3	3	1	0	0				0	0			3700	EPA-4	2	0
Trichlorophenol[2,4,6-]	SVOC	3	3	1	0	0				0	0			65	WQCC-9	2	0
Benzene	VOC	3	3	1	0	0				0	0			710	WQCC-9	2	0
Bromodichloromethane	VOC	3	3	1	0	0				0	0			460	WQCC-9	2	0
Bromoform	VOC	3	3	1	0	0				0	0			3600	WQCC-9	2	0
Bromomethane	VOC	3	3	1	0	0				0	0			4000	WQCC-9	2	0
Butanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Carbon Disulfide	VOC	1	1	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	3	3	1	0	0				0	0			44	WQCC-9	2	0
Chlorobenzene	VOC	3	3	1	0	0				0	0			21000	WQCC-9	2	0
Chlorodibromomethane	VOC	3	3	1	0	0				0	0			340	WQCC-9	2	0
Chloroethane	VOC	3	3	1	0	0				0	0			39	EPA-4	2	0
Chloroform	VOC	3	3	1	0	0				0	0			4700	WQCC-9	2	0
Chloromethane	VOC	3	3	1	0	0				0	0			15	EPA-4	2	0
Dichlorobenzene[1,2-]	VOC	3	3	1	0	0				0	0			17000	WQCC-9	2	0
Dichlorobenzene[1,3-]	VOC	3	3	1	0	0				0	0			2600	WQCC-9	2	0
Dichlorobenzene[1,4-]	VOC	3	3	1	0	0				0	0			2600	WQCC-9	2	0
Dichlorodifluoromethane	VOC	1	1	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	3	3	1	0	0				0	0			810	EPA-4	2	0
Dichloroethane[1,2-]	VOC	3	3	1	0	0				0	0			990	WQCC-9	2	0
Dichloroethene[1,1-]	VOC	3	3	1	0	0				0	0			32	WQCC-9	2	0
Dichloroethene[trans-1,2-]	VOC	2	2	1	0	0				0	0			140000	WQCC-9	2	0
Dichloropropane[1,2-]	VOC	3	3	1	0	0				0	0			390	WQCC-9	2	0
Dichloropropene[cis-1,3-]	VOC	3	3	1	0	0				0	0			1700	WQCC-9	2	0
Dichloropropene[trans-1,3-]	VOC	3	3	1	0	0				0	0			1700	WQCC-9	2	0
Ethylbenzene	VOC	3	3	1	0	0				0	0			29000	WQCC-9	2	0
Hexanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Methyl-2-pentanone[4-]	VOC	1	1	1	0	0				0	0			160	EPA-4	1	0
Styrene	VOC	1	1	1	0	0				0	0			1600	EPA-4	1	0
Tetrachloroethane[1,1,2,2-]	VOC	3	3	1	0	0				0	0			110	WQCC-9	2	0
Tetrachloroethene	VOC	3	3	1	0	0				0	0			88.5	WQCC-9	2	0
Toluene	VOC	3	3	1	0	0				0	0			200000	WQCC-9	2	0
Trichlorobenzene[1,2,4-]	VOC	3	3	1	0	0				0	0			940	WQCC-9	2	0

Table B-233 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloroethane[1,1,1-]	VOC	3	3	1	0	0				0	0			790	EPA-4	2	0
Trichloroethane[1,1,2-]	VOC	3	3	1	0	0				0	0			420	WQCC-9	2	0
Trichloroethene	VOC	3	3	1	0	0				0	0			810	WQCC-9	2	0
Trichlorofluoromethane	VOC	3	3	1	0	0				0	0			1300	EPA-4	2	0
Vinyl Chloride	VOC	3	3	1	0	0				0	0			5250	WQCC-9	2	0
Xylene (Total)	VOC	1	1	1	0	0				0	0			1400	EPA-4	1	0

Table B-234
Nonfiltered Miscellaneous Constituents of Guaje Watershed Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bromide	ANION	1	1	1	0	0											
Chloride	ANION	10	1	0.1	9	0.9	900	2050	6700								
Fluoride	ANION	8	0	0	8	1	100	145	400	0	0	0.06591	0.1818	2200	EPA-4	2	0
Nitrate	ANION	11	3	0.2727	8	0.7273	100	600	130000	0	1	0.06	13	10000	EPA-4	4	0
Nitrite	ANION	1	1	1	0	0				0	0			1000	EPA-4	1	0
Perchlorate	ANION	3	3	1	0	0				0	0			3.7	EPA-4	2	0
Sulfate	ANION	10	0	0	10	1	1700	4000	13800								
Calcium	GENINORG	2	0	0	2	1	7300	7350	7400								
Hardness	GENINORG	2	0	0	2	1	30000	30950	31900								
Magnesium	GENINORG	3	0	0	3	1	2800	3300	4850								
Potassium	GENINORG	2	0	0	2	1	1800	2300	2800								
Sodium	GENINORG	2	0	0	2	1	6100	6700	7300								
Chemical Oxygen Demand	WATER_QUAL	1	0	0	1	1	29900	29900	29900								
pH	WATER_QUAL	3	0	0	3	1	7.6	7.6	7.6								
Specific Conductance	WATER_QUAL	4	0	0	4	1	85	108.5	121								
Specific Gravity	WATER_QUAL	1	0	0	1	1	0.988	0.988	0.988								
Suspended Sediment Concentration	WATER_QUAL	1	1	1	0	0											
Total Suspended Solids	WATER_QUAL	7	1	0.1429	6	0.8571	962	6500	335000								

Table B-235
Filtered Inorganics of White Rock Canyon Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Antimony	METALS	5	0	0	5	1	3	3	3	0	0	0.5	0.5	6	EPA-2	5	0
Arsenic	METALS	5	2	0.4	3	0.6	4	6	9	0	0	0.6	0.9	10	EPA-2	5	0
Barium	METALS	5	0	0	5	1	19	64	118	0	0	0.064	0.118	1000	WQCC-11	5	0
Beryllium	METALS	5	0	0	5	1	3	3	3	0	0	0.75	0.75	4	EPA-2	5	0
Boron	METALS	5	0	0	5	1	48	100	1398	0	0	0.0303	0.4236	3300	EPA-4	5	0
Cadmium	METALS	5	5	1	0	0				5	0			5	EPA-2	5	5
Chromium	METALS	5	5	1	0	0				0	0			50	WQCC-11	5	0
Cobalt	METALS	5	5	1	0	0											
Copper	METALS	5	4	0.8	1	0.2	13	13	13	0	0	0.013	0.013	1000	WQCC-12	5	0
Iron	METALS	5	0	0	5	1	40	42	102	0	0	0.042	0.102	1000	WQCC-12	5	0
Lead	METALS	5	5	1	0	0				0	0			15	EPA-2	5	0
Manganese	METALS	5	3	0.6	2	0.4	4	5	6	0	0	0.025	0.03	200	WQCC-12	5	0
Molybdenum	METALS	5	5	1	0	0				0	0			180	EPA-4	5	0
Nickel	METALS	5	5	1	0	0				0	0			100	EPA-2	5	0
Silver	METALS	5	5	1	0	0				0	0			50	WQCC-11	5	0
Strontium	METALS	5	0	0	5	1	56	241	1240	0	0	0.01095	0.05636	22000	EPA-4	5	0
Thallium	METALS	5	0	0	5	1	3	3	3	0	5	1.5	1.5	2	EPA-2	5	0
Tin	METALS	5	5	1	0	0				0	0			22000	EPA-4	5	0
Vadium	METALS	5	2	0.4	3	0.6	12	16	22	0	0	0.06154	0.08462	260	EPA-4	5	0
Zinc	METALS	5	5	1	0	0				0	0			10000	WQCC-12	5	0

Table B-236
Filtered Miscellaneous Constituents of White Rock Canyon Regional Aquifer Groundwater

Filtered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Hardness	GENINORG	4	0	0	4	1	7800	55300	105000								
Magnesium	GENINORG	4	0	0	4	1	199	1590	2609								
Potassium	GENINORG	4	0	0	4	1	1000	2001	7978								
Sodium	GENINORG	4	0	0	4	1	49630	84560	109900								
Specific Conductance	GENINORG	10	0	0	10	1	291	394	1785								
Total Dissolved Solids	WATER_QUAL	25	0	0	25	1	56000	289000	1275000	0	3	0.289	1.275	1000000	WQCC-12	6	0
pH	WATER_QUAL	10	0	0	10	1	7.96	8	9.14								

Table B-237
Nonfiltered Inorganics of White Rock Canyon Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	39	32	0.8205	7	0.1795	50	80	150	0	0	0.002162	0.004054	37000	EPA-4	9	0
Antimony	METALS	39	27	0.6923	12	0.3077	0.4	2.3	5	0	0	0.3833	0.8333	6	EPA-2	9	0
Arsenic	METALS	40	18	0.45	22	0.55	4	7.42	15	2	5	0.742	1.5	10	EPA-2	10	2
Barium	METALS	39	5	0.1282	34	0.8718	1.8	65	180	0	0	0.065	0.18	1000	WQCC-11	9	0
Beryllium	METALS	39	33	0.8462	6	0.1538	3	3	12	0	1	0.75	3	4	EPA-2	9	0
Boron	METALS	39	1	0.02564	38	0.9744	38.9	129	1830	0	0	0.03909	0.5545	3300	EPA-4	9	0
Cadmium	METALS	39	38	0.9744	1	0.02564	5	5	5	10	1	1	1	5	EPA-2	9	5
Chromium	METALS	39	35	0.8974	4	0.1026	8	9.65	55	0	1	0.193	1.1	50	WQCC-11	9	0
Cobalt	METALS	39	32	0.8205	7	0.1795	5	6.89	55								
Copper	METALS	39	28	0.7179	11	0.2821	4	13	34	0	0	0.013	0.034	1000	WQCC-12	9	0
Cyanide (Total)	METALS	34	21	0.6176	13	0.3824	4.39	10	30	0	0	0.05	0.15	200	WQCC-11	8	0
Cyanide, Ameble	CN	1	1	1	0	0				0	0			200	EPA-2	1	0
Iron	METALS	39	16	0.4103	23	0.5897	30	148	860	0	0	0.148	0.86	1000	WQCC-12	9	0
Lead	METALS	39	37	0.9487	2	0.05128	3	4.92	6.84	5	0	0.328	0.456	15	EPA-2	9	5
Lithium	METALS	6	6	1	0	0				0	0			730	EPA-4	6	0
Manganese	METALS	39	27	0.6923	12	0.3077	3	7	11.4	0	0	0.035	0.057	200	WQCC-12	9	0
Mercury	METALS	39	21	0.5385	18	0.4615	0.1	0.2	0.202	0	0	0.1	0.101	2	WQCC-11	9	0
Molybdenum	METALS	39	32	0.8205	7	0.1795	7	10.2	57	0	0	0.05667	0.3167	180	EPA-4	9	0
Nickel	METALS	39	38	0.9744	1	0.02564	28	28	28	0	0	0.28	0.28	100	EPA-2	9	0
Selenium	METALS	39	39	1	0	0				0	0			10	EPA-1	9	0
SeleniumRe	METALS	39	39	1	0	0				0	0			50	WQCC-11	9	0
Silver	METALS	39	36	0.9231	3	0.07692	13	15	44	0	0	0.3	0.88	50	WQCC-11	9	0
Strontium	METALS	39	0	0	39	1	26.8	219	1400	0	0	0.009955	0.06364	22000	EPA-4	9	0
Thallium	METALS	36	30	0.8333	6	0.1667	0.9	3	3	16	5	1.5	1.5	2	EPA-2	9	5
Tin	METALS	39	38	0.9744	1	0.02564	30.2	30.2	30.2	0	0	0.001373	0.001373	22000	EPA-4	9	0
Titanium	METALS	3	2	0.6667	1	0.3333	1.16	1.16	1.16								
Uranium	METALS	31	4	0.129	27	0.871	0.19	12	26.9	0	0	0.4	0.8967	30	EPA-2	9	0
Vadium	URANIUM	39	11	0.2821	28	0.7179	5	15.25	31	0	0	0.05865	0.1192	260	EPA-4	9	0
Zinc	METALS	39	29	0.7436	10	0.2564	7.59	29	400	0	0	0.0029	0.04	10000	WQCC-12	9	0

Table B-238
Nonfiltered Radionuclides of White Rock Canyon Regional Aquifer Groundwater

Unfiltered WGR Sample		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	43	38	0.8837	5	0.1163	0.0169	0.031	0.075	0	0	0.02583	0.0625	1.2	DOE	10	0
Cesium-137	rad	43	43	1	0	0				0	0			120	DOE	10	0
Cobalt-60	rad	31	29	0.9355	2	0.06452	49.4	52.15	54.9	0	0	0.5215	0.549	100	EPA-2	9	0
Gross alpha	rad	43	31	0.7209	12	0.2791	5.04	11.33	19.4	8	5	0.7553	1.293	15	EPA-2	10	4
Gross beta	rad	43	22	0.5116	21	0.4884	1.87	5.42	11.1	0	0	0.1084	0.222	50	EPA-2	10	0
Gross gamma	rad	18	18	1	0	0											
Plutonium-238	rad	46	41	0.8913	5	0.1087	0.00992	0.0492	0.317	0	0	0.03075	0.1981	1.6	DOE	10	0
Plutonium-239	rad	46	45	0.9783	1	0.02174	0.0249	0.0249	0.0249	0	0	0.02075	0.02075	1.2	DOE	10	0
Radium-226	rad	1	0	0	1	1	0.336	0.336	0.336								
Strontium-90	rad	42	40	0.9524	2	0.04762	0.442	4.421	8.4	0	1	0.5526	1.05	8	EPA-2	10	0
Thorium-228	rad	6	5	0.8333	1	0.1667	0.0195	0.0195	0.0195								
Thorium-230	rad	6	5	0.8333	1	0.1667	0.0207	0.0207	0.0207								
Thorium-232	rad	6	5	0.8333	1	0.1667	0.00519	0.00519	0.00519								
Tritium	rad	44	44	1	0	0				0	0			20000	EPA-2	10	0
Uranium-234	rad	14	2	0.1429	12	0.8571	3.49	9.47	13.4	0	0	0.4735	0.67	20	DOE	8	0
Uranium-235	rad	15	4	0.2667	11	0.7333	0.116	0.323	0.707	0	0	0.01346	0.02946	24	DOE	8	0
Uranium-238	rad	15	2	0.1333	13	0.8667	1.89	3.14	17.3	0	0	0.1308	0.7208	24	DOE	8	0

Table B-239
Nonfiltered Organics of White Rock Canyon Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Methylene Chloride	VOC	14	10	0.7143	4	0.2857	2.3	2.65	17	8	1	0.53	3.4	5	EPA-2	7	0
Bis(2-ethylhexyl)phthalate	SVOC	12	10	0.8333	2	0.1667	0.72	1.01	1.3	8	0	0.1683	0.2167	6	EPA-2	7	7
Di-n-butylphthalate	SVOC	14	13	0.9286	1	0.07143	11	11	11	0	0	0.002973	0.002973	3700	EPA-4	7	0
Amino-4,6-dinitrotoluene[2-]	HEXP	4	4	1	0	0											
Nitrotoluene[3-]	HEXP	4	4	1	0	0											
Nitrotoluene[4-]	HEXP	4	4	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	4	4	1	0	0											
Aroclor-1221	PCB	9	9	1	0	0				4	0			0.5	EPA-2	7	4
Aroclor-1232	PCB	9	9	1	0	0				4	0			0.5	EPA-2	7	4
Aroclor-1242	PCB	14	14	1	0	0				9	0			0.5	EPA-2	7	5
Aroclor-1248	PCB	9	9	1	0	0				4	0			0.5	EPA-2	7	4
Aroclor-1254	PCB	14	14	1	0	0				9	0			0.5	EPA-2	7	5
Aroclor-1260	PCB	14	14	1	0	0				9	0			0.5	EPA-2	7	5
Aroclor-1262	PCB	6	6	1	0	0				1	0			0.5	EPA-2	6	1
Azobenzene	PCB	6	6	1	0	0				6	0			6.1	EPA-4	5	5
Acenaphthene	SVOC	14	14	1	0	0				0	0			370	EPA-4	7	0
Acenaphthylene	SVOC	14	14	1	0	0				0	0			370	EPA-4	7	0
Aniline	SVOC	11	11	1	0	0				0	0			120	EPA-4	7	0
Anthracene	SVOC	14	14	1	0	0				0	0			1800	EPA-4	7	0
Aroclor-1016	SVOC	9	9	1	0	0				4	0			0.5	EPA-2	7	4
Benzene	SVOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Benzo(a)anthracene	SVOC	14	14	1	0	0				14	0			0.92	EPA-4	7	7
Benzo(a)pyrene	SVOC	14	14	1	0	0				14	0			0.2	EPA-2	7	7
Benzo(b)fluoranthene	SVOC	14	14	1	0	0				14	0			0.92	EPA-4	7	7
Benzo(g,h,i)perylene	SVOC	14	14	1	0	0				0	0			180	EPA-4	7	0
Benzo(k)fluoranthene	SVOC	14	14	1	0	0				9	0			9.2	EPA-4	7	5
Benzoic Acid	SVOC	14	14	1	0	0				0	0			150000	EPA-4	7	0
Benzyl Alcohol	SVOC	14	14	1	0	0				0	0			11000	EPA-4	7	0
Bis(2-chloroethoxy)methane	SVOC	14	14	1	0	0											
Bis(2-chloroethyl)ether	SVOC	14	14	1	0	0				14	0			0.098	EPA-4	7	7
Bromobenzene	SVOC	10	10	1	0	0				0	0			23	EPA-4	7	0
Butanone[2-]	SVOC	14	14	1	0	0				0	0			1900	EPA-4	7	0
Carbon Disulfide	SVOC	14	14	1	0	0				0	0			1000	EPA-4	7	0
Chloroaniline[4-]	SVOC	14	14	1	0	0				0	0			150	EPA-4	7	0
Chlorobenzene	SVOC	14	14	1	0	0				0	0			100	EPA-2	7	0
Chlorophenol[2-]	SVOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Chlorophenyl-phenyl[4-] Ether	SVOC	14	14	1	0	0											
Chlorotoluene[2-]	SVOC	10	10	1	0	0				0	0			120	EPA-4	7	0
Dibenz(a,h)anthracene	SVOC	14	14	1	0	0				14	0			0.092	EPA-4	7	7
Dibenzofuran	SVOC	14	14	1	0	0				3	0			24	EPA-4	7	3

Table B-239 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibromo-3-Chloropropane[1,2-]	SVOC	10	10	1	0	0											
Dichlorodifluoromethane	SVOC	14	14	1	0	0				0	0			390	EPA-4	7	0
Dichloropropane[1,2-]	SVOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Dimethyl Phthalate	SVOC	11	11	1	0	0				0	0			370000	EPA-4	7	0
Dimethylphenol[2,4-]	SVOC	14	14	1	0	0				0	0			730	EPA-4	7	0
Dinitro-2-methylphenol[4,6-]	SVOC	14	14	1	0	0											
Dinitrobenzene[1,3-]	SVOC	4	4	1	0	0											
Dinitrophenol[2,4-]	SVOC	14	14	1	0	0				0	0			73	EPA-4	7	0
Dinitrotoluene[2,4-]	SVOC	18	18	1	0	0				0	0			73	EPA-4	8	0
Dinitrotoluene[2,6-]	SVOC	18	18	1	0	0				0	0			37	EPA-4	8	0
Di-n-octylphthalate	SVOC	14	14	1	0	0				0	0			730	EPA-4	7	0
Diphenylamine	SVOC	5	5	1	0	0				0	0			910	EPA-4	5	0
Diphenylhydrazine[1,2-]	SVOC	5	5	1	0	0											
Ethylbenzene	SVOC	14	14	1	0	0				0	0			700	EPA-2	7	0
Fluorene	SVOC	14	14	1	0	0				0	0			240	EPA-4	7	0
Hexachlorobenzene	SVOC	14	14	1	0	0				14	0			1	EPA-2	7	7
Hexachlorobutadiene	SVOC	14	14	1	0	0				9	0			7.3	EPA-4	7	5
Hexachlorocyclopentadiene	SVOC	14	14	1	0	0				0	0			50	EPA-2	7	0
Hexachloroethane	SVOC	14	14	1	0	0				0	0			37	EPA-4	7	0
Hexanone[2-]	SVOC	14	14	1	0	0				0	0			1900	EPA-4	7	0
HMX	SVOC	4	4	1	0	0											
Iodomethane	SVOC	10	10	1	0	0				0	0			8.7	EPA-4	7	0
Isopropylbenzene	SVOC	10	10	1	0	0				0	0			660	EPA-4	7	0
Methylphenol[2-]	SVOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Methylphenol[4-]	SVOC	11	11	1	0	0				0	0			180	EPA-4	7	0
Methylpyridine[2-]	SVOC	8	8	1	0	0											
Nitroaniline[2-]	SVOC	14	14	1	0	0				14	0			2.2	EPA-4	7	7
Nitroaniline[3-]	SVOC	14	14	1	0	0				14	0			2.2	EPA-4	7	7
Nitroaniline[4-]	SVOC	14	14	1	0	0				14	0			2.2	EPA-4	7	7
Nitrobenzene	SVOC	18	18	1	0	0				14	0			3.4	EPA-4	8	7
Nitrophenol[2-]	SVOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Nitrophenol[4-]	SVOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Nitrosodimethylamine[N-]	SVOC	11	11	1	0	0				11	0			0.013	EPA-4	7	7
Nitroso-di-n-propylamine[N-]	SVOC	14	14	1	0	0				14	0			0.096	EPA-4	7	7
Nitrosodiphenylamine[N-]	SVOC	9	9	1	0	0				0	0			140	EPA-4	5	0
Nitrotoluene[2-]	SVOC	4	4	1	0	0											
Oxybis(1-chloropropane)[2,2'-]	SVOC	5	5	1	0	0											
Pentachlorophenol	SVOC	14	14	1	0	0				14	0			1	EPA-2	7	7
Phenol	SVOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Phenthrene	SVOC	14	14	1	0	0				0	0			1800	EPA-4	7	0

Table B-239 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
phthalene	SVOC	14	14	1	0	0				0	0			30	WQCC-11	7	0
Propylbenzene[1-]	SVOC	10	10	1	0	0				0	0			61	EPA-4	7	0
Pyridine	SVOC	8	8	1	0	0				0	0			37	EPA-4	7	0
RDX	SVOC	4	4	1	0	0											
Trichlorophenol[2,4,6-]	SVOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Trichloropropane[1,2,3-]	SVOC	10	10	1	0	0				10	0			0.016	EPA-4	7	7
Acetone	VOC	14	14	1	0	0				0	0			610	EPA-4	7	0
Acrolein	VOC	5	5	1	0	0											
Acrylonitrile	VOC	5	5	1	0	0											
Amino-2,6-dinitrotoluene[4-]	VOC	4	4	1	0	0											
Benzidine	VOC	11	11	1	0	0				11	0			0.0029	EPA-4	7	7
Bromochloromethane	VOC	10	10	1	0	0				5	0			5	EPA-2	7	0
Bromodichloromethane	VOC	14	14	1	0	0				0	0			100	EPA-2	7	0
Bromoform	VOC	14	14	1	0	0				0	0			100	EPA-2	7	0
Bromomethane	VOC	14	14	1	0	0				9	0			8.7	EPA-4	7	5
Bromophenyl-phenylether[4-]	VOC	14	14	1	0	0											
Butylbenzene[n-]	VOC	10	10	1	0	0				0	0			61	EPA-4	7	0
Butylbenzene[sec-]	VOC	10	10	1	0	0				0	0			61	EPA-4	7	0
Butylbenzene[tert-]	VOC	10	10	1	0	0				0	0			61	EPA-4	7	0
Butylbenzylphthalate	VOC	14	14	1	0	0				0	0			7300	EPA-4	7	0
Carbon Tetrachloride	VOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Chloro-3-methylphenol[4-]	VOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Chlorodibromomethane	VOC	14	14	1	0	0				0	0			100	EPA-2	7	0
Chloroethane	VOC	13	13	1	0	0				0	0			39	EPA-4	7	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	14	14	1	0	0				0	0			100	WQCC-11	7	0
Chloromethane	VOC	14	14	1	0	0				0	0			15	EPA-4	7	0
Chlorophthalene[2-]	VOC	14	14	1	0	0				0	0			490	EPA-4	7	0
Chlorotoluene[4-]	VOC	10	10	1	0	0				0	0			120	EPA-4	7	0
Chrysene	VOC	14	14	1	0	0				0	0			92	EPA-4	7	0
Dibromoethane[1,2-]	VOC	10	10	1	0	0				10	0			0.05	EPA-2	7	7
Dibromomethane	VOC	10	10	1	0	0				0	0			61	EPA-4	7	0
Dichlorobenzene[1,2-]	VOC	14	14	1	0	0				0	0			600	EPA-2	7	0
Dichlorobenzene[1,3-]	VOC	14	14	1	0	0				0	0			18	EPA-4	7	0
Dichlorobenzene[1,4-]	VOC	14	14	1	0	0				0	0			75	EPA-2	7	0
Dichlorobenzidine[3,3'-]	VOC	14	14	1	0	0				14	0			1.5	EPA-4	7	7
Dichloroethane[1,1-]	VOC	14	14	1	0	0				0	0			25	WQCC-11	7	0
Dichloroethane[1,2-]	VOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Dichloroethene[1,1-]	VOC	14	14	1	0	0				9	0			5	WQCC-11	7	0
Dichloroethene[cis/trans-1,2-]	VOC	1	1	1	0	0											

Table B-239 (continued)

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichloroethene[cis-1,2-]	VOC	5	5	1	0	0				0	0			70	EPA-2	5	0
Dichloroethene[trans-1,2-]	VOC	10	10	1	0	0				0	0			100	EPA-2	7	0
Dichlorophenol[2,4-]	VOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Dichloropropane[1,3-]	VOC	10	10	1	0	0				5	0			5	EPA-2	7	0
Dichloropropane[2,2-]	VOC	10	10	1	0	0				5	0			5	EPA-2	7	0
Dichloropropene[1,1-]	VOC	10	10	1	0	0				5	0			4	EPA-4	7	5
Dichloropropene[cis-1,3-]	VOC	14	14	1	0	0				9	0			4	EPA-4	7	5
Dichloropropene[trans-1,3-]	VOC	14	14	1	0	0				9	0			4	EPA-4	7	5
Diethylphthalate	VOC	14	14	1	0	0				0	0			29000	EPA-4	7	0
Fluoranthene	VOC	14	14	1	0	0				0	0			1500	EPA-4	7	0
Indeno(1,2,3-cd)pyrene	VOC	14	14	1	0	0				14	0			0.92	EPA-4	7	7
Isophorone	VOC	14	14	1	0	0				0	0			710	EPA-4	7	0
Isopropyltoluene[4-]	VOC	10	10	1	0	0				0	0			660	EPA-4	7	0
Methyl-2-pentanone[4-]	VOC	14	14	1	0	0				0	0			160	EPA-4	7	0
Methylphthalene[2-]	VOC	14	14	1	0	0				0	0			30	WQCC-11	7	0
Pyrene	VOC	14	14	1	0	0				0	0			180	EPA-4	7	0
Styrene	VOC	14	14	1	0	0				0	0			100	EPA-2	7	0
Suspended Sediment Concentratio	VOC	1	1	1	0	0											
Tetrachloroethane[1,1,1,2-]	VOC	10	10	1	0	0				5	0			4.3	EPA-4	7	5
Tetrachloroethane[1,1,2,2-]	VOC	14	14	1	0	0				0	0			10	WQCC-11	7	0
Tetrachloroethene	VOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Tetryl	VOC	4	4	1	0	0											
Toluene	VOC	14	14	1	0	0				0	0			750	WQCC-11	7	0
Trichloro-1,2,2-trifluoroethane	VOC	3	3	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	14	14	1	0	0				0	0			70	EPA-2	7	0
Trichloroethane[1,1,1-]	VOC	14	14	1	0	0				0	0			60	WQCC-11	7	0
Trichloroethane[1,1,2-]	VOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Trichloroethene	VOC	14	14	1	0	0				9	0			5	EPA-2	7	0
Trichlorofluoromethane	VOC	14	14	1	0	0				0	0			1300	EPA-4	7	0
Trichlorophenol[2,4,5-]	VOC	14	14	1	0	0				14	0			5	WQCC-12	7	7
Trichlorotrifluoroethane	VOC	5	5	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	10	10	1	0	0				0	0			12	EPA-4	7	0
Trimethylbenzene[1,3,5-]	VOC	10	10	1	0	0				0	0			12	EPA-4	7	0
Trinitrobenzene[1,3,5-]	VOC	4	4	1	0	0											
Vinyl Chloride	VOC	14	14	1	0	0				14	0			1	WQCC-11	7	5
Xylene (Total)	VOC	14	14	1	0	0				0	0			620	WQCC-11	7	0
Xylene[1,2-]	VOC	5	5	1	0	0				0	0			1400	EPA-4	5	0
Xylene[1,3-]+Xylene[1,4-]	VOC	5	5	1	0	0				0	0			620	WQCC-11	5	0

Table B-240
Nonfiltered Miscellaneous Constituents of White Rock Canyon Regional Aquifer Groundwater

Unfiltered WGR Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	1	1	1	0	0											
Bromide	ANION	4	0	0	4	1	85	215	1780								
Chloride	ANION	35	0	0	35	1	2580	8370	341000	0	2	0.03348	1.364	250000	WQCC-12	8	0
Fluoride	ANION	35	1	0.02857	34	0.9714	125	706.5	5440	0	3	0.4416	3.4	1600	WQCC-11	8	0
Nitrate	ANION	39	7	0.1795	32	0.8205	10	1485	8630	0	0	0.1485	0.863	10000	EPA-4	8	0
Nitrite	ANION	4	4	1	0	0				0	0			1000	EPA-4	4	0
Perchlorate	ANION	16	16	1	0	0				3	0			3.7	EPA-4	8	3
Sulfate	ANION	35	0	0	35	1	13900	30500	81000	0	0	0.05083	0.135	600000	WQCC-12	8	0
Calcium	GENINORG	29	0	0	29	1	2739	15300	41500								
Hardness	GENINORG	28	0	0	28	1	7200	43050	115000								
Magnesium	GENINORG	29	1	0.03448	28	0.9655	100	970.5	2700								
Potassium	GENINORG	29	8	0.2759	21	0.7241	461	1214	3300								
Sodium	GENINORG	29	0	0	29	1	54600	83600	481000								
pH	WATER_QUAL	29	0	0	29	1	7.35	8.4	9.5								
Specific Conductance	WATER_QUAL	30	0	0	30	1	262	406	1977								
Total Dissolved Solids	WATER_QUAL	10	0	0	10	1	229000	289500	1150000	0	1	0.2895	1.15	1000000	WQCC-12	7	0
Total Suspended Solids	WATER_QUAL	29	22	0.7586	7	0.2414	1000	1400	4100								

Table B-241
Filtered Inorganics of White Rock Canyon Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	104	98	0.9423	6	0.05769	4.2	489.7	1820	36	3	5.629	20.92	87	WQCC-6	25	22
AluminumRe	METALS	104	98	0.9423	6	0.05769	4.2	489.7	1820	0	0	0.09794	0.364	5000	WQCC-4	25	0
Antimony	METALS	86	80	0.9302	6	0.06977	1.63	3	3	26	0	0.5	0.5	6	EPA-2	25	20
Arsenic	METALS	88	72	0.8182	16	0.1818	3	4	28	25	5	0.4	2.8	10	EPA-2	25	0
Barium	METALS	108	26	0.2407	82	0.7593	1.4	29.8	300	0	0	0.0298	0.3	1000	WQCC-11	25	0
Beryllium	METALS	96	80	0.8333	16	0.1667	0.014	3	3	23	0	0.75	0.75	4	EPA-2	25	20
Boron	METALS	102	45	0.4412	57	0.5588	10	30	80.1	0	0	0.009091	0.02427	3300	EPA-4	25	0
Cadmium	METALS	96	94	0.9792	2	0.02083	0.386	3.693	7	57	1	1.65	3.128	2.24	WQCC-6	25	24
CadmiumRe	METALS	96	94	0.9792	2	0.02083	0.386	3.693	7	47	1	0.7386	1.4	5	EPA-2	25	20
Chromium	METALS	97	86	0.8866	11	0.1134	1.4	3.9	7	0	0	0.078	0.14	50	WQCC-11	25	0
Cobalt	METALS	96	88	0.9167	8	0.08333	0.43	4	11	0	0	0.004	0.011	1000	WQCC-4	25	0
Copper	METALS	95	90	0.9474	5	0.05263	0.3	10	10	63	3	1.117	1.117	8.96	WQCC-6	25	24
CopperRe	METALS	95	90	0.9474	5	0.05263	0.3	10	10	0	0	0.02	0.02	500	WQCC-4	25	0
Cyanide (Total)	METALS	9	4	0.4444	5	0.5556	10	10	10	0	0	0.05	0.05	200	WQCC-11	9	0
Iron	CN	104	80	0.7692	24	0.2308	22	40	2400	0	2	0.04	2.4	1000	WQCC-12	25	0
Lead	METALS	87	84	0.9655	3	0.03448	0.099	5	10.4	56	2	1.987	4.132	2.52	WQCC-6	25	25
LeadRe	METALS	87	84	0.9655	3	0.03448	0.099	5	10.4	10	0	0.3333	0.6933	15	EPA-2	25	10
Lithium	METALS	37	0	0	37	1	20	24	50	0	0	0.03288	0.06849	730	EPA-4	22	0
Manganese	METALS	101	69	0.6832	32	0.3168	0.64	7.05	500	0	2	0.03525	2.5	200	WQCC-12	25	0
Mercury	METALS	57	29	0.5088	28	0.4912	0.1	0.2	0.2	0	0	0.1	0.1	2	WQCC-11	23	0
Molybdenum	METALS	88	87	0.9886	1	0.01136	4	4	4	0	0	0.02222	0.02222	180	EPA-4	25	0
Nickel	METALS	96	91	0.9479	5	0.05208	0.9	1.1	11	1	0	0.02115	0.2115	52.01	WQCC-6	25	1
NickelRe	METALS	96	91	0.9479	5	0.05208	0.9	1.1	11	0	0	0.011	0.11	100	EPA-2	25	0
Selenium	METALS	56	41	0.7321	15	0.2679	3	5	14	0	2	0.5	1.4	10	EPA-1	23	0
SeleniumRe	METALS	56	41	0.7321	15	0.2679	3	5	14	0	0	0.1	0.28	50	WQCC-4	23	0
Silver	METALS	96	93	0.9688	3	0.03125	21	112.6	174.2	64	3	32.64	50.49	3.45	WQCC-2	25	25
SilverRe	METALS	96	93	0.9688	3	0.03125	21	112.6	174.2	0	2	2.252	3.484	50	WQCC-11	25	0
Strontium	METALS	86	1	0.01163	85	0.9884	4.2	102.2	817	0	0	0.004645	0.03714	22000	EPA-4	25	0
Thallium	METALS	86	72	0.8372	14	0.1628	0.183	1.465	3	52	6	0.7325	1.5	2	EPA-2	25	25
Tin	METALS	88	70	0.7955	18	0.2045	10	23.5	30	0	0	0.001068	0.001364	22000	EPA-4	25	0
Uranium	METALS	40	0	0	40	1	0.1312	0.9656	13	0	0	0.03219	0.4333	30	EPA-2	20	0
Vanadium	URANIUM	96	29	0.3021	67	0.6979	2.8	10	60	0	0	0.1	0.6	100	WQCC-4	25	0
Zinc	METALS	97	79	0.8144	18	0.1856	1	20	170	0	3	0.1707	1.451	117.19	WQCC-2	25	0
ZincRe	METALS	97	79	0.8144	18	0.1856	1	20	170	0	0	0.002	0.017	10000	WQCC-12	25	0

Table B-242
Filtered Radionuclides of White Rock Canyon Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	64	58	0.9062	6	0.09375	0.0112	0.02775	0.0513	0	0	0.02313	0.04275	1.2	DOE	21	0
Cesium-137	rad	61	59	0.9672	2	0.03279	3.92	6.505	9.09	0	0	0.05421	0.07575	120	DOE	21	0
Cobalt-60	rad	50	43	0.86	7	0.14	35.3	55.2	76.8	0	0	0.552	0.768	100	EPA-2	20	0
Gross alpha	rad	76	70	0.9211	6	0.07895	1.53	5.4	11.3	0	0	0.36	0.7533	15	EPA-2	21	0
Gross beta	rad	75	46	0.6133	29	0.3867	2.16	3.84	17	0	0	0.0768	0.34	50	EPA-2	21	0
Gross gamma	rad	23	22	0.9565	1	0.04348	352.5	352.5	352.5								
Plutonium-238	rad	61	55	0.9016	6	0.09836	0.0142	0.0652	0.141	0	0	0.04075	0.08812	1.6	DOE	21	0
Plutonium-239	rad	61	60	0.9836	1	0.01639	0.00965	0.00965	0.00965	0	0	0.008042	0.008042	1.2	DOE	21	0
Radium-226	rad	6	6	1	0	0											
Strontium-90	rad	65	64	0.9846	1	0.01538	4.49	4.49	4.49	0	0	0.5612	0.5612	8	EPA-2	19	0
Thorium-228	rad	7	7	1	0	0											
Thorium-230	rad	7	7	1	0	0											
Thorium-232	rad	7	7	1	0	0											
Tritium	rad	11	11	1	0	0				0	0			20000	EPA-2	11	0
Uranium-234	rad	29	1	0.03448	28	0.9655	0.135	0.6595	5.86	0	0	0.03298	0.293	20	DOE	16	0
Uranium-235	rad	33	27	0.8182	6	0.1818	0.0325	0.1116	0.257	0	0	0.00465	0.01071	24	DOE	16	0
Uranium-238	rad	29	2	0.06897	27	0.931	0.0867	0.37	3.73	0	0	0.01542	0.1554	24	DOE	16	0

Table B-243
Filtered Miscellaneous Constituents of White Rock Canyon Springs

Filtered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	102	0	0	102	1	895	16870	56000								
Hardness	GENINORG	64	0	0	64	1	3000	51950	142600								
Magnesium	GENINORG	101	7	0.06931	94	0.9307	174.4	2951	5000								
Potassium	GENINORG	101	0	0	101	1	1000	2000	5500								
Silicon	GENINORG	8	0	0	8	1	13000	23500	33000								
Sodium	GENINORG	102	0	0	102	1	770	12950	51700								
Total Kjeldahl Nitrogen	GENINORG	8	3	0.375	5	0.625	140	190	340								
Total Phosphate as Phosphorus	GENINORG	14	11	0.7857	3	0.2143	20	40	80								
Total Phosphorus	GENINORG	25	18	0.72	7	0.28	21.8	80	240								
Dissolved Oxygen	WATER_QUAL	1	0	0	1	1	7000	7000	7000								
pH	WATER_QUAL	117	0	0	117	1	4	7.84	8.4								
Specific Conductance	WATER_QUAL	129	0	0	129	1	101	181	471								
Total Dissolved Solids	WATER_QUAL	134	0	0	134	1	54000	160000	681500	0	0	0.16	0.6815	1000000	WQCC-12	26	0
Total Suspended Solids	WATER_QUAL	29	9	0.3103	20	0.6897	2000	32500	1100000								

Table B-244
Nonfiltered Inorganics of White Rock Canyon Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n
Aluminum	METALS	22	8	0.3636	14	0.6364	32.6	350	5100	0	0	0.009459	0.1378	37000	EPA-4	18
Antimony	METALS	18	17	0.9444	1	0.05556	0.6	0.6	0.6	0	0	0.1	0.1	6	EPA-2	15
Arsenic	METALS	23	15	0.6522	8	0.3478	2.4	3.5	9	15	8	7.778	20	0.45	EPA-4	18
Barium	METALS	22	3	0.1364	19	0.8636	7	30	157	0	0	0.03	0.157	1000	WQCC-11	18
Beryllium	METALS	20	20	1	0	0				0	0			4	EPA-2	16
Boron	METALS	22	6	0.2727	16	0.7273	11	35.5	86.6	0	0	0.01076	0.02624	3300	EPA-4	18
Cadmium	METALS	18	13	0.7222	5	0.2778	4	5	5	2	3	1	1	5	EPA-2	15
Chromium	METALS	19	7	0.3684	12	0.6316	5	7	8	0	0	0.14	0.16	50	WQCC-11	16
Cobalt	METALS	18	16	0.8889	2	0.1111	3	6.5	10							
Copper	METALS	20	17	0.85	3	0.15	6	8	9	0	0	0.008	0.009	1000	WQCC-12	16
Cyanide (Total)	CN	84	59	0.7024	25	0.2976	10	10	20	29	25	1.923	3.846	5.2	WQCC-7	24
Cyanide (Total)Re	CN	84	59	0.7024	25	0.2976	10	10	20	0	0	0.05	0.1	200	WQCC-11	24
Cyanide, Amenable	CN	14	14	1	0	0				0	0			5.2	WQCC-8	14
Iron	METALS	22	9	0.4091	13	0.5909	28	190	5200	0	2	0.19	5.2	1000	WQCC-12	18
Lead	METALS	19	19	1	0	0				0	0			15	EPA-2	16
Lithium	METALS	14	14	1	0	0				0	0			730	EPA-4	14
Manganese	METALS	19	11	0.5789	8	0.4211	2	32	100	0	0	0.16	0.5	200	WQCC-12	16
Mercury	METALS	45	16	0.3556	29	0.6444	0.1	0.2	0.2	16	29	16.67	16.67	0.012	WQCC-7	19
MercuryRe	METALS	45	16	0.3556	29	0.6444	0.1	0.2	0.2	0	0	0.2597	0.2597	0.77	WQCC-8	19
Molybdenum	METALS	20	17	0.85	3	0.15	12	15	16	0	0	0.08333	0.08889	180	EPA-4	16
Nickel	METALS	18	17	0.9444	1	0.05556	11	11	11	0	0	0.11	0.11	100	EPA-2	15
Selenium	METALS	46	45	0.9783	1	0.02174	3	3	3	1	0	0.6	0.6	5	WQCC-8	19
Silver	METALS	18	18	1	0	0				0	0			50	WQCC-11	15
Strontium	METALS	22	0	0	22	1	51	95.75	810	0	0	0.004352	0.03682	22000	EPA-4	18
Thallium	METALS	18	18	1	0	0				17	0			2	EPA-2	15
Tin	METALS	18	11	0.6111	7	0.3889	35	42	59	0	0	0.001909	0.002682	22000	EPA-4	15
Uranium	METALS	29	2	0.06897	27	0.931	0.12	1.2	12.41	0	0	0.04	0.4137	30	EPA-2	14
Vanadium	METALS	18	2	0.1111	16	0.8889	7	11	24	0	0	0.04231	0.09231	260	EPA-4	15
Zinc	METALS	19	17	0.8947	2	0.1053	22	26	30	0	0	0.0026	0.003	10000	WQCC-12	15

Table B-245
Nonfiltered Radionuclides of White Rock Canyon Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	28	25	0.8929	3	0.1071	0.069	0.071	0.074	0	0	0.05917	0.06167	1.2	DOE	14	0
Cesium-137	rad	28	28	1	0	0				0	0			120	DOE	14	0
Cobalt-60	rad	12	12	1	0	0				0	0			100	EPA-2	12	0
Gross alpha	rad	38	36	0.9474	2	0.05263	7.4	8.665	9.93	2	0	0.5777	0.662	15	EPA-2	21	1
Gross beta	rad	38	29	0.7632	9	0.2368	3.1	4.7	8	0	0	0.094	0.16	50	EPA-2	21	0
Gross gamma	rad	12	12	1	0	0											
Plutonium-238	rad	28	28	1	0	0				0	0			1.6	DOE	14	0
Plutonium-239	rad	28	28	1	0	0				0	0			1.2	DOE	14	0
Strontium-90	rad	31	29	0.9355	2	0.06452	3.6	4.35	5.1	0	0	0.5438	0.6375	8	EPA-2	16	0
Tritium	rad	95	89	0.9368	6	0.06316	1.149	5.588	166	0	0	0.0002794	0.0083	20000	WQCC-5	24	0

Table B-246
Nonfiltered Organics of White Rock Canyon Springs

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Bis(2-ethylhexyl)phthalate	SVOC	55	47	0.8545	8	0.1455	0.35	1.5	5.35	37	0	0.25	0.8917	6	EPA-2	24	23
Methylene Chloride	VOC	46	43	0.9348	3	0.06522	2.1	2.6	3.2	29	0	0.52	0.64	5	EPA-2	22	0
Di-n-butylphthalate	SVOC	52	49	0.9423	3	0.05769	1.1	3	6	0	0	0.0008108	0.001622	3700	EPA-4	24	0
Benzo(a)anthracene	SVOC	55	52	0.9455	3	0.05455	0.11	0.12	0.12	42	0	0.2449	0.2449	0.49	WQCC-9	24	23
Trinitrotoluene[2,4,6-]	HEXP	66	63	0.9545	3	0.04545	0.2	3.58	4.8								
Diphenylhydrazine[1,2-]	SVOC	23	22	0.9565	1	0.04348	1.6	1.6	1.6								
Tetryl	HEXP	65	63	0.9692	2	0.03077	0.055	0.3325	0.61								
Dinitrotoluene[2,4-]	SVOC	78	76	0.9744	2	0.02564	0.18	2.005	3.83	0	0	0.02747	0.05247	73	EPA-4	24	0
Butanone[2-]	VOC	41	40	0.9756	1	0.02439	23	23	23	0	0	0.01211	0.01211	1900	EPA-4	21	0
Aroclor-1016	PCB	42	41	0.9762	1	0.02381	4.67	4.67	4.67	41	1	2747	2747	0.0017	WQCC-9	22	22
Bromoform	VOC	52	51	0.9808	1	0.01923	3	3	3	0	0	0.03	0.03	100	EPA-2	23	0
Bromomethane	VOC	52	51	0.9808	1	0.01923	2.1	2.1	2.1	29	0	0.2414	0.2414	8.7	EPA-4	23	21
Benzoic Acid	SVOC	55	54	0.9818	1	0.01818	22.5	22.5	22.5	0	0	0.00015	0.00015	150000	EPA-4	24	0
Chloro-3-methylphenol[4-]	SVOC	55	54	0.9818	1	0.01818	43.4	43.4	43.4	44	1	8.68	8.68	5	WQCC-12	24	23
Chlorophenol[2-]	SVOC	55	54	0.9818	1	0.01818	56.6	56.6	56.6	44	1	11.32	11.32	5	WQCC-12	24	23
Nitrophenol[2-]	SVOC	55	54	0.9818	1	0.01818	1.3	1.3	1.3	44	0	0.26	0.26	5	WQCC-12	24	23
HMX	HEXP	66	65	0.9848	1	0.01515	4.9	4.9	4.9								
RDX	HEXP	67	66	0.9851	1	0.01493	23	23	23								
Amino-2,6-dinitrotoluene[4-]	HEXP	65	65	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	66	66	1	0	0											
Amino-DNTs	HEXP	1	1	1	0	0											
Dinitrobenzene[1,3-]	HEXP	65	65	1	0	0											
Nitrotoluene[2-]	HEXP	65	65	1	0	0											
Nitrotoluene[3-]	HEXP	64	64	1	0	0											
Nitrotoluene[4-]	HEXP	65	65	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	19	19	1	0	0											
Aroclor-1221	PCB	42	42	1	0	0				42	0			0.0017	WQCC-9	22	22
Aroclor-1232	PCB	42	42	1	0	0				42	0			0.0017	WQCC-9	22	22
Aroclor-1242	PCB	55	55	1	0	0				55	0			0.0017	WQCC-9	24	24
Aroclor-1248	PCB	42	42	1	0	0				42	0			0.0017	WQCC-9	22	22
Aroclor-1254	PCB	55	55	1	0	0				55	0			0.0017	WQCC-9	24	24
Aroclor-1260	PCB	55	55	1	0	0				55	0			0.0017	WQCC-9	24	24
Aroclor-1262	PCB	27	27	1	0	0				27	0			0.0017	WQCC-9	18	18
Acenaphthene	SVOC	55	55	1	0	0				0	0			370	EPA-4	24	0
Acenaphthylene	SVOC	55	55	1	0	0				0	0			370	EPA-4	24	0
Aniline	SVOC	47	47	1	0	0				0	0			120	EPA-4	24	0
Anthracene	SVOC	55	55	1	0	0				0	0			1800	EPA-4	24	0
Azobenzene	SVOC	24	24	1	0	0				24	0			6.1	EPA-4	22	22
Benzidine	SVOC	46	46	1	0	0				46	0			0.0029	EPA-4	24	24

Table B-246 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Benzo(a)pyrene	SVOC	55	55	1	0	0				45	0			0.2	EPA-2	24	23
Benzo(b)fluoranthene	SVOC	55	55	1	0	0				45	0			0.49	WQCC-9	24	23
Benzo(g,h,i)perylene	SVOC	55	55	1	0	0				0	0			180	EPA-4	24	0
Benzo(k)fluoranthene	SVOC	50	50	1	0	0				40	0			0.49	WQCC-9	23	22
Benzyl Alcohol	SVOC	55	55	1	0	0				0	0			11000	EPA-4	24	0
Bis(2-chloroethoxy)methane	SVOC	55	55	1	0	0											
Bis(2-chloroethyl)ether	SVOC	55	55	1	0	0				55	0			0.098	EPA-4	24	24
Bromophenyl-phenylether[4-]	SVOC	55	55	1	0	0											
Butylbenzylphthalate	SVOC	55	55	1	0	0				0	0			5200	WQCC-9	24	0
Carbazole	SVOC	6	6	1	0	0				0	0			34	EPA-4	6	0
Chloroaniline[4-]	SVOC	55	55	1	0	0				0	0			150	EPA-4	24	0
Chloronaphthalene[2-]	SVOC	55	55	1	0	0				0	0			490	EPA-4	24	0
Chlorophenyl-phenyl[4-] Ether	SVOC	55	55	1	0	0											
Chrysene	SVOC	55	55	1	0	0				45	0			0.49	WQCC-9	24	23
Dibenz(a,h)anthracene	SVOC	55	55	1	0	0				55	0			0.092	EPA-4	24	24
Dibenzofuran	SVOC	55	55	1	0	0				0	0			24	EPA-4	24	0
Dichlorobenzidine[3,3'-]	SVOC	55	55	1	0	0				45	0			0.77	WQCC-9	24	23
Dichlorophenol[2,4-]	SVOC	55	55	1	0	0				45	0			5	WQCC-12	24	23
Diethylphthalate	SVOC	55	55	1	0	0				0	0			29000	EPA-4	24	0
Dimethyl Phthalate	SVOC	47	47	1	0	0				0	0			370000	EPA-4	24	0
Dimethylphenol[2,4-]	SVOC	55	55	1	0	0				0	0			730	EPA-4	24	0
Dinitro-2-methylphenol[4,6-]	SVOC	55	55	1	0	0				0	0			765	WQCC-9	24	0
Dinitrophenol[2,4-]	SVOC	55	55	1	0	0				1	0			73	EPA-4	24	1
Dinitrotoluene[2,6-]	SVOC	77	77	1	0	0				0	0			37	EPA-4	24	0
Di-n-octylphthalate	SVOC	55	55	1	0	0				0	0			730	EPA-4	24	0
Diphenylamine	SVOC	23	23	1	0	0				0	0			910	EPA-4	18	0
Fluoranthene	SVOC	55	55	1	0	0				0	0			370	WQCC-9	24	0
Fluorene	SVOC	55	55	1	0	0				0	0			240	EPA-4	24	0
Hexachlorobenzene	SVOC	55	55	1	0	0				55	0			0.0077	WQCC-9	24	24
Hexachlorobutadiene	SVOC	55	55	1	0	0				32	0			7.3	EPA-4	24	23
Hexachlorocyclopentadiene	SVOC	55	55	1	0	0				0	0			50	EPA-2	24	0
Hexachloroethane	SVOC	55	55	1	0	0				0	0			37	EPA-4	24	0
Indeno(1,2,3-cd)pyrene	SVOC	55	55	1	0	0				45	0			0.49	WQCC-9	24	23
Isophorone	SVOC	55	55	1	0	0				0	0			710	EPA-4	24	0
Methylnaphthalene[2-]	SVOC	55	55	1	0	0				32	0			6.2	EPA-4	24	23
Methylphenol[2-]	SVOC	55	55	1	0	0				45	0			5	WQCC-12	24	23
Methylphenol[4-]	SVOC	47	47	1	0	0				0	0			180	EPA-4	24	0
Methylpyridine[2-]	SVOC	37	37	1	0	0											
Naphthalene	SVOC	55	55	1	0	0				32	0			6.2	EPA-4	24	23

Table B-246 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitroaniline[2-]	SVOC	55	55	1	0	0				45	0			2.2	EPA-4	24	23
Nitroaniline[3-]	SVOC	55	55	1	0	0				45	0			2.2	EPA-4	24	23
Nitroaniline[4-]	SVOC	55	55	1	0	0				45	0			2.2	EPA-4	24	23
Nitrobenzene	SVOC	78	78	1	0	0				24	0			3.4	EPA-4	24	18
Nitrophenol[4-]	SVOC	54	54	1	0	0				44	0			5	WQCC-12	24	23
Nitrosodimethylamine[N-]	SVOC	47	47	1	0	0				47	0			0.013	EPA-4	24	24
Nitroso-di-n-propylamine[N-]	SVOC	55	55	1	0	0				55	0			0.096	EPA-4	24	24
Nitrosodiphenylamine[N-]	SVOC	32	32	1	0	0				0	0			140	EPA-4	23	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	23	23	1	0	0				0	0			170000	WQCC-9	18	0
Pentachlorophenol	SVOC	54	54	1	0	0				54	0			1	EPA-2	24	24
Phenanthrene	SVOC	55	55	1	0	0				0	0			1800	EPA-4	24	0
Phenol	SVOC	55	55	1	0	0				45	0			5	WQCC-12	24	23
Pyrene	SVOC	54	54	1	0	0				0	0			180	EPA-4	24	0
Pyridine	SVOC	47	47	1	0	0				0	0			37	EPA-4	24	0
Trichlorophenol[2,4,5-]	SVOC	55	55	1	0	0				45	0			5	WQCC-12	24	23
Trichlorophenol[2,4,6-]	SVOC	55	55	1	0	0				45	0			5	WQCC-12	24	23
Acetone	VOC	32	32	1	0	0				0	0			610	EPA-4	17	0
Acrolein	VOC	13	13	1	0	0											
Acrylonitrile	VOC	13	13	1	0	0											
Benzene	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Bromobenzene	VOC	34	34	1	0	0				0	0			23	EPA-4	22	0
Bromochloromethane	VOC	34	34	1	0	0				21	0			5	EPA-2	22	0
Bromodichloromethane	VOC	52	52	1	0	0				0	0			100	EPA-2	23	0
Butylbenzene[n-]	VOC	34	34	1	0	0				0	0			61	EPA-4	22	0
Butylbenzene[sec-]	VOC	34	34	1	0	0				0	0			61	EPA-4	22	0
Butylbenzene[tert-]	VOC	34	34	1	0	0				0	0			61	EPA-4	22	0
Carbon Disulfide	VOC	42	42	1	0	0				0	0			1000	EPA-4	22	0
Carbon Tetrachloride	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Chlorobenzene	VOC	52	52	1	0	0				0	0			100	EPA-2	23	0
Chlorodibromomethane	VOC	52	52	1	0	0				0	0			100	EPA-2	23	0
Chloroethane	VOC	50	50	1	0	0				0	0			39	EPA-4	23	0
Chloroethyl vinyl ether[2-]	VOC	3	3	1	0	0											
Chloroform	VOC	52	52	1	0	0				0	0			100	WQCC-11	23	0
Chloromethane	VOC	52	52	1	0	0				0	0			15	EPA-4	23	0
Chlorotoluene[2-]	VOC	34	34	1	0	0				0	0			120	EPA-4	22	0
Chlorotoluene[4-]	VOC	34	34	1	0	0				0	0			120	EPA-4	22	0
Dibromo-3-Chloropropane[1,2-]	VOC	34	34	1	0	0											
Dibromoethane[1,2-]	VOC	34	34	1	0	0				34	0			0.0076	EPA-4	22	22
Dibromomethane	VOC	34	34	1	0	0				0	0			61	EPA-4	22	0

Table B-246 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dichlorobenzene[1,2-]	VOC	56	56	1	0	0				0	0			600	EPA-2	24	0
Dichlorobenzene[1,3-]	VOC	56	56	1	0	0				0	0			18	EPA-4	24	0
Dichlorobenzene[1,4-]	VOC	56	56	1	0	0				0	0			75	EPA-2	24	0
Dichlorodifluoromethane	VOC	42	42	1	0	0				0	0			390	EPA-4	22	0
Dichloroethane[1,1-]	VOC	52	52	1	0	0				0	0			25	WQCC-11	23	0
Dichloroethane[1,2-]	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Dichloroethene[1,1-]	VOC	52	52	1	0	0				29	0			5	WQCC-11	23	0
Dichloroethene[cis/trans-1,2-]	VOC	2	2	1	0	0											
Dichloroethene[cis-1,2-]	VOC	19	19	1	0	0				0	0			61	EPA-4	19	0
Dichloroethene[trans-1,2-]	VOC	44	44	1	0	0				0	0			100	EPA-2	23	0
Dichloropropane[1,2-]	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Dichloropropane[1,3-]	VOC	34	34	1	0	0				21	0			5	EPA-2	22	0
Dichloropropane[2,2-]	VOC	34	34	1	0	0				21	0			5	EPA-2	22	0
Dichloropropene[1,1-]	VOC	34	34	1	0	0				21	0			4	EPA-4	22	21
Dichloropropene[cis-1,3-]	VOC	52	52	1	0	0				29	0			4	EPA-4	23	21
Dichloropropene[trans-1,3-]	VOC	50	50	1	0	0				27	0			4	EPA-4	23	21
Ethylbenzene	VOC	52	52	1	0	0				0	0			700	EPA-2	23	0
Hexanone[2-]	VOC	42	42	1	0	0				0	0			1900	EPA-4	22	0
Iodomethane	VOC	34	34	1	0	0				0	0			8.7	EPA-4	22	0
Isopropylbenzene	VOC	34	34	1	0	0				0	0			660	EPA-4	22	0
Isopropyltoluene[4-]	VOC	34	34	1	0	0				0	0			660	EPA-4	22	0
Methyl-2-pentanone[4-]	VOC	42	42	1	0	0				0	0			160	EPA-4	22	0
Propylbenzene[1-]	VOC	34	34	1	0	0				0	0			61	EPA-4	22	0
Styrene	VOC	42	42	1	0	0				0	0			100	EPA-2	22	0
Tetrachloroethane[1,1,1,2-]	VOC	29	29	1	0	0				16	0			4.3	EPA-4	20	16
Tetrachloroethane[1,1,2,2-]	VOC	52	52	1	0	0				0	0			10	WQCC-11	23	0
Tetrachloroethene	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Toluene	VOC	52	52	1	0	0				0	0			750	WQCC-11	23	0
Trichloro-1,2,2-trifluoroethane	VOC	8	8	1	0	0											
Trichlorobenzene[1,2,3-]	VOC	3	3	1	0	0				0	0			70	EPA-2	2	0
Trichlorobenzene[1,2,4-]	VOC	55	55	1	0	0				0	0			70	EPA-2	24	0
Trichloroethane[1,1,1-]	VOC	52	52	1	0	0				0	0			60	WQCC-11	23	0
Trichloroethane[1,1,2-]	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Trichloroethene	VOC	52	52	1	0	0				29	0			5	EPA-2	23	0
Trichlorofluoromethane	VOC	52	52	1	0	0				0	0			1300	EPA-4	23	0
Trichloropropane[1,2,3-]	VOC	34	34	1	0	0				34	0			0.016	EPA-4	22	22
Trichlorotrifluoroethane	VOC	5	5	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	34	34	1	0	0				0	0			12	EPA-4	22	0
Trimethylbenzene[1,3,5-]	VOC	34	34	1	0	0				0	0			12	EPA-4	22	0

Table B-246 (continued)

Unfiltered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Vinyl Chloride	VOC	52	52	1	0	0				42	0			1	WQCC-11	23	21
Xylene (Total)	VOC	33	33	1	0	0				0	0			620	WQCC-11	21	0
Xylene[1,2-]	VOC	19	19	1	0	0				0	0			1400	EPA-4	13	0
Xylene[1,3-]+Xylene[1,4-]	VOC	19	19	1	0	0				0	0			620	WQCC-11	13	0

Table B-247
Nonfiltered Miscellaneous Constituents of White Rock Canyon Springs

Unfitered WGS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	30	26	0.8667	4	0.1333	60	125	1100								
Bromide	ANION	11	7	0.6364	4	0.3636	20	91.5	140								
Chloride	ANION	133	10	0.07519	123	0.9248	1830	4400	32600	0	0	0.0176	0.1304	250000	WQCC-12	25	0
Fluoride	ANION	130	12	0.09231	118	0.9077	220	438	1160	0	0	0.2738	0.725	1600	WQCC-11	25	0
Nitrate*	ANION	138	6	0.04348	132	0.9565	10	530	5370	0	0	0.053	0.537	10000	EPA-4	25	0
Nitrite	ANION	4	4	1	0	0				0	0			1000	EPA-4	3	0
Oxalate	ANION	1	1	1	0	0											
Perchlorate	ANION	47	42	0.8936	5	0.1064	6.62	13.6	16.5	0	5	3.676	4.459	3.7	EPA-4	22	0
Sulfate	ANION	132	8	0.06061	124	0.9394	1750	5800	22000	0	0	0.009667	0.03667	600000	WQCC-12	25	0
Calcium	GENINORG	30	0	0	30	1	400	14900	34400								
Hardness	GENINORG	29	2	0.06897	27	0.931	35000	49100	93000								
Magnesium	GENINORG	31	1	0.03226	30	0.9677	600	3000	4600								
Potassium	GENINORG	30	1	0.03333	29	0.9667	400	2100	9400								
Sodium	GENINORG	31	1	0.03226	30	0.9677	9000	12100	40200								
Deuterium Ratio	STABLE_ISOTOPES	10	0	0	10	1	-84	-80.5	-78								
Nitrogen-15/Nitrogen-14 Ratio	STABLE_ISOTOPES	8	0	0	8	1	-3.1	-1.6	2.6								
Oxygen-18/Oxygen-16 Ratio	STABLE_ISOTOPES	10	0	0	10	1	-11.6	-10.95	-10.4								
Max TSS	WATER_QUAL	1	0	0	1	1	144000	144000	144000								
pH	WATER_QUAL	30	0	0	30	1	6.8	7.85	8.4								
Specific Conductance	WATER_QUAL	30	0	0	30	1	115	177.5	312								
Total Suspended Solids	WATER_QUAL	89	30	0.3371	59	0.6629	1000	11000	1350000								
Suspended Sediment Concentration	WATER_QUAL	5	2	0.4	3	0.6	2800	3600	45300								

*Nitrate results include Analyte Codes of NO3 and NO2+NO3 (as N)

Table B-248
Filtered Inorganics of White Rock Canyon Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	45	32	0.7111	13	0.2889	14.9	122.4	6930	4	8	1.407	79.66	87	WQCC-6	12	4
AluminumRe	METALS	45	32	0.7111	13	0.2889	14.9	122.4	6930	0	1	0.02448	1.386	5000	WQCC-4	12	0
Antimony	METALS	44	35	0.7955	9	0.2045	0.6	3	3	0	0	0.0006977	0.0006977	4300	WQCC-9	12	0
Arsenic	METALS	39	36	0.9231	3	0.07692	1.98	2	3	0	0	0.08264	0.124	24.2	WQCC-9	10	0
Barium	METALS	47	4	0.08511	43	0.9149	16.2	41.8	146	0	0	0.01608	0.05615	2600	EPA-4	12	0
Beryllium	METALS	47	40	0.8511	7	0.1489	3	3	3	0	0	0.566	0.566	5.3	WQCC-6	12	0
BeryllioumRe	METALS	47	40	0.8511	7	0.1489	3	3	3	0	0	0.0411	0.0411	73	EPA-4	12	0
Boron	METALS	41	24	0.5854	17	0.4146	23.1	33.25	572	0	0	0.00665	0.1144	5000	WQCC-4	12	0
Cadmium	METALS	44	44	1	0	0				20	0			2.24	WQCC-6	12	10
CadmiumRe	METALS	44	44	1	0	0				0	0			50	WQCC-4	12	0
Chromium	METALS	46	46	1	0	0				0	0			74.12	WQCC-6	12	0
ChromiumRe	METALS	46	46	1	0	0				0	0			1000	WQCC-4	12	0
Cobalt	METALS	44	42	0.9545	2	0.04545	7.47	10.14	12.8	0	0	0.01014	0.0128	1000	WQCC-4	12	0
Copper	METALS	46	40	0.8696	6	0.1304	6	16.7	28.4	14	5	1.865	3.171	8.96	WQCC-6	12	9
CopperRe	METALS	46	40	0.8696	6	0.1304	6	16.7	28.4	0	0	0.0334	0.0568	500	WQCC-4	12	0
Cyanide (Total)	CN	8	3	0.375	5	0.625	10	10	10								
Iron	METALS	45	28	0.6222	17	0.3778	40	87	3790	0	0	0.007909	0.3445	11000	EPA-4	12	0
Lead	METALS	46	44	0.9565	2	0.04348	0.364	1.532	2.7	24	1	0.6087	1.073	2.52	WQCC-6	12	10
LeadRe	METALS	46	44	0.9565	2	0.04348	0.364	1.532	2.7	0	0	0.01532	0.027	100	WQCC-4	12	0
Lithium	METALS	3	2	0.6667	1	0.3333	30	30	30	0	0	0.0411	0.0411	730	EPA-4	3	0
Manganese	METALS	43	24	0.5581	19	0.4419	2.1	11.9	122	0	0	0.007	0.07176	1700	EPA-4	12	0
Mercury	METALS	26	21	0.8077	5	0.1923	0.2	0.2	0.2	0	0	0.01818	0.01818	11	EPA-4	9	0
Molybdenum	METALS	40	40	1	0	0				0	0			180	EPA-4	11	0
Nickel	METALS	46	46	1	0	0				0	0			52.01	WQCC-6	12	0
NickelRe	METALS	46	46	1	0	0				0	0			4600	WQCC-9	12	0
Selenium	METALS	18	17	0.9444	1	0.05556	5	5	5	0	0	0.1	0.1	50	WQCC-4	10	0
Silver	METALS	47	47	1	0	0				20	0			3.45	WQCC-2	12	10
SilverRe	METALS	47	47	1	0	0				0	0			180	EPA-4	12	0
Strontium	METALS	47	0	0	47	1	10	150.3	405	0	0	0.006832	0.01841	22000	EPA-4	12	0
Thallium	METALS	43	33	0.7674	10	0.2326	0.09	3	3	3	0	0.4762	0.4762	6.3	WQCC-9	12	3
Tin	METALS	47	47	1	0	0				0	0			22000	EPA-4	12	0
Titanium	METALS	6	2	0.3333	4	0.6667	1.02	1.825	6.36								
Uranium	URANIUM	15	0	0	15	1	0.21	1.4	2								
Vanadium	METALS	43	28	0.6512	15	0.3488	5.09	9	14	0	0	0.09	0.14	100	WQCC-4	12	0
Zinc	METALS	46	41	0.8913	5	0.1087	14.7	27.2	68.8	0	0	0.2321	0.5871	117.19	WQCC-2	12	0
ZincRe	METALS	46	41	0.8913	5	0.1087	14.7	27.2	68.8	0	0	0.001088	0.002752	25000	WQCC-4	12	0

Table B-249
Filtered Radionuclides of White Rock Canyon Base Flow

Filtered WS Samples		Summary by Sample												Screening Level		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	8	7	0.875	1	0.125	0.02	0.02	0.02	0	0	0.01667	0.01667	1.2	DOE	3	0
Gross alpha	rad	3	3	1	0	0											
Gross beta	rad	3	3	1	0	0											
Plutonium-238	rad	8	8	1	0	0				0	0			1.6	DOE	3	0
Plutonium-239	rad	8	8	1	0	0				0	0			1.2	DOE	3	0
Strontium-90	rad	12	9	0.75	3	0.25	0.33	1.01	1.43	0	0	0.02525	0.03575	40	DOE	6	0
Thorium-228	rad	9	9	1	0	0											
Thorium-230	rad	9	6	0.6667	3	0.3333	0.08	0.09	0.12								
Thorium-232	rad	9	9	1	0	0											
Uranium-234	rad	8	0	0	8	1	0.53	0.58	0.79	0	0	0.029	0.0395	20	DOE	3	0
Uranium-235	rad	8	4	0.5	4	0.5	0.01	0.015	0.03	0	0	0.000625	0.00125	24	DOE	3	0
Uranium-238	rad	8	0	0	8	1	0.3	0.445	0.64	0	0	0.01854	0.02667	24	DOE	3	0

Table B-250
Filtered Organics of White Rock Canyon Base Flow

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acenaphthene	SVOC	1	1	1	0	0				0	0			2700	WQCC-9	1	0
Acenaphthylene	SVOC	1	1	1	0	0				0	0			2700	WQCC-9	1	0
Acetone	VOC	1	0	0	1	1	2.5	2.5	2.5	0	0	0.004098	0.004098	610	EPA-4	1	0
Acrolein	VOC	1	1	1	0	0											
Acrylonitrile	VOC	1	1	1	0	0											
Aldrin	PEST	1	1	1	0	0				1	0			0.0014	WQCC-9	1	1
Amino-2,6-dinitrotoluene[4-]	HEXP	1	1	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	1	1	1	0	0											
Anthracene	SVOC	1	1	1	0	0				0	0			110000	WQCC-9	1	0
Aroclor-1016	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1221	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1232	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1242	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1248	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1254	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
Aroclor-1260	PCB	1	1	1	0	0				1	0			0.0017	WQCC-9	1	1
BHC[alpha-]	PEST	1	1	1	0	0				1	0			0.13	WQCC-9	1	1
BHC[beta-]	PEST	1	1	1	0	0				0	0			0.46	WQCC-9	1	0
BHC[delta-]	PEST	1	1	1	0	0											
BHC[gamma-]	PEST	1	1	1	0	0				0	0			0.63	WQCC-9	1	0
Benzene	VOC	1	1	1	0	0				0	0			710	WQCC-9	1	0
Benzidine	SVOC	1	1	1	0	0				1	0			0.0054	WQCC-9	1	1
Benzo(a)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(a)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(b)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Benzo(g,h,i)perylene	SVOC	1	1	1	0	0				0	0			11000	WQCC-9	1	0
Benzo(k)fluoranthene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Bis(2-chloroethoxy)methane	SVOC	1	1	1	0	0											
Bis(2-chloroethyl)ether	SVOC	1	1	1	0	0				0	0			14	WQCC-9	1	0
Bis(2-ethylhexyl)phthalate	SVOC	1	1	1	0	0				0	0			59	WQCC-9	1	0
Bromodichloromethane	VOC	1	1	1	0	0				0	0			460	WQCC-9	1	0
Bromoform	VOC	1	1	1	0	0				0	0			3600	WQCC-9	1	0
Bromomethane	VOC	1	1	1	0	0				0	0			4000	WQCC-9	1	0
Bromophenyl-phenylether[4-]	SVOC	1	1	1	0	0											
Butanone[2-]	VOC	1	1	1	0	0				0	0			1900	EPA-4	1	0
Butylbenzylphthalate	SVOC	1	1	1	0	0				0	0			5200	WQCC-9	1	0
Carbon Disulfide	VOC	1	1	1	0	0				0	0			1000	EPA-4	1	0
Carbon Tetrachloride	VOC	1	1	1	0	0				0	0			44	WQCC-9	1	0
Chloro-3-methylphenol[4-]	SVOC	1	1	1	0	0											
Chloro-o-tolyloxyacetic[4-] Acid	HERB	1	1	1	0	0											

Table B-250 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Chlorobenzene	VOC	1	1	1	0	0				0	0			21000	WQCC-9	1	0
Chlorodibromomethane	VOC	1	1	1	0	0				0	0			340	WQCC-9	1	0
Chloroethane	VOC	1	1	1	0	0				0	0			39	EPA-4	1	0
Chloroethyl vinyl ether[2-]	VOC	1	1	1	0	0											
Chloroform	VOC	1	1	1	0	0				0	0			4700	WQCC-9	1	0
Chloromethane	VOC	1	1	1	0	0				0	0			15	EPA-4	1	0
Chloronaphthalene[2-]	SVOC	1	1	1	0	0				0	0			4300	WQCC-9	1	0
Chlorophenol[2-]	SVOC	1	1	1	0	0				0	0			400	WQCC-9	1	0
Chlorophenyl-phenyl[4-] Ether	SVOC	1	1	1	0	0											
Chrysene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
DB[2,4-]	HERB	1	1	1	0	0											
DDD[4,4'-]	PEST	1	1	1	0	0				1	0			0.0059	WQCC-9	1	1
DDE[4,4'-]	PEST	1	1	1	0	0				1	0			0.0059	WQCC-9	1	1
DDT[4,4'-]	PEST	1	1	1	0	0				1	0			0.0059	WQCC-9	1	1
D[2,4-]	HERB	1	1	1	0	0											
Dalapon	HERB	1	1	1	0	0											
Di-n-octylphthalate	SVOC	1	1	1	0	0				0	0			730	EPA-4	1	0
Dibenz(a,h)anthracene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Dibromo-3-Chloropropane[1,2-]	VOC	1	1	1	0	0											
Dibromoethane[1,2-]	VOC	1	1	1	0	0				1	0			0.0076	EPA-4	1	1
Dibromomethane	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dicamba	HERB	1	1	1	0	0											
Dichlorobenzene[1,2-]	VOC	1	1	1	0	0				0	0			17000	WQCC-9	1	0
Dichlorobenzene[1,3-]	VOC	1	1	1	0	0				0	0			2600	WQCC-9	1	0
Dichlorobenzene[1,4-]	VOC	1	1	1	0	0				0	0			2600	WQCC-9	1	0
Dichlorobenzidine[3,3'-]	SVOC	1	1	1	0	0				1	0			0.77	WQCC-9	1	1
Dichlorodifluoromethane	VOC	1	1	1	0	0				0	0			390	EPA-4	1	0
Dichloroethane[1,1-]	VOC	1	1	1	0	0				0	0			810	EPA-4	1	0
Dichloroethane[1,2-]	VOC	1	1	1	0	0				0	0			990	WQCC-9	1	0
Dichloroethene[1,1-]	VOC	1	1	1	0	0				0	0			32	WQCC-9	1	0
Dichloroethene[cis-1,2-]	VOC	1	1	1	0	0				0	0			61	EPA-4	1	0
Dichloroethene[trans-1,2-]	VOC	1	1	1	0	0				0	0			140000	WQCC-9	1	0
Dichlorophenol[2,4-]	SVOC	1	1	1	0	0				0	0			790	WQCC-9	1	0
Dichloropropane[1,2-]	VOC	1	1	1	0	0				0	0			390	WQCC-9	1	0
Dichloropropene[cis-1,3-]	VOC	1	1	1	0	0				0	0			1700	WQCC-9	1	0
Dichloropropene[trans-1,3-]	VOC	1	1	1	0	0				0	0			1700	WQCC-9	1	0
Dichlorprop	HERB	1	1	1	0	0											
Dieldrin	PEST	1	1	1	0	0				1	0			0.0014	WQCC-9	1	1
Diethylphthalate	SVOC	1	1	1	0	0				0	0			120000	WQCC-9	1	0
Dimethyl Phthalate	SVOC	1	1	1	0	0				0	0			2900000	WQCC-9	1	0

Table B-250 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dimethylphenol[2,4-]	SVOC	1	1	1	0	0				0	0			2300	WQCC-9	1	0
Dinitrobenzene[1,3-]	HEXP	1	1	1	0	0											
Dinitrophenol[2,4-]	SVOC	1	1	1	0	0				0	0			14000	WQCC-9	1	0
Dinitrotoluene[2,4-]	SVOC	1	1	1	0	0				0	0			91	WQCC-9	1	0
Dinitrotoluene[2,6-]	SVOC	1	1	1	0	0				0	0			37	EPA-4	1	0
Dinoseb	HERB	1	1	1	0	0											
Endosulfan I	PEST	1	1	1	0	0				0	0			240	WQCC-9	1	0
Endosulfan II	PEST	1	1	1	0	0				0	0			240	WQCC-9	1	0
Endosulfan Sulfate	PEST	1	1	1	0	0				0	0			240	WQCC-9	1	0
Endrin	PEST	1	1	1	0	0				0	0			0.81	WQCC-9	1	0
Endrin Aldehyde	PEST	1	1	1	0	0				0	0			0.81	WQCC-9	1	0
Ethylbenzene	VOC	1	1	1	0	0				0	0			29000	WQCC-9	1	0
Fluoranthene	SVOC	1	1	1	0	0				0	0			370	WQCC-9	1	0
Fluorene	SVOC	1	1	1	0	0				0	0			14000	WQCC-9	1	0
HMX	HEXP	1	1	1	0	0											
Heptachlor	PEST	1	1	1	0	0				1	0			0.0021	WQCC-9	1	1
Heptachlor Epoxide	PEST	1	1	1	0	0				1	0			0.0011	WQCC-9	1	1
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Heptachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorobenzene	SVOC	1	1	1	0	0				1	0			0.0077	WQCC-9	1	1
Hexachlorobutadiene	SVOC	1	1	1	0	0				0	0			500	WQCC-9	1	0
Hexachlorocyclopentadiene	SVOC	1	1	1	0	0				0	0			17000	WQCC-9	1	0
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0				0	0			0.00011	EPA-4	1	0
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[1,2,3,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofuran[2,3,4,6,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Hexachlorodibenzofurans (Total)	DIOXIN_FURAN	1	1	1	0	0											
Hexachloroethane	SVOC	1	1	1	0	0				0	0			89	WQCC-9	1	0
Indeno(1,2,3-cd)pyrene	SVOC	1	1	1	0	0				1	0			0.49	WQCC-9	1	1
Isophorone	SVOC	1	1	1	0	0				0	0			26000	WQCC-9	1	0
Methoxychlor[4,4'-]	PEST	1	1	1	0	0				0	0			180	EPA-4	1	0
Methylene Chloride	VOC	1	1	1	0	0				0	0			16000	WQCC-9	1	0
Naphthalene	SVOC	1	1	1	0	0				1	0			6.2	EPA-4	1	1

Table B-250 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Nitrobenzene	SVOC	1	1	1	0	0				0	0			1900	WQCC-9	1	0
Nitrophenol[2-]	SVOC	1	1	1	0	0				0	0			290	EPA-4	1	0
Nitrophenol[4-]	SVOC	1	1	1	0	0				0	0			290	EPA-4	1	0
Nitroso-di-n-propylamine[N-]	SVOC	1	1	1	0	0				0	0			14	WQCC-9	1	0
Nitrosodimethylamine[N-]	SVOC	1	1	1	0	0				0	0			81	WQCC-9	1	0
Nitrosodiphenylamine[N-]	SVOC	1	1	1	0	0				0	0			160	WQCC-9	1	0
Nitrotoluene[2-]	HEXP	1	1	1	0	0											
Nitrotoluene[3-]	HEXP	1	1	1	0	0											
Nitrotoluene[4-]	HEXP	1	1	1	0	0											
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	1	1	1	0	0											
Oxybis(1-chloropropane)[2,2'-]	SVOC	1	1	1	0	0				0	0			170000	WQCC-9	1	0
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorodibenzofuran[2,3,4,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Pentachlorophenol	SVOC	1	1	1	0	0				0	0			82	WQCC-9	1	0
Phenanthrene	SVOC	1	1	1	0	0				0	0			110000	WQCC-9	1	0
Phenol	SVOC	1	1	1	0	0				0	0			4600000	WQCC-9	1	0
Pyrene	SVOC	1	1	1	0	0				0	0			11000	WQCC-9	1	0
RDX	HEXP	1	1	1	0	0											
Styrene	VOC	1	1	1	0	0				0	0			1600	EPA-4	1	0
TP[2,4,5-]	HERB	1	1	1	0	0											
T[2,4,5-]	HERB	1	1	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0				1	0			1.40E-07	WQCC-9	1	1
Tetrachlorodibenzodioxins (Total)	DIOXIN_FURAN	1	1	1	0	0											
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	1	1	1	0	0											
Tetrachloroethane[1,1,1,2-]	VOC	1	1	1	0	0				1	0			4.3	EPA-4	1	1
Tetrachloroethane[1,1,2,2-]	VOC	1	1	1	0	0				0	0			110	WQCC-9	1	0
Tetrachloroethene	VOC	1	1	1	0	0				0	0			88.5	WQCC-9	1	0
Tetryl	HEXP	1	1	1	0	0											
Toluene	VOC	1	1	1	0	0				0	0			200000	WQCC-9	1	0
Toxaphene (Technical Grade)	PEST	1	1	1	0	0				1	0			0.0075	WQCC-9	1	1
Trichlorobenzene[1,2,4-]	VOC	1	1	1	0	0				0	0			940	WQCC-9	1	0
Trichloroethane[1,1,1-]	VOC	1	1	1	0	0				0	0			790	EPA-4	1	0
Trichloroethane[1,1,2-]	VOC	1	1	1	0	0				0	0			420	WQCC-9	1	0
Trichloroethene	VOC	1	1	1	0	0				0	0			810	WQCC-9	1	0
Trichlorofluoromethane	VOC	1	1	1	0	0				0	0			1300	EPA-4	1	0
Trichlorophenol[2,4,5-]	SVOC	1	1	1	0	0				0	0			3700	EPA-4	1	0
Trichlorophenol[2,4,6-]	SVOC	1	1	1	0	0				0	0			65	WQCC-9	1	0

Table B-250 (continued)

Filtered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Trichloropropane[1,2,3-]	VOC	1	1	1	0	0				1	0			0.016	EPA-4	1	1
Trinitrobenzene[1,3,5-]	HEXP	1	1	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	1	1	1	0	0											
Vinyl Chloride	VOC	1	1	1	0	0				0	0			5250	WQCC-9	1	0

Table B-251
Filtered Miscellaneous Constituents of White Rock Canyon Base Flow

Fitered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Calcium	GENINORG	47	0	0	47	1	1300	24000	49800								
Dissolved Oxygen	WATER_QUAL	1	0	0	1	1	7000	7000	7000								
Hardness	GENINORG	36	0	0	36	1	4000	75600	168000								
Magnesium	GENINORG	47	0	0	47	1	200	4980	10400								
Potassium	GENINORG	43	1	0.02326	42	0.9767	1533	2425	15770								
Sodium	GENINORG	47	0	0	47	1	700	13700	92700								
Specific Conductance	WATER_QUAL	31	0	0	31	1	2.15	198	597								
Total Dissolved Solids	WATER_QUAL	58	0	0	58	1	125000	189500	13600000								
Total Suspended Solids	WATER_QUAL	2	1	0.5	1	0.5	117000	117000	117000								
pH	WATER_QUAL	26	0	0	26	1	7.38	8.1	8.8								

Table B-252
Nonfiltered Inorganics of White Rock Canyon Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Inorganic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Aluminum	METALS	28	3	0.1071	25	0.8929	150	4030	344000	0	4	0.1089	9.297	37000	EPA-4	12	0
Antimony	METALS	23	20	0.8696	3	0.1304	0.6	0.83	3	0	0	0.05533	0.2	15	EPA-4	12	0
Arsenic	METALS	22	5	0.2273	17	0.7727	3	5	26	5	17	11.11	57.78	0.45	EPA-4	11	4
Barium	METALS	28	0	0	28	1	16	102.5	4040	0	2	0.03942	1.554	2600	EPA-4	12	0
Beryllium	METALS	28	23	0.8214	5	0.1786	4	9.8	20	0	0	0.1342	0.274	73	EPA-4	12	0
Boron	METALS	19	2	0.1053	17	0.8947	17	40	410	0	0	0.01212	0.1242	3300	EPA-4	9	0
Cadmium	METALS	26	21	0.8077	5	0.1923	1.05	3.1	6	0	0	0.1722	0.3333	18	EPA-4	12	0
Chromium	METALS	26	13	0.5	13	0.5	3	9	138	0	0	0.0001636	0.002509	55000	EPA-4	12	0
Cobalt	METALS	25	19	0.76	6	0.24	4	32.83	89.1								
Copper	METALS	25	13	0.52	12	0.48	3	17.5	195	0	0	0.0125	0.1393	1400	EPA-4	12	0
Cyanide (Total)	CN	49	33	0.6735	16	0.3265	10	10	40	17	16	1.923	7.692	5.2	WQCC-7	12	9
Cyanide, Amenable	CN	9	8	0.8889	1	0.1111	5.08	5.08	5.08	0	0	0.9769	0.9769	5.2	WQCC-8	6	0
Iron	METALS	28	2	0.07143	26	0.9286	120	2445	191000	0	4	0.2223	17.36	11000	EPA-4	12	0
Lead	METALS	28	15	0.5357	13	0.4643	2.2	6	215								
Lithium	METALS	10	10	1	0	0				0	0			730	EPA-4	9	0
Manganese	METALS	28	4	0.1429	24	0.8571	3	114	9740	0	4	0.06706	5.729	1700	EPA-4	12	0
Mercury	METALS	61	32	0.5246	29	0.4754	0.1	0.2	0.28	32	29	16.67	23.33	0.012	WQCC-7	17	12
MercuryRe	METALS	61	32	0.5246	29	0.4754	0.1	0.2	0.28	0	0	0.2597	0.3636	0.77	WQCC-8	17	0
Molybdenum	METALS	23	21	0.913	2	0.08696	13	13	13	0	0	0.07222	0.07222	180	EPA-4	12	0
Nickel	METALS	24	18	0.75	6	0.25	3	58.35	175	0	0	0.07993	0.2397	730	EPA-4	12	0
Selenium	METALS	57	49	0.8596	8	0.1404	3	3	7	2	2	0.6	1.4	5	WQCC-8	14	0
Silver	METALS	28	27	0.9643	1	0.03571	6	6	6	0	0	0.03333	0.03333	180	EPA-4	12	0
Strontium	METALS	28	0	0	28	1	59	312.5	2220	0	0	0.0142	0.1009	22000	EPA-4	12	0
Thallium	METALS	26	19	0.7308	7	0.2692	0.09	1.3	3								
Tin	METALS	28	24	0.8571	4	0.1429	35	40.5	63	0	0	0.001841	0.002864	22000	EPA-4	12	0
Titanium	METALS	1	1	1	0	0											
Uranium	URANIUM	43	3	0.06977	40	0.9302	0.1312	1.75	20.4								
Vanadium	METALS	27	4	0.1481	23	0.8519	4	11	326	0	1	0.04231	1.254	260	EPA-4	12	0
Zinc	METALS	24	8	0.3333	16	0.6667	11	36.1	570	0	0	0.003282	0.05182	11000	EPA-4	12	0

Table B-253
Nonfiltered Radionuclides of White Rock Canyon Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Rad Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Americium-241	rad	62	56	0.9032	6	0.09677	0.02	0.0361	0.34	0	0	0.03008	0.2833	1.2	DOE	12	0
Cesium-137	rad	53	53	1	0	0				0	0			120	DOE	9	0
Cobalt-60	rad	36	32	0.8889	4	0.1111	12.2	17.8	39.9	0	0	0.089	0.1995	200	DOE	7	0
Gross alpha	rad	53	44	0.8302	9	0.1698	1.42	3.5	5.533								
Gross beta	rad	53	31	0.5849	22	0.4151	1.87	5.01	14.7								
Gross gamma	rad	20	19	0.95	1	0.05	153.7	153.7	153.7								
Plutonium-238	rad	62	58	0.9355	4	0.06452	0.02	0.117	0.264	0	0	0.07312	0.165	1.6	DOE	12	0
Plutonium-239	rad	62	57	0.9194	5	0.08065	0.00673	0.15	0.38	0	0	0.125	0.3167	1.2	DOE	12	0
Radium-226	rad	6	4	0.6667	2	0.3333	0.378	0.463	0.548								
Strontium-90	rad	59	53	0.8983	6	0.1017	0.333	3.065	9.205	0	0	0.07662	0.2301	40	DOE	12	0
Thorium-228	rad	14	7	0.5	7	0.5	0.14	0.58	12.1								
Thorium-230	rad	14	7	0.5	7	0.5	0.06	0.3	5.47								
Thorium-232	rad	14	7	0.5	7	0.5	0.133	0.41	11.5								
Tritium	rad	56	52	0.9286	4	0.07143	41.1	48.55	92	0	0	0.002428	0.0046	20000	WQCC-5	12	0
Uranium-234	rad	25	1	0.04	24	0.96	0.061	0.699	3.56	0	0	0.03495	0.178	20	DOE	9	0
Uranium-235	rad	25	15	0.6	10	0.4	0.02	0.0363	0.11	0	0	0.001513	0.004583	24	DOE	9	0
Uranium-238	rad	25	4	0.16	21	0.84	0.0851	0.4932	3.17	0	0	0.02055	0.1321	24	DOE	9	0

Table B-254
Nonfiltered Organics of White Rock Canyon Base Flow

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Acetone	VOC	21	10	0.4762	11	0.5238	3	5.5	25	0	0	0.009016	0.04098	610	EPA-4	9	0
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	8	6	0.75	2	0.25	7.00E-05	0.000105	0.00014								
Bis(2-ethylhexyl)phthalate	SVOC	29	24	0.8276	5	0.1724	1.7	3	8	0	0	0.05085	0.1356	59	WQCC-9	9	0
DDE[4,4'-]	PEST	8	7	0.875	1	0.125	0.0062	0.0062	0.0062	7	1	6.2	6.2	0.001	WQCC-8	3	3
Endosulfan I	PEST	8	7	0.875	1	0.125	0.01	0.01	0.01	0	0	0.1786	0.1786	0.056	WQCC-7	3	0
Endosulfan IRe	PEST	8	7	0.875	1	0.125	0.01	0.01	0.01	0	0	4.17E-05	4.17E-05	240	WQCC-9	3	0
Methylene Chloride	VOC	31	28	0.9032	3	0.09677	1	1.4	1.8	0	0	8.75E-05	0.000113	16000	WQCC-9	10	0
Butanone[2-]	VOC	24	22	0.9167	2	0.08333	2.3	3.45	4.6	0	0	0.001816	0.002421	1900	EPA-4	9	0
Bromomethane	VOC	32	30	0.9375	2	0.0625	2.1	2.1	2.1	0	0	0.000525	0.000525	4000	WQCC-9	10	0
Chloromethane	VOC	32	30	0.9375	2	0.0625	0.79	3.095	5.4	0	0	0.2063	0.36	15	EPA-4	10	0
Dichlorobenzene[1,4-]	VOC	36	34	0.9444	2	0.05556	0.15	0.18	0.21	0	0	6.92E-05	8.08E-05	2600	WQCC-9	10	0
Di-n-octylphthalate	SVOC	31	30	0.9677	1	0.03226	8	8	8	0	0	0.01096	0.01096	730	EPA-4	10	0
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Heptachlorodibenzodioxins (Total)	DIOXIN_FURAN	8	8	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	DIOXIN_FURAN	8	8	1	0	0											
Heptachlorodibenzofurans (Total)	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzodioxins (Total)	DIOXIN_FURAN	8	8	1	0	0				0	0			0.00011	EPA-4	3	0
Hexachlorodibenzofuran[1,2,3,4,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzofuran[1,2,3,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzofuran[1,2,3,7,8,9-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzofuran[2,3,4,6,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Hexachlorodibenzofurans (Total)	DIOXIN_FURAN	8	8	1	0	0											
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	DIOXIN_FURAN	8	8	1	0	0											
Pentachlorodibenzodioxin[1,2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Pentachlorodibenzodioxins (Total)	DIOXIN_FURAN	8	8	1	0	0											
Pentachlorodibenzofuran[1,2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Pentachlorodibenzofuran[2,3,4,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Tetrachlorodibenzodioxin[2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0				8	0			1.40E-07	WQCC-9	3	3
Tetrachlorodibenzodioxins (Total)	DIOXIN_FURAN	8	8	1	0	0											
Tetrachlorodibenzofuran[2,3,7,8-]	DIOXIN_FURAN	8	8	1	0	0											
Chloro-o-tolyloxyacetic[4-] Acid	HERB	8	8	1	0	0											
D[2,4-]	HERB	8	8	1	0	0											
Dalapon	HERB	8	8	1	0	0											
DB[2,4-]	HERB	8	8	1	0	0											
Dicamba	HERB	8	8	1	0	0											
Dichlorprop	HERB	8	8	1	0	0											
Dinoseb	HERB	8	8	1	0	0											
T[2,4,5-]	HERB	8	8	1	0	0											
TP[2,4,5-]	HERB	8	8	1	0	0											

Table B-254 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Amino-2,6-dinitrotoluene[4-]	HEXP	28	28	1	0	0											
Amino-4,6-dinitrotoluene[2-]	HEXP	28	28	1	0	0											
Dinitrobenzene[1,3-]	HEXP	28	28	1	0	0											
HMX	HEXP	28	28	1	0	0											
Nitrotoluene[2-]	HEXP	28	28	1	0	0											
Nitrotoluene[3-]	HEXP	28	28	1	0	0											
Nitrotoluene[4-]	HEXP	28	28	1	0	0											
PETN	HEXP	1	1	1	0	0											
RDX	HEXP	28	28	1	0	0											
Tetryl	HEXP	28	28	1	0	0											
Trinitrobenzene[1,3,5-]	HEXP	20	20	1	0	0											
Trinitrotoluene[2,4,6-]	HEXP	28	28	1	0	0											
Aroclor-1016	PCB	27	27	1	0	0				27	0			0.0017	WQCC-9	9	9
Aroclor-1221	PCB	27	27	1	0	0				27	0			0.0017	WQCC-9	9	9
Aroclor-1232	PCB	27	27	1	0	0				27	0			0.0017	WQCC-9	9	9
Aroclor-1242	PCB	33	33	1	0	0				33	0			0.0017	WQCC-9	9	9
Aroclor-1248	PCB	27	27	1	0	0				27	0			0.0017	WQCC-9	9	9
Aroclor-1254	PCB	33	33	1	0	0				33	0			0.0017	WQCC-9	9	9
Aroclor-1260	PCB	33	33	1	0	0				33	0			0.0017	WQCC-9	9	9
Aroclor-1262	PCB	15	15	1	0	0				15	0			0.0017	WQCC-9	6	6
Aldrin	PEST	8	8	1	0	0				8	0			0.0014	WQCC-9	3	3
BHC[alpha-]	PEST	8	8	1	0	0				8	0			0.13	WQCC-9	3	3
BHC[beta-]	PEST	8	8	1	0	0				0	0			0.46	WQCC-9	3	0
BHC[delta-]	PEST	8	8	1	0	0											
BHC[gamma-]	PEST	8	8	1	0	0				0	0			0.63	WQCC-9	3	0
DDD[4,4'-]	PEST	8	8	1	0	0				8	0			0.001	WQCC-8	3	3
DDT[4,4'-]	PEST	8	8	1	0	0				8	0			0.001	WQCC-8	3	3
Dieldrin	PEST	8	8	1	0	0				8	0			0.0014	WQCC-9	3	3
Endosulfan II	PEST	8	8	1	0	0				8	0			0.056	WQCC-7	3	3
Endosulfan IIRe	PEST	8	8	1	0	0				0	0			240	WQCC-9	3	0
Endosulfan Sulfate	PEST	8	8	1	0	0				0	0			240	WQCC-9	3	0
Endrin	PEST	8	8	1	0	0				8	0			0.036	WQCC-7	3	3
Endrin Aldehyde	PEST	8	8	1	0	0				0	0			0.81	WQCC-9	3	0
EndrinRe	PEST	8	8	1	0	0				0	0			0.81	WQCC-9	3	0
Heptachlor	PEST	8	8	1	0	0				8	0			0.0021	WQCC-9	3	3
Heptachlor Epoxide	PEST	8	8	1	0	0				8	0			0.0011	WQCC-9	3	3
Methoxychlor[4,4'-]	PEST	8	8	1	0	0				0	0			180	EPA-4	3	0
PentachlorophenolRe	PEST	30	30	1	0	0				0	0			82	WQCC-9	10	0
Toxaphene (Technical Grade)	PEST	8	8	1	0	0				8	0			0.0002	WQCC-7	3	3
Toxaphene (Technical Grade)Re	PEST	8	8	1	0	0				8	0			0.0075	WQCC-9	3	3
Acenaphthene	SVOC	31	31	1	0	0				0	0			2700	WQCC-9	10	0
Acenaphthylene	SVOC	31	31	1	0	0				0	0			2700	WQCC-9	10	0
Aniline	SVOC	22	22	1	0	0				0	0			120	EPA-4	7	0

Table B-254 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Anthracene	SVOC	31	31	1	0	0				0	0			110000	WQCC-9	10	0
Azobenzene	SVOC	13	13	1	0	0				13	0			6.1	EPA-4	4	4
Benzidine	SVOC	30	30	1	0	0				30	0			0.0054	WQCC-9	10	10
Benzo(a)anthracene	SVOC	31	31	1	0	0				29	0			0.49	WQCC-9	10	10
Benzo(a)pyrene	SVOC	31	31	1	0	0				29	0			0.49	WQCC-9	10	10
Benzo(b)fluoranthene	SVOC	31	31	1	0	0				29	0			0.49	WQCC-9	10	10
Benzo(g,h,i)perylene	SVOC	31	31	1	0	0				0	0			11000	WQCC-9	10	0
Benzo(k)fluoranthene	SVOC	28	28	1	0	0				26	0			0.49	WQCC-9	10	10
Benzoic Acid	SVOC	23	23	1	0	0				0	0			150000	EPA-4	7	0
Benzyl Alcohol	SVOC	23	23	1	0	0				0	0			11000	EPA-4	7	0
Bis(2-chloroethoxy)methane	SVOC	31	31	1	0	0											
Bis(2-chloroethyl)ether	SVOC	31	31	1	0	0				0	0			14	WQCC-9	10	0
Bromophenyl-phenylether[4-]	SVOC	31	31	1	0	0											
Butylbenzylphthalate	SVOC	31	31	1	0	0				0	0			5200	WQCC-9	10	0
Carbazole	SVOC	3	3	1	0	0				0	0			34	EPA-4	3	0
Chloro-3-methylphenol[4-]	SVOC	30	30	1	0	0											
Chloroaniline[4-]	SVOC	23	23	1	0	0				0	0			150	EPA-4	7	0
Chloronaphthalene[2-]	SVOC	31	31	1	0	0				0	0			4300	WQCC-9	10	0
Chlorophenol[2-]	SVOC	31	31	1	0	0				0	0			400	WQCC-9	10	0
Chlorophenyl-phenyl[4-] Ether	SVOC	31	31	1	0	0											
Chrysene	SVOC	31	31	1	0	0				29	0			0.49	WQCC-9	10	10
Dibenz(a,h)anthracene	SVOC	31	31	1	0	0				29	0			0.49	WQCC-9	10	10
Dibenzofuran	SVOC	23	23	1	0	0				4	0			24	EPA-4	7	4
Dichlorobenzidine[3,3'-]	SVOC	31	31	1	0	0				29	0			0.77	WQCC-9	10	10
Dichlorophenol[2,4-]	SVOC	30	30	1	0	0				0	0			790	WQCC-9	10	0
Diethylphthalate	SVOC	31	31	1	0	0				0	0			120000	WQCC-9	10	0
Dimethyl Phthalate	SVOC	30	30	1	0	0				0	0			2900000	WQCC-9	10	0
Dimethylphenol[2,4-]	SVOC	30	30	1	0	0				0	0			2300	WQCC-9	10	0
Di-n-butylphthalate	SVOC	22	22	1	0	0				0	0			12000	WQCC-9	7	0
Dinitro-2-methylphenol[4,6-]	SVOC	22	22	1	0	0				0	0			765	WQCC-9	7	0
Dinitrophenol[2,4-]	SVOC	30	30	1	0	0				0	0			14000	WQCC-9	10	0
Dinitrotoluene[2,4-]	SVOC	34	34	1	0	0				0	0			91	WQCC-9	10	0
Dinitrotoluene[2,6-]	SVOC	34	34	1	0	0				0	0			37	EPA-4	10	0
Diphenylamine	SVOC	9	9	1	0	0				0	0			910	EPA-4	6	0
Diphenylhydrazine[1,2-]	SVOC	9	9	1	0	0											
Fluoranthene	SVOC	31	31	1	0	0				0	0			370	WQCC-9	10	0
Fluorene	SVOC	31	31	1	0	0				0	0			14000	WQCC-9	10	0
Hexachlorobenzene	SVOC	31	31	1	0	0				31	0			0.0077	WQCC-9	10	10
Hexachlorobutadiene	SVOC	31	31	1	0	0				0	0			500	WQCC-9	10	0
Hexachlorocyclopentadiene	SVOC	31	31	1	0	0				0	0			17000	WQCC-9	10	0
Hexachloroethane	SVOC	31	31	1	0	0				0	0			89	WQCC-9	10	0
Indeno(1,2,3-cd)pyrene	SVOC	31	31	1	0	0				29	0			0.49	WQCC-9	10	10
Isophorone	SVOC	31	31	1	0	0				0	0			26000	WQCC-9	10	0

Table B-254 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Methylnaphthalene[2-]	SVOC	23	23	1	0	0				14	0			6.2	EPA-4	7	4
Methylphenol[2-]	SVOC	22	22	1	0	0				0	0			1800	EPA-4	7	0
Methylphenol[4-]	SVOC	21	21	1	0	0				0	0			180	EPA-4	7	0
Methylpyridine[2-]	SVOC	16	16	1	0	0											
Naphthalene	SVOC	31	31	1	0	0				22	0			6.2	EPA-4	10	7
Nitroaniline[2-]	SVOC	23	23	1	0	0				21	0			2.2	EPA-4	7	7
Nitroaniline[3-]	SVOC	23	23	1	0	0				21	0			2.2	EPA-4	7	7
Nitroaniline[4-]	SVOC	23	23	1	0	0				21	0			2.2	EPA-4	7	7
Nitrobenzene	SVOC	34	34	1	0	0				0	0			1900	WQCC-9	10	0
Nitrophenol[2-]	SVOC	30	30	1	0	0				0	0			290	EPA-4	10	0
Nitrophenol[4-]	SVOC	30	30	1	0	0				0	0			290	EPA-4	10	0
Nitrosodimethylamine[N-]	SVOC	30	30	1	0	0				0	0			81	WQCC-9	10	0
Nitroso-di-n-propylamine[N-]	SVOC	31	31	1	0	0				0	0			14	WQCC-9	10	0
Nitrosodiphenylamine[N-]	SVOC	22	22	1	0	0				0	0			160	WQCC-9	7	0
Oxybis(1-chloropropane)[2,2'-]	SVOC	17	17	1	0	0				0	0			170000	WQCC-9	9	0
Pentachlorophenol	SVOC	30	30	1	0	0				18	0			15	WQCC-7	10	6
Phenanthrene	SVOC	31	31	1	0	0				0	0			110000	WQCC-9	10	0
Phenol	SVOC	31	31	1	0	0				0	0			4600000	WQCC-9	10	0
Pyrene	SVOC	31	31	1	0	0				0	0			11000	WQCC-9	10	0
Pyridine	SVOC	18	18	1	0	0				0	0			37	EPA-4	6	0
Trichlorophenol[2,4,5-]	SVOC	30	30	1	0	0				0	0			3700	EPA-4	10	0
Trichlorophenol[2,4,6-]	SVOC	30	30	1	0	0				0	0			65	WQCC-9	10	0
Acrolein	VOC	13	13	1	0	0											
Acrylonitrile	VOC	13	13	1	0	0											
Benzene	VOC	32	32	1	0	0				0	0			710	WQCC-9	10	0
Bromobenzene	VOC	15	15	1	0	0				0	0			23	EPA-4	6	0
Bromochloromethane	VOC	15	15	1	0	0				0	0			16000	WQCC-9	6	0
Bromodichloromethane	VOC	32	32	1	0	0				0	0			460	WQCC-9	10	0
Bromoform	VOC	32	32	1	0	0				0	0			3600	WQCC-9	10	0
Butylbenzene[n-]	VOC	15	15	1	0	0				0	0			61	EPA-4	6	0
Butylbenzene[sec-]	VOC	15	15	1	0	0				0	0			61	EPA-4	6	0
Butylbenzene[tert-]	VOC	15	15	1	0	0				0	0			61	EPA-4	6	0
Carbon Disulfide	VOC	24	24	1	0	0				0	0			1000	EPA-4	9	0
Carbon Tetrachloride	VOC	32	32	1	0	0				0	0			44	WQCC-9	10	0
Chlorobenzene	VOC	32	32	1	0	0				0	0			21000	WQCC-9	10	0
Chlorodibromomethane	VOC	32	32	1	0	0				0	0			340	WQCC-9	10	0
Chloroethane	VOC	32	32	1	0	0				0	0			39	EPA-4	10	0
Chloroethyl vinyl ether[2-]	VOC	12	12	1	0	0											
Chloroform	VOC	32	32	1	0	0				0	0			4700	WQCC-9	10	0
Chlorotoluene[2-]	VOC	15	15	1	0	0				0	0			120	EPA-4	6	0
Chlorotoluene[4-]	VOC	15	15	1	0	0				0	0			120	EPA-4	6	0
Dibromo-3-Chloropropane[1,2-]	VOC	23	23	1	0	0											
Dibromoethane[1,2-]	VOC	23	23	1	0	0				23	0			0.0076	EPA-4	9	9

Table B-254 (continued)

Unfiltered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Organic Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Dibromomethane	VOC	23	23	1	0	0				0	0			61	EPA-4	9	0
Dichlorobenzene[1,2-]	VOC	36	36	1	0	0				0	0			17000	WQCC-9	10	0
Dichlorobenzene[1,3-]	VOC	36	36	1	0	0				0	0			2600	WQCC-9	10	0
Dichlorodifluoromethane	VOC	24	24	1	0	0				0	0			390	EPA-4	9	0
Dichloroethane[1,1-]	VOC	32	32	1	0	0				0	0			810	EPA-4	10	0
Dichloroethane[1,2-]	VOC	32	32	1	0	0				0	0			990	WQCC-9	10	0
Dichloroethene[1,1-]	VOC	32	32	1	0	0				0	0			32	WQCC-9	10	0
Dichloroethene[cis-1,2-]	VOC	18	18	1	0	0				0	0			61	EPA-4	7	0
Dichloroethene[trans-1,2-]	VOC	31	31	1	0	0				0	0			140000	WQCC-9	10	0
Dichloropropane[1,2-]	VOC	32	32	1	0	0				0	0			390	WQCC-9	10	0
Dichloropropane[1,3-]	VOC	15	15	1	0	0				0	0			390	WQCC-9	6	0
Dichloropropane[2,2-]	VOC	15	15	1	0	0				0	0			390	WQCC-9	6	0
Dichloropropene[1,1-]	VOC	15	15	1	0	0				0	0			1700	WQCC-9	6	0
Dichloropropene[cis-1,3-]	VOC	32	32	1	0	0				0	0			1700	WQCC-9	10	0
Dichloropropene[trans-1,3-]	VOC	32	32	1	0	0				0	0			1700	WQCC-9	10	0
Ethylbenzene	VOC	32	32	1	0	0				0	0			29000	WQCC-9	10	0
Hexanone[2-]	VOC	16	16	1	0	0				0	0			1900	EPA-4	6	0
Iodomethane	VOC	15	15	1	0	0				0	0			4000	WQCC-9	6	0
Isopropylbenzene	VOC	15	15	1	0	0				0	0			660	EPA-4	6	0
Isopropyltoluene[4-]	VOC	15	15	1	0	0				0	0			660	EPA-4	6	0
Methyl-2-pentanone[4-]	VOC	16	16	1	0	0				0	0			160	EPA-4	6	0
Propylbenzene[1-]	VOC	15	15	1	0	0				0	0			61	EPA-4	6	0
Styrene	VOC	24	24	1	0	0				0	0			1600	EPA-4	9	0
Tetrachloroethane[1,1,1,2-]	VOC	20	20	1	0	0				15	0			4.3	EPA-4	9	7
Tetrachloroethane[1,1,2,2-]	VOC	32	32	1	0	0				0	0			110	WQCC-9	10	0
Tetrachloroethene	VOC	32	32	1	0	0				0	0			88.5	WQCC-9	10	0
Toluene	VOC	32	32	1	0	0				0	0			200000	WQCC-9	10	0
Trichloro-1,2,2-trifluoroethane	VOC	4	4	1	0	0											
Trichlorobenzene[1,2,4-]	VOC	31	31	1	0	0				0	0			940	WQCC-9	10	0
Trichloroethane[1,1,1-]	VOC	32	32	1	0	0				0	0			790	EPA-4	10	0
Trichloroethane[1,1,2-]	VOC	32	32	1	0	0				0	0			420	WQCC-9	10	0
Trichloroethene	VOC	32	32	1	0	0				0	0			810	WQCC-9	10	0
Trichlorofluoromethane	VOC	32	32	1	0	0				0	0			1300	EPA-4	10	0
Trichloropropane[1,2,3-]	VOC	23	23	1	0	0				23	0			0.016	EPA-4	9	9
Trichlorotrifluoroethane	VOC	5	5	1	0	0											
Trimethylbenzene[1,2,4-]	VOC	15	15	1	0	0				0	0			12	EPA-4	6	0
Trimethylbenzene[1,3,5-]	VOC	15	15	1	0	0				0	0			12	EPA-4	6	0
Vinyl Chloride	VOC	32	32	1	0	0				0	0			5250	WQCC-9	10	0
Xylene (Total)	VOC	13	13	1	0	0				0	0			1400	EPA-4	6	0
Xylene[1,2-]	VOC	8	8	1	0	0				0	0			1400	EPA-4	5	0
Xylene[1,3-]+Xylene[1,4-]	VOC	8	8	1	0	0				0	0			1400	EPA-4	5	0

Table B-255
Nonfiltered Miscellaneous Constituents of White Rock Canyon Base Flow

Unfitered WS Samples		Summary by Sample												Screening Levels		Summary by Location	
Analyte	Suite	n	ND	ND/n	D	D/n	Min.	Median	Max.	DL>Std	D>Std	Median/Std	Max/Std	Std	Std.Type	n	DL>Std
Ammonia	ANION	10	6	0.6	4	0.4	110	127.5	260								
Bromide	ANION	11	11	1	0	0											
Chloride	ANION	67	0	0	67	1	2000	5190	73800								
Fluoride	ANION	58	0	0	58	1	100	370	1100	0	0	0.1682	0.5	2200	EPA-4	13	0
Nitrate	ANION	67	17	0.2537	50	0.7463	20	165	7470	0	0	0.0165	0.747	10000	EPA-4	16	0
Nitrite	ANION	2	2	1	0	0				0	0			1000	EPA-4	2	0
Perchlorate	ANION	24	24	1	0	0				0	0			3.7	EPA-4	9	0
Sulfate	ANION	67	0	0	67	1	1410	34090	72800								
Calcium	GENINORG	28	0	0	28	1	9200	38300	808000								
Hardness	GENINORG	27	0	0	27	1	35000	123000	926000								
Magnesium	GENINORG	28	0	0	28	1	3000	7800	128000								
Potassium	GENINORG	24	1	0.04167	23	0.9583	1200	2900	34000								
Sodium	GENINORG	28	0	0	28	1	9200	15900	85000								
Chemical Oxygen Demand	WATER_QUAL	4	4	1	0	0											
Max TSS	WATER_QUAL	1	0	0	1	1	98000	98000	98000								
pH	WATER_QUAL	25	0	0	25	1	7.1	8.2	9.4								
Specific Conductance	WATER_QUAL	25	0	0	25	1	115	268	619								
Suspended Sediment Concentration	WATER_QUAL	11	1	0.09091	10	0.9091	6600	53650	495000								
Total Suspended Solids	WATER_QUAL	56	10	0.1786	46	0.8214	909	64500	13200000								

Appendix C

Methods, Procedures, and Investigation-Derived Waste Management

Table C-1
Procedures for Measuring Groundwater Levels and Collecting Water Samples Under the Interim Plan

Procedure Identifier	Procedure Title	Applicability
Measurement of Groundwater Levels		
WQH QP-062	Groundwater Level Data Review and Validation	Groundwater level program data guidelines
WQH SOP-045	Manual Groundwater Level Measurements	Groundwater level program single screen wells
WQH SOP-016	Pressure Transducer Installation, Removal, and Maintenance	Groundwater level program transducer operation
WQH SOP-064	Westbay Pressure Transducer Installation, Removal and Maintenance	Groundwater level program Westbay transducer operation
Collection of Groundwater and Base Flow Samples		
WQH SOP-002	General Field Work	Field work guidance
WQH SOP-043	Pressure System Use for Groundwater Sampling	Collection of groundwater samples using pressure systems
WQH SOP-048	Groundwater Sampling Using Bladder Pumps	Low flow groundwater sampling using bladder pumps
WQH SOP-049	Groundwater Sampling Using Submersible Pumps	Moderate flow sampling using impeller and other traditional pumps
WQH SOP-050	Groundwater Sampling and Pressure Probes Using Westbay System	Westbay multilevel well sampling instructions
WQH SOP-054	Field Water Quality Analysis Systems	Measurement of field parameters
WQH SOP-047	Spring and Surface Water Sampling	Spring and base flow sampling
WQH SOP-020	Packaging and Transportation of Samples	Sample packaging and shipping
WQH QP-028	Creating and Maintaining Chain of Custody	Sample packaging and shipping
ECR QP-4.4	Record Transmittal to the Records Processing Facility	Storage of information and data

Table C-2
Brief Description of Field Investigation Methods

Method	Summary
Groundwater Sampling Using Submersible Pumps	This method is used for collection of groundwater samples using a submersible pump. Groundwater is drawn into the pump through a system of impellers and carried to the surface via a system of inert tubing. Pumps are typically dedicated to individual wells and are permanently wired to an electrical outlet. Sample collection, preservation, and measurement of field parameters are conducted according to SOPs described below.
Groundwater Sampling Using Bladder Pumps	This method is used for collection of groundwater samples using a bladder pump and pressurized gas. Groundwater is forced into a chamber by the overlying hydrostatic head and forced to the surface as the internal bladder inflates. The groundwater is then brought to the surface via a system of inert tubing. Pumps are typically dedicated to individual wells and typically operated under low flow conditions in order to collect low turbidity samples. Following installation, the well is allowed to equilibrate before sample collection. Sample collection, preservation, and measurement of field parameters are conducted according to SOPs described below.
Groundwater Sampling and Pressure Probes Using Westbay System	This method is used for collection of groundwater samples using a Westbay sampling system. The Westbay system consists of a stainless steel bottle attached to a wire that is lowered to a sampling port. The bottle lands on the port and a shoe is extended to align the bottle port with the screen port. When the insertion is complete, groundwater in the screen annulus flows into and fills the bottle. The container is then brought to the surface and decanted into sampling bottles. Sample collection, preservation, and measurement of field parameters are conducted according to SOPs described below.
Spring and Surface Water Sampling	Spring and surface water samples are collected using a peristaltic head attached to an electric motor. Water is drawn into and forced through inert tubing and into a sampling container. . Sample collection, preservation, and measurement of field parameters are conducted according to SOPs described below.
Manual Groundwater Level Measurements	Manual groundwater measurements will be performed using an electronic wire or graduated tape lowered into an open well or into an access tube installed in a well casing. When the sensor at the bottom of the tape encounters water a audible sound initiates and the measurement is read and recorded.
Pressure Transducer Installation, Removal, and Maintenance	Pressure sensitive transducers and data loggers are installed in many wells across the Facility. The transducers are lowered into the well and suspended at a predetermined location in the well screen and record hydrostatic pressure at select time intervals. This type of measurement is considered continuous.
Westbay Pressure Transducer Installation, Removal and Maintenance	Pressure sensitive transducers and data loggers are installed in many Westbay wells across the Facility. The transducers are lowered into the inner annulus of the well and fastened to a pressure port that allows communication with the ambient aquifer. Hydrostatic pressure is automatically recorded at predetermined time intervals. This type of measurement is considered continuous.

Method	Summary
Handling, Packaging, and Shipping of Samples	Field team members seal and label samples before packing, and ensure that the sample containers and the containers used for transport are free of external contamination. Field team members package all samples so as to minimize the possibility of breakage during transportation. After all environmental samples are collected, packaged, and preserved, a field team member transports them to either the SMO or an SMO-approved radiation screening laboratory under chain-of-custody. The SMO arranges for shipping of samples to analytical laboratories. The field team member must inform the SMO and/or the radiation screening laboratory coordinator when levels of radioactivity are in the action-level or limited-quantity ranges.
Sample Control and Field Documentation	The collection, screening, and transport of samples is documented on standard forms generated by the SMO. These include sample collection logs, chain-of-custody forms, and sample container labels. Collection logs are completed at the time of sample collection, and are signed by the sampler and a reviewer who verifies the logs for completeness and accuracy. Corresponding labels are initialed and applied to each sample container, and custody seals are placed around container lids or openings. Chain-of-custody forms are completed and assigned to verify that the samples are not left unattended.
Field Quality Control Samples	Field quality control samples are collected as directed in the Order on Consent as follows: Field Duplicate: At a frequency 10%; collected at the same time as a regular sample and submitted for the same analyses. Equipment Rinsate Blank: At a frequency of 10%; collected by rinsing sampling equipment with deionized water, which is collected in a sample container and submitted for laboratory analyis. Trip Blanks: Required for all field events that include the collection of samples for volatile organic compound (VOC) analysis. Trip blanks containers of certified clean sand that are opened and kept with the other sample containers during the sampling process.
Containers and preservation of samples	Specific requirements/processes for sample containers, preservation techniques, and holding times are based on EPA guidance for environmental sampling, preservation, and quality assurance. Specific requirements for each sample are printed on the sample collection logs provided by the SMO (size and type of container, i.e. glass, amber glass, polyethylene, preservative, etc.). All samples are preserved by placing in insulated containers with ice to maintain a temperature of 4˚C. Other requirements such as nitric acid or other preservatives may apply to different media or analytical requests.

Table C-3
Analytical Methods – Groundwater Analytical Suites

Analyte Description	Analytical Method	Analytical Procedure
Field Parameters		
Field pH	potentiometric meter	WQH SOP-054.0
Field Specific Conductance	EC meter using bridge	WQH SOP-054.0
Field Temperature	thermocouple	WQH SOP-054.0
Field Turbidity	turbidity meter (attenuation cell)	WQH SOP-054.0
Field Dissolved Oxygen	spectrophotometer/probe	WQH SOP-054.0
Field ORP	potentiometric meter	WQH SOP-054.0
Radiochemistry		
Americium-241	Alpha Spectrometry	EPA:911
Plutonium-238	Alpha Spectrometry	EPA:911
Plutonium-239, 240	Alpha Spectrometry	EPA:911
Uranium-234	Alpha Spectrometry	EPA:911
Uranium-235,236	Alpha Spectrometry	EPA:911
Uranium-238	Alpha Spectrometry	EPA:911
Strontium-90	Gamma Proportional Counting	EPA:905.0
Cobalt-60	Gamma Spectroscopy	EPA:901.1
Cesium-137	Gamma Spectroscopy	EPA:901.1
Potassium-40	Gamma Spectroscopy	EPA:901.1
Sodium-22	Gamma Spectroscopy	EPA:901.1
Neptunium-237	Gamma Spectroscopy	EPA:901.1
Gross alpha	Gamma Proportional Counting	EPA:900
Gross beta	Gamma Proportional Counting	EPA:900
Gross gamma	Gamma Proportional Counting	EPA:900
Tritium	LSC	EPA:906.0
Tritium	LLEE	
Uranium	ICPMS	EPA:6020
General Chemistry		
Alkalinity-CO3	Titrimetric	EPA:310.1
Alkalinity-CO3+HCO3	Titrimetric	EPA:310.1
Calcium	ICPES	200.7 or 6010
Chloride	IC	EPA:300
Cyanide	Colorimetry	EPA:335.3

Fluoride	??	EPA:340.2

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
General Chemistry (continued)		
as mg CaCO3/L	Calculation	SM 18th Ed. 2340 B
Potassium	ICPES	200.7 or 6010
Magnesium	ICPES	200.7 or 6010
Sodium	ICPES	200.7 or 6010
Nitrate-Nitrite as N	IC	EPA:353.1
Total Phosphorus	??	EPA:365.4
pH	pH meter	EPA:150.1
Silicon Dioxide	ICPES	200.7 or 6010
Sulfate	IC	EPA:300
Specific Conductance	EC meter	EPA:120.1
Total Dissolved Solids	Gravimetric	EPA:160.1
Perchlorate	IC	EPA: 314.0
Perchlorate	LC/TS-MS	SW-846 8321 (modified)
Suspended Sediment Concentration	Gravimetric	EPA 160.2 (modified)
Metals		
Silver	ICPES	SW-846:6020
Aluminum	ICPES	SW-846:6010B
Arsenic	ICPES	SW-846:6010B
Boron	ICPES	SW-846:6010B
Barium	ICPES	SW-846:6010B
Beryllium	ICPMS	SW-846:6020
Cadmium	ICPMS	SW-846:6020
Cobalt	ICPES	SW-846:6010B
Chromium	ICPES	SW-846:6010B
Copper	ICPES	SW-846:6010B
Iron	ICPES	SW-846:6010B
Mercury	CVAA	SW-846:7470A
Manganese	ICPES	SW-846:6010B
Molybdenum	ICPES	SW-846:6010B
Nickel	ICPMS	SW-846:6020
Lead	ICPMS	SW-846:6020
Antimony	ICPMS	SW-846:6020

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
Selenium	ICPMS	SW-846:6020
Tin	ICPES	SW-846:6010B
Metals (continued)		
Strontium	ICPES	SW-846:6010B
Thallium	ICPMS	SW-846:6020
Vanadium	ICPES	SW-846:6010B
Zinc	ICPES	SW-846:6010B
VOCs		
Acetone	GCMS	SW-846 8260B
Acetonitrile	GCMS	SW-846 8260B
Acrolein	GCMS	SW-846 8260B
Acrylonitrile	GCMS	SW-846 8260B
Benzene	GCMS	SW-846 8260B
Bromobenzene	GCMS	SW-846 8260B
Bromochloromethane	GCMS	SW-846 8260B
Bromodichloromethane	GCMS	SW-846 8260B
Bromoform	GCMS	SW-846 8260B
Bromomethane	GCMS	SW-846 8260B
Butanone[2-]	GCMS	SW-846 8260B
Butylbenzene[n-]	GCMS	SW-846 8260B
Butylbenzene[sec-]	GCMS	SW-846 8260B
Butylbenzene[tert-]	GCMS	SW-846 8260B
Carbon Disulfide	GCMS	SW-846 8260B
Carbon Tetrachloride	GCMS	SW-846 8260B
Chloro-1,3-butadiene[2-]	GCMS	SW-846 8260B
Chloro-1-propene[3-]	GCMS	SW-846 8260B
Chlorobenzene	GCMS	SW-846 8260B
Chlorodibromomethane	GCMS	SW-846 8260B
Chloroethane	GCMS	SW-846 8260B
Chloroform	GCMS	SW-846 8260B
Chloromethane	GCMS	SW-846 8260B
Chlorotoluene[2-]	GCMS	SW-846 8260B
Chlorotoluene[4-]	GCMS	SW-846 8260B
Dibromo-3-Chloropropane[1,2-]	GCMS	SW-846 8260B
Dibromoethane[1,2-]	GCMS	SW-846 8260B

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
Dichlorobenzene[1,2-]	GCMS	SW-846 8260B
Dichlorobenzene[1,3-]	GCMS	SW-846 8260B
VOCs (continued)		
Dibromomethane	GCMS	SW-846 8260B
Dichlorobenzene[1,4-]	GCMS	SW-846 8260B
Dichlorodifluoromethane	GCMS	SW-846 8260B
Dichloroethane[1,1-]	GCMS	SW-846 8260B
Dichloroethane[1,2-]	GCMS	SW-846 8260B
Dichloroethene[1,1-]	GCMS	SW-846 8260B
Dichloroethene[cis-1,2-]	GCMS	SW-846 8260B
Dichloroethene[trans-1,2-]	GCMS	SW-846 8260B
Dichloropropane[1,2-]	GCMS	SW-846 8260B
Dichloropropane[1,3-]	GCMS	SW-846 8260B
Dichloropropane[2,2-]	GCMS	SW-846 8260B
Dichloropropene[1,1-]	GCMS	SW-846 8260B
Dichloropropene[cis-1,3-]	GCMS	SW-846 8260B
Dichloropropene[trans-1,3-]	GCMS	SW-846 8260B
Dioxane[1,4-]	GCMS	SW-846 8260B
Ethyl Methacrylate	GCMS	SW-846 8260B
Ethylbenzene	GCMS	SW-846 8260B
Hexachlorobutadiene	GCMS	SW-846 8260B
Hexanone[2-]	GCMS	SW-846 8260B
Iodomethane	GCMS	SW-846 8260B
Isopropylbenzene	GCMS	SW-846 8260B
Isopropyltoluene[4-]	GCMS	SW-846 8260B
Methacrylonitrile	GCMS	SW-846 8260B
Methyl Methacrylate	GCMS	SW-846 8260B
Methyl-1-propanol[2-]	GCMS	SW-846 8260B
Methyl-2-pentanone[4-]	GCMS	SW-846 8260B
Methylene Chloride	GCMS	SW-846 8260B
Naphthalene	GCMS	SW-846 8260B
Propionitrile	GCMS	SW-846 8260B
Propylbenzene[1-]	GCMS	SW-846 8260B
Tetrachloroethene	GCMS	SW-846 8260B
Toluene	GCMS	SW-846 8260B

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
Trichloro-1,2,2-trifluoroethane[1,1,2-]	GCMS	SW-846 8260B
Trichlorobenzene[1,2,3-]	GCMS	SW-846 8260B
VOCs (continued)		
Styrene	GCMS	SW-846 8260B
Tetrachloroethane[1,1,1,2-]	GCMS	SW-846 8260B
Tetrachloroethane[1,1,2,2-]	GCMS	SW-846 8260B
Trichlorobenzene[1,2,4-]	GCMS	SW-846 8260B
Trichloroethane[1,1,1-]	GCMS	SW-846 8260B
Trichloroethane[1,1,2-]	GCMS	SW-846 8260B
Trichloroethene	GCMS	SW-846 8260B
Trichlorofluoromethane	GCMS	SW-846 8260B
Trichloropropane[1,2,3-]	GCMS	SW-846 8260B
Trimethylbenzene[1,2,4-]	GCMS	SW-846 8260B
Trimethylbenzene[1,3,5-]	GCMS	SW-846 8260B
Vinyl Chloride	GCMS	SW-846 8260B
Vinyl acetate	GCMS	SW-846 8260B
Xylene[1,2-]	GCMS	SW-846 8260B
Xylene[1,3-]+Xylene[1,4-]	GCMS	SW-846 8260B
SVOCs		
Acenaphthene	GCMS	SW-846 8270C
Acenaphthylene	GCMS	SW-846 8270C
Aniline	GCMS	SW-846 8270C
Anthracene	GCMS	SW-846 8270C
Atrazine	GCMS	SW-846 8270C
Azobenzene	GCMS	SW-846 8270C
Benzidine	GCMS	SW-846 8270C
Benzo(a)anthracene	GCMS	SW-846 8270C
Benzo(a)pyrene	GCMS	SW-846 8270C
Benzo(b)fluoranthene	GCMS	SW-846 8270C
Benzo(g,h,i)perylene	GCMS	SW-846 8270C
Benzo(k)fluoranthene	GCMS	SW-846 8270C
Benzoic Acid	GCMS	SW-846 8270C
Bromophenyl-phenylether[4-]	GCMS	SW-846 8270C
Butylbenzylphthalate	GCMS	SW-846 8270C
Chloro-3-methylphenol[4-]	GCMS	SW-846 8270C

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
Chloroaniline[4-]	GCMS	SW-846 8270C
Chloronaphthalene[2-]	GCMS	SW-846 8270C
SVOCs (continued)		
Benzyl Alcohol	GCMS	SW-846 8270C
Bis(2-chloroethoxy)methane	GCMS	SW-846 8270C
Bis(2-chloroethyl)ether	GCMS	SW-846 8270C
Bis(2-ethylhexyl)phthalate	GCMS	SW-846 8270C
Chlorophenol[2-]	GCMS	SW-846 8270C
Chlorophenyl-phenyl[4-] Ether	GCMS	SW-846 8270C
Chrysene	GCMS	SW-846 8270C
Dibenz(a,h)anthracene	GCMS	SW-846 8270C
Dibenzofuran	GCMS	SW-846 8270C
Dichlorobenzene[1,2-]	GCMS	SW-846 8270C
Dichlorobenzene[1,3-]	GCMS	SW-846 8270C
Dichlorobenzene[1,4-]	GCMS	SW-846 8270C
Dichlorobenzidine[3,3'-]	GCMS	SW-846 8270C
Dichlorophenol[2,4-]	GCMS	SW-846 8270C
Diethylphthalate	GCMS	SW-846 8270C
Dimethyl Phthalate	GCMS	SW-846 8270C
Dimethylphenol[2,4-]	GCMS	SW-846 8270C
Di-n-butylphthalate	GCMS	SW-846 8270C
Dinitro-2-methylphenol[4,6-]	GCMS	SW-846 8270C
Dinitrophenol[2,4-]	GCMS	SW-846 8270C
Dinitrotoluene[2,4-]	GCMS	SW-846 8270C
Dinitrotoluene[2,6-]	GCMS	SW-846 8270C
Di-n-octylphthalate	GCMS	SW-846 8270C
Dinoseb	GCMS	SW-846 8270C
Diphenylamine	GCMS	SW-846 8270C
Fluoranthene	GCMS	SW-846 8270C
Fluorene	GCMS	SW-846 8270C
Hexachlorobenzene	GCMS	SW-846 8270C
Hexachlorobutadiene	GCMS	SW-846 8270C
Hexachlorocyclohexane	GCMS	SW-846 8270C
Hexachlorocyclopentadiene	GCMS	SW-846 8270C
Hexachloroethane	GCMS	SW-846 8270C

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
Indeno(1,2,3-cd)pyrene	GCMS	SW-846 8270C
Isophorone	GCMS	SW-846 8270C
SVOCs (continued)		
Methylnaphthalene[1-]	GCMS	SW-846 8270C
Methylnaphthalene[2-]	GCMS	SW-846 8270C
Methylphenol[2-]	GCMS	SW-846 8270C
Methylphenol[4-]	GCMS	SW-846 8270C
Naphthalene	GCMS	SW-846 8270C
Nitroaniline[2-]	GCMS	SW-846 8270C
Nitroaniline[3-]	GCMS	SW-846 8270C
Nitroaniline[4-]	GCMS	SW-846 8270C
Nitrobenzene	GCMS	SW-846 8270C
Nitrophenol[2-]	GCMS	SW-846 8270C
Nitrophenol[4-]	GCMS	SW-846 8270C
Nitrosodiethylamine[N-]	GCMS	SW-846 8270C
Nitrosodimethylamine[N-]	GCMS	SW-846 8270C
Nitroso-di-n-butylamine[N-]	GCMS	SW-846 8270C
Nitroso-di-n-propylamine[N-]	GCMS	SW-846 8270C
Nitrosopyrrolidine[N-]	GCMS	SW-846 8270C
Oxybis(1-chloropropane)[2,2'-]	GCMS	SW-846 8270C
Pentachlorobenzene	GCMS	SW-846 8270C
Pentachlorophenol	GCMS	SW-846 8270C
Phenanthrene	GCMS	SW-846 8270C
Phenol	GCMS	SW-846 8270C
Pyrene	GCMS	SW-846 8270C
TCDD[2,3,7,8-]	GCMS	SW-846 8270C
Tetrachlorobenzene[1,2,4,5-]	GCMS	SW-846 8270C
Tetrachlorophenol[2,3,4,6-]	GCMS	SW-846 8270C
Trichlorobenzene[1,2,4-]	GCMS	SW-846 8270C
Trichlorophenol[2,4,5-]	GCMS	SW-846 8270C
Trichlorophenol[2,4,6-]	GCMS	SW-846 8270C
Pesticides		
Aldrin	GC ECD	SW-846:8081A
BHC[alpha-]	GC ECD	SW-846:8081A
BHC[beta-]	GC ECD	SW-846:8081A

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
BHC[delta-]	GC ECD	SW-846:8081A
BHC[gamma-]	GC ECD	SW-846:8081A
Pesticides (continued)		
Chlordane[alpha-]	GC ECD	SW-846:8081A
Chlordane[gamma-]	GC ECD	SW-846:8081A
DDD[4,4'-]	GC ECD	SW-846:8081A
DDE[4,4'-]	GC ECD	SW-846:8081A
DDT[4,4'-]	GC ECD	SW-846:8081A
Dieldrin	GC ECD	SW-846:8081A
Endosulfan I	GC ECD	SW-846:8081A
Endosulfan II	GC ECD	SW-846:8081A
Endosulfan Sulfate	GC ECD	SW-846:8081A
Endrin	GC ECD	SW-846:8081A
Endrin Aldehyde	GC ECD	SW-846:8081A
Endrin Ketone	GC ECD	SW-846:8081A
Heptachlor	GC ECD	SW-846:8081A
Heptachlor Epoxide	GC ECD	SW-846:8081A
Methoxychlor[4,4'-]	GC ECD	SW-846:8081A
Toxaphene (Technical Grade)	GC ECD	SW-846:8081A
PCBs		
Aroclor-1016	GC ECD	SW-846:8082
Aroclor-1221	GC ECD	SW-846:8082
Aroclor-1232	GC ECD	SW-846:8082
Aroclor-1242	GC ECD	SW-846:8082
Aroclor-1248	GC ECD	SW-846:8082
Aroclor-1254	GC ECD	SW-846:8082
Aroclor-1260	GC ECD	SW-846:8082
Aroclor-1262	GC ECD	SW-846:8082
HEXP		
2,4-Dinitrotoluene	HPLC/TS/MS	SW-846:8321A
2,6-Dinitrotoluene	HPLC/TS/MS	SW-846:8321A
Nitrobenzene	HPLC/TS/MS	SW-846:8321A
1,3,5-Trinitrobenzene	HPLC/TS/MS	SW-846:8321A
1,3-Dinitrobenzene	HPLC/TS/MS	SW-846:8321A
Hexahydro-1,3,5-Trinitro-1,3,5-Triazine	HPLC/TS/MS	SW-846:8321A

Table C-3 (continued)

Analyte Description	Analytical Method	Analytical Procedure
4-Amino-2,6-dinitrotoluene	HPLC/TS/MS	SW-846:8321A
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine	HPLC/TS/MS	SW-846:8321A
HEXP (continued)		
2-Amino-4,6-dinitrotoluene	HPLC/TS/MS	SW-846:8321A
Methyl-2,4,6-trinitrophenylnitramine	HPLC/TS/MS	SW-846:8321A
2,4,6-Trinitrotoluene	HPLC/TS/MS	SW-846:8321A
2-Nitrotoluene	HPLC/TS/MS	SW-846:8321A
3-Nitrotoluene	HPLC/TS/MS	SW-846:8321A
4-Nitrotoluene	HPLC/TS/MS	SW-846:8321A
Pentaerythritol tetranitrate	HPLC/TS/MS	SW-846:8321A
Triaminotrinitrobenzene	HPLC/TS/MS	SW-846:8321A
2,6-Diamino-4-nitrotoluene	HPLC/TS/MS	SW-846:8321A
3,5-dinitroaniline	HPLC/TS/MS	SW-846:8321A
2,4-Diamino-6-nitrotoluene	HPLC/TS/MS	SW-846:8321A
Tris(o-cresyl) phosphate	HPLC/TS/MS	SW-846:8321A

Notes:

EC = Electroconductivity probe and meter

GC = Gas chromatography

GC ECD = gas chromatography with electron-capture detection

GCMS = Gas chromatography mass spectrometry

HPLC/TS/MS = High pressure liquid chromatography-TS mass spectrometry

ICPES = Inductively coupled emission spectrometry

ICPMS = Inductively coupled mass spectrometry

LC TS-MS = Liquid chromatography-TS mass spectrometry

LLEE = Low level electrolytic enrichment

LSC = Liquid scinilation counting

Colorametric spectrophotometry

Dissolved oxygen probe of spectrophotometer

Field Water Quality Analysis

Ion chromatography

pH sensitive electrode and meter

Platinum electrode and meter

Radio chemical analysis using alpha spectrometery

Radio chemical analysis using gamma detection

Radio chemical analysis using gamma spectrometery

Spectrophotometric attenuation cell

Titrimetric analysis

Thermocouple probe

INVESTIGATION-DERIVED WASTE MANAGEMENT

This appendix describes how investigation-derived waste (IDW) generated during the groundwater monitoring activities conducted under the Los Alamos National Laboratory (the Laboratory) Interim Facility-Wide Groundwater Monitoring Plan (Interim Plan) will be managed. IDW is waste generated as a result of field investigation activities and may include, but is not limited to purge water; contaminated personal protective equipment (PPE), sampling supplies, and plastic; fluids from the decontamination of PPE and sampling equipment; and all other wastes potentially contacting contaminants. IDW generated during implementation of the Interim Plan will be managed to protect human health and the environment, comply with applicable regulatory requirements, and adhere to Laboratory waste minimization goals.

All IDW generated during groundwater monitoring activities will be managed in accordance with applicable Environmental Stewardship–Environmental Characterization and Remediation (ENV-ECR) standard operating procedures (SOPs). These SOPs incorporate the requirements of all applicable U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) regulations, Department of Energy (DOE) orders, and Laboratory Implementation Requirements (LIRs). SOPs applicable to the characterization and management of IDW are the following:

- ENV-ECR SOP-1.06, Management of Environmental Restoration Project Waste and
- ENV-ECR SOP-1.10, Waste Characterization.

These SOPs are among those applicable to implementation of the Interim Plan and are available at the following URL: http://erproject.lanl.gov/documents/procedures.html.

The Environmental Stewardship–Environmental Remediation and Surveillance (ENV-ERS) Waste Minimization Awareness Plan will be implemented during groundwater monitoring to minimize waste generation.

The IDW waste streams associated with groundwater monitoring are identified in Table C-1 and are briefly described below. Table C-1 also summarizes the waste type, estimated volume, and method of on-site management.

Purge water: The purge water waste stream will consist of water purged from wells prior to sampling in order to assure that representative samples are collected. Purge water from most wells will be discharged to the ground in accordance with Notices of Intent to Discharge (NOIs) submitted to and approved by the NMED Groundwater Quality Bureau pursuant to the New Mexico Water Quality Control Commission (WQCC) regulations. The Laboratory has submitted NOIs for most of the wells to be monitored under the Interim Plan. Based on the information contained in the NOIs, including the results of screening and past sampling, the Groundwater Quality Bureau determined that the purge water could be discharged to the ground without a discharge permit. Purge water from wells covered by NOIs will be disposed of by discharge to the ground in accordance with the NOI.

Purge water that cannot be discharged in accordance with an NOI will be collected in containers as it is removed from the wells. The type of containers used will depend on the volume of purge water expected, but may include 55-gal. drums or New Mexico Department of Transportation (DOT)-approved transportable tanks. The containers of purge water will be staged in secure accumulation areas approved by the Laboratory's Solid Waste Regulatory Compliance (SWRC) Group pending results of analysis. The accumulation areas may be at the location of the wells, or may be at other locations at the Laboratory. Containerized purge water will be characterized based on the results of the analysis of water samples from the associated well(s) or by direct sampling and analysis of the purge water. The characterization approach for specific wells will be specified in the waste stream characterization form (WCSF) for the

monitoring form. The method of disposal of containerized purge water will depend on the results of the waste characterization, but could include on-site disposal at the Technical Area (TA)-50 Radioactive Liquid Waste Treatment Facility (RLWTF), on-site disposal at the TA-46 Sanitary Waste System Consolidation (SWSC) facility, or off-site disposal at a permitted treatment, storage, or disposal facility.

Spent PPE: The spent PPE waste stream will consist of PPE that has "contacted" potentially contaminated environmental media (i.e., purge water) and that cannot be decontaminated. The bulk of this waste stream will consist of protective clothing such as coveralls, gloves, and shoe covers. Spent PPE will be collected in containers at personnel decontamination stations. Characterization of this waste stream will be performed through acceptable knowledge of the waste materials, the methods of generation, and the levels of contamination observed in the environmental media (e.g., the results of analysis of associated water samples). The Laboratory expects most of these wastes to be designated as nonhazardous waste that will be disposed of at a New Mexico solid waste landfill. If groundwater contains elevated radioactivity, the wastes may be designated as low-level radioactive waste and disposed of at TA-54 Area G.

Disposable sampling supplie: The disposable sampling supplies waste stream will consist of all equipment and materials necessary for collection of samples that come into direct contact with potentially contaminated environmental media and that cannot be decontaminated. This waste stream also includes wastes associated with dry decontamination activities. This waste stream will consist primarily of paper and plastic items collected in bags at the sampling location and transferred to accumulation drums. Characterization of this waste stream will be performed through acceptable knowledge of the waste materials, the methods of generation, and the levels of contamination observed in the environmental media (e.g., the results of analysis of associated water samples). The Laboratory expects most of these wastes to be designated as nonhazardous waste that will be disposed of at a New Mexico solid waste landfill. If groundwater contains elevated radioactivity, the wastes may be designated as low-level radioactive waste and disposed of at TA-54 Area G.

Decontamination fluids: The decontamination fluids waste stream will consist of liquid wastes from decontamination activities (i.e., decontamination solutions and rinse waters). Consistent with waste minimization practices, the Laboratory employs dry decontamination methods to the extent possible. If dry decontamination cannot be performed, liquid decontamination wastes will be collected in containers at the point of generation. Small amounts (less than 6 gal.) of nonhazardous decontamination fluids may be discharged directly on-site provided these discharges are unlikely to generate leachate that will move directly or indirectly into groundwater and provided that WQCC groundwater protection standards are met. Decontamination fluids meeting these conditions may be disposed of by discharge to the ground without submitting an NOI. Otherwise, the decontamination fluids waste stream will be accumulated in drums and characterized with analytical results from direct sampling of the containerized waste. The Laboratory expects these wastes would be designated as nonhazardous liquid waste or radioactive liquid waste that would be sent to a SWSC or RLWTF, respectively.

Prior to the start of field investigation activities, a WCSF will be prepared and approved per requirements of SOP 01.10. The WCSF will provide detailed information on IDW characterization, management, containerization, and possible volumes. IDW characterization will be completed through review of existing data and/or documentation, by direct sampling of the IDW, and/or by sampling the media being investigated (i.e., surface soil, subsurface soil, etc.). If sampling is necessary, it will be described in a sampling and analysis plan developed in conjunction with the WCSF.

The selection of waste containers will be based on appropriate DOT requirements, waste types, and estimated volumes of IDW to be generated. Immediately following containerization, each waste container will be individually labeled with a unique identification number and with information regarding waste

classification, item(s), radioactivity (if applicable), and date generated. The wastes will be contained in clearly marked and appropriately constructed waste accumulation areas. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based on the type of IDW and its classification. Container and storage requirements will be detailed in the WCSF and approved prior to waste being generated.

Table C-4
Summary of Estimated IDW Generation and Management

Waste Stream	Estimated Volume	On-Site Management
Purge water	5 to 1000 gal. per well per sampling event	Discharge in accordance with NOI or accumulation in 55-gal. drums or DOT-approved tanks
Spent PPE	Less than 55 gal. per watershed monitoring campaign	Accumulation in 55-gal. drums
Disposable sampling supplies	Less than 55 gal. per watershed monitoring campaign	Accumulation in 55-gal. drums
Decontamination fluids	Less than 55 gal. per watershed monitoring campaign	Discharge to ground if WQCC standards met or accumulation in 55-gal. drums

Appendix D

Supplemental Information

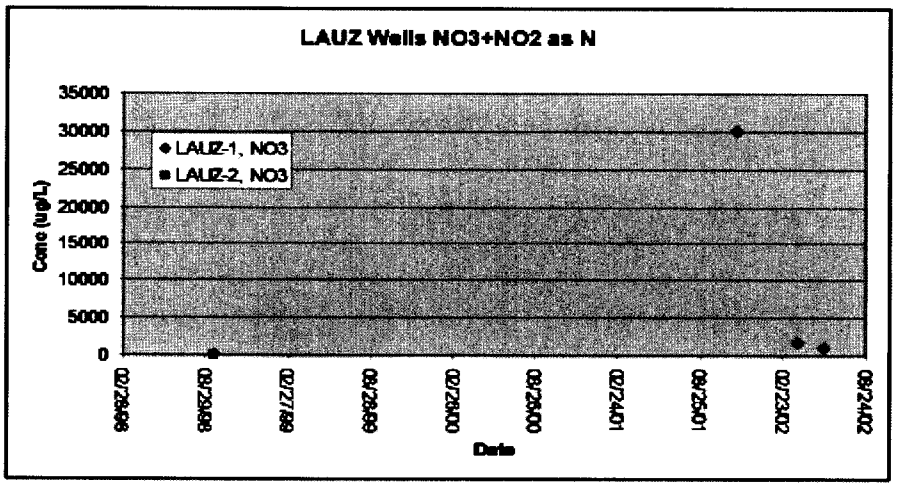
Table D-1
Wells Included in Consent Order Table X11-5
and Not Included in Interim Plan for Various Reasons

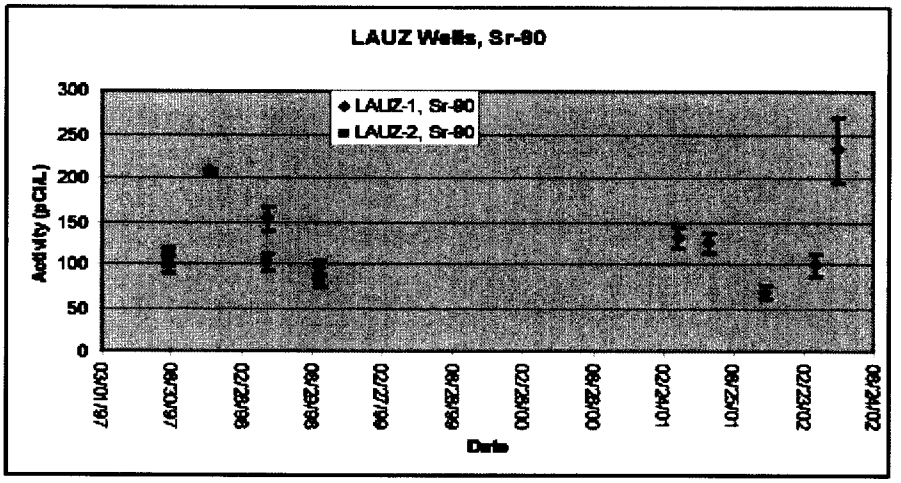
Location	Comment
Los Alamos/Pueblo Watershed	
LA-5.19	No history of contamination in this spring location. The historical record is sparse and collection of data at this location will not add to the monitoring network in this part of the watershed.
LA-0.6	LAO-0.6 has a poor historical record; LAO-0.3 is close by and has a longer monitoring record.
LAO-1	Well not constructed to RCRA standards.
LAUZ-2	LAUZ-2 is frequently dry; LAUZ-1 has a better historical record (See Figure D-1 below).
R-7, screen-2	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at R-7 screen 2 and groundwater samples will be collected if sufficient water is detected.
TW-3	Scheduled for plugging and abandonment.
PAO-2.5	PAO-1, PAO-2, and PAO-3 will be used to monitor groundwater quality and levels in this reach of the canyon. These three wells have a better historical record and were used in the analysis of Los Alamos/Pajarito watershed.
PAO-5s	Redundant with APCO-1, which has a longer historical water quality record.
PAO-5n	Redundant with APCO-1, which has a longer historical water quality record.
TW-2A	Scheduled for plugging and abandonment.
TW-1A	Scheduled for plugging and abandonment.
R-5, screen-1	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at R-5, screen 1 and groundwater samples will be collected if sufficient water is detected.
TW-4	Scheduled for plugging and abandonment.
TW-2	Scheduled for plugging and abandonment.
TW-1	Scheduled for plugging and abandonment.
Otowi Spring	Redundant with LA surface water samples. Data from this location will not give added value to the environmental record in this reach.
LLAO-3	Spatially redundant with LLAO-1b and LLAO-4 in lower Los Alamos Canyon.
Highway Department Wells MW-3, -5, -6, -9	No location or well construction information is available for any of the Highway Department wells. These old wells are not constructed to RCRA construction guidelines and therefore may produce questionable groundwater samples.
Sandia Watershed	
All Consent Order Table XII-5 locations are included in the Interim Plan	
Mortandad Watershed (characterization work plan locations determine monitoring)	
MCO-2	MCO-2 has been replaced by new alluvial well MCA-4.
MCO-3	MCO-3 has been replaced by new alluvial well MCA-4.
TSWB-6	Spatially redundant by nearby wells.
MCO-7.5	Spatially redundant by nearby wells.
CBDO-1, -2, -3, -4, -5, -8, -9	Dry, no water has ever been found since installation.
MCOBT-8.5	Dry, no water has been found since installation.

Location	Comment
TW-8	Scheduled for plugging and abandonment.
Pajarito Watershed (characterization work plan locations determine monitoring)	
18-BG-1	New well PCAO-6 replaces 18-BG-1. In the event that the new well does not yield enough groundwater fro sampling monitor well BG-1 will be used.
18-BG-4	New well 3MAO-1 replaces 18-BG-4. In the event that the new well does not yield enough groundwater fro sampling monitor well BG-4 will be used.
18-MW-4, -5, -7, -9, -10, -11, -12, -16	Spatial redundancy with new wells to be installed in FY05 for the NMED approved Pajarito Watershed Work Plan.
PCO-1	New well PCAO-7 will replace location PCO-1, per Pajarito Watershed Work Plan.
Water Canyon/Cañon de Valle Watershed	
Beta	Dry, open hole with no evidence of water to collect groundwater sample.
CdV-37-2, screen-1	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at CdV-37-2 screen 1 and groundwater samples will be collected if sufficient water is detected.
CdV-15-3, screen-1	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at CdV-15-3 screen 1 and groundwater samples will be collected if sufficient water is detected.
CdV-15-3, screen-2	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at CdV-15-3 screen 2 and groundwater samples will be collected if sufficient water is detected.
CdV-15-3, screen-3	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at CdV-15-3 screen 3 and groundwater samples will be collected if sufficient water is detected.
Ancho/Chaquehui/Frijoles Watersheds	
R-31, screen-1	Intermediate zone is dry. Hydrostatic pressure will continue to be monitored at R-31 screen 1 and groundwater samples will be collected if sufficient water is detected.
White Rock Canyon Springs	
Ancho Spring	Have identified a new spring in the area with agreement from the NMED Oversight Bureau.
Spring 9B	Low flow, unreliable yield

Note: Most locations that deviate from Table XII-5 are due to replacement, abandonment, or are dry.

Comparison between parameters at LAUZ-1 and LAUZ-2





Redundant with LAUZ-1. LAUZ-1 shows consistently higher strontium-90 levels then LAUZ-2 and represents a more conservative choice. LAUZ-2 is frequently dry and LAUZ-1 represents a longer record of historical water quality data.

Figure D-1. Comparison of historical water quality record between LAUZ-1 and LAUZ-2

This page intentionally left blank.