

# **MATILIJA DAM**

## **Water Quality Monitoring Project**

**Department of Justice Grant 2001-0297-007**



**Ventura County Watershed Protection District**

**December 2005**



## **EXECUTIVE SUMMARY**

As part of the Army Corps of Engineers Feasibility Study for the removal of Matilija Dam, a \$60,000 Grant was awarded to the Ventura County Watershed Protection District (VCWPD) to collect and provide sufficient water quality data to identify the potential impacts to water quality and associated aquatic habitats with the removal of the Matilija Dam. Due to a shortage of rain during the 2003/2004 monitoring season, the VCWPD was granted a one-year extension to allow for the collection of additional wet event water quality data during the 2004/2005 winter season, which extended the grant through December 31, 2005.

The grant provided for the following:

- Installation of two automated water quality stations on Matilija Creek.
- Collection of water quality samples during 8 events (3 dry and 5 wet).
- Analyses of water quality samples for over 200 priority pollutant parameters, including toxicity, bacteria, nutrients, heavy metals, semi-volatiles, PCBs and pesticides

Some results derived from the sampling and analysis effort:

- No detections of organochlorine pesticides, orthophosphate pesticides, chlorinated herbicides, or semi-volatiles.
- No exceedances of water quality standards established by either the California Toxics Rule (CTR) or the Los Angeles Regional Water Quality Control Board's Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.
- No significant difference between the upstream and downstream sites with respect to most parameters (see next bullet).
- Six detections of BOD and three detections of TKN at the downstream site, which may indicate a potential source of pollution entering the waterway between these two sites.
- Metals, nutrients and indicator bacteria detected much more frequently during wet events.
- Conductivity and chloride elevated during dry sampling events.
- No indication of either acute or chronic toxicity.

## TABLE OF CONTENTS

|            |                                                                 |           |
|------------|-----------------------------------------------------------------|-----------|
| <b>1.0</b> | <b>SCOPE AND OBJECTIVES.....</b>                                | <b>1</b>  |
| <b>2.0</b> | <b>BACKGROUND.....</b>                                          | <b>2</b>  |
| 2.1        | The Matilija Dam.....                                           | 2         |
| 2.2        | Ventura River Watershed .....                                   | 4         |
| 2.3        | Precipitation .....                                             | 4         |
| 2.4        | Geology/Soils .....                                             | 5         |
| 2.5        | Vegetation and Habitat.....                                     | 6         |
| 2.6        | Biology.....                                                    | 8         |
| 2.7        | Land Use .....                                                  | 8         |
| <b>3.0</b> | <b>MONITORING PROGRAM.....</b>                                  | <b>9</b>  |
| 3.1        | Monitoring Stations.....                                        | 10        |
| 3.1.1      | Upper Matilija Dam Monitoring Station (UMC) .....               | 10        |
| 3.1.2      | Lower Matilija Dam Monitoring Station (LMC).....                | 11        |
| 3.2        | Monitoring Methods .....                                        | 11        |
| 3.3        | Parameters.....                                                 | 11        |
| 3.4        | Sampling Events .....                                           | 13        |
| 3.5        | Sampling Methods .....                                          | 13        |
| <b>4.0</b> | <b>RESULTS .....</b>                                            | <b>13</b> |
| 4.1        | Water Chemistry Analytical Results.....                         | 13        |
| 4.2        | Toxicity Analytical Results .....                               | 19        |
| 4.2.1      | Acute .....                                                     | 19        |
| 4.2.2      | Chronic.....                                                    | 20        |
| 4.3        | QA/QC.....                                                      | 21        |
| <b>5.0</b> | <b>CONCLUSIONS .....</b>                                        | <b>21</b> |
|            | <b>APPENDIX A - WATER QUALITY MONITORING SCOPE OF WORK.....</b> | <b>23</b> |
|            | <b>APPENDIX B – WATER QUALITY MONITORING PLAN .....</b>         | <b>24</b> |
|            | <b>APPENDIX C – WATER CHEMISTRY DATA .....</b>                  | <b>25</b> |
|            | <b>APPENDIX D – CHAINS OF CUSTODY .....</b>                     | <b>26</b> |
|            | <b>APPENDIX E – SAMPLING SUMMARIES.....</b>                     | <b>27</b> |



### LIST OF TABLES

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| Table 1. 2002 CWA 303(d)-Listed Waters in the Ventura River Watershed..... | 9  |
| Table 2. Parameters of Sampling Program .....                              | 12 |
| Table 3. Sampling Events.....                                              | 13 |
| Table 4. Detections of Selected Constituents .....                         | 15 |
| Table 5. Trends Observed During Sampling Program.....                      | 16 |
| Table 6. Acute Toxicity Sampling Results .....                             | 19 |
| Table 7. QA/QC Sampling Schedule.....                                      | 21 |

### LIST OF FIGURES

|                                                         |    |
|---------------------------------------------------------|----|
| Figure 1. Original Configuration of Matilija Dam .....  | 2  |
| Figure 2. Matilija Dam After Notching.....              | 2  |
| Figure 3. Fish Ladder Below Matilija Dam .....          | 3  |
| Figure 4. Ventura River .....                           | 4  |
| Figure 5. Monthly Average Rainfall in Ventura, CA ..... | 5  |
| Figure 6. Ventura River at Foster Park.....             | 6  |
| Figure 7. Water Quality Monitoring Locations.....       | 9  |
| Figure 8. Upper Monitoring Station.....                 | 10 |
| Figure 9. USGS Gauging Station.....                     | 10 |
| Figure 10. Lower Monitoring Station .....               | 11 |
| Figure 11. Cumulative Rainfall and Sampling Events..... | 14 |
| Figure 12. Total Coliform Sampling Results .....        | 17 |
| Figure 13. Chloride Sampling Results.....               | 18 |



## 1.0 SCOPE AND OBJECTIVES

As part of the Army Corps of Engineers Feasibility Study for the removal of Matilija Dam, a \$60,000 Grant was awarded to the Ventura County Watershed Protection District (VCWPD) to collect and provide sufficient water quality data to identify the potential impacts to water quality and associated aquatic habitats with the removal of the Matilija Dam. The VCWPD was to complete the project by the original end date of December 31, 2004. Due to a shortage of rain during the 2003/2004 monitoring season, the VCWPD was granted a one-year extension to allow for the collection of additional wet event water quality data during the 2004/2005 winter season, which extended the grant through December 31, 2005. The purpose of this report is to provide an overview of the water quality study work performed and to report the results of this study according to the criteria outlined in the Matilija Dam Water Quality Monitoring Plan, DOJ Grant #2001-0297-007 (Appendix B).

The objectives of the Matilija Water Quality Monitoring Project are listed below:

- Provide sufficient water quality data to identify the potential impacts to water quality and associated aquatic habitats with the removal of the Matilija Dam.
- Describe and summarize the water quality within the watershed under both wet and dry conditions, and both above and below the Matilija Dam.
- Identify elevated concentrations of pollutants and regulatory exceedences.
- Describe and summarize the extent of bacterial pollution within the watersheds.
- Provide recommendations on future studies.
- Maintain results in a database for future reference and data comparison study.
- Provide scientific data to understand the influence of stored sediment on overlying water quality at some time in the future.
- Allow for future evaluation of impacts of dam removal to downstream fish habitat

## 2.0 BACKGROUND

### 2.1 The Matilija Dam

The Matilija Dam is located approximately 16 miles north of the Pacific Ocean on Matilija Creek, which flows downstream from the dam for approximately 0.6 miles before joining the North Fork Matilija Creek and becoming the mainstem of the Ventura River.



**Figure 1. Original Configuration of Matilija Dam**

The Matilija Dam was constructed in 1946-47 by the Ventura County Flood Control District (since renamed the Ventura County Watershed Protection District (VCWPD)) for the purpose of providing storage for agricultural water needs and for limited flood control (Figure 1). The reservoir was first completely filled with water in 1952.



**Figure 2. Matilija Dam After Notching**

The reservoir and dam had an initial capacity of 7,000 acre-feet at the spillway crest. The dam's arch is constructed of concrete with an average height of 190 feet and a crest length of 616 feet. The arch varies in thickness from 35 feet at its base to eight feet thick at the crown. The original spillway ran along the crest for 535 of the 616-foot total arch length. The arch has been modified three times to its

current configuration due to adverse conditions and external elements that have compromised the operational use of the dam (Figure 2).

Structurally, the dam suffers from extensive “Alkali Silica Reaction,” a chemical reaction that weakens the concrete. Despite this problem, there are no structural modifications needed for the dam to remain adequately stable for next the 50 years. Notching of the dam was conducted to lower and widen the spillway in an effort to maintain public safety. In 1965, a 280-foot wide by 30-foot high section of the dam was removed due to damage. An additional notching was performed in 1977 when an additional 78 feet in width section was removed. This notched portion now serves as the current spillway.

The notching has decreased the maximum pool level which results in a decrease in loads and less stress to the dam. Reservoir capacity has decreased significantly, due in part to the dam notching and also to sedimentation in the reservoir following significant storm and fire events. The reservoir capacity is presently estimated to be less than 500 acre-feet, or about 7% of original capacity. It



**Figure 3. Fish Ladder Below Matilija Dam**

is estimated that approximately 6 million cubic yards of sediment are trapped within the reservoir.

A concrete fish ladder forms the downstream edge of the plunge pool (Figure 3). Originally, water flowed from the outlet to the fish ladder and into the plunge pool. Fish making their way upstream were collected in the trap, and hauled upstream above the dam. Over the years, the fish ladder has been damaged by falling rocks and debris over the spillway at peak flows and is no longer operable.



## 2.2 Ventura River Watershed

The 16-mile Ventura River is the main drainage for the 235-square mile watershed and receives runoff from three main tributaries: Matilija Creek above the dam, San Antonio Creek, and Canada Larga Creek (see Figure 4). The Matilija Creek tributary (56 square miles and 15.6 miles long) is located in the northern portion of the watershed above Matilija Dam and the North Fork of Matilija Creek, which discharges into the main stem below the dam. San Antonio Creek drains the northeastern portion of the watershed and has two main tributaries, Lion Canyon Creek and Stewart Canyon Creek. Canada Larga Creek drains the eastern portion of the watershed.

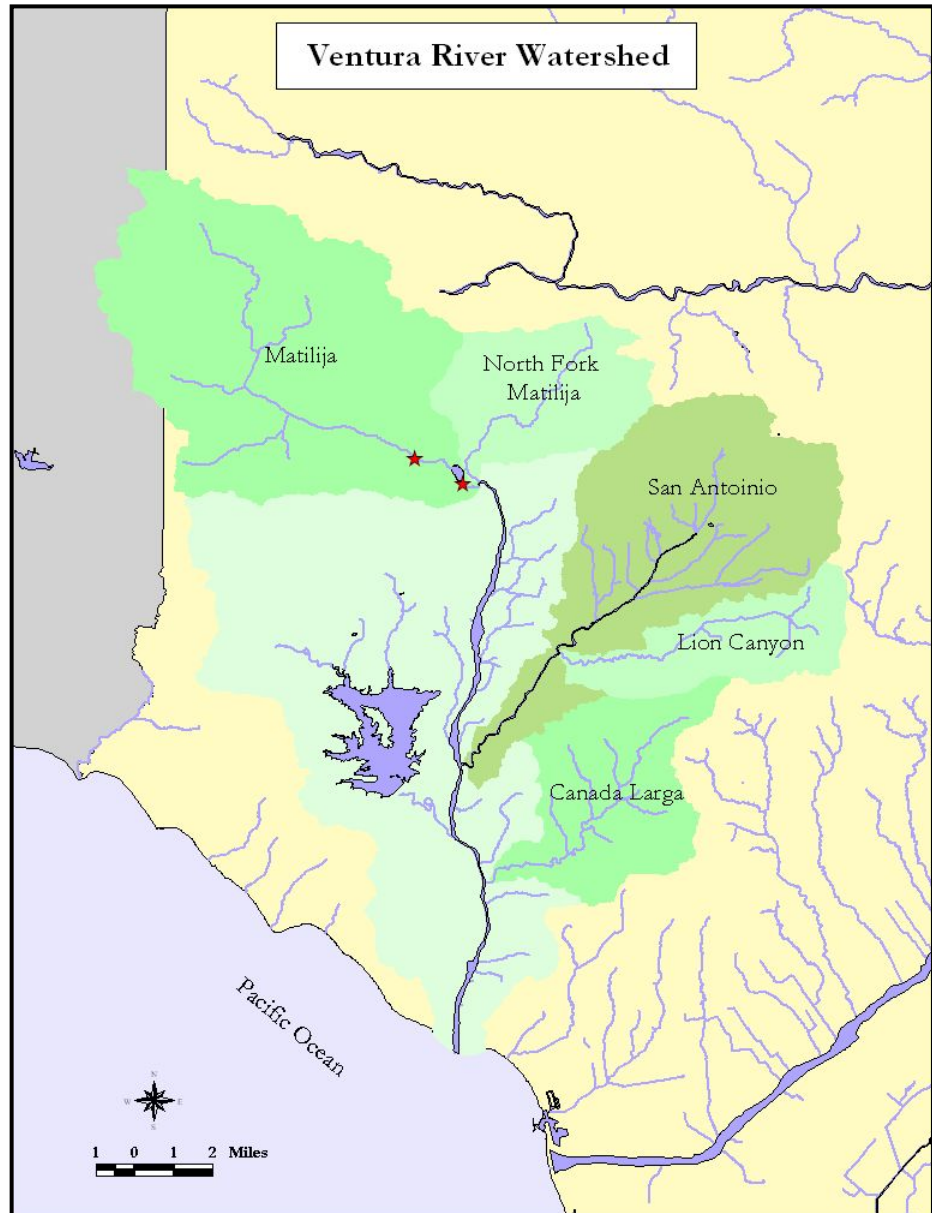


Figure 4. Ventura River

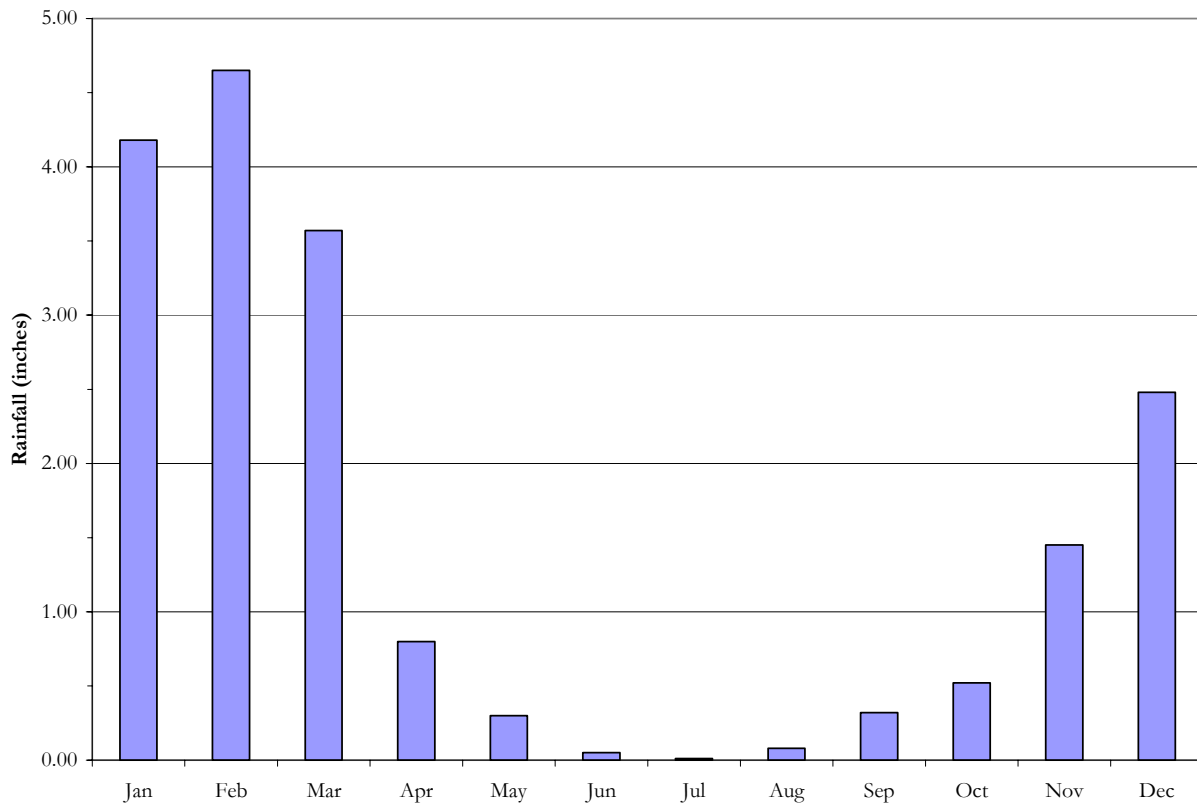
## 2.3 Precipitation

In general, the highest elevations of the watershed receive the most rainfall. The average annual rainfall for the Matilija watershed is 23.9 inches while the average annual rainfall near the mouth of



the Ventura River is approximately 16.9 inches. The average annual rainfall for the entire watershed is approximately 20 inches.

Most of the rainfall occurs between November and March, while the fall and summer months are typically dry (see Figure 5). Although snow occurs at the higher elevations, melting snowpack does not create significant runoff in the warmer months.



**Figure 5. Monthly Average Rainfall in Ventura, CA**

## **2.4 Geology/Soils**

The Ventura River watershed lies within the western Transverse Ranges in California. The range is comprised almost entirely of highly folded and faulted, unmetamorphosed marine sedimentary rocks of Cenozoic and late Mesozoic age. Topography on both sides of the upper watershed is very steep. These steep slopes, overlain by loose eroding rock debris, characterize the Matilija Creek drainage and frequent landslides deposit large amounts of sediment to the river channels. Forest fires, which



are common in the upper watershed, clear the normally dense vegetation and contribute to the erodibility of land surfaces.

The Matilija Dam was constructed on the Matilija Formation, which is comprised of massive sandstone beds imbedded with thinner fractured sandstone beds, minor siltstone, mudstone, and weak layers of shale. Although no major fault lines have been mapped within the Matilija Creek, the watershed is considered to be within a seismically active area. Just two miles north of Matilija Dam is the 90 mile long Santa Ynez fault, which is recorded as the largest transverse fault west of the San Andreas Fault.

## 2.5 Vegetation and Habitat

Aquatic vegetation in the wetted channel consists primarily of algae, ditchgrass, and duckweed in the open waters. The surrounding low cobble terraces support water primrose, water parsnip, and



**Figure 6. Ventura River at Foster Park**

common horseweed. The vegetation of the estuary is dominated by mixed stands of saltbush, coast goosefoot, brass buttons, narrow leaf cattail, California bulrush, jaumea, pickleweed and saltgrass.

Coastal sage scrub and chaparral communities occur on the surrounding upland hillsides while mixed riparian and alluvial scrub

habitat occurs along the lower

sections of the Ventura River. Pine forests occur on many of the peaks of the surrounding Santa Ynez Mountains. Agricultural lands planted with citrus and avocado groves are intermixed with residential properties, horse stables, oil facilities, industrial facilities and city parks along many



sections of the river. This development has encroached into the river flood plain, which has required the development of a levee system.

The Ventura River is typical of coastal southern California streams in that it exhibits typically steep gradients and is dominated by a flashy, precipitation regime. “Flashy” means that the river stage rises and falls abruptly within a hydrologic event. The riparian vegetation of the river is directly related to these hydro-geomorphic factors. Where slopes are steep, fast-moving water scours the streambed. Major storms can produce sediment-laden flows that dislodge significant portions of the riparian vegetation and alter the topography of the stream channel. Where gradients are low, and as flood flows recede, alluvial material is deposited, thereby providing areas where pioneer, seral vegetation can become established. If the interval between stream-altering flows is several years, rapidly growing riparian vegetation can establish dense riparian canopies.

Giant reed (*Arundo donax*) readily colonizes the floodplain within the Ventura River to the exclusion of many native species. Within active channels, scouring action removes giant reed, as well as native woody vegetation. However, in lower flood terraces that may be washed over by floodwaters but not necessarily scoured, existing populations of giant reed and other vegetation can survive. Once established, giant reed can out compete and displace native vegetation by depleting available water and overcrowding. Resultant giant reed monocultures provide little habitat value for native fauna.

The sediment trapped by Matilija Dam has significantly degraded the downstream river and coastal habitats. Surveys reveal that, downstream of the dam, sediment-starved “hungry water” has eroded the riverbed so that it now suffers a deficit of almost two million cubic yards of sand, gravel and cobble. Sediment reduction has exacerbated beach erosion from the mouth of the river to the Ventura harbor. High quality habitat still exists in the upper watershed above the Matilija Dam, but remains disconnected from the river and coast.



## **2.6 Biology**

With California's wetlands rapidly disappearing (only about 10% remain), the Ventura River area maintains marine, estuarine, and freshwater wetlands that provide habitat for a wide variety of plants and animals, some of which are classified as rare or endangered.

Historically, the Ventura River is believed to have had one of the largest runs of steelhead trout in southern California. Before the dam was built, it is believed that more than 5,000 steelhead trout migrated up the Ventura River and Matilija Creek; now less than 100 fish make their way up the river. The decline in population is cause for great concern for the survival of the steelhead.

Because the dam blocks access to some of the best remaining steelhead habitat in Southern, California, it has been determined that the removal of the dam is critical for the recovery of this species within the region. The removal would provide fish passage to historic breeding waters in the upper watershed, as well as greatly enhance the opportunities for restored habitat for other species of concern such as the California condor, California red-legged frog and the California Brown pelican by improving the overall habitat quality of the Ventura River.

## **2.7 Land Use**

Approximately 89% of the watershed is undeveloped land and about 1.5% of the watershed comprises urbanized communities, which includes the cities of Ojai and Ventura, and the unincorporated communities of Oak View, Matilija Canyon, Live Oak Acres, Meiners Oaks, and Casitas Springs. In these developed areas, the land use designations range from rural to residential to industrial. The human population of these urbanized areas is approximately 20,000.

Human impacted areas include activities related to livestock grazing, agriculture, recreation and oil production. Due to these influences, the Regional Water Quality Control Board has identified the Ventura River as Category I impaired watershed and has listed it on both the 303(d) list and Total Maximum Daily Load (TMDL) priority schedule for DDT, copper, silver, zinc, algae (eutrophication) and trash (see Table 1).

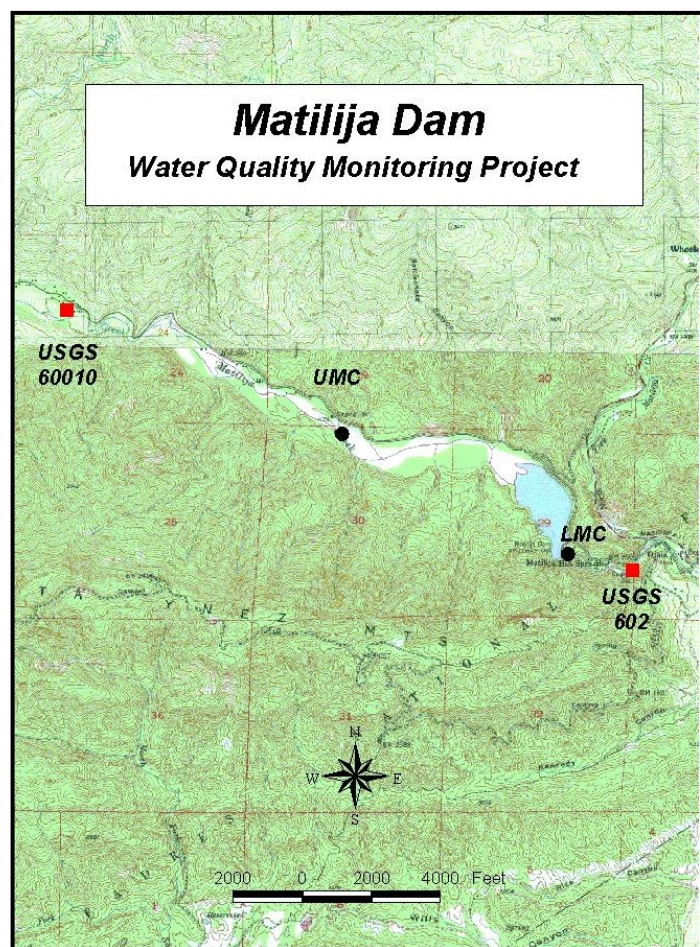


**Table 1. 2002 CWA 303(d)-Listed Waters in the Ventura River Watershed**

| Reach                                                        | Impairments                                                       |
|--------------------------------------------------------------|-------------------------------------------------------------------|
| Canada Larga (Ventura River Watershed)                       | Fecal coliform<br>Low dissolved oxygen                            |
| Matilija Creek Reach 1 (Jct. With N. Fork to Reservoir)      | Fish barriers                                                     |
| Matilija Creek Reach 2 (above Reservoir)                     | Fish barriers                                                     |
| Matilija Reservoir                                           | Fish barriers                                                     |
| San Antonio Creek (tributary to Ventura River Reach 4)       | Nitrogen                                                          |
| Ventura River Estuary                                        | Algae/Eutrophication<br>Fecal coliform<br>Total coliform<br>Trash |
| Ventura River Reach 1 (estuary to Main St.)                  | Algae                                                             |
| Ventura River Reach 2 (Main St. to Weldon Canyon)            | Algae                                                             |
| Ventura River Reach 3 (Weldon Canyon to confl. w/Coyote Cr.) | Pumping, water diversions                                         |
| Ventura River Reach 4 (Coyote Creek to Camino Cielo Rd.)     | Pumping, water diversions                                         |

### 3.0 MONITORING PROGRAM

The installation of two automated water quality monitoring stations on Matilija Creek, located upstream and downstream of Matilija Dam (see Figure 7), allowed for the collection and analysis of both wet and dry weather water quality samples. Time-paced composite samples were collected and analyzed for eight sampling events and included over 200 priority pollutant parameters including toxicity, bacteria, nutrients, heavy metals, semi-volatiles, PCBs and pesticides (see Section 3.3). The testing effort and subsequent data analysis provides the most accurate and comprehensive Matilija Creek water quality data collected to date. Information from the testing effort



**Figure 7. Water Quality Monitoring Locations**



was used to evaluate current conditions above and below Matilija Dam and will aid in the assessment of potential water quality and habitat impacts related to the removal of Matilija Dam.

### 3.1 Monitoring Stations

#### 3.1.1 Upper Matilija Dam Monitoring Station (UMC)

The Upper Matilija Dam water quality monitoring station is located approximately 1.6 miles above the Matilija Dam on North Matilija Road (see Figure 8). The drainage area above this site is approximately 55 square miles of primarily open space with a few residential homes located approximately 3.3 miles above the Matilija Dam. Direct electricity is cost prohibitive at this site so all power is supplied by a 12-volt deep cycle marine battery.



Figure 8. Upper Monitoring Station



Figure 9. USGS Gauging Station

Flow monitoring for the watershed above Matilija Dam is located approximately 1.9 miles upstream of the Matilija Dam (roughly 0.3 miles upstream the UMC site). The flow monitoring station includes a rated stage gauge maintained by the USGS (Station No. 11114495). Stage is measured



using a bubbler system and a data logger (see Figure 9). The stage data is translated into a flow value using a rating table developed and maintained by the USGS.

### **3.1.2 Lower Matilija Dam Monitoring Station (LMC)**

The Lower Matilija Dam water quality monitoring station is located just below the Matilija Dam on a path off the lower road to the dam, off of South Matilija Road. Time paced water quality samples were collected using a refrigerated automated ISCO sampler. The sampler was powered using a 12-volt deep cycle marine battery.



**Figure 10. Lower Monitoring Station**

### **3.2 Monitoring Methods**

All personnel were trained in sampling and transportation procedures, QA/QC techniques, field measurements, and documentation (see monitoring plan in Appendix A for further details). Appropriately treated and preserved sample bottles were provided by a certified laboratory. Grab samples were collected by lowering the sample container to approximately 6 inches below the surface water, whenever possible. The bottle was directed into the current, at least one foot from the bank. Samples were immediately stored on ice (4° C) and transported to the laboratory within six hours. Composite samples were gathered throughout the duration of the storm and collected at the end of the event for transport to the appropriate laboratory. Water temperature measurements were gathered at sampling locations using hand-held equipment. Additional information on sample documentation, transport and storage; laboratory procedures; personnel training; and quality assurance/quality control for this study are available from the VCWPD.

### **3.3 Parameters**

Samples were analyzed for over 200 priority pollutant parameters including bacteria, heavy metals, volatiles, semi-volatiles, phenols, PCB's, pesticides, and dioxins (see Table 2).



**Table 2. Parameters of Sampling Program**

| Constituent                                                                      | Method              | MDLs        | Holding Time       | Laboratory       |
|----------------------------------------------------------------------------------|---------------------|-------------|--------------------|------------------|
| <b>Metals: (Total Recoverable and Dissolved)</b> (units = ug/l unless specified) |                     |             |                    |                  |
| Arsenic                                                                          | EPA 206.3           | 1           | 6 mos.             | FGL              |
| Cadmium                                                                          | EPA 213.2           | 0.1         | 6 mos.             | FGL              |
| Chromium                                                                         | EPA 218.2           | 1           | 6 mos.             | FGL              |
| Copper                                                                           | EPA 220.1           | 1           | 6 mos.             | FGL              |
| Lead                                                                             | EPA 239.2           | 1           | 6 mos.             | FGL              |
| Nickel                                                                           | EPA 249.2           | 1           | 6 mos.             | FGL              |
| Selenium                                                                         | EPA 270.3           | 2           | 6 mos.             | FGL              |
| Silver                                                                           | EPA 272.2           | 0.2         | 6 mos.             | FGL              |
| Thallium                                                                         | EPA 279.2           | 1           | 6 mos.             | FGL              |
| Zinc                                                                             | EPA 289.1           | 1           | 6 mos.             | FGL              |
| <b>Organics</b>                                                                  |                     |             |                    |                  |
| Organochlorine Pesticides                                                        | EPA 8081            | 1-10 ng/L   | 7/40 days          | CRG Labs         |
| Orthophosphate Pesticides                                                        | EPA 8141            | 2.0 ng/l    | 7/40 days          | APPL             |
| Chlorinated Herbicides                                                           | EPA 8151            | 2-50 ng/L   | 7/40 days          | APPL             |
| Semi-volatiles                                                                   | EPA 8270            | 10-200 ng/L | 7/40 days          | CRG Labs         |
| TOC                                                                              | EPA 415.1           | 1000        | 28 days            | FGL              |
| <b>Conventional Inorganics</b> (units = mg/l)                                    |                     |             |                    |                  |
| Ammonia                                                                          | EPA 350.2           | 0.05        | 28 days            | FGL              |
| BOD                                                                              | EPA 405.1           | 1.0         | <b>48 hours</b>    | FGL              |
| Bromide                                                                          | SM 4500BR           | 0.0001      | <b>immediately</b> | FGL              |
| Chloride                                                                         | EPA 325.3           | 0.0001      | 28 days            | FGL              |
| Conductivity & pH                                                                | Electrometric       | n/a         | <b>immediately</b> | FGL              |
| Hardness                                                                         | EPA 130.2/SM2340B   | 1           | 6 mos.             | FGL              |
| Nitrate                                                                          | EPA 352.1           | 0.01        | 28 days            | FGL              |
| TKN                                                                              | EPA 351.3           | 0.05        | 28 days            | FGL              |
| Oil & Grease                                                                     | EPA 413.1/413.2     | 0.1         | 28 days            | FGL              |
| Petroleum hydrocarbons (TRPH)                                                    | EPA418.1/SM5520B, F | 0.1         | 7 days             | FGL              |
| Orthophosphate                                                                   | EPA 365.3           | 0.01        | 28 days            | FGL              |
| Phosphorus, total and dissolved                                                  | EPA 365.3           | 0.01        | 28 days            | FGL              |
| Solids, Total Dissolved                                                          | EPA 160.1           | 1           | 7 days             | FGL              |
| Solids, Total Suspended                                                          | EPA 160.2           | 1           | 7 days             | FGL              |
| <b>Microbiological</b> (units = MPN/100ml)                                       |                     |             |                    |                  |
| Total and Fecal Coliform                                                         | SM9221              | 2           | <b>6 hours</b>     | VCPHD            |
| E. Coli                                                                          |                     | 2           | <b>6 hours</b>     | VCPHD            |
| Enterococcus                                                                     |                     | 2           | <b>6 hours</b>     | VCPHD            |
| <b>Toxicity</b>                                                                  |                     |             |                    |                  |
| Chronic and Acute Toxicity/                                                      | EPA 600/4-91/002    | -           | 36 hours           | Aquatic Bioassay |



### 3.4 Sampling Events

Samples were taken during eight different events. Sampling events were considered “wet” after more than ¼” of rain had fallen (see Table 3 and Figure 11).

### 3.5 Sampling Methods

A large portion of the water necessary for sample analysis was collected using the ISCO automated samplers. These samplers were programmed to take time-paced composite samples when a storm of the proper size and duration was forecasted for the area.

However, in some instances, water quality samples cannot be taken as composite samples and the samples must be taken as grab samples. Frequently, short holding times necessitates gathering samples as grabs, although other characteristics, such as the tendency for oil and grease to adhere to the intake lines of samplers, also precludes automated sampling. Parameters that were collected as grab samples during this sampling program include bacteria, ammonia as N, conductivity, pH, oil and grease, total recoverable petroleum hydrocarbons (TRPH), and chronic and acute toxicity.

To the greatest extent possible, grab samples were collected mid-depth at a location where significant positive flow was present, during peak stormwater runoff flow conditions. During dry weather events, grab samples were collected at the approximate midpoint of the event when there was sufficient flow.

## 4.0 RESULTS

### 4.1 Water Chemistry Analytical Results

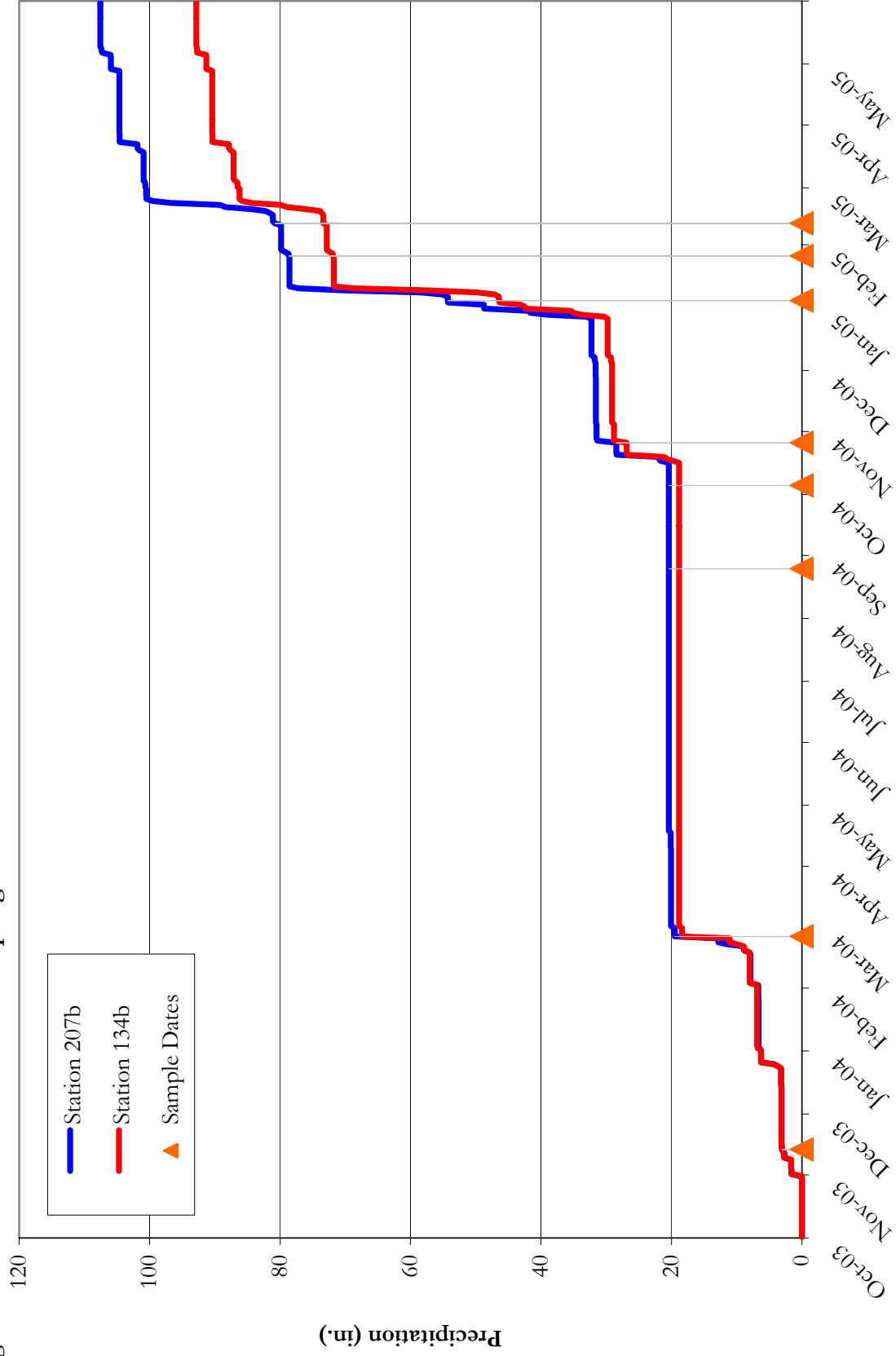
Table 4 shows the number of samples that were collected during the project, the number of detections at each location and the basic statistical summary of those detections. Included in the sampling program, but not included in Table 4 because no detections occurred, are organochlorine pesticides, orthophosphate pesticides, chlorinated herbicides, and semi-volatiles.

**Table 3. Sampling Events**

| Event # | Date             | Type | Precipitation<br>(134b/207b) |
|---------|------------------|------|------------------------------|
| 1       | Nov. 11-14, 2003 | Dry  | 0.31” / 0.42”                |
| 2       | Feb. 25-27, 2004 | Wet  | 7.30” / 6.67”                |
| 3       | Aug. 25-27, 2004 | Dry  | 0.00” / 0.00”                |
| 4       | Oct. 5-6, 2004   | Dry  | 0.00” / 0.00”                |
| 5       | Oct. 26-29, 2004 | Wet  | 1.94” / 2.94”                |
| 6       | Jan. 3-5, 2005   | Wet  | 3.38” / 5.52”                |
| 7       | Jan. 26-27, 2005 | Wet  | 0.17” / 0.15”                |
| 8       | Feb. 11-13, 2005 | Wet  | 0.55” / 1.28”                |



Figure 11. Cumulative Rainfall and Sampling Events





**Table 4. Detections of Selected Constituents**

| Constituent                           | Detections<br>(Upper/Lower) | Min. | Avg.    | Max.   | Units      |
|---------------------------------------|-----------------------------|------|---------|--------|------------|
| Ammonia as N                          | 2 (1/1)                     | 0.4  | 0.45    | 0.5    | mg/L       |
| Arsenic - Dissolved                   | 2 (0/2)                     | 3.3  | 3.65    | 4      | µg/L       |
| Arsenic - Total                       | 5 (2/3)                     | 2    | 2.6     | 3      | µg/L       |
| Beryllium - Total                     | 1 (0/1)                     | 0.2  | 0.2     | 0.2    | µg/L       |
| BOD                                   | 6 (0/6)                     | 1.1  | 2.30    | 4.7    | mg/L       |
| Bromide                               | 8 (4/4)                     | 0.2  | 0.38    | 0.8    | mg/L       |
| Cadmium - Dissolved                   | 1 (0/1)                     | 0.7  | 0.7     | 0.7    | µg/L       |
| Cadmium - Total                       | 5 (2/3)                     | 0.2  | 1.1     | 3      | µg/L       |
| Calcium - Total                       | 16 (8/8)                    | 60   | 96.0    | 114    | mg/L       |
| Chloride                              | 16 (8/8)                    | 4    | 51.6    | 192    | mg/L       |
| Chromium - Dissolved                  | 5 (3/2)                     | 1    | 1.4     | 3      | µg/L       |
| Chromium - Total                      | 9 (5/4)                     | 1    | 4.3     | 12     | µg/L       |
| Conductivity                          | 16 (8/8)                    | 497  | 896.9   | 1360   | µmhos/cm   |
| Copper - Dissolved                    | 14 (8/6)                    | 1    | 1.9     | 9      | µg/L       |
| Copper - Total                        | 5 (2/3)                     | 1    | 6.6     | 12     | µg/L       |
| E. Coli                               | 16 (8/8)                    | 10   | 58.3    | 173    | MPN/100 mL |
| Enterococcus                          | 16 (8/8)                    | 20   | 125.5   | 429    | MPN/100 mL |
| Fecal Coliform                        | 16 (8/8)                    | 2    | 23.0    | 170    | MPN/100 mL |
| Hardness as CaCO <sub>3</sub> - Total | 16 (8/8)                    | 216  | 350.0   | 417    | mg/L       |
| Lead - Dissolved                      | 3 (1/2)                     | 0.3  | 0.43    | 0.7    | µg/L       |
| Lead - Total                          | 10 (5/5)                    | 0.2  | 1.47    | 5.7    | µg/L       |
| Magnesium - Total                     | 16 (8/8)                    | 16   | 26.8    | 35     | mg/L       |
| Mercury - Total                       | 5 (1/4)                     | 10   | 18.0    | 40     | ng/L       |
| Nickel - Dissolved                    | 2 (1/1)                     | 1    | 1       | 1      | µg/L       |
| Nickel - Total                        | 3 (1/2)                     | 2    | 4.3     | 7      | µg/L       |
| Nitrate + Nitrite as N                | 3 (2/1)                     | 0.1  | 0.10    | 0.1    | mg/L       |
| Nitrate as N                          | 3 (1/2)                     | 0.1  | 0.1     | 0.1    | mg/L       |
| pH                                    | 16 (8/8)                    | 7.6  | 8.02    | 8.5    | pH Units   |
| Phosphorus - Dissolved                | 2 (0/2)                     | 0.1  | 0.1     | 0.1    | mg/L       |
| Phosphorus - Total                    | 3 (1/2)                     | 0.1  | 0.30    | 0.6    | mg/L       |
| Selenium - Dissolved                  | 9 (6/3)                     | 2    | 2.4     | 4      | µg/L       |
| Selenium - Total                      | 1 (1/0)                     | 2    | 2       | 2      | µg/L       |
| TKN                                   | 3 (0/3)                     | 0.5  | 0.63    | 0.8    | mg/L       |
| Total Coliform                        | 16 (8/8)                    | 148  | 3,395.4 | 16,580 | MPN/100 mL |



| Constituent            | Detections<br>(Upper/Lower) | Min. | Avg.  | Max. | Units |
|------------------------|-----------------------------|------|-------|------|-------|
| Total Dissolved Solids | 14 (7/7)                    | 320  | 615.0 | 810  | mg/L  |
| Total Organic Carbon   | 16 (8/8)                    | 1.1  | 2.85  | 6.2  | mg/L  |
| Total Suspended Solids | 3 (2/1)                     | 10   | 43.3  | 100  | mg/L  |
| Zinc - Dissolved       | 1 (0/1)                     | 80   | 80    | 80   | µg/L  |
| Zinc - Total           | 11(6/5)                     | 20   | 50    | 80   | µg/L  |

It is important to note that no sample collected exceeded the water quality standards set forth by either the California Toxics Rule (CTR) or the Los Angeles Regional Water Quality Control Board's Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Table 5 lists some of the trends observed during the sampling program.

There does not seem to be a significant difference between the upstream and downstream sites with respect to most parameters. However, there were six detections of BOD at the downstream site, while none were recorded at the upstream site. BOD is a standard test widely used for assessing organic pollution in water, particularly biodegradable organic wastes such as those found in raw sewage, treatment plant effluents, industrial point sources, or agricultural runoff. In general, clean water has a BOD of 1 or less mg/L and seriously polluted water contains more than 10 mg/L. When coupled with the fact that TKN was detected at the downstream site during three sampling events, the fact that sample results for BOD ranged from 1.1 to 4.7 mg/L may indicate a potential source of pollution entering the waterway between these two sites.

**Table 5. Trends Observed During Sampling Program**

|                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Detections at lower site only (# of detections)</u> <ul style="list-style-type: none"> <li>• Arsenic (2)</li> <li>• Biochemical Oxygen Demand (6)</li> <li>• Phosphorous – Dissolved (2)</li> <li>• Total Kjeldahl Nitrogen (3)</li> </ul> | <u>Wet event detections only (# of detections)</u> <ul style="list-style-type: none"> <li>• Cadmium - Total (5)</li> <li>• Chromium - Total (9)</li> <li>• Copper - Total (5)</li> <li>• Nickel - Total (3)</li> <li>• Nitrate + Nitrite as N (3)</li> <li>• Nitrate as N (3)</li> </ul> |
| <u>Dry event detections higher</u> <ul style="list-style-type: none"> <li>• Chloride (all 16 samples)</li> <li>• Conductivity (15 of 16 samples))</li> </ul>                                                                                  | <u>Detections mostly during wet events</u> <ul style="list-style-type: none"> <li>• Total Lead (9 of 10 detections)</li> <li>• E. coli (6 of 7 detections)</li> </ul>                                                                                                                    |



Figure 12. Total Coliform Sampling Results

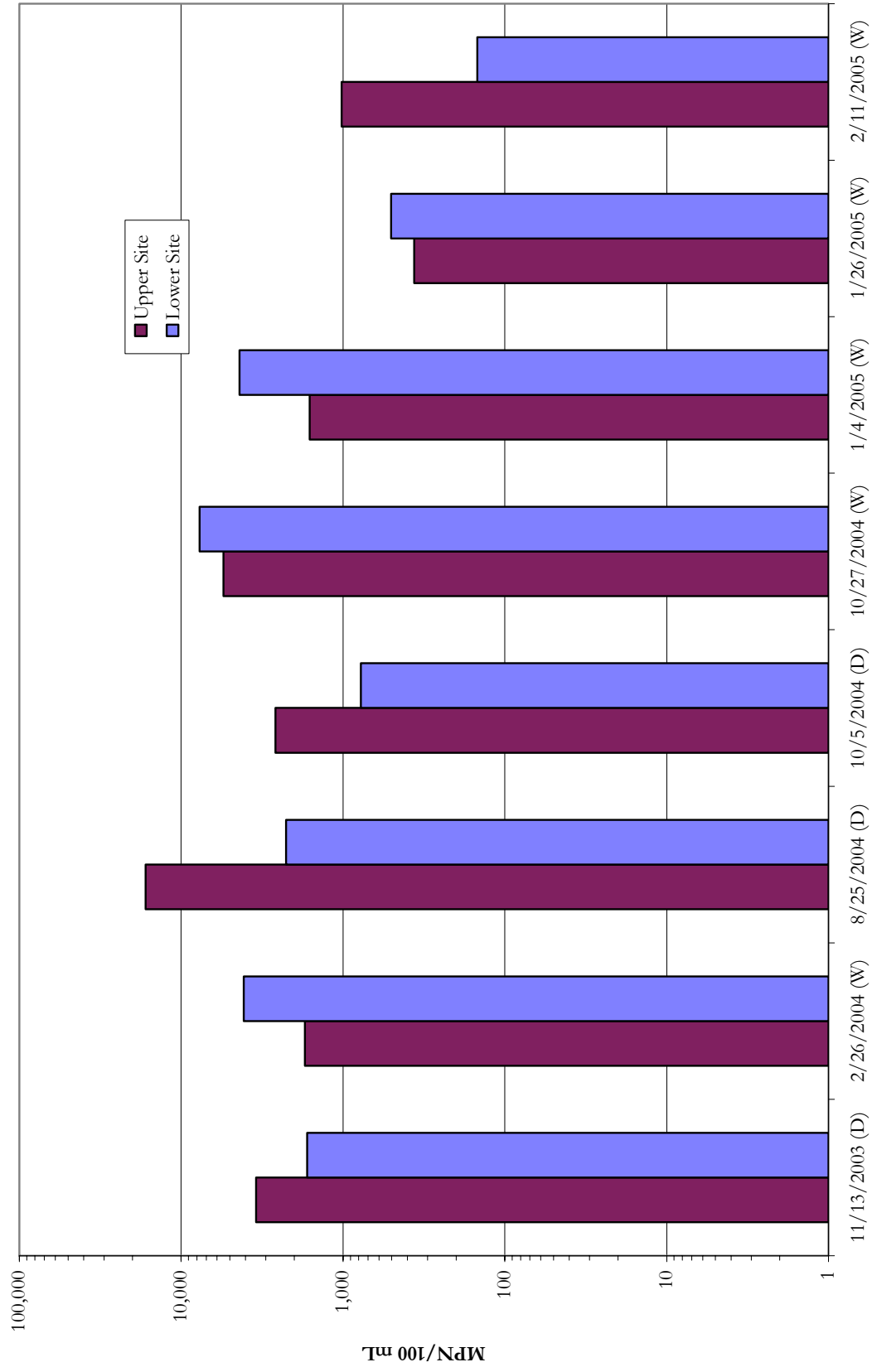
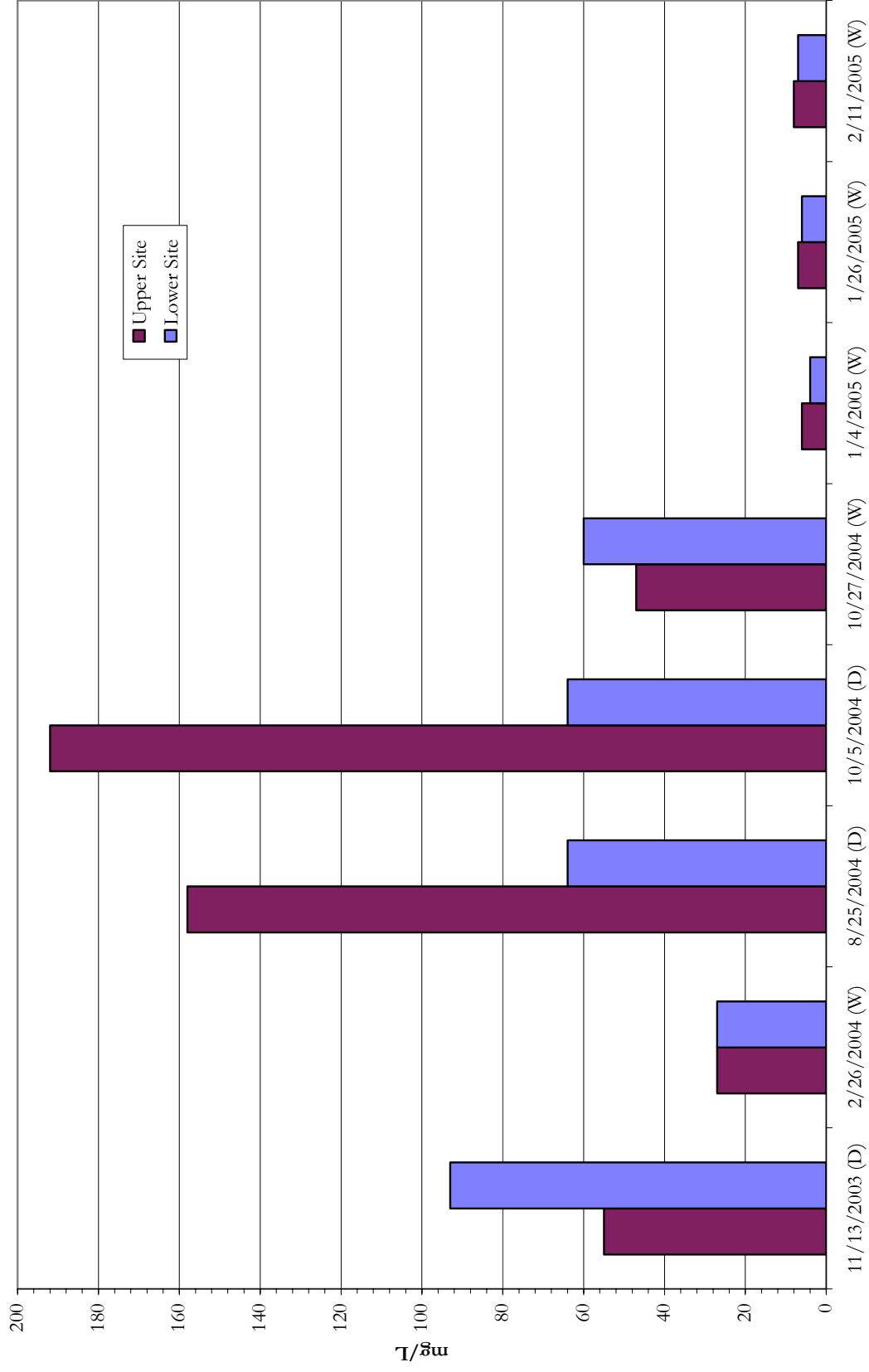




Figure 13. Chloride Sampling Results





Detections of pollutants that occurred only during wet events or primarily during wet events were not unexpected. The flushing of metals, nutrients and indicator bacteria from nearby land during storm events has been well documented (see Figure 12). Similarly, salt concentrations and corresponding conductivity readings dropped, as expected, during wet weather events due to dilution by increased flow in the waterway. (see Figure 13).

## 4.2 Toxicity Analytical Results

Acute toxicity tests measure how well organisms survive, while chronic tests measure survival and sub-lethal effects, such as a sample's effect on organism growth, reproduction, or fecundity. For both of these tests, water fleas (*Ceriodaphnia dubia*) were exposed to water taken from each site and their responses observed.

### 4.2.1 Acute

In order for a water sample to “pass” the acute toxicity portion of the test, the survival rate of the *Ceriodaphnia* must be at or above 90% and the toxicity units (TUa), which is simply 100 divided by the  $LC_{50}$  value, must be at or below 1.00.<sup>1</sup> This was the case in all samples taken both above and below the Matilija Dam, as shown in Table 6. Likewise, there was no significant difference between wet and dry sampling events.

**Table 6. Acute Toxicity Sampling Results**

| Event # | Location | Acute <i>Ceriodaphnia</i> Survival Bioassay |      |               |
|---------|----------|---------------------------------------------|------|---------------|
|         |          | Survival (%)                                | TUa  | $LC_{50}$ (%) |
| 1       | LMC      | 90                                          | 0.59 | >100          |
| 1       | UMC      | 100                                         | 0.00 | >100          |
| 2       | LMC      | 100                                         | 0.00 | >100          |
| 2       | UMC      | 100                                         | 0.00 | >100          |
| 3       | LMC      | 100                                         | 0.00 | >100          |

<sup>1</sup> *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821-R-02-012).



| Event # | Location | Acute <i>Ceriodaphnia</i> Survival Bioassay |      |                      |
|---------|----------|---------------------------------------------|------|----------------------|
|         |          | Survival (%)                                | TUa  | LC <sub>50</sub> (%) |
| 3       | UMC      | 100                                         | 0.00 | >100                 |
| 4       | LMC      | 95                                          | 0.41 | >100                 |
| 4       | UMC      | 90                                          | 0.59 | >100                 |
| 5       | LMC      | 100                                         | 0.00 | >100                 |
| 5       | UMC      | 100                                         | 0.00 | >100                 |
| 6       | LMC      | 100                                         | 0.00 | >100                 |
| 6       | UMC      | 100                                         | 0.00 | >100                 |
| 7       | LMC      | 100                                         | 0.00 | >100                 |
| 7       | UMC      | 100                                         | 0.00 | >100                 |
| 8       | LMC      | 100                                         | 0.00 | >100                 |
| 8       | UMC      | 100                                         | 0.00 | >100                 |

#### 4.2.2 Chronic

In order for a water sample to “pass” the chronic toxicity portion of the test, the survival rate of the *Ceriodaphnia* must be at or above 90% and the toxicity units (TUc), which is simply 100 divided by the LC<sub>50</sub> value, must be at or below 1.00.<sup>2</sup> For the chronic *Ceriodaphnia* survival and reproduction bioassay, No Observed Effect Concentration (NOEC) = 100%, TUc = 1.00, IC25 >100% and IC50 >100% for both survival and reproduction during all events at both the upper and lower sites.<sup>3</sup> As with the acute toxicity results, all samples “passed” (e.g., no chronic toxicity was discovered) and there was no difference between the samples gathered at the upstream and downstream sites or samples taken during wet and dry sampling events.

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<sup>2</sup> *Short-Term Methods For Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms* (EPA-821-R-02-013).

<sup>3</sup> For Events 2 and 3, the improper organism (Purple sea urchin (*Strongylocentrotus purpuratus*)) was used to test chronic toxicity due to communication problems with the laboratory. For this reason, the results of this sampling have been omitted from this report.



### 4.3 QA/QC

Field blanks, matrix spikes/matrix spike duplicates, and field duplicates were gathered in accordance with the protocol established in the Matilija Dam Water Quality Monitoring Plan (see Table 7). All results were within the expected range, indicating no contamination by the field crews (VCWPD staff) or the laboratory staff, as well as proper sampling techniques conducted by the field crews.

**Table 7. QA/QC Sampling Schedule**

| Event # | Type of QA/QC    | Site                 |
|---------|------------------|----------------------|
| 1       | --               | --                   |
| 2       | Field Duplicates | Lower Matilija Creek |
| 3       | Field Blanks     | Upper Matilija Creek |
| 4       | MS/MSD           | Lower Matilija Creek |
| 5       | Field Blanks     | Lower Matilija Creek |
| 6       | MS/MSD           | Upper Matilija Creek |
| 7       | MS/MSD           | Upper Matilija Creek |
| 8       | Field Blanks     | Upper Matilija Creek |

Once submitted to the VCWPD by the appropriate laboratories, sampling results were inspected for errors. During the course of this inspection, VCWPD staff discovered that indicator bacteria results and toxicity results had been improperly reported. Both laboratories were informed of this error and the proper results were resubmitted to the VCWPD.

### 5.0 CONCLUSIONS

Generally speaking, the water quality at both of these sites appears to be fairly good. Although a small community exists upstream of the upstream site (UMC), bacteria levels are not unexpectedly elevated and none of the other parameters were in exceedance of the various limits established for the area. Furthermore, there are no signs of toxicity at either site.

The data gathered during this study do not show any appreciable difference between the upstream and downstream sites. The one exception to this is the elevated number of detections of BOD and TKN at the lower site, which may indicate a potential source of pollution. As such, future studies



should look specifically at this problem by increasing both the number of sites and the frequency of testing (during both wet and dry events) for BOD, TKN, TSS and indicator bacteria.

Unlike the comparison of the upstream and down locations, there is a significant difference between wet and dry events. As anticipated, dissolved metals, nutrients and indicator bacteria concentrations rose while the concentration of salts and, correspondingly, conductivity fell.

The sampling results presented here provide a good background for water quality both above and below the Matilija Dam should removal of the structure occur. However, this study may need to be undertaken again in several years if the dam removal process has not begun and land use within the watershed has changed appreciably.



## **APPENDIX A - WATER QUALITY MONITORING SCOPE OF WORK**

## Matilija Dam Water Quality Monitoring Project

### I. Overall Project Budget:

| Budget Category      | Expense per Category | Matching Funds  | NFWF Funds      |
|----------------------|----------------------|-----------------|-----------------|
| Salaries & Benefits: | \$15,161             | \$11,287        | \$3,874         |
| Equipment:           | \$10,000             | -               | \$10,000        |
| Analytical Services  | \$46,126             | -               | \$46,126        |
| <b>TOTAL</b>         | <b>\$71,287</b>      | <b>\$11,287</b> | <b>\$60,000</b> |

### II. Budget Justification:

Environmental changes in the Ventura River system associated with the removal of Matilija Dam is an important issue to be considered and evaluated as part of the Matilija Dam Ecosystem Restoration Project Feasibility Study.

Environmental studies currently taking place in the watershed include the macroinvertebrate monitoring associated with the Watershed Protection District NPDES Stormwater Program and the Habitat Evaluation work as part of the Matilija Ecosystem Restoration Project Feasibility Study. Installation and operation of two water quality monitoring stations, one both above and below Matilija Dam, will provide valuable information on current aquatic habitat conditions in the form of baseline water quality data.

The goal of the Matilija Dam Water Quality Project is to monitor the river system for water quality in order to characterize current aquatic conditions, both above and below Matilija Dam. Characterization of Matilija Creek in the vicinity of the Dam site will provide important documentation of environmental conditions prior to removal of Matilija Dam. Continued water quality monitoring once Matilija Dam has been removed will provide the necessary data needed to evaluate water quality changes, if any, associated with the removal of Matilija Dam.

The overall scope of the project includes project planning, the construction of two water quality monitoring stations, water quality sampling and analytical analysis, and data management and analysis. The project start date is February 1, 2003 and will end December 31, 2004. The end product of the project will be a final water quality characterization report of conditions above and below Matilija Dam. This information will be made available to the Matilija Dam Ecosystem Restoration Project and included in the evaluation of environmental changes associated with the removal of Matilija Dam.

### **III. Project Phasing:**

#### **Phase 1 – Project Planning**

Project Planning Phase includes the following tasks:

- A. Identify locations above and below Matilija Dam for installation of monitoring stations.
- B. Determine suitable equipment for the automated collection of composite water quality samples.
- C. Design and construct vandalism proof enclosures.
- D. Select water quality parameters for sampling.
- E. Develop a water quality monitoring plan including Quality Control/Quality Assurance protocol and sampling frequency.
- F. Identify USGS and Watershed Protection District sources of water flow data above and below Matilija Dam.

#### **Phase 2 – Monitoring Station Installation**

The Monitoring Station Installation Phase includes the following tasks:

- A. Purchasing monitoring equipment.
- B. Install monitoring station enclosures and automated monitoring equipment.
- C. Calibrate monitoring equipment.

#### **Phase 3 – Water Quality Monitoring and Sample Analysis**

The Water Quality Monitoring Phase includes the following tasks:

- A. Coordinate monitoring events to take place during various weather conditions throughout the year 2003/2004.
- B. Collect composite water quality samples during monitoring events and analyze for appropriate parameters.
- C. Assemble hydrologic information (flow and precipitation) associated with each monitoring event.
- D. Document all aspects of the water quality monitoring events including interrogation of monitoring equipment.
- E. Submit water samples to the appropriate laboratories for chemical analysis.

#### **Phase 4 – Data Management and Final Report**

The Data Management and Reporting Phase includes the following tasks:

- A. Assemble data in an ACCESS Database.
- B. Review data for QA/QC and summarize for analysis.
- C. Evaluate data using water quality standards established in the California Toxics Rule, L.A. Basin Plan, and the Ocean Plan.
- D. Produce a final water quality report based on the data summarizing water quality conditions above and below Matilija Dam.



## **APPENDIX B – WATER QUALITY MONITORING PLAN**



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# **Ventura County Watershed Protection District Matilija Dam Water Quality Monitoring Plan Department of Justice Grant 2003 - 2005**



Ventura County  
Watershed Protection District  
Matilija Dam Water Quality Monitoring Plan 2003 - 2005

**TABLE OF CONTENTS**

|      |                                                       |    |
|------|-------------------------------------------------------|----|
| 1.0  | Overview .....                                        | 3  |
| 1.1  | Monitoring Sites .....                                | 4  |
| 1.2  | Monitoring Requirements .....                         | 5  |
| 1.3  | Monitoring Station Equipment .....                    | 8  |
| 2.0  | Flow Measurement.....                                 | 8  |
| 2.1  | Flow Monitoring Equipment .....                       | 8  |
| 3.0  | Monitoring Equipment Preparation and Maintenance..... | 9  |
| 3.1  | Pre-Season Maintenance.....                           | 9  |
| 3.2  | Field Crew Equipment .....                            | 9  |
| 3.3  | Vehicles .....                                        | 9  |
| 3.4  | Communication.....                                    | 9  |
| 4.0  | Monitoring Event Preparation .....                    | 11 |
| 4.1  | Event Summary.....                                    | 11 |
| 4.2  | Bottle Order .....                                    | 11 |
| 4.3  | Bottle Labels .....                                   | 11 |
| 5.0  | Storm Tracking, Communication, and Mobilization ..... | 11 |
| 5.1  | Decision to Monitor a Storm Event .....               | 11 |
| 5.2  | Phone Tree .....                                      | 11 |
| 6.0  | Station Preparation.....                              | 14 |
| 7.0  | Monitoring .....                                      | 15 |
| 7.1  | Project Manager Activities .....                      | 15 |
| 7.2  | Field Activities.....                                 | 16 |
| 7.3  | Manual Composite Sample Collection Method.....        | 21 |
| 8.0  | Toxicity Sampling.....                                | 22 |
| 9.0  | QA/QC - Quality Control Samples .....                 | 22 |
| 9.1  | Pre-Storm Bottle and Equipment Blanks.....            | 23 |
| 9.2  | Storm Event Quality Control Samples.....              | 23 |
| 9.3  | QA/QC Sample Collection Schedule.....                 | 24 |
| 9.4  | Collection Methods.....                               | 24 |
| 10.0 | Sample Compositing/Splitting and Shipment.....        | 25 |
| 10.1 | Labels/Station Codes .....                            | 25 |
| 10.2 | Sample ID Conventions .....                           | 25 |
| 10.3 | Chain-of-Custody Forms .....                          | 25 |
| 10.4 | Sample Splitting/Analytical Priorities .....          | 28 |
| 10.5 | Transport to Laboratory .....                         | 29 |
| 10.6 | Follow-up Activities .....                            | 30 |

Ventura County  
Watershed Protection District  
Matilija Dam Water Quality Monitoring Plan 2003 - 2005

**LIST OF TABLES**

|          |                                                                 |    |
|----------|-----------------------------------------------------------------|----|
| Table 1. | Monitoring Program Requirements .....                           | 6  |
| Table 2. | Monitoring - Sample Volumes.....                                | 7  |
| Table 3. | Monitoring Equipment Checklist.....                             | 10 |
| Table 4. | Sampling Containers and Preservatives.....                      | 15 |
| Table 5. | Storm Event QA/QC Schedule .....                                | 22 |
| Table 6. | Bottle Label Site Codes .....                                   | 25 |
| Table 7. | Analytes, Methods, Limits, Holding Times, and Laboratories..... | 27 |

**LIST OF FIGURES**

|           |                                     |    |
|-----------|-------------------------------------|----|
| Figure 1. | Water Quality Monitoring Sites..... | 3  |
| Figure 2. | Phone Tree .....                    | 13 |

**APPENDICES**

- A Emergency Procedures
- B Monitoring Event Field Sampling Requirements
- C Quality Assurance/Quality Control – Sample Container Procedures
- D Documentation – Field Logs and Chain of Custody Forms

## **1.0 OVERVIEW**

As part of the Army Corps of Engineers Feasibility Study for the removal of Matilija Dam, an assessment of potential impacts to the surrounding environment is necessary. Water quality data is an important component of the assessment and sufficient data has not been collected in the upper reaches of the watershed. The proposed monitoring program would provide sufficient water quality data to identify the potential impacts to water quality and associated aquatic habitats with the removal of Matilija Dam.

### **Project Description**

Ventura County Watershed Protection District proposes to install two automated water quality monitoring stations on Matilija Creek (Figure 1), located immediately upstream and downstream of Matilija Dam. As the Matilija Ecosystem Restoration Project proceeds forward with the feasibility study, the need for up-to-date, accurate environmental data increases.

Installation of these automated water quality stations on Matilija Creek will allow for the collection and analysis of representative water quality samples. Time paced composite samples will be collected and analyzed for nine sampling events and include over 200 priority pollutant parameters including toxicity, bacteria, nutrients, heavy metals, semi-volatiles, PCBs and pesticides (Table 1). The testing effort will provide the most accurate and comprehensive Matilija Creek water quality data collected to date. Information from the testing effort will be used to evaluate current conditions above and below Matilija Dam and aid in the assessment of potential water quality and habitat impacts related to the removal of Matilija Dam.

While the sediment stored behind Matilija Dam has been recently sampled and tested for sediment composition and toxicity, the chemical characteristics of the sediment and their impact to the overlying water that flows through the sub-basin have not been examined in much detail. Water quality data collected as part of the Matilija Dam Water Quality Monitoring Project will provide the much needed scientific data to understand the influence of the stored sediment on overlying water quality and provide additional information as to the overall health of the Matilija Watershed. Without current, accurate water quality data, evaluation of the impacts to downstream fish habitat with the removal of Matilija Dam will be almost impossible to accurately access.

### **Summary**

Water quality data is needed to understand the significance of removing Matilija Dam from the Ventura River Watershed. To date, very little data has been collected in the upper area of the watershed and therefore, little is known regarding the potential water quality impacts of disturbing Matilija Dam. With the proposed project, representative water quality samples will be collected above and below Matilija Dam and analyzed for over 200 priority pollutant compounds. The results will be used to determine the best alternative for the ecosystem restoration of Matilija Dam.

## **1.1 Monitoring Sites**

The two water quality monitoring sites are described in detail below. Both sites will be equipped with automated ISCO monitoring equipment that includes a peristaltic pump sampler that is programmable to conduct time paced composite sampling.

### **1.1.1 Upper Matilija Dam Monitoring Station**

The Upper Matilija Dam water quality monitoring station is located approximately 1.6 miles above the Dam on North Matilija Road. The Upper monitoring site is positioned above the Dam in the upper reach of the Ventura watershed. The drainage area is approximately 54.6 square miles of primarily open space with a few residential homes located approximately 3.3 miles above the Dam.

Flow monitoring for the watershed above Matilija is located approximately 1.9 miles upstream of the dam. The flow monitoring station includes a rated stage gauge maintained by the USGS. Stage is measured using a bubbler system and a data logger. The stage data is translated into a flow value using a rating table developed and maintained by the USGS. Direct electricity is cost prohibitive at this site so all power is provided using a solar panel system with a series of back-up batteries.

### **1.1.2 Lower Matilija Dam Monitoring Station**

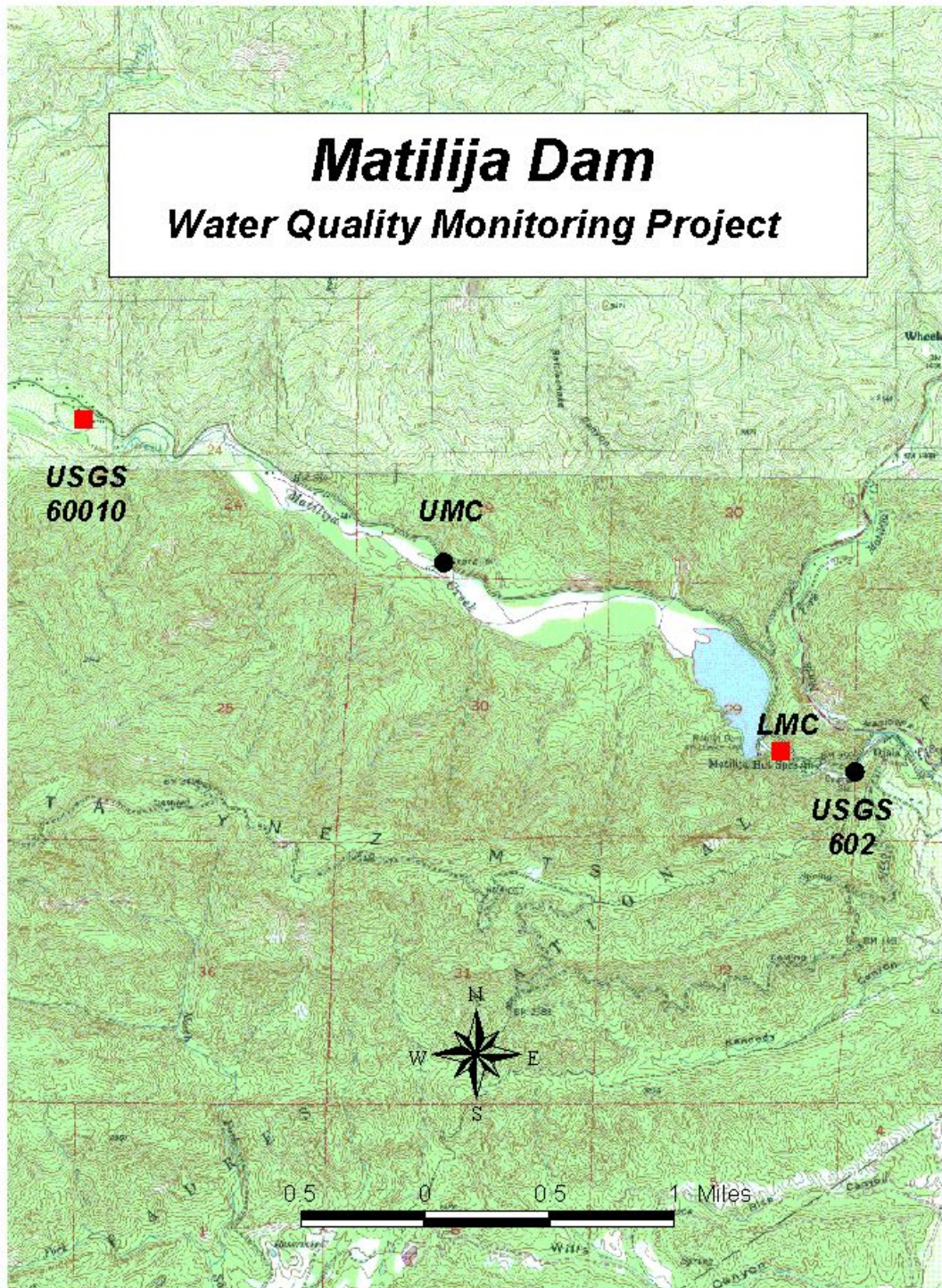
The Lower Matilija Dam water quality monitoring station is located just below the Dam on a path off the lower road to the dam, off of South Matilija Road. Time paced water quality samples are collected using a refrigerated automated ISCO sampler. The sampler is powered using a series of marine dry cell batteries.

There is currently no flowmeter at the lower monitoring site. The proposed monitoring station will include a bubbler stage gauge. Stage data will be translated into flow using a hard rating curve established by the WPD for a concrete weir structure located below the monitoring site.

## **Figure 1. Matilija Dam Water Quality Monitoring Stations**

# ***Matilija Dam***

## ***Water Quality Monitoring Project***



## 1.2 Monitoring Requirements

Monitoring requirements are based on the 205J Grant proposal for the monitoring of Matilija Dam water quality and include a summary of the monitoring sites, site names, and monitoring requirements (Table 1).

See Table 2 for a list of monitoring constituents, sample volume requirements, and required sample collection method.

An annual monitoring log for the purpose of planning and recording the dates of each monitoring event may be found in Appendix D.

Additional monitoring requirements related to collection, documentation, preservation, and analysis of samples are outlined as follows:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The Ventura County Watershed Protection District shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports, and records of all data used to complete the final project report.
3. Records of monitoring information shall include: (1) the date, exact place and time of sampling or measurements; (2) the individual(s) who performed the sampling or measurements; (3) the date(s) analyses were performed; (4) the individual(s) who performed the analyses; (5) the analytical techniques or methods used; and, (6) the results of such analyses.
4. All sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified.
5. All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.
6. For any analyses performed for which no procedure is specified in the EPA guidelines or in this Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
7. Whenever feasible, the minimum detection levels from the California State Implementation Plan will be used. If this is not feasible, the Watershed Protection District shall use analytical methods with the lowest MDL.

**Table 1. Monitoring Program Requirements**

| <b>Site Code</b> | <b>Monitoring Station</b> | <b>Number of Events</b>                                                           | <b>Sample Type</b>                   | <b>Constituents<sup>1</sup></b>                                                                  |
|------------------|---------------------------|-----------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------|
| UMC              | Upper Matilija Creek      | Four per year over a two year time period.<br>(beginning with the 2003-04 season) | Automated composite and grab samples | Metals, Organics, Conventional, Pesticides, Nutrients, Inorganics, Microbiological, and Toxicity |
| LMC              | Lower Matilija Creek      | Four per year over a two year time period.<br>(beginning with the 2003-04 season) | Automated composite and grab samples | Metals, Organics, Conventional, Pesticides, Nutrients, Inorganics, Microbiological, and Toxicity |

1.The list of specific constituents, analytical methods, detection limits, and holding times is included in Table 7.

**Table 2. Water Quality Sample Volumes**

| <b>Constituent (bottle preservative)</b>                       | <b>Sample (mLs)</b> | <b>MS/MSD (mLs)</b> | <b>Field Dup (mLs)</b> | <b>Lab Dup (mLs)</b> | <b>Type</b>      |
|----------------------------------------------------------------|---------------------|---------------------|------------------------|----------------------|------------------|
| <b>Grab Samples</b>                                            |                     |                     |                        |                      |                  |
| Total Ammonia as N (1 pint) (H <sub>2</sub> SO <sub>4</sub> )  | 500                 | -                   | 500                    | 500                  | grab             |
| Conductivity (1 pint)                                          | 500                 | -                   | 500                    | 500                  | grab             |
| pH                                                             |                     |                     |                        |                      |                  |
| Oil & Grease (1 quart) (H <sub>2</sub> SO <sub>4</sub> )       | 1000                | -                   | 1000                   | 1000                 | grab             |
| TRPH (HCl)                                                     | 1000                | -                   | 1000                   | 1000                 | grab             |
| Total and Fecal Coliform                                       | 100                 | -                   | 100                    | 100                  | grab             |
| E. Coli                                                        |                     |                     |                        |                      |                  |
| Enterococcus                                                   |                     |                     |                        |                      |                  |
| Chronic & Acute Toxicity (TIE)                                 | 10 gal.             | -.                  | -                      | -                    | grab             |
| <b>Composite Samples</b>                                       |                     |                     |                        |                      |                  |
| Dis. Metals (As, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn )          | 500                 | -                   | 500                    | 500                  | composite        |
| Total Metals (As, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn )         | 500                 | *                   | 500                    | 500                  | composite        |
| Hardness (HNO <sub>3</sub> )                                   |                     |                     |                        |                      |                  |
| Semi-volatile Organics (EPA 8270)                              | 1000                | 2000                | 1000                   | 1000                 | composite        |
| OC-Pesticides (EPA 8081)                                       | 1000                | 2000                | 1000                   | 1000                 | composite        |
| OP-Pesticides (EPA 8141)                                       | 1000                | 2000                | 1000                   | 1000                 | composite        |
| Cl-Herbicides (EPA 8151)                                       | 1000                | 2000                | 1000                   | 1000                 | composite        |
| TOC (2 x 40 mL vials) (H <sub>2</sub> SO <sub>4</sub> )        | 80                  | -                   | 80                     | 80                   | composite        |
| BOD (1 quart bottle)                                           | 1000                | -                   | 1000                   | 1000                 | composite        |
| Bromide                                                        |                     |                     |                        |                      |                  |
| Chloride                                                       |                     |                     |                        |                      |                  |
| Nitrite as N                                                   |                     |                     |                        |                      |                  |
| Orthophosphate                                                 |                     |                     |                        |                      |                  |
| TDS/TSS                                                        |                     |                     |                        |                      |                  |
| Nitrate as N (1 pint bottle) (H <sub>2</sub> SO <sub>4</sub> ) | 500                 | -                   | 500                    | 500                  | composite        |
| Nitrate – Nitrite as N                                         |                     |                     |                        |                      |                  |
| TKN                                                            |                     |                     |                        |                      |                  |
| Phosphorous, total                                             |                     |                     |                        |                      |                  |
| Phosphorous, diss.                                             |                     |                     |                        |                      |                  |
| <b>Total Composite Volumes</b>                                 | <b>6080</b>         | <b>8000</b>         | <b>6080</b>            | <b>6080</b>          | <b>composite</b> |

\* Conduct analysis on original sample volume

## **1.3 Monitoring Station Equipment**

Each of monitoring stations are equipped with an automated ISCO 6712 peristaltic pump sampler with data logging capabilities. The power source includes a series of marine dry cell batteries.

Monitoring equipment is housed in a locked 3'x3'x3' steel security enclosure at each of the two monitoring stations. Monitoring data is managed using ISCO Flowlink 4 software for Windows. A database with reporting and QA/QC features used to store and manage the water quality monitoring data is currently under development and should be completed by monitoring year 2003–2004. The major monitoring station components (sample collection and flow measuring equipment) are described briefly below.

### **1.3.1 Automatic Sampler**

The ISCO automated sampler consists of an ISCO sampler/controller, an intake strainer, Teflon intake tubing, flexible pump tubing and a glass composite sample bottle. The sampler is programmed to collect time-based composite samples. The intake strainer is securely fastened at a location in the flow stream. The Teflon intake tubing is securely fastened to the intake strainer, and then housed in protective conduit to the point where the tubing enters the monitoring equipment enclosure. The Teflon intake tubing is attached to the flexible pump tubing at the sampler. The flexible pump tubing runs through the sampler peristaltic pump into the composite sample bottle. The sample bottle is housed in the sampler unit where it is stored on ice at a constant temperature of 4° C.

## **2.0 FLOW MEASUREMENT**

### **2.1 Flow Monitoring Equipment**

The following equipment is used to measure and monitor flow in Upper Matilija Creek.

#### **2.1.1 Staff Gauge**

The upper USGS monitoring station is equipped with a staff gauge for the purpose of visually determining river depth. The staff gauge depth readings will be recorded during each of the monitoring events. It is important to record the staff gauge reading at the beginning and end of each station visit. The WPD has plans to install a staff gauge at the lower station when the flow monitoring station is established at that site.

#### **2.1.2 VCWPD/USGS Station**

The Upper Matilija watershed is monitored for flow using a continuous bubbler flowmeter operated by the USGS. In addition to the staff gauge measurement, depth readings from the bubble flowmeter are continuously recorded using a data logger. The stage data may then be related to river flow using a flow rating curve. Flow rating curves are maintained and adjusted by USGS hydrologists.

### **3.0 MONITORING EQUIPMENT PREPARATION AND MAINTENANCE**

The following equipment preparation and maintenance activities are performed in preparation for monitoring.

#### **3.1 Pre-Season Maintenance**

Prior to the beginning of monitoring the following routine maintenance is performed on each of the monitoring sites:

- Check/recharge/replace batteries
- Inspect/calibrate ISCO equipment
- Inspect/clean/install sample tubing
- Collect equipment blanks
- Clean/install composite sample bottles
- Inspect/clean staff gauge
- General maintenance

See ISCO instruction manual for detailed information regarding maintenance and servicing information for the above-listed equipment.

#### **3.2 Field Crew Equipment**

Prior to the first monitored event of the season and immediately after each of the subsequent monitoring events, the field crew takes inventory all field equipment (see Table 3 for monitoring equipment checklist) and replaces items as necessary.

#### **3.3 Vehicles**

Two designated 4WD vehicles equipped for water quality monitoring are permanently assigned to monitoring field crews for use during monitoring events.

#### **3.4 Communication**

Each field crew member has a cellular phone for remote communication. This is important for safety as well as for receiving direction from the Water Quality Monitoring Program Manager. Matilija is known as a 10-1 area which means there is no cell phone service in most of the watershed area. A phone is available at Matilija Dam located in the upper dam house.

**Table 3. Monitoring Equipment Checklist**

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Log Books, Monitoring Plan and Sampler Programming Log<br>Chain-of-Custody Forms<br>Grab Sample Bottles<br>5 Gal. Buckets for Toxicity Samples<br>Lab Water for Field Blanks<br>Replacement Composite Bottles (with mesh carriers and 10 gal. buckets)<br>Grab Poles<br>Powder-free nitrile gloves<br>Coolers and ice<br>Ice Scooper<br>Spare sample bottle labels<br>D.I. water and squirt bottles<br>Paper towels, antibacterial hand cleaner<br>Keys: Enclosures (NPDES), Gates (2503), and Hydro/USGS Enclosures (2151, 2640)<br>Cellular Phone<br>Digital Camera (charged)<br>Flashlights (2)<br>Tools: Diagonal Clippers, Utility Knife, Screw Drivers,<br>Electrical tape<br>Cable ties (assorted sizes)<br>Batteries: Spare 12 volt Deep Gel Marine<br>Pencils and waterproof markers & paper<br>Ziplock bags (assorted sizes)<br>Rubber bands<br>First Aid Kit<br>Personal Rain Jacket and Pants<br>Rubber Boots, Short/Hip/Chest Waders<br>Safety Gear: Traffic cones, Signing, etc.<br>Laptop Computer |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **4.0 MONITORING EVENT PREPARATION**

**The following monitoring preparation activities are performed prior to each monitoring event.**

### **4.1 Event Summary**

The monitoring event summary (Table 2) should be reviewed prior to each monitoring event. The event summary sheet shows sampling requirements at each monitoring site and includes sample volume, grab sample bottle and QA/QC requirements. The composite sample breakdown sheet shows bottle requirements for composite sample breakdown. The monitoring event summary table will serve as a guide to help field crews prepare for and conduct monitoring events.

### **4.2 Bottle Order**

Bottle orders should be placed prior to each monitoring event. The bottle orders are telephoned in to the appropriate laboratories (CAPCO Analytical Services, Fruit Growers Laboratory and Ventura County Public Health Laboratory) used for this project and picked up prior to the monitoring event by the monitoring crew. Chain of custody forms are customized for the monitoring program and provided by the monitoring crew (Appendix D). Bottle orders include the following:

- Automated sampler composite bottles, cleaned (CAPCO Analytical Services)
- Grab sample bottles (Fruit Growers Laboratory)
- Bacteria sample bottles (Ventura County Public Health Laboratory)
- Trip, field, and equipment blanks (Fruit Growers Laboratory)
- Blank water (Fruit Growers Laboratory and/or VCPHL)
- Ice chests (VCWPD)

### **4.3 Bottle Labels**

Sample bottle labels are prepared and applied to sample bottles prior to each monitoring event. See Section 10.0, “Sample Compositing/Splitting and Shipment” for bottle label preparation details.

## **5.0 STORM TRACKING, COMMUNICATION, AND MOBILIZATION**

### **5.1 Decision to Monitor a Storm Event**

The decision to sample a storm event is made by the Project Manager in consultation with weather forecasting information services. The decision is made once a minimum quantity of precipitation forecast (0.25 inches) has been determined.

### **5.2 Phone Tree**

Field crews are designated for each monitoring event as need is determined by the Project Manager. When field crews are notified regarding monitoring status (including notifications to begin sampling) the phone tree is utilized (Figure 2). For each monitoring event it is the

responsibility of the Project Manager to contact personnel participating as members of the monitoring crew.

**Figure 2. Matilija Dam Water Quality Monitoring Program Phone Tree**

**Project Manager**

Darla Wise      654-3942 w  
                         218-4522 c  
                         984-2239 h

**Emergency 911**

Community Memorial Hospital    652-5011  
Ventura County Med. Center      652-6000  
St. Johns Reg. Med. Center      988-2500

**Fox Weather – Alan Fox/Steven Boyd**

985-8743 w  
444-8341 c

**Monitoring Crew Supervisor**

David Thomas    650-4086 w  
                         701-1689 c  
                         647-8239 h

**Aquatic Bioassay Consulting Lab.**

Michael Machuzak    643-5621 w  
Tim Mikel              643-5621 w  
                                 644-8690 h  
                                 643-2930 f

**Monitoring Crew**

WQA II              000-0000 w  
                         000-0000 h  
                         000-0000 c  
  
Paul Tantet        662-6737 w  
                         (818) 703-0377 h  
  
Chris Stephens    654-2032 w  
                         218-1385 c  
                         524-6835 h  
  
WQA I              000-0000 w  
                         000-0000 c  
                         000-0000 h  
  
Darleen Travali   477-7175 w  
                         428-2954 pc

**FGL – Kelly Dunnahoo/David Terz**

659-0910 w  
Kelly x130, David x116, Vicki H x136  
525-4172 f

**Ventura County HCA Public Health Lab**

Susan Benavidez    981-5131 w  
Sal Barragan        981-5131 w

**Frontier Lab – Eric Von Der Geest**

(206) 622-6960 w  
(206) 622-6870 f

**CAPCO Analytical Services**

Dan Farah          644-1095 w  
                         644-9947 f

## **6.0 STATION PREPARATION**

When a monitoring event becomes imminent, the field crews perform the following activities at each of the monitoring stations.

1. Site Inspection
2. Check electrical and sample tubing connections
3. Check battery levels
4. Check desiccant
5. Check that clean composite sample bottles are installed
6. Visually inspect intake lines
7. Fill out log sheet
8. Get ice from Water Quality ice machine at the El Rio Corporate Yard
9. Ice down composite sample bottles
10. Gather, inspect, and label all grab sample bottles

When the decision is made to monitor an event, the Project Manager should perform the following activities on each of the monitoring stations.

1. Calculate sample collection time and volumes based on a 24 to 48 hour monitoring event.
2. Fill out the Field Log sheet including Sample collection time, sample collection volume in ml, and number of samples to be collected (Appendix D).
3. Program sample collection time and volume values into ISCO units at each monitoring station. See ISCO sampler manual for specific programming steps.
4. For wet weather monitoring, composite samples will be collected over a 24 to 48 hour time period and span the hydrograph generated by the storm event.

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## 7.0 MONITORING

Each of the monitoring stations will be monitored for water quality parameters at the frequency shown previously in Table 1. Both grab and composite samples will be collected and analyzed from these sites for the water quality constituents shown in Table 2. See Table 4 for containers and preservatives required for grab samples. The following section describes the Project Manager and Field Personnel activities required to successfully collect specified grab and composite samples. If automated composite sample collection equipment is not operational, composite samples may be collected using the back-up manual method described in Section 7.3.

### 7.1 Project Manager Activities

During each monitoring event, the monitoring crew will visit each monitoring station on a periodic basis. During the site visits the monitoring crew will estimate the time until each composite bottle fills, monitor the storm hydrograph, review the time for grab sample collection, and at the end of the 24 to 48 hour monitoring event terminate sampling. These activities are described in more detail below.

#### 7.1.1 Initiating Sampling

To initiate sampling the following steps should be taken:

1. Review Fox Weather quantitative precipitation forecasts.
2. Review and update sampler programs as necessary due to anticipated changes in monitoring conditions.
3. Confirm that all automated samplers are armed and ready to begin sample collection at the beginning of the 48 hour monitoring event.

**Table 4. Sampling Containers and Preservatives**

| Constituent                                         | Container                  | Preservative        |
|-----------------------------------------------------|----------------------------|---------------------|
| Composite (see Table 2)                             | 20 liter glass             | 4°C                 |
| Ammonia                                             | 1 liter plastic            | 4°C                 |
| Conductivity and pH                                 | 250 ml plastic             | 4°C                 |
| Oil & Grease                                        | 1 liter glass              | 4°C & acid to pH <2 |
| Petroleum hydrocarbons (TRPH)                       | 1 liter glass              | 4°C & acid to pH <2 |
| Total and Fecal Coliform<br>Enterococcus<br>E. Coli | 100 ml sterile plastic     | Cool to 4°C         |
| Chronic and Acute Ceriodaphnia Toxicity             | 1 - 5 gal. Plastic Buckets | Cool to 4°C         |

#### 7.1.2 Composite Sample Collection

7.1.3 Time paced composite samples will be collected over a 24 to 48 hour time period at 15 to 30 minute time intervals. The monitoring crew will visit each monitoring site at varying times throughout the collection of the composite sample. During the site visits the sample will be checked for adequate sample volume and a maintained temperature of 4°C.

#### 7.1.4 Selecting Time for Grab Samples

For grab sample initiation, the Project Manager will notify sampling crew of the time to begin filling grab sample bottles. To the greatest extent possible, grab samples should be collected mid-depth at a location where significant positive flow is present, during peak stormwater runoff flow conditions. During dry weather events, grab samples should be collected at the approximate midpoint of the event when there is sufficient flow.

Grab samples are ideally collected during peak flow. However, because it is difficult to predict the time of peak flow, timing grab sampling to coincide with the hydrographic peak may not be possible. Therefore, to the greatest extent possible, grab samples should be collected during the early to middle portion of the monitoring event, at a time when flow rates are increasing and precipitation rates are decreasing.

The Project Manager should monitor weather reports and site hydrographs (if available) at each sampling location to determine appropriate times for grab sample collection. The Project Manager should notify the field crew as to the time that grab samples should be collected.

#### 7.1.5 Terminating Sampling

When it has been determined that the monitoring event is over, the Manager will terminate sampling at the monitoring sites by stopping the monitoring equipment.

#### 7.1.6 Downloading Monitoring Event Data

Monitoring event data is downloaded on site immediately following each monitoring event. Monitoring data is downloaded using the ISCO Flowlink software and stored in the Water Quality Access database on the Ventura County intranet K drive.

### **7.2 Field Activities**

Monitoring sites are visited by the field crew for four reasons: 1) to perform station maintenance and/or troubleshooting; 2) to collect a full composite bottle; 3) to collect grab samples and make field measurements; or 4) to terminate a monitoring event. Clean sample handling techniques, site visit activities, grab sample collection methods, field measurement methods, composite bottle changing procedures, and sampling termination activities are presented below.

#### 7.2.1 Clean Sample Handling

“Clean sampling” techniques are required to collect and handle water samples in a way that does not result in contamination, loss, or change in the chemical form of the analytes of interest. Samples are collected using rigorous protocols, based on EPA Method 1669, as summarized below:

- Samples are collected only into rigorously pre-cleaned sample bottles.
- At least two persons, wearing clean, powder-free nitrile gloves at all times, are required on a sampling crew.
- One person (“dirty hands”) touches and opens only the outer bag of all double bagged items (such as sample bottles, tubing, strainers and lids), avoiding touching the inside of the bag.
- The other person (“clean hands”) reaches into the outer bag, opens the inner bag, and removes the clean item (sample bottle, tubing, lid, strainer, etc.).
- After a grab sample is collected, or when a clean item must be re-bagged, it is done in the opposite order from which it was removed.
- Clean, powder-free nitrile gloves are changed whenever something not known to be clean has been touched.
- For this program, clean techniques must be employed whenever handling the composite bottles, Teflon lids, suction tubing, strainers, or grab sample bottles for metals, organics or bacteriological grab samples.
- To reduce potential contamination, sample collection personnel must adhere to the following rules while collecting stormwater samples:
  1. No smoking.
  2. Never sample near a running vehicle. Do not park vehicles in immediate sample collection area (even non-running vehicles).
  3. Avoid allowing rain water to drip from rain gear or any other surface into sample bottles.
  4. Do not eat or drink during sample collection.
  5. Do not breath, sneeze or cough in the direction of an open sample bottle.

#### 7.2.2 All Site Visits

The following activities should be conducted during all monitoring site visits:

- Check weather and flow conditions.
- Open enclosure and check ISCO display.
- Interrogate ISCO samplers and review storm hydrograph.
- Fill out log sheet parameters.
- Check battery level.

#### 7.2.3 Grab Sample Collection

The preferred method for grab sample collection is direct submersion of sample bottles at mid-stream and mid-depth. However, due to monitoring site configurations and safety concerns, direct filling of sample bottles is not always feasible. Monitoring site configuration and the type of grab sample will dictate grab sample collection technique. The following constituents have specific sample collection requirements:

- Submersion, or with the use of a sterile intermediate container, such as a Teflon bailer. **These samples have a 6-hour hold time from collection to analysis.** Therefore, prompt delivery to the lab after collection is essential.
- Oil and grease and TRPH samples may **NOT** be pumped or collected using an intermediate container, as these constituents tend to adhere to tubing and containers. Therefore, sample bottles must be filled by direct submersion. Wide mouth bottles should be requested for these samples.
- Toxicity grab samples may be collected by direct submersion, using a clean intermediate container, or by pumping. Pumping, however, will most likely be the easiest way to fill the large toxicity sample containers.
- Conductivity and pH grab samples may be collected using any of the techniques presented below. These samples should be tested immediately after collection. Therefore, they should be delivered to the lab promptly along with bacteriological samples.

Grab samples should be collected using one or more of the five grab sample collection techniques presented below. Always use clean sample handling techniques as described above.

#### *7.2.3.1 Direct Submersion: Hand Technique*

Where practical, all grab samples may be collected by direct submersion to mid-stream, mid-depth using the following procedures.

1. Wear clean gloves when handling bottles and caps;
2. Pre-label sample containers (site code, location, date, time, analysis) except mercury sample bottles;
3. Do **NOT** label mercury bottles! Simply record mercury bottle number and collection information in field notes and on chain-of-custody (label may be placed on outer bag only);
4. Submerge bottle to mid-stream/mid-depth, remove lid, let bottle fill, and replace lid;
5. Place sample on ice, fill out COC form, and deliver to lab;
6. Collect duplicate samples if needed using the same protocols described above.

#### *7.2.3.2 Direct Submersion: Grab Pole Technique*

Certain samples (oil & grease and TRPH) are required to be collected without the use of an intermediate container. Where site access is difficult or unsafe, sample bottles may be submerged directly by attaching sample bottle to a grab pole using a Velcro strap or cable ties as follows.

1. Wear clean gloves when handling bottles and caps;
2. Pre-label sample containers (site code, location, date, time, analysis) except mercury sample bottles;
3. Do **NOT** label mercury bottles! Simply record mercury bottle number and collection information in field notes and on chain-of-custody (label may be placed on outer bag only);

4. Attach sample bottle to grab pole using a Velcro strap;
5. Remove bottle lid, lower bottle into stream, submerge bottle to approximately mid-stream/ mid-depth, fill bottle, raise to surface and replace lid;
6. Place sample on ice and fill out COC form;
7. Collect duplicate samples if needed using the same protocols described above.

#### *7.2.3.3 Teflon Bailer Technique*

Samples for which the introduction of a secondary container is acceptable (bacteriological, mercury), and which will be collected from an open channel, may be collected with the use of a Teflon bailer following the steps listed below.

1. Wear clean gloves when handling bottles and caps;
2. Pre-label sample containers (site code, location, date, time, analysis) except mercury sample bottles;
3. Do not label mercury bottles! Simply record mercury bottle number and collection information in field notes and on chain-of-custody;
4. Use a new, clean (sterile for bacteriological samples), disposable Teflon bailer;
5. Attach Teflon bailer to grab pole/line;
6. Fill bailer with sample;
7. Remove bottle lid, fill sample bottles by pouring from bailer, replace lid;
8. Place sample on ice and fill out COC form;
9. Collect duplicate samples if needed using the same protocols described above.

#### *7.2.3.4 Grab Pole Intermediate Container Technique*

Samples collected from an open channel for which the introduction of a secondary container is acceptable may be collected with the use of a specially cleaned intermediate container (see cleaning procedure listed below). This technique is not preferred for bacteriological, mercury, oil & grease, or TRPH samples.

1. Wear clean gloves when handling bottles and caps;
2. Pre-label sample containers (site code, location, date, time, analysis);
3. Attach specially cleaned borosilicate glass intermediate container to the grab pole using a Velcro strap or plastic cable ties;
4. Submerge intermediate container to mid-stream/mid-depth, let bottle fill, and pour off into individual sample bottles;
5. Place sample on ice, fill out COC form, and deliver to lab;
6. Collect duplicate samples if needed using the same protocols described above.

#### *7.2.3.5 Peristaltic Pump Grab Technique*

Samples for which collection by pumping is acceptable (mercury and toxicity) may be collected as follows.

1. Wear clean gloves when handling tubing, bottles, and caps;

2. Pre-label sample containers (site code, location, date, time, analysis) except mercury sample bottles;
3. Do not label mercury bottles! Simply record mercury bottle number and collection information in field notes and on chain-of-custody;
4. Consult with the Monitoring Manager prior to sample collection, so as not to interfere with composite sample collection;
5. Remove the sample tubing from composite bottle and pump sufficient sample through the ISCO sampler to fill sample bottles. This is done by pressing “STOP” on the ISCO sampler, pressing “PUMP FORWARD” to fill the container, and pressing “RESUME SAMPLING” to return to automated compositing. Clean handling techniques must be used when removing the sampling tube from the composite jug, filling the mercury containers, and replacing the tube in the composite jug;
6. Collect duplicate samples if needed using the same protocols described above.

#### 7.2.4 Changing a Composite Sample Bottle (See Appendix C for specific procedures)

If a bottle change is required during a monitoring event, the procedures below should be followed.

- Estimate time until sample bottle fills using the following calculation:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\text{Estimated minutes until bottle fills} = \left\lceil \frac{V2S * (NS - SC) - VS}{V} \right\rceil$ <div style="margin-top: 10px;"> <p>V2S = Sample Volume</p> <p>VS = Volume Sum (volume of water that has passed in the river since the start of sample collection)</p> <p>V = Volume of water that passed during the last one minute</p> <p>NS = number of samples until bottle is full (check ISCO: “Sample XX of YY after 1 pulse”)</p> <p>SC = sample count</p> </div> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- Change composite sample bottle, re-set ISCO sampler
- Adjust Volume to Sample if directed to do so by Monitoring Manager

#### 7.2.5 Prior to Leaving the Site

- Add ice to all collected sample coolers
- Conduct general physical inspection of site
- Fill out log sheet
- Secure the site

#### 7.2.6 Terminating Sampling

Sample collection will be terminated after 48 hours of monitoring has been conducted. Monitoring stations should be visited at the end of each sampled event to pick up composite bottle(s) and deliver them to the appropriate laboratory(s). Activities to be performed during a station shut down visit are listed below.

- Terminate sampling
- Download data stored in the ISCO control unit
- Check batteries
- Fill out log sheet

### **7.3 Manual Composite Sample Collection Method**

If automatic composite sampling equipment malfunctions, composite sample collection may be conducted using the following manual methods. Grab samples will be collected one time during the monitoring event following typical grab sample collection methods.

#### **7.3.1 Additional Equipment Required for Manual Composite Sample Collection**

- Portable peristaltic pump with charged battery
- Extra charged battery for peristaltic pump
- Clean Teflon tubing, flexible pump tubing, and intake strainer for each station
- Clean 9 liter or larger borosilicate glass sample bottles with Teflon lined lids (a minimum of 8 bottles per site)

#### **7.3.2 Manual Composite Sample Collection Steps**

Multiple sample aliquots will be collected throughout the monitoring event using a portable peristaltic pump. Due to logistical and personnel constraints, it is anticipated that a maximum of 8 manually collected sample aliquots will be collected at each monitoring location during a given monitoring event (one aliquot at each station every 6 hours throughout the monitoring event). Each sample aliquot will be collected as follows.

1. Upon arrival, record the river flow/stage in the field notes.
2. Determine the safest and most representative location to collect manual composite sample aliquots. Typically, the most representative location is that which has consistent moderate positive flow.
3. Using clean techniques, remove the clean tubing and strainer from the laboratory provided double bag and install into the peristaltic pump. Take care not to allow the ends of the tubing to contact any unclean surface.
4. Lower the intake end of the tubing into the flow stream and turn on the peristaltic pump.
5. Using clean techniques, remove the lid from the borosilicate glass bottle, place the pump tubing outlet at the mouth of the open bottle, and allow the bottle to fill.
6. After the bottle is full, turn off the portable pump, replace the bottle lid, and place the sample on ice.

7. Using clean techniques, remove the tubing from the pump and place it back in the laboratory provided double bags. Be sure that the tubing bag is properly labeled so that the tubing is not inadvertently used at another site.
8. Prior to departure from the site, record flow/stage again in the field notes.
9. Repeat above steps every six hours at each station. Contact the Monitoring Manager after aliquot collection at each station.

After the monitoring event has concluded, the individual sample aliquots are combined into a single borosilicate composite sample bottle. See Section 10.0 for details on sample compositing, splitting, and shipment to laboratories.

Safety is a primary concern during manual sample collection. Samples should be collected from a stable structure, out of the traffic lane and behind the railing. If at any time during manual sample collection, conditions appear unsafe or cause the monitoring field crew to have concern for personal safety, monitoring efforts should cease immediately and field personnel should report to the project Monitoring Manager.

## **8.0 TOXICITY SAMPLING**

Samples for toxicity testing will be collected from each monitoring site during each monitoring event per monitoring season. Chronic and acute toxicity tests shall be conducted using the water flea ceriodaphnia. Toxicity testing requires the filling of the following sample containers:

Chronic and Acute Toxicity      1 - 5 gallon plastic bucket

Where these samples cannot be collected by direct submersion, the ISCO peristaltic pump should be used. See Peristaltic Grab Pump Technique above for toxicity sample collection method.

## **9.0 QA/QC - QUALITY CONTROL SAMPLES**

Quality control samples should be collected prior to the first monitoring event of each monitoring season and during each event according to the schedule presented in Table 5. Quality control sample results are used for data evaluation and interpretation.

**Table 5. Monitoring Event QA/QC Schedule**

| <b>Site</b> | <b>Event #1 &amp; #6</b> | <b>Event #2</b> | <b>Event #3 &amp; #8</b> | <b>Event #4</b> | <b>Event #5</b> |
|-------------|--------------------------|-----------------|--------------------------|-----------------|-----------------|
| UMC         | MS/MSD                   |                 | Field Blank              |                 |                 |
| LMC         |                          | Field Duplicate |                          | MS/MSD          | Field Blank     |

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses on total recoverable metals, total recoverable mercury, MTBE, EPA 8270, EPA 8081, EPA 8141, and EPA 8151 only.
- Field Blank on total recoverable metals, total recoverable mercury, MTBE, Semi-Volatiles, and bacteriological only.
- Lab and Field Duplicates – all analyses alternating between field and laboratory duplicates

## **9.1 Pre-Storm Bottle and Equipment Blanks**

All sample bottles, lids, tubing, and strainers should be rigorously cleaned prior to use. Sample tubing and strainers are removed at the end of each monitoring season, cleaned, then re-installed prior to the onset of the next monitoring season. Sample bottles should be cleaned prior to each monitoring event. Composite bottles should be cleaned following procedures based on EPA recommendations. See Appendix C for detailed bottle and equipment cleaning procedures. Bottles and equipment are checked for potential contaminants through analysis of equipment, stationary, field and travel blanks prepared as described below.

### **9.1.1 Equipment Blanks**

Prior to each monitoring season, an equipment blank (blank water run through the cleaned tubing installed in the auto sampler) should be collected from one site, and analyzed for total recoverable metals. See Appendix C for blank sample collection procedures.

### **9.1.2 Blanks Stationary**

Prior to the first monitoring event of each season, the lab should collect two composite bottle blanks and analyze them for total recoverable metals and Semi- and Non-Volatile Organics (EPA 625). See Appendix C for blank sample collection procedures.

Prior to the first storm of each season, the lab should collect two metals storage bottle blanks and analyze them for total recoverable metals. See Appendix C for procedures.

## **9.2 Storm Event Quality Control Samples**

The following quality control samples should be analyzed during monitoring events according to the QA/QC sample collection schedule presented as Table 6.

- Matrix Spike/Matrix Spike Duplicate (total recoverable metals, total recoverable mercury, EPA 625, EPA 8080, EPA 8140, and EPA 8150 analyses only)
- Field Blank (total recoverable metals, total recoverable mercury, EPA 625, and bacteriological only)
- Lab and Field Duplicates – All analytes

### 9.3 QA/QC Sample Collection Schedule

Matrix spike/matrix spike duplicate analyses should be performed on “normal” samples collected and labeled for each monitoring station. Field-generated quality control samples (field blanks) should be submitted “blind” to the laboratory. Blind samples are disguised by the use of bogus site names (see 10.1 Labels/Station Codes). Composite and grab (when collected) quality control samples should be collected according to the schedule shown in Table 6.

### 9.4 Collection Methods

Specific collection methods for each type of quality control sample type are described below.

#### 9.4.1 Field Blank

- Grab sample field blanks should be collected immediately prior to the collection of normal grab samples. The field crew will use the blank water provided and will fill each grab sample container according to standard procedures.
- Composite sample field blanks should be collected at the time that the final composite bottle is removed from the monitoring station enclosure. Blank water will be poured directly into the composite sample field blank container.
- Field blanks should be submitted “blind” to the laboratory, with the exception of mercury samples. Mercury samples should simply be specified as “field blank” (see “10.1 Labels/Station Codes” for bogus sample names).

#### 9.4.2 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Matrix spike and matrix spike duplicate (MS/MSD) analyses should be requested on the specified sample for events #1 and #6. No special sampling considerations are required. However, additional sample volume must be collected for each analysis. Total recoverable mercury is the only grab sample for which MS/MSD analysis is requested, and no more than the standard 250 ml sample is required.

#### 9.4.3 Field Duplicate

- Field duplicates should be collected for the sites and events specified in Table 5.
- Grab sample field duplicates should be collected immediately following the collection of normal grab samples.
- Composite sample field splits should be produced during the compositing process. Double the normal composite sample volume is required for these samples (see Table 2 for sample volumes).
- Field duplicates should be submitted “blind” to the laboratory with the exception of mercury samples. Mercury samples should simply be specified as “Site Name field duplicate”. (see “10.1 Label/Station Codes” for bogus site names).

#### 9.4.4 Laboratory Duplicate

Laboratory duplicate analyses should be requested for all constituents monitored for the sites and events specified in Table 5. No special sampling considerations are required. However, double the normal sample volume must be collected.

### 10.0 SAMPLE COMPOSITING/SPLITTING AND SHIPMENT

Following collection of each sample, the sample container must be labeled, the chain-of-custody form filled out, and the sample delivered/shipped to the appropriate laboratory. These actions are described below.

#### 10.1 Labels/Station Codes

Collected samples are designated by the names and site codes listed in Table 6. Quality control samples submitted “blind” to the laboratory are designated by the fictitious names and site codes listed below. For preparation of labels, follow the tables prepared by event for composite and grab samples in Appendix B.

**Table 6. Bottle Label Site Codes**

| Site Code       | Site                 |                   |
|-----------------|----------------------|-------------------|
| UMC             | Upper Matilija Creek |                   |
| LMC             | Lower Matilija Creek |                   |
| “Blind” Samples |                      | QC Sample         |
| “MCB-1”         | “Blind Road”         | (Field Blank)     |
| “MCD-1”         | “Dillon Street”      | (Field Duplicate) |

#### 10.2 Sample ID Conventions

Sample bottles submitted to laboratories for analysis shall be labeled with the sampling site name, the date and time of sample collection, and a sample ID devised as follows:

*SITE*–Event *XX*

Where: *SITE* = Site code (see above), and  
*XX* = Event number (i.e., 1, 2, or 3)

For example, “UMD - Event 1” would be the sample ID used for a sample collected from Upper Matilija Dam during the first sampled event.

#### 10.3 Chain-of-Custody Forms

Chain-of-custody (COC) forms should be filled out for all samples submitted to each laboratory. Sample date, sample location, and analysis requested should be noted on each COC. See Appendix D for example COC forms. Analytical methods, detection limits, and holding times for each parameter monitored are presented in Table 7. The following special notes should be added to COC forms when applicable.

- Filter for dissolved metals immediately.
- Perform bacteriological analyses within 6 hours of sample collection time.
- Perform conductivity and pH analyses immediately.
- Specify site to receive MS/MSD, laboratory duplicates, field blanks or field duplicates as required (Table 5).

**Table 7. Analytes, Methods, Limits, Holding Times, and Laboratories.**

| <b>Constituent</b>                               | <b>Method</b>       | <b>MDLs</b>                            | <b>Holding Time</b> | <b>Laboratory</b> |
|--------------------------------------------------|---------------------|----------------------------------------|---------------------|-------------------|
| <b>Metals: (Total Recoverable and Dissolved)</b> |                     | <b>(units = ug/l unless specified)</b> |                     |                   |
| Arsenic                                          | EPA 206.3           | 1                                      | 6 mos.              | FGL               |
| Cadmium                                          | EPA 213.2           | 0.1                                    | 6 mos.              | FGL               |
| Chromium                                         | EPA 218.2           | 1                                      | 6 mos.              | FGL               |
| Copper                                           | EPA 220.1           | 1                                      | 6 mos.              | FGL               |
| Lead                                             | EPA 239.2           | 1                                      | 6 mos.              | FGL               |
| Nickel                                           | EPA 249.2           | 1                                      | 6 mos.              | FGL               |
| Selenium                                         | EPA 270.3           | 2                                      | 6 mos.              | FGL               |
| Silver                                           | EPA 272.2           | 0.2                                    | 6 mos.              | FGL               |
| Thallium                                         | EPA 279.2           | 1                                      | 6 mos.              | FGL               |
| Zinc                                             | EPA 289.1           | 1                                      | 6 mos.              | FGL               |
| <b>Organics</b>                                  |                     |                                        |                     |                   |
| Organochlorine Pesticides                        | EPA 8081            | 1-10 ng/L                              | 7/40 days           | CRG Labs          |
| Orthophosphate Pesticides                        | EPA 8141            | 2.0 ng/l                               | 7/40 days           | APPL              |
| Chlorinated Herbicides                           | EPA 8151            | 2-50 ng/L                              | 7/40 days           | APPL              |
| Semi-volatiles                                   | EPA 8270            | 10-200 ng/L                            | 7/40 days           | CRG Labs          |
| TOC                                              | EPA 415.1           | 1000                                   | 28 days             | FGL               |
| <b>Conventional Inorganics</b>                   |                     | <b>(units = mg/l)</b>                  |                     |                   |
| Ammonia                                          | EPA 350.2           | 0.05                                   | 28 days             | FGL               |
| BOD                                              | EPA 405.1           | 1.0                                    | <b>48 hours</b>     | FGL               |
| Bromide                                          | SM 4500BR           | 0.0001                                 | <b>immediately</b>  | FGL               |
| Chloride                                         | EPA 325.3           | 0.0001                                 | 28 days             | FGL               |
| Conductivity & pH                                | Electrometric       | n/a                                    | <b>immediately</b>  | FGL               |
| Hardness                                         | EPA 130.2/SM2340B   | 1                                      | 6 mos.              | FGL               |
| Nitrate                                          | EPA 352.1           | 0.01                                   | 28 days             | FGL               |
| TKN                                              | EPA 351.3           | 0.05                                   | 28 days             | FGL               |
| Oil & Grease                                     | EPA 413.1/413.2     | 0.1                                    | 28 days             | FGL               |
| Petroleum hydrocarbons (TRPH)                    | EPA418.1/SM5520B, F | 0.1                                    | 7 days              | FGL               |
| Orthophosphate                                   | EPA 365.3           | 0.01                                   | 28 days             | FGL               |
| Phosphorus, total and diss.                      | EPA 365.3           | 0.01                                   | 28 days             | FGL               |
| Solids, Total Dissolved                          | EPA 160.1           | 1                                      | 7 days              | FGL               |
| Solids, Total Suspended                          | EPA 160.2           | 1                                      | 7 days              | FGL               |
| <b>Microbiological</b>                           |                     | <b>(units = MPN/100ml)</b>             |                     |                   |
| Total and Fecal Coliform                         | SM9221              | 2                                      | <b>6 hours</b>      | VCPHD             |
| E. Coli                                          |                     | 2                                      | <b>6 hours</b>      | VCPHD             |
| Enterococcus                                     |                     | 2                                      | <b>6 hours</b>      | VCPHD             |
| <b>Toxicity</b>                                  |                     |                                        |                     |                   |
| Chronic and Acute Toxicity/(TIE)                 | EPA 600/4-91/002    | -                                      | 36 hours            | Aquatic Bioassay  |

Note: Holding times for methods 8270, 8081, 8141, and 8151 are 7 days until extraction, 40 days after extraction.

Once the volume to be used from each individual composite bottle has been determined, the final composite sample will be created using the following steps.

1. Wear clean gloves when handling bottles and lids;
2. Thoroughly agitate the sample to be poured until well mixed using a compositing device if available;
3. Remove lids from both composite bottles (one of the original bottles, plus the new final composite bottle);
4. Pour from one original composite bottle into the final composite bottle, and replace final composite bottle lid.
5. Repeat for second (and subsequent) original composite sample bottles.

#### **10.4 Sample Splitting/Analytical Priorities**

After one composite bottle has been generated for each sampling site, samples will be poured into individual sample containers at FGL Laboratory for specific types of analysis.

Prior to splitting samples, sample volumes must be evaluated to determine whether enough sample volume has been collected for all analyses and QA/QC samples. If inadequate volume has been collected, use the following steps to maximize the use of the samples collected.

1. If a site that requires MS/MSD or duplicate analyses (see Table 5 for QA/QC schedule) is short of composite volume, and another site has surplus volume, the QA/QC schedule should be modified so that the site with surplus volume receives the QA/QC analyses.
2. If multiple sites are short of composite volume, QA/QC samples should be reduced. MS/MSD is the most important type of QA/QC analysis, and should be the last to be eliminated. However, if sample volume is limited, even the MS/MSD analyses should be eliminated. If limited volume is available for minimal QA/QC analyses, use the priorities shown in #3 below.
3. If sample volume is inadequate to perform required analyses, even after QA/QC analyses have been eliminated, samples should be prioritized as follows: Metals are most important, then organics, then conventionals. These priorities also apply to QA/QC analyses, when limited additional QA/QC sample volume is available.

Because multiple labs will be used, it is important to correctly label each sample bottle prior to pouring off samples. Composite samples should be split using the following procedures.

1. Wear clean gloves when handling bottles and lids;
2. Thoroughly agitate the sample to be poured until well mixed, using a compositing device if available;
3. Remove the lid from final composite and cap from bottle to be filled;
4. Pour composite sample into individual analysis bottle and replace both lids;
5. Place individual sample in an ice chest with ice for lab shipment;

6. Repeat steps 1 through 5 for each individual analysis bottle to be filled;
7. Generate field duplicate samples, if required (see Table 5), by alternating the pouring off of normal with field duplicate samples;
8. Fill out COC forms and deliver samples to laboratories specified below.

### **10.5 Transport to Laboratory**

All samples should be kept on ice from the time of sample collection until delivery to the lab. Samples must be delivered to the lab well within holding times. See Table 7 for analytical methods, constituent holding times, and laboratory to performing analyses. Delivery/shipping instructions for individual laboratories are listed below.

#### 10.5.1 Aquatic Bioassay & Consulting

Toxicity/(TIE) samples are delivered to Aquatic Bioassay at 29 North Olive Street in Ventura. Keep samples on ice during delivery.

Call: Tim Mikel or Michael Machuzak 643-5621 o  
Tim Mikel 644-8690 h

#### 10.5.2 10.6.2 Fruit Growers Laboratory (FGL) Environmental

Samples to be analyzed for the following constituents are delivered to FGL at 853 Corporation Street in Santa Paula: Conventional, Oil & Grease, TOC, Volatiles, Semi-volatiles, Pesticides and Total and Dissolved Metals

Keep samples in ice chests and on ice for delivery.

Contact: David Terz (805) 659-0910 x 116

#### 10.5.3 Associated Laboratories

Samples to be analyzed for the following constituents are shipped to Associated Laboratories at 806 N. Batavia Street in Orange, California 92868: Total Recoverable Petroleum Hydrocarbons Method 418.1

Keep samples in ice chests on ice for shipment.

Call: Edward Behare (714) 771-6900

#### 10.5.4 Frontier Geosciences

Samples to be analyzed for the following constituent shall be shipped to Frontier via next morning overnight parcel service:

#### 10.5.5 Ventura County HCA Public Health Department Laboratory

Samples to be analyzed for the following constituents are delivered to Ventura County Public Health Department Laboratory at 2240 East Gonzalez Road, Suite 160, Oxnard, CA 93036: Total and Fecal Coliform, E. Coli and Enterococcus Bacteria Analysis

Keep samples in ice chests on ice for delivery within 6-hour holding time.

Contact: Susan Benavidez (805) 981-5131

## **10.6 Follow-up Activities**

When the laboratory reports are received following each monitored storm event, and after the pre-season QA/QC sampling, it is important to check the reported data as soon as possible to identify gross errors that may have been committed in the sampling, analysis, or reporting process. This means that the laboratory must first report results in a timely fashion (within three weeks of sample delivery) and then the results must be reviewed immediately upon receipt to allow for re-analysis of questionable (out-of-range) results within the prescribed holding time. The initial screening includes the following checks:

- √ Completeness. All laboratory analyses specified in the sampling plan should be requested on the COC forms. All laboratory analyses should likewise be performed as specified in the COC forms. QA/QC analyses should also be checked for completeness. A review of COC forms is necessary to check that this documentation was properly filled out by the field crew and the laboratory check-in attendant.
- √ Holding Time. All analyses should be performed within the prescribed holding time.
- √ Detection Limits. Detection limits should meet or be lower than the levels agreed upon prior to laboratory submission.
- √ Reporting Errors. On occasion laboratories commit typographical errors or send incomplete results. Reported concentrations that appear out of range or inconsistent are indicators of laboratory reporting problems that should be investigated when detected. Examples of this would be a dissolved concentration greater than the corresponding total recoverable concentration, or a constituent concentration orders of magnitude different than the same constituent for other events.

Irregularities found in the initial screening process should immediately be reported to the laboratory for clarification or correction. The initial screening process can identify and correct errors that would otherwise cause problems further along in the data evaluation process, or later if the data are used for higher-level analysis. Moreover, re-analysis of out-of-range values can increase confidence in the integrity of questionable data.



## **APPENDIX C – WATER CHEMISTRY DATA**

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>  | <u>SampleMethod</u> |  |  | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|---------------------|---------------------|--|--|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 11/13/2003 9:00   | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/13/2003 10:00  | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/26/2004 12:00   | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/26/2004 13:00   | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/25/2004 9:30    | Ammonia as N        | Grab                |  |  | =           | 0.5           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/25/2004 10:30   | Ammonia as N        | Grab                |  |  | =           | 0.4           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/5/2004 8:30    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/5/2004 9:30    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/27/2004 13:45  | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/27/2004 14:30  | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/4/2005 10:30    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/4/2005 11:30    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/26/2005 9:00    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/26/2005 10:00   | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/11/2005 8:15    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/11/2005 9:00    | Ammonia as N        | Grab                |  |  | <           | 0.2           | mg/L         | SM 4500-NH3 H | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Antimony - Total    | Composite           |  |  | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Arsenic - Dissolved | Composite           |  |  | =           | 4             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Arsenic - Dissolved | Composite           |  |  | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Arsenic - Dissolved | Composite           |  |  | =           | 3.3           | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |

| SiteName            | SiteID | SampleDate       | ConstitFrac         | SampleMethod | Sign | Result | Units | Method    | DL      | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|---------------------|--------------|------|--------|-------|-----------|---------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Arsenic - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Arsenic - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Arsenic - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Arsenic - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Arsenic - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Arsenic - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Arsenic - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL  | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Arsenic - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL  | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Arsenic - Total     | Composite    | =    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Arsenic - Total     | Composite    | =    | 3      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Arsenic - Total     | Composite    | =    | 3      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Arsenic - Total     | Composite    | =    | 3      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Arsenic - Total     | Composite    | =    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Arsenic - Total     | Composite    | <    | 2      | µg/L  | EPA 200.7 | 2 PQL   | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Beryllium - Total   | Composite    | =    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Beryllium - Total   | Composite    | <    | 0.2    | µg/L  | EPA 200.8 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | BOD                 | Composite    | =    | 1.6    | mg/L  | SM 5210B  | 1.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | BOD                 | Composite    | <    | 1.5    | mg/L  | SM 5210B  | 1.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | BOD                 | Composite    | <    | 1.7    | mg/L  | SM 5210B  | 1.7 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | BOD                 | Composite    | <    | 2.2    | mg/L  | SM 5210B  | 1.5 PQL | none | FGL     | FGL          |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>  | <u>SampleMethod</u> |  | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|---------------------|---------------------|--|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | BOD                 | Composite           |  | <           | 2.2           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | BOD                 | Composite           |  | =           | 3.1           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | BOD                 | Composite           |  | <           | 1.7           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | BOD                 | Composite           |  | =           | 4.7           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | BOD                 | Composite           |  | <           | 1.6           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | BOD                 | Composite           |  | =           | 1.7           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | BOD                 | Composite           |  | <           | 7.8           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | BOD                 | Composite           |  | <           | 1.3           | mg/L         | SM 5210B      | 1.3 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | BOD                 | Composite           |  | <           | 1.1           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | BOD                 | Composite           |  | =           | 1.1           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | BOD                 | Composite           |  | <           | 1.6           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | BOD                 | Composite           |  | =           | 1.6           | mg/L         | SM 5210B      | 1.5 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Bromide             | Composite           |  | =           | 0.3           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Bromide             | Composite           |  | =           | 0.2           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Bromide             | Composite           |  | =           | 0.7           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Bromide             | Composite           |  | =           | 0.2           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Bromide             | Composite           |  | =           | 0.8           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Bromide             | Composite           |  | =           | 0.4           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Bromide             | Composite           |  | =           | 0.2           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Bromide             | Composite           |  | =           | 0.2           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Bromide             | Composite           |  | <           | 0.3           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Bromide             | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 11:12  | Cadmium - Dissolved | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 12:07  | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 0:30    | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 11:45   | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Cadmium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   |            | none           | FGL                 |

| <u>SiteName</u>      | <u>SiteID</u> | <u>SampleDate</u>                | <u>ConstitFrac</u>  | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|----------------------|---------------|----------------------------------|---------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matilija Creek | UMC           | <a href="#">10/28/2004 10:00</a> | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">10/28/2004 10:15</a> | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">1/5/2005 9:30</a>    | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">1/5/2005 10:30</a>   | Cadmium - Dissolved | Composite           | =           | 0.7           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">1/27/2005 9:15</a>   | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">1/27/2005 10:00</a>  | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">2/14/2005 8:30</a>   | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">2/14/2005 10:00</a>  | Cadmium - Dissolved | Composite           | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">11/14/2003 11:12</a> | Cadmium - Total     | Composite           | <           | 5             | µg/L         | EPA 200.7     | 5 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">11/14/2003 12:07</a> | Cadmium - Total     | Composite           | <           | 5             | µg/L         | EPA 200.7     | 5 PQL     | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">2/27/2004 0:30</a>   | Cadmium - Total     | Composite           | =           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">2/27/2004 11:45</a>  | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">8/27/2004 9:00</a>   | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">8/27/2004 10:00</a>  | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">10/6/2004 8:30</a>   | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">10/6/2004 9:30</a>   | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">10/28/2004 10:00</a> | Cadmium - Total     | Composite           | =           | 3             | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">10/28/2004 10:15</a> | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">1/5/2005 9:30</a>    | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">1/5/2005 10:30</a>   | Cadmium - Total     | Composite           | =           | 1.8           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">1/27/2005 9:15</a>   | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">1/27/2005 10:00</a>  | Cadmium - Total     | Composite           | =           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">2/14/2005 8:30</a>   | Cadmium - Total     | Composite           | =           | 0.3           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">2/14/2005 10:00</a>  | Cadmium - Total     | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">11/14/2003 11:12</a> | Calcium - Total     | Composite           | =           | 112           | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">11/14/2003 12:07</a> | Calcium - Total     | Composite           | =           | 106           | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">2/27/2004 0:30</a>   | Calcium - Total     | Composite           | =           | 84            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">2/27/2004 11:45</a>  | Calcium - Total     | Composite           | =           | 87            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">8/27/2004 9:00</a>   | Calcium - Total     | Composite           | =           | 96            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">8/27/2004 10:00</a>  | Calcium - Total     | Composite           | =           | 107           | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">10/6/2004 8:30</a>   | Calcium - Total     | Composite           | =           | 97            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">10/6/2004 9:30</a>   | Calcium - Total     | Composite           | =           | 105           | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">10/28/2004 10:00</a> | Calcium - Total     | Composite           | =           | 114           | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">10/28/2004 10:15</a> | Calcium - Total     | Composite           | =           | 111           | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matilija Creek | UMC           | <a href="#">1/5/2005 9:30</a>    | Calcium - Total     | Composite           | =           | 73            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matilija Creek | LMC           | <a href="#">1/5/2005 10:30</a>   | Calcium - Total     | Composite           | =           | 60            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>   | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|----------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Calcium - Total      | Composite           | =           | 93            | mg/L         | EPA 200.7     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Calcium - Total      | Composite           | =           | 96            | mg/L         | EPA 200.7     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Calcium - Total      | Composite           | =           | 95            | mg/L         | EPA 200.7     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Calcium - Total      | Composite           | =           | 100           | mg/L         | EPA 200.7     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Chloride             | Composite           | =           | 93            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Chloride             | Composite           | =           | 55            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Chloride             | Composite           | =           | 27            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Chloride             | Composite           | =           | 27            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Chloride             | Composite           | =           | 158           | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Chloride             | Composite           | =           | 64            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Chloride             | Composite           | =           | 192           | mg/L         | EPA 300.0     | 5 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Chloride             | Composite           | =           | 64            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Chloride             | Composite           | =           | 47            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Chloride             | Composite           | =           | 60            | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Chloride             | Composite           | =           | 6             | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Chloride             | Composite           | =           | 4             | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Chloride             | Composite           | =           | 7             | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Chloride             | Composite           | =           | 6             | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Chloride             | Composite           | =           | 8             | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Chloride             | Composite           | =           | 7             | mg/L         | EPA 300.0     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Chromium - Dissolved | Composite           | =           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Chromium - Dissolved | Composite           | =           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Chromium - Dissolved | Composite           | =           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Chromium - Dissolved | Composite           | =           | 3             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Chromium - Dissolved | Composite           | =           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Chromium - Dissolved | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |

| Site Name           | Site ID | Sample Date      | Constit/Frac       | Sample Method | Sign | Result | Units    | Method    | DL     | DLT  | LabQual | Analyzing Lab |
|---------------------|---------|------------------|--------------------|---------------|------|--------|----------|-----------|--------|------|---------|---------------|
| Lower Matlija Creek | LMC     | 11/14/2003 11:12 | Chromium - Total   | Composite     | <    | 10     | µg/L     | EPA 200.7 | 10 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 11/14/2003 12:07 | Chromium - Total   | Composite     | <    | 10     | µg/L     | EPA 200.7 | 10 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/27/2004 0:30   | Chromium - Total   | Composite     | =    | 9      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/27/2004 11:45  | Chromium - Total   | Composite     | =    | 12     | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 8/27/2004 9:00   | Chromium - Total   | Composite     | <    | 1      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 8/27/2004 10:00  | Chromium - Total   | Composite     | <    | 1      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/6/2004 8:30   | Chromium - Total   | Composite     | <    | 1      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/6/2004 9:30   | Chromium - Total   | Composite     | <    | 1      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/28/2004 10:00 | Chromium - Total   | Composite     | =    | 1      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/28/2004 10:15 | Chromium - Total   | Composite     | <    | 1      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/5/2005 9:30    | Chromium - Total   | Composite     | =    | 4      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/5/2005 10:30   | Chromium - Total   | Composite     | =    | 5      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/27/2005 9:15   | Chromium - Total   | Composite     | =    | 1      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/27/2005 10:00  | Chromium - Total   | Composite     | =    | 3      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/14/2005 8:30   | Chromium - Total   | Composite     | =    | 1      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/14/2005 10:00  | Chromium - Total   | Composite     | =    | 3      | µg/L     | EPA 200.7 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 11/13/2003 9:00  | Conductivity       | Grab          | =    | 1010   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 11/13/2003 10:00 | Conductivity       | Grab          | =    | 1100   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/26/2004 12:00  | Conductivity       | Grab          | =    | 552    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/26/2004 13:00  | Conductivity       | Grab          | =    | 512    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 8/25/2004 9:30   | Conductivity       | Grab          | =    | 1280   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 8/25/2004 10:30  | Conductivity       | Grab          | =    | 1090   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/5/2004 8:30   | Conductivity       | Grab          | =    | 1360   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/5/2004 9:30   | Conductivity       | Grab          | =    | 1100   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/27/2004 13:45 | Conductivity       | Grab          | =    | 1010   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/27/2004 14:30 | Conductivity       | Grab          | =    | 1050   | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/4/2005 10:30   | Conductivity       | Grab          | =    | 563    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/4/2005 11:30   | Conductivity       | Grab          | =    | 497    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/26/2005 9:00   | Conductivity       | Grab          | =    | 800    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/26/2005 10:00  | Conductivity       | Grab          | =    | 802    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/11/2005 8:15   | Conductivity       | Grab          | =    | 791    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/11/2005 9:00   | Conductivity       | Grab          | =    | 833    | µmhos/cm | SM 2510B  | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 11/14/2003 11:12 | Copper - Dissolved | Composite     | =    | 1      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 11/14/2003 12:07 | Copper - Dissolved | Composite     | =    | 1      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/27/2004 0:30   | Copper - Dissolved | Composite     | =    | 2      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/27/2004 11:45  | Copper - Dissolved | Composite     | =    | 2      | µg/L     | EPA 200.8 | 1 PQL  | none | FGL     |               |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u> | <u>SampleMethod</u> |   |     | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|--------------------|---------------------|---|-----|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Copper - Dissolved | Composite           | = | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Copper - Dissolved | Composite           | = | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Copper - Dissolved | Composite           | = | 2   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Copper - Dissolved | Composite           | = | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Copper - Dissolved | Composite           | = | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Copper - Dissolved | Composite           | < | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Copper - Dissolved | Composite           | = | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Copper - Dissolved | Composite           | = | 2   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Copper - Dissolved | Composite           | = | 2   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Copper - Dissolved | Composite           | < | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Copper - Dissolved | Composite           | = | 1   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Copper - Dissolved | Composite           | = | 9   |             |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Copper - Total     | Composite           | < | 10  |             |               | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Copper - Total     | Composite           | < | 10  |             |               | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Copper - Total     | Composite           | = | 12  |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Copper - Total     | Composite           | = | 12  |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Copper - Total     | Composite           | = | 3   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Copper - Total     | Composite           | = | 5   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Copper - Total     | Composite           | = | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Copper - Total     | Composite           | < | 1   |             |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/13/2003 9:00   | E. Coli            | Grab                | = | 10  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Upper Matlija Creek | UMC           | 11/13/2003 10:00  | E. Coli            | Grab                | < | 10  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Upper Matlija Creek | UMC           | 2/26/2004 12:00   | E. Coli            | Grab                | = | 20  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Lower Matlija Creek | LMC           | 2/26/2004 13:00   | E. Coli            | Grab                | = | 173 |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Upper Matlija Creek | UMC           | 8/25/2004 9:30    | E. Coli            | Grab                | < | 10  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Lower Matlija Creek | LMC           | 8/25/2004 10:30   | E. Coli            | Grab                | < | 10  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Upper Matlija Creek | UMC           | 10/5/2004 8:30    | E. Coli            | Grab                | < | 10  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |
| Lower Matlija Creek | LMC           | 10/5/2004 9:30    | E. Coli            | Grab                | < | 10  |             |               | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          | VCHCA               |

| Site Name           | Site ID | Sample Date      | Constit/Frac   | Sample Method | Sign | Result | Units      | Method     | DL    | DLT  | LabQual | Analyzing Lab |
|---------------------|---------|------------------|----------------|---------------|------|--------|------------|------------|-------|------|---------|---------------|
| Upper Matlija Creek | UMC     | 10/27/2004 13:45 | E. Coli        | Grab          | =    | 41     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 10/27/2004 14:30 | E. Coli        | Grab          | =    | 134    | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 1/4/2005 10:30   | E. Coli        | Grab          | =    | 20     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 1/4/2005 11:30   | E. Coli        | Grab          | =    | 10     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 1/26/2005 9:00   | E. Coli        | Grab          | <    | 10     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 1/26/2005 10:00  | E. Coli        | Grab          | <    | 10     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 2/11/2005 8:15   | E. Coli        | Grab          | <    | 10     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 2/11/2005 9:00   | E. Coli        | Grab          | <    | 10     | MPN/100 mL | MMO-MUG    | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 11/13/2003 9:00  | Enterococcus   | Grab          | =    | 20     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 11/13/2003 10:00 | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 2/26/2004 12:00  | Enterococcus   | Grab          | =    | 31     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 2/26/2004 13:00  | Enterococcus   | Grab          | =    | 429    | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 8/25/2004 9:30   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 8/25/2004 10:30  | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 10/5/2004 8:30   | Enterococcus   | Grab          | =    | 42     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 10/5/2004 9:30   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 10/27/2004 13:45 | Enterococcus   | Grab          | =    | 200    | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 10/27/2004 14:30 | Enterococcus   | Grab          | =    | 31     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 1/4/2005 10:30   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 1/4/2005 11:30   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 1/26/2005 9:00   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 1/26/2005 10:00  | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 2/11/2005 8:15   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 2/11/2005 9:00   | Enterococcus   | Grab          | <    | 10     | MPN/100 mL | Enterolert | 10 RL | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 11/13/2003 9:00  | Fecal Coliform | Grab          | =    | 13     | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 11/13/2003 10:00 | Fecal Coliform | Grab          | =    | 4      | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 2/26/2004 12:00  | Fecal Coliform | Grab          | =    | 17     | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 2/26/2004 13:00  | Fecal Coliform | Grab          | =    | 170    | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 8/25/2004 9:30   | Fecal Coliform | Grab          | =    | 23     | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 8/25/2004 10:30  | Fecal Coliform | Grab          | =    | 11     | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 10/5/2004 8:30   | Fecal Coliform | Grab          | <    | 2      | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 10/5/2004 9:30   | Fecal Coliform | Grab          | =    | 7      | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 10/27/2004 13:45 | Fecal Coliform | Grab          | <    | 2      | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 10/27/2004 14:30 | Fecal Coliform | Grab          | =    | 7      | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Upper Matlija Creek | UMC     | 1/4/2005 10:30   | Fecal Coliform | Grab          | =    | 17     | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |
| Lower Matlija Creek | LMC     | 1/4/2005 11:30   | Fecal Coliform | Grab          | =    | 22     | MPN/100 mL | SM 9221E   | 2 RL  | none | VCHCA   | VCHCA         |

| SiteName            | SiteID | SampleDate       | ConstitFrac               | SampleMethod | Sign | Result | Units      | Method    | DL  | DLT | LabQual | AnalyzingLab |
|---------------------|--------|------------------|---------------------------|--------------|------|--------|------------|-----------|-----|-----|---------|--------------|
| Upper Matlija Creek | UMC    | 1/26/2005 9:00   | Fecal Coliform            | Grab         | =    | 2      | MPN/100 mL | SM 9221E  | 2   | RL  | none    | VCHCA        |
| Lower Matlija Creek | LMC    | 1/26/2005 10:00  | Fecal Coliform            | Grab         | <    | 2      | MPN/100 mL | SM 9221E  | 2   | RL  | none    | VCHCA        |
| Upper Matlija Creek | UMC    | 2/11/2005 8:15   | Fecal Coliform            | Grab         | =    | 4      | MPN/100 mL | SM 9221E  | 2   | RL  | none    | VCHCA        |
| Lower Matlija Creek | LMC    | 2/11/2005 9:00   | Fecal Coliform            | Grab         | =    | 2      | MPN/100 mL | SM 9221E  | 2   | RL  | none    | VCHCA        |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Hardness as CaCO3 - Total | Composite    | =    | 415    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Hardness as CaCO3 - Total | Composite    | =    | 380    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Hardness as CaCO3 - Total | Composite    | =    | 296    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Hardness as CaCO3 - Total | Composite    | =    | 308    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Hardness as CaCO3 - Total | Composite    | =    | 347    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Hardness as CaCO3 - Total | Composite    | =    | 399    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Hardness as CaCO3 - Total | Composite    | =    | 353    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Hardness as CaCO3 - Total | Composite    | =    | 406    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Hardness as CaCO3 - Total | Composite    | =    | 408    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Hardness as CaCO3 - Total | Composite    | =    | 417    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Hardness as CaCO3 - Total | Composite    | =    | 264    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Hardness as CaCO3 - Total | Composite    | =    | 216    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Hardness as CaCO3 - Total | Composite    | =    | 335    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Hardness as CaCO3 - Total | Composite    | =    | 347    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Hardness as CaCO3 - Total | Composite    | =    | 344    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Hardness as CaCO3 - Total | Composite    | =    | 365    | mg/L       | EPA 200.7 | 2.5 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Lead - Dissolved          | Composite    | <    | 0.9    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Lead - Dissolved          | Composite    | =    | 0.3    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Lead - Dissolved          | Composite    | =    | 0.3    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Lead - Dissolved          | Composite    | =    | 0.7    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Lead - Dissolved          | Composite    | <    | 1.7    | µg/L       | EPA 200.8 | 0.2 | PQL | none    | FGL          |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u> | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|--------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Lead - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Lead - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Lead - Total       | Composite           | =           | 1.1           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Lead - Total       | Composite           | =           | 5.7           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Lead - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Lead - Total       | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Lead - Total       | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Lead - Total       | Composite           | =           | 0.8           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Lead - Total       | Composite           | =           | 0.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Lead - Total       | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Lead - Total       | Composite           | =           | 2.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Lead - Total       | Composite           | =           | 2.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Lead - Total       | Composite           | =           | 0.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Lead - Total       | Composite           | =           | 0.7           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Lead - Total       | Composite           | =           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Lead - Total       | Composite           | =           | 0.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Magnesium - Total  | Composite           | =           | 33            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Magnesium - Total  | Composite           | =           | 28            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Magnesium - Total  | Composite           | =           | 21            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Magnesium - Total  | Composite           | =           | 22            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Magnesium - Total  | Composite           | =           | 26            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Magnesium - Total  | Composite           | =           | 32            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Magnesium - Total  | Composite           | =           | 27            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Magnesium - Total  | Composite           | =           | 35            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Magnesium - Total  | Composite           | =           | 30            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Magnesium - Total  | Composite           | =           | 34            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Magnesium - Total  | Composite           | =           | 20            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Magnesium - Total  | Composite           | =           | 16            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Magnesium - Total  | Composite           | =           | 25            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Magnesium - Total  | Composite           | =           | 26            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Magnesium - Total  | Composite           | =           | 28            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Magnesium - Total  | Composite           | =           | 26            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Mercury - Total    | Composite           | <           | 10            | ng/L         | EPA 245.2     | 10 MDL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Mercury - Total    | Composite           | =           | 40            | ng/L         | EPA 245.2     | 40 MDL    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Mercury - Total    | Composite           | <           | 10            | ng/L         | EPA 245.2     | 10 PQL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Mercury - Total    | Composite           | <           | 10            | ng/L         | EPA 245.2     | 10 PQL    | none       | FGL            | FGL                 |

| SiteName            | SiteID | SampleDate       | ConstitFrac        | SampleMethod | Sign | Result | Units | Method    | DL     | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|--------------------|--------------|------|--------|-------|-----------|--------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Mercury - Total    | Composite    | =    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Mercury - Total    | Composite    | =    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Mercury - Total    | Composite    | =    | 20     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Mercury - Total    | Composite    | =    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nickel - Dissolved | Composite    | =    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nickel - Dissolved | Composite    | =    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nickel - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nickel - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nickel - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nickel - Total     | Composite    | =    | 7      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nickel - Total     | Composite    | <    | 8      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nickel - Total     | Composite    | =    | 2      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nickel - Total     | Composite    | =    | 4      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |

| SiteName            | SiteID | SampleDate       | ConstitFrac            | SampleMethod | Sign | Result | Units | Method    | DL      | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|------------------------|--------------|------|--------|-------|-----------|---------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nitrate + Nitrite as N | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nitrate + Nitrite as N | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nitrate + Nitrite as N | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nitrate as N           | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nitrate as N           | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nitrate as N           | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |

| Site Name           | Site ID | Sample Date      | Constit/Frac   | Sample Method | Sign | Result | Units    | Method      | DL      | DLT  | LabQual | Analyzing Lab |
|---------------------|---------|------------------|----------------|---------------|------|--------|----------|-------------|---------|------|---------|---------------|
| Lower Matlija Creek | LMC     | 11/14/2003 11:12 | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 11/14/2003 12:07 | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/27/2004 0:30   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/27/2004 11:45  | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 8/27/2004 9:00   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 8/27/2004 10:00  | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/6/2004 8:30   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/6/2004 9:30   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/28/2004 10:00 | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/28/2004 10:15 | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/5/2005 9:30    | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/5/2005 10:30   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/27/2005 9:15   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/27/2005 10:00  | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/14/2005 8:30   | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/14/2005 10:00  | Nitrite as N   | Composite     | <    | 0.1    | mg/L     | EPA 300.0   | 0.1 PQL | none | FGL     |               |
| Lower Matlija Creek | LMC     | 11/13/2003 9:00  | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 11/13/2003 10:00 | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/26/2004 12:00  | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/26/2004 13:00  | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 8/25/2004 9:30   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 8/25/2004 10:30  | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/5/2004 8:30   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/5/2004 9:30   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 10/27/2004 13:45 | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 10/27/2004 14:30 | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/4/2005 10:30   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/4/2005 11:30   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 1/26/2005 9:00   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 1/26/2005 10:00  | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/11/2005 8:15   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/11/2005 9:00   | Oil and Grease | Grab          | <    | 3      | mg/L     | EPA 1664A   | 3 PQL   | none | FGL     |               |
| Lower Matlija Creek | LMC     | 11/13/2003 9:00  | pH             | Grab          | =    | 8.2    | pH Units | SM 4500-H B | 0.1 IP  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 11/13/2003 10:00 | pH             | Grab          | =    | 8.5    | pH Units | SM 4500-H B | 0.1 IP  | none | FGL     |               |
| Upper Matlija Creek | UMC     | 2/26/2004 12:00  | pH             | Grab          | =    | 7.8    | pH Units | SM 4500-H B | 0.1 IP  | none | FGL     |               |
| Lower Matlija Creek | LMC     | 2/26/2004 13:00  | pH             | Grab          | =    | 7.8    | pH Units | SM 4500-H B | 0.1 IP  | none | FGL     |               |

| <u>SiteName</u>      | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>     | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|----------------------|---------------|-------------------|------------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matilija Creek | UMC           | 8/25/2004 9:30    | pH                     | Grab                | =           | 8             | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/25/2004 10:30   | pH                     | Grab                | =           | 7.9           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/5/2004 8:30    | pH                     | Grab                | =           | 7.6           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/5/2004 9:30    | pH                     | Grab                | =           | 7.9           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/27/2004 13:45  | pH                     | Grab                | =           | 8             | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/27/2004 14:30  | pH                     | Grab                | =           | 8             | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/4/2005 10:30    | pH                     | Grab                | =           | 7.9           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/4/2005 11:30    | pH                     | Grab                | =           | 7.8           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/26/2005 9:00    | pH                     | Grab                | =           | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/26/2005 10:00   | pH                     | Grab                | =           | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/11/2005 8:15    | pH                     | Grab                | =           | 8.3           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/11/2005 9:00    | pH                     | Grab                | =           | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 11/14/2003 11:12  | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 11/14/2003 12:07  | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/27/2004 0:30    | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/27/2004 11:45   | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 8/27/2004 9:00    | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/27/2004 10:00   | Phosphate - Total      | Composite           | <           | 0.4           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/6/2004 8:30    | Phosphate - Total      | Composite           | <           | 0.5           | mg/L         | SM 4500-P E   | 0.5 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/6/2004 9:30    | Phosphate - Total      | Composite           | <           | 0.5           | mg/L         | SM 4500-P E   | 0.5 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/28/2004 10:00  | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/28/2004 10:15  | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/5/2005 9:30     | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/5/2005 10:30    | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/27/2005 9:15    | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/27/2005 10:00   | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/14/2005 8:30    | Phosphate - Total      | Composite           | <           | 0.5           | mg/L         | SM 4500-P E   | 0.5 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/14/2005 10:00   | Phosphate - Total      | Composite           | <           | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 11/14/2003 11:12  | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 11/14/2003 12:07  | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/27/2004 0:30    | Phosphorus - Dissolved | Composite           | =           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/27/2004 11:45   | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 8/27/2004 9:00    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/27/2004 10:00   | Phosphorus - Dissolved | Composite           | =           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/6/2004 9:30    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/28/2004 10:00  | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |

| <u>SiteName</u>      | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>     | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|----------------------|---------------|-------------------|------------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matilija Creek | LMC           | 10/28/2004 10:15  | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/5/2005 9:30     | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/5/2005 10:30    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/27/2005 9:15    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/27/2005 10:00   | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/14/2005 8:30    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/14/2005 10:00   | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 11/14/2003 11:12  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 11/14/2003 12:07  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/27/2004 0:30    | Phosphorus - Total     | Composite           | =           | 0.2           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/27/2004 11:45   | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 8/27/2004 9:00    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/27/2004 10:00   | Phosphorus - Total     | Composite           | =           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/6/2004 8:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/6/2004 9:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/28/2004 10:00  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/28/2004 10:15  | Phosphorus - Total     | Composite           | =           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/5/2005 9:30     | Phosphorus - Total     | Composite           | <           | 0.6           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/5/2005 10:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/27/2005 9:15    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/27/2005 10:00   | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/14/2005 8:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/14/2005 10:00   | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 11/14/2003 11:12  | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 11/14/2003 12:07  | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/27/2004 0:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/27/2004 11:45   | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 8/27/2004 9:00    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/27/2004 10:00   | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/6/2004 8:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/6/2004 9:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/28/2004 10:00  | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/28/2004 10:15  | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/5/2005 9:30     | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/5/2005 10:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/27/2005 9:15    | Selenium - Dissolved   | Composite           | =           | 4             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>   | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|----------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Selenium - Dissolved | Composite           | =           | 4             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Selenium - Dissolved | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Selenium - Dissolved | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Selenium - Total     | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Selenium - Total     | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Selenium - Total     | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Silver - Total       | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Silver - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Silver - Total       | Composite           | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     |            | none           | FGL                 |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>   | <u>SampleMethod</u> |  | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|----------------------|---------------------|--|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Silver - Total       | Composite           |  | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Thallium - Dissolved | Composite           |  | <           | 10            | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Thallium - Dissolved | Composite           |  | <           | 0.2           | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Thallium - Total     | Composite           |  | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Thallium - Total     | Composite           |  | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Thallium - Total     | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u> | <u>SampleMethod</u> |  | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|--------------------|---------------------|--|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Thallium - Total   | Composite           |  | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | TKN                | Composite           |  | =           | 0.8           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | TKN                | Composite           |  | =           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | TKN                | Composite           |  | =           | 0.6           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | TKN                | Composite           |  | <           | 0.5           | mg/L         | EPA 351.1     | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 11/13/2003 9:00   | Total Coliform     | Grab                |  | =           | 1664          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 11/13/2003 10:00  | Total Coliform     | Grab                |  | =           | 3448          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 2/26/2004 12:00   | Total Coliform     | Grab                |  | =           | 1722          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek | LMC           | 2/26/2004 13:00   | Total Coliform     | Grab                |  | =           | 4106          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 8/25/2004 9:30    | Total Coliform     | Grab                |  | =           | 16580         | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek | LMC           | 8/25/2004 10:30   | Total Coliform     | Grab                |  | =           | 2247          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 10/5/2004 8:30    | Total Coliform     | Grab                |  | =           | 2613          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek | LMC           | 10/5/2004 9:30    | Total Coliform     | Grab                |  | =           | 776           | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 10/27/2004 13:45  | Total Coliform     | Grab                |  | =           | 5475          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek | LMC           | 10/27/2004 14:30  | Total Coliform     | Grab                |  | =           | 7701          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 1/4/2005 10:30    | Total Coliform     | Grab                |  | =           | 1607          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek | LMC           | 1/4/2005 11:30    | Total Coliform     | Grab                |  | =           | 4352          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek | UMC           | 1/26/2005 9:00    | Total Coliform     | Grab                |  | =           | 364           | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |

| SiteName             | SiteID | SampleDate       | ConstitFrac            | SampleMethod | Sign | Result     | Units      | Method   | DL      | DLT  | LabQual | AnalyzingLab |
|----------------------|--------|------------------|------------------------|--------------|------|------------|------------|----------|---------|------|---------|--------------|
| Lower Matlija Creek  | LMC    | 1/26/2005 10:00  | Total Coliform         | Grab         | =    | 504        | MPN/100 mL | MMO-MUG  | 10 RL   | none | VCHCA   |              |
| Upper Matlija Creek  | UMC    | 2/11/2005 8:15   | Total Coliform         | Grab         | =    | 1019       | MPN/100 mL | MMO-MUG  | 10 RL   | none | VCHCA   |              |
| Lower Matlija Creek  | LMC    | 2/11/2005 9:00   | Total Coliform         | Grab         | =    | 148        | MPN/100 mL | MMO-MUG  | 10 RL   | none | VCHCA   |              |
| Lower Matlija Creek  | LMC    | 11/14/2003 11:12 | Total Dissolved Solids | Composite    | =    | 710        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 11/14/2003 12:07 | Total Dissolved Solids | Composite    | =    | 630        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 2/27/2004 0:30   | Total Dissolved Solids | Composite    | =    | 470        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 2/27/2004 11:45  | Total Dissolved Solids | Composite    | =    | 810        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 8/27/2004 9:00   | Total Dissolved Solids | Composite    | =    | 810        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 8/27/2004 10:00  | Total Dissolved Solids | Composite    | =    | 700        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 10/28/2004 10:00 | Total Dissolved Solids | Composite    | =    | 730        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 10/28/2004 10:15 | Total Dissolved Solids | Composite    | =    | 710        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 1/5/2005 9:30    | Total Dissolved Solids | Composite    | =    | 390        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 1/5/2005 10:30   | Total Dissolved Solids | Composite    | =    | 320        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 1/27/2005 9:15   | Total Dissolved Solids | Composite    | =    | 570        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 1/27/2005 10:00  | Total Dissolved Solids | Composite    | =    | 600        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 2/14/2005 8:30   | Total Dissolved Solids | Composite    | =    | 580        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 2/14/2005 10:00  | Total Dissolved Solids | Composite    | =    | 580        | mg/L       | SM 2540C | 40 PQL  | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 11/14/2003 11:12 | Total Organic Carbon   | Composite    | =    | 4          | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 11/14/2003 12:07 | Total Organic Carbon   | Composite    | =    | 1.6        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 2/27/2004 0:30   | Total Organic Carbon   | Composite    | =    | 4.6        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 2/27/2004 11:45  | Total Organic Carbon   | Composite    | =    | 4          | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 8/27/2004 9:00   | Total Organic Carbon   | Composite    | =    | 1.5        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 8/27/2004 10:00  | Total Organic Carbon   | Composite    | =    | 4          | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 10/6/2004 8:30   | Total Organic Carbon   | Composite    | =    | 1.4        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 10/6/2004 9:30   | Total Organic Carbon   | Composite    | =    | 4.4        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 10/28/2004 10:00 | Total Organic Carbon   | Composite    | =    | 2.5        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 10/28/2004 10:15 | Total Organic Carbon   | Composite    | =    | 3.8        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 1/5/2005 9:30    | Total Organic Carbon   | Composite    | =    | 6.2        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 1/5/2005 10:30   | Total Organic Carbon   | Composite    | =    | 2.7        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 1/27/2005 9:15   | Total Organic Carbon   | Composite    | =    | 1.1        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 1/27/2005 10:00  | Total Organic Carbon   | Composite    | =    | 1.3        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 2/14/2005 8:30   | Total Organic Carbon   | Composite    | =    | 1.1        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| Lower Matlija Creek  | LMC    | 2/14/2005 10:00  | Total Organic Carbon   | Composite    | =    | 1.4        | mg/L       | SM 5310C | 0.5 PQL | none | FGL     |              |
| <b>Total Samples</b> |        |                  |                        |              |      | <b>680</b> |            |          |         |      |         |              |
| Lower Matlija Creek  | LMC    | 11/14/2003 11:12 | Total Suspended Solids | Composite    | <    | 10         | mg/L       | SM 2540D | 10 PQL  | none | FGL     |              |
| Upper Matlija Creek  | UMC    | 11/14/2003 12:07 | Total Suspended Solids | Composite    | =    | 20         | mg/L       | SM 2540D | 10 PQL  | none | FGL     |              |

| SiteName            | SiteID | SampleDate       | ConstitFrac               | SampleMethod | Sign | Result | Units      | Method    | DL      | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|---------------------------|--------------|------|--------|------------|-----------|---------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 1/26/2005 9:00   | Fecal Coliform            | Grab         | =    | 2      | MPN/100 mL | SM 9221E  | 2 RL    | none | none    | VCHCA        |
| Lower Matlija Creek | LMC    | 1/26/2005 10:00  | Fecal Coliform            | Grab         | <    | 2      | MPN/100 mL | SM 9221E  | 2 RL    | none | none    | VCHCA        |
| Upper Matlija Creek | UMC    | 2/11/2005 8:15   | Fecal Coliform            | Grab         | =    | 4      | MPN/100 mL | SM 9221E  | 2 RL    | none | none    | VCHCA        |
| Lower Matlija Creek | LMC    | 2/11/2005 9:00   | Fecal Coliform            | Grab         | =    | 2      | MPN/100 mL | SM 9221E  | 2 RL    | none | none    | VCHCA        |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Hardness as CaCO3 - Total | Composite    | =    | 415    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Hardness as CaCO3 - Total | Composite    | =    | 380    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Hardness as CaCO3 - Total | Composite    | =    | 296    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Hardness as CaCO3 - Total | Composite    | =    | 308    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Hardness as CaCO3 - Total | Composite    | =    | 347    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Hardness as CaCO3 - Total | Composite    | =    | 399    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Hardness as CaCO3 - Total | Composite    | =    | 353    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Hardness as CaCO3 - Total | Composite    | =    | 406    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Hardness as CaCO3 - Total | Composite    | =    | 408    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Hardness as CaCO3 - Total | Composite    | =    | 417    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Hardness as CaCO3 - Total | Composite    | =    | 264    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Hardness as CaCO3 - Total | Composite    | =    | 216    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Hardness as CaCO3 - Total | Composite    | =    | 335    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Hardness as CaCO3 - Total | Composite    | =    | 347    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Hardness as CaCO3 - Total | Composite    | =    | 344    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Hardness as CaCO3 - Total | Composite    | =    | 365    | mg/L       | EPA 200.7 | 2.5 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Lead - Dissolved          | Composite    | <    | 0.9    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Lead - Dissolved          | Composite    | =    | 0.3    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Lead - Dissolved          | Composite    | =    | 0.3    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Lead - Dissolved          | Composite    | =    | 0.7    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Lead - Dissolved          | Composite    | <    | 0.2    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Lead - Dissolved          | Composite    | <    | 1.7    | µg/L       | EPA 200.8 | 0.2 PQL | none | none    | FGL          |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u> | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|--------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Lead - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Lead - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Lead - Total       | Composite           | =           | 1.1           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Lead - Total       | Composite           | =           | 5.7           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Lead - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Lead - Total       | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Lead - Total       | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Lead - Total       | Composite           | =           | 0.8           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Lead - Total       | Composite           | =           | 0.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Lead - Total       | Composite           | <           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Lead - Total       | Composite           | =           | 2.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Lead - Total       | Composite           | =           | 2.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Lead - Total       | Composite           | =           | 0.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Lead - Total       | Composite           | =           | 0.7           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Lead - Total       | Composite           | =           | 0.2           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Lead - Total       | Composite           | =           | 0.5           | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Magnesium - Total  | Composite           | =           | 33            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Magnesium - Total  | Composite           | =           | 28            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Magnesium - Total  | Composite           | =           | 21            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Magnesium - Total  | Composite           | =           | 22            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Magnesium - Total  | Composite           | =           | 26            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Magnesium - Total  | Composite           | =           | 32            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Magnesium - Total  | Composite           | =           | 27            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Magnesium - Total  | Composite           | =           | 35            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Magnesium - Total  | Composite           | =           | 30            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Magnesium - Total  | Composite           | =           | 34            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Magnesium - Total  | Composite           | =           | 20            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Magnesium - Total  | Composite           | =           | 16            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Magnesium - Total  | Composite           | =           | 25            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Magnesium - Total  | Composite           | =           | 26            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Magnesium - Total  | Composite           | =           | 28            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Magnesium - Total  | Composite           | =           | 26            | mg/L         | EPA 200.7     | 1 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Mercury - Total    | Composite           | <           | 10            | ng/L         | EPA 245.2     | 10 MDL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Mercury - Total    | Composite           | =           | 40            | ng/L         | EPA 245.2     | 40 MDL    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Mercury - Total    | Composite           | <           | 10            | ng/L         | EPA 245.2     | 10 PQL    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Mercury - Total    | Composite           | <           | 10            | ng/L         | EPA 245.2     | 10 PQL    | none       | FGL            | FGL                 |

| SiteName            | SiteID | SampleDate       | ConstitFrac        | SampleMethod | Sign | Result | Units | Method    | DL     | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|--------------------|--------------|------|--------|-------|-----------|--------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Mercury - Total    | Composite    | =    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Mercury - Total    | Composite    | <    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Mercury - Total    | Composite    | =    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Mercury - Total    | Composite    | =    | 20     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Mercury - Total    | Composite    | =    | 10     | ng/L  | EPA 245.2 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nickel - Dissolved | Composite    | =    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nickel - Dissolved | Composite    | =    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nickel - Dissolved | Composite    | <    | 2      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nickel - Dissolved | Composite    | <    | 1      | µg/L  | EPA 200.8 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nickel - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nickel - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nickel - Total     | Composite    | =    | 7      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nickel - Total     | Composite    | <    | 8      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nickel - Total     | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nickel - Total     | Composite    | =    | 2      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nickel - Total     | Composite    | =    | 4      | µg/L  | EPA 200.7 | 1 PQL  | none | FGL     |              |

| SiteName            | SiteID | SampleDate       | ConstitFrac            | SampleMethod | Sign | Result | Units | Method    | DL      | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|------------------------|--------------|------|--------|-------|-----------|---------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nickel - Total         | Composite    | <    | 1      | µg/L  | EPA 200.7 | 1 PQL   | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nitrate + Nitrite as N | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nitrate + Nitrite as N | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nitrate + Nitrite as N | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nitrate + Nitrite as N | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Nitrate as N           | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Nitrate as N           | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Nitrate as N           | Composite    | =    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Nitrate as N           | Composite    | <    | 0.1    | mg/L  | EPA 300.0 | 0.1 PQL | none | FGL     |              |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u> | <u>SampleMethod</u> |  | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|--------------------|---------------------|--|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Nitrite as N       | Composite           |  | <           | 0.1           | mg/L         | EPA 300.0     | 0.1 PQL   | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/13/2003 9:00   | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/13/2003 10:00  | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/26/2004 12:00   | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/26/2004 13:00   | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 8/25/2004 9:30    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 8/25/2004 10:30   | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/5/2004 8:30    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/5/2004 9:30    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 10/27/2004 13:45  | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 10/27/2004 14:30  | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/4/2005 10:30    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/4/2005 11:30    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 1/26/2005 9:00    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 1/26/2005 10:00   | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/11/2005 8:15    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/11/2005 9:00    | Oil and Grease     | Grab                |  | <           | 3             | mg/L         | EPA 1664A     | 3 PQL     | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 11/13/2003 9:00   | pH                 | Grab                |  | =           | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 11/13/2003 10:00  | pH                 | Grab                |  | =           | 8.5           | pH Units     | SM 4500-H B   | 0.1 IP    | none       | FGL            | FGL                 |
| Upper Matlija Creek | UMC           | 2/26/2004 12:00   | pH                 | Grab                |  | =           | 7.8           | pH Units     | SM 4500-H B   | 0.1 IP    | none       | FGL            | FGL                 |
| Lower Matlija Creek | LMC           | 2/26/2004 13:00   | pH                 | Grab                |  | =           | 7.8           | pH Units     | SM 4500-H B   | 0.1 IP    | none       | FGL            | FGL                 |

| <u>SiteName</u>      | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>     | <u>SampleMethod</u> |   | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|----------------------|---------------|-------------------|------------------------|---------------------|---|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matilija Creek | UMC           | 8/25/2004 9:30    | pH                     | Grab                | = |             | 8             | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/25/2004 10:30   | pH                     | Grab                | = |             | 7.9           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/5/2004 8:30    | pH                     | Grab                | = |             | 7.6           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/5/2004 9:30    | pH                     | Grab                | = |             | 7.9           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/27/2004 13:45  | pH                     | Grab                | = |             | 8             | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/27/2004 14:30  | pH                     | Grab                | = |             | 8             | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/4/2005 10:30    | pH                     | Grab                | = |             | 7.9           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/4/2005 11:30    | pH                     | Grab                | = |             | 7.8           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/26/2005 9:00    | pH                     | Grab                | = |             | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/26/2005 10:00   | pH                     | Grab                | = |             | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/11/2005 8:15    | pH                     | Grab                | = |             | 8.3           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/11/2005 9:00    | pH                     | Grab                | = |             | 8.2           | pH Units     | SM 4500-H B   | 0.1 IP    |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 11/14/2003 11:12  | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 11/14/2003 12:07  | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/27/2004 0:30    | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/27/2004 11:45   | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 8/27/2004 9:00    | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/27/2004 10:00   | Phosphate - Total      | Composite           | < |             | 0.4           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/6/2004 8:30    | Phosphate - Total      | Composite           | < |             | 0.5           | mg/L         | SM 4500-P E   | 0.5 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/6/2004 9:30    | Phosphate - Total      | Composite           | < |             | 0.5           | mg/L         | SM 4500-P E   | 0.5 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/28/2004 10:00  | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/28/2004 10:15  | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/5/2005 9:30     | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/5/2005 10:30    | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 1/27/2005 9:15    | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 1/27/2005 10:00   | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/14/2005 8:30    | Phosphate - Total      | Composite           | < |             | 0.5           | mg/L         | SM 4500-P E   | 0.5 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/14/2005 10:00   | Phosphate - Total      | Composite           | < |             | 0.3           | mg/L         | SM 4500-P E   | 0.3 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 11/14/2003 11:12  | Phosphorus - Dissolved | Composite           | < |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 11/14/2003 12:07  | Phosphorus - Dissolved | Composite           | < |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 2/27/2004 0:30    | Phosphorus - Dissolved | Composite           | = |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 2/27/2004 11:45   | Phosphorus - Dissolved | Composite           | < |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 8/27/2004 9:00    | Phosphorus - Dissolved | Composite           | < |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 8/27/2004 10:00   | Phosphorus - Dissolved | Composite           | = |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Lower Matilija Creek | LMC           | 10/6/2004 9:30    | Phosphorus - Dissolved | Composite           | < |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |
| Upper Matilija Creek | UMC           | 10/28/2004 10:00  | Phosphorus - Dissolved | Composite           | < |             | 0.1           | mg/L         | SM 4500-P E   | 0.1 PQL   |            | none           | FGL                 |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>     | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|------------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Phosphorus - Dissolved | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Phosphorus - Total     | Composite           | =           | 0.2           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Phosphorus - Total     | Composite           | =           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Phosphorus - Total     | Composite           | =           | 0.6           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Phosphorus - Total     | Composite           | <           | 0.1           | mg/L         | SM 4500-P E   | 0.1       | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Selenium - Dissolved   | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Selenium - Dissolved   | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Selenium - Dissolved   | Composite           | =           | 4             | µg/L         | EPA 200.8     | 2         | PQL        | none           | FGL                 |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>   | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|----------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Selenium - Dissolved | Composite           | =           | 4             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Selenium - Dissolved | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Selenium - Dissolved | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Selenium - Total     | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Selenium - Total     | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Selenium - Total     | Composite           | =           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.8     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Selenium - Total     | Composite           | <           | 2             | µg/L         | EPA 200.7     | 2 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Silver - Dissolved   | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Silver - Total       | Composite           | <           | 1             | µg/L         | EPA 200.8     | 1 PQL     |            | none           | FGL                 |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Silver - Total       | Composite           | <           | 10            | µg/L         | EPA 200.7     | 10 PQL    |            | none           | FGL                 |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Silver - Total       | Composite           | <           | 1             | µg/L         | EPA 200.7     | 1 PQL     |            | none           | FGL                 |

| <u>SiteName</u>      | <u>SiteID</u> | <u>SampleDate</u>                | <u>ConstitFrac</u>   | <u>SampleMethod</u> |   | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|----------------------|---------------|----------------------------------|----------------------|---------------------|---|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Upper Matilija Creek | UMC           | <a href="#">2/27/2004 11:45</a>  | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">8/27/2004 9:00</a>   | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">8/27/2004 10:00</a>  | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">10/6/2004 8:30</a>   | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">10/6/2004 9:30</a>   | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">10/28/2004 10:00</a> | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">10/28/2004 10:15</a> | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">1/5/2005 9:30</a>    | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">1/5/2005 10:30</a>   | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">1/27/2005 9:15</a>   | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">1/27/2005 10:00</a>  | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">2/14/2005 8:30</a>   | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">2/14/2005 10:00</a>  | Silver - Total       | Composite           | < | 1           |               | µg/L         | EPA 200.7     | 1 PQL     | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">11/14/2003 11:12</a> | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">11/14/2003 12:07</a> | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">2/27/2004 0:30</a>   | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">2/27/2004 11:45</a>  | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">8/27/2004 9:00</a>   | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">8/27/2004 10:00</a>  | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">10/6/2004 8:30</a>   | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">10/6/2004 9:30</a>   | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">1/5/2005 9:30</a>    | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">1/5/2005 10:30</a>   | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">1/27/2005 9:15</a>   | Thallium - Dissolved | Composite           | < | 10          |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">1/27/2005 10:00</a>  | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">2/14/2005 8:30</a>   | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">2/14/2005 10:00</a>  | Thallium - Dissolved | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">11/14/2003 11:12</a> | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.8     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">11/14/2003 12:07</a> | Thallium - Total     | Composite           | < | 10          |               | µg/L         | EPA 200.7     | 10 PQL    | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">2/27/2004 0:30</a>   | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">2/27/2004 11:45</a>  | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">8/27/2004 9:00</a>   | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">8/27/2004 10:00</a>  | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">10/6/2004 8:30</a>   | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Lower Matilija Creek | LMC           | <a href="#">10/6/2004 9:30</a>   | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |
| Upper Matilija Creek | UMC           | <a href="#">10/28/2004 10:00</a> | Thallium - Total     | Composite           | < | 0.2         |               | µg/L         | EPA 200.7     | 0.2 PQL   | none       | FGL            |                     |

| SiteName            | SiteID | SampleDate       | ConstitFrac      | SampleMethod | Sign | Result | Units      | Method    | DL      | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|------------------|--------------|------|--------|------------|-----------|---------|------|---------|--------------|
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Thallium - Total | Composite    | <    | 0.2    | µg/L       | EPA 200.7 | 0.2 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | TKN              | Composite    | =    | 0.8    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | TKN              | Composite    | =    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | TKN              | Composite    | =    | 0.6    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | TKN              | Composite    | <    | 0.5    | mg/L       | EPA 351.1 | 0.5 PQL | none | FGL     | FGL          |
| Lower Matlija Creek | LMC    | 11/13/2003 9:00  | Total Coliform   | Grab         | =    | 1664   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 11/13/2003 10:00 | Total Coliform   | Grab         | =    | 3448   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 2/26/2004 12:00  | Total Coliform   | Grab         | =    | 1722   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Lower Matlija Creek | LMC    | 2/26/2004 13:00  | Total Coliform   | Grab         | =    | 4106   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 8/25/2004 9:30   | Total Coliform   | Grab         | =    | 16580  | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Lower Matlija Creek | LMC    | 8/25/2004 10:30  | Total Coliform   | Grab         | =    | 2247   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 10/5/2004 8:30   | Total Coliform   | Grab         | =    | 2613   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Lower Matlija Creek | LMC    | 10/5/2004 9:30   | Total Coliform   | Grab         | =    | 776    | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 10/27/2004 13:45 | Total Coliform   | Grab         | =    | 5475   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Lower Matlija Creek | LMC    | 10/27/2004 14:30 | Total Coliform   | Grab         | =    | 7701   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 1/4/2005 10:30   | Total Coliform   | Grab         | =    | 1607   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Lower Matlija Creek | LMC    | 1/4/2005 11:30   | Total Coliform   | Grab         | =    | 4352   | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |
| Upper Matlija Creek | UMC    | 1/26/2005 9:00   | Total Coliform   | Grab         | =    | 364    | MPN/100 mL | MMO-MUG   | 10 RL   | none | VCHCA   | VCHCA        |

| <u>SiteName</u>      | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>     | <u>SampleMethod</u> | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|----------------------|---------------|-------------------|------------------------|---------------------|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek  | LMC           | 1/26/2005 10:00   | Total Coliform         | Grab                | =           | 504           | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Upper Matlija Creek  | UMC           | 2/11/2005 8:15    | Total Coliform         | Grab                | =           | 1019          | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek  | LMC           | 2/11/2005 9:00    | Total Coliform         | Grab                | =           | 148           | MPN/100 mL   | MMO-MUG       | 10 RL     | none       | VCHCA          |                     |
| Lower Matlija Creek  | LMC           | 11/14/2003 11:12  | Total Dissolved Solids | Composite           | =           | 710           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 11/14/2003 12:07  | Total Dissolved Solids | Composite           | =           | 630           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 2/27/2004 0:30    | Total Dissolved Solids | Composite           | =           | 470           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 2/27/2004 11:45   | Total Dissolved Solids | Composite           | =           | 810           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 8/27/2004 9:00    | Total Dissolved Solids | Composite           | =           | 810           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 8/27/2004 10:00   | Total Dissolved Solids | Composite           | =           | 700           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 10/28/2004 10:00  | Total Dissolved Solids | Composite           | =           | 730           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 10/28/2004 10:15  | Total Dissolved Solids | Composite           | =           | 710           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 1/5/2005 9:30     | Total Dissolved Solids | Composite           | =           | 390           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 1/5/2005 10:30    | Total Dissolved Solids | Composite           | =           | 320           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 1/27/2005 9:15    | Total Dissolved Solids | Composite           | =           | 570           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 1/27/2005 10:00   | Total Dissolved Solids | Composite           | =           | 600           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 2/14/2005 8:30    | Total Dissolved Solids | Composite           | =           | 580           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 2/14/2005 10:00   | Total Dissolved Solids | Composite           | =           | 580           | mg/L         | SM 2540C      | 40 PQL    | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 11/14/2003 11:12  | Total Organic Carbon   | Composite           | =           | 4             | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 11/14/2003 12:07  | Total Organic Carbon   | Composite           | =           | 1.6           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 2/27/2004 0:30    | Total Organic Carbon   | Composite           | =           | 4.6           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 2/27/2004 11:45   | Total Organic Carbon   | Composite           | =           | 4             | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 8/27/2004 9:00    | Total Organic Carbon   | Composite           | =           | 1.5           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 8/27/2004 10:00   | Total Organic Carbon   | Composite           | =           | 4             | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 10/6/2004 8:30    | Total Organic Carbon   | Composite           | =           | 1.4           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 10/6/2004 9:30    | Total Organic Carbon   | Composite           | =           | 4.4           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 10/28/2004 10:00  | Total Organic Carbon   | Composite           | =           | 2.5           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 10/28/2004 10:15  | Total Organic Carbon   | Composite           | =           | 3.8           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 1/5/2005 9:30     | Total Organic Carbon   | Composite           | =           | 6.2           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 1/5/2005 10:30    | Total Organic Carbon   | Composite           | =           | 2.7           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 1/27/2005 9:15    | Total Organic Carbon   | Composite           | =           | 1.1           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 1/27/2005 10:00   | Total Organic Carbon   | Composite           | =           | 1.3           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 2/14/2005 8:30    | Total Organic Carbon   | Composite           | =           | 1.1           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| Lower Matlija Creek  | LMC           | 2/14/2005 10:00   | Total Organic Carbon   | Composite           | =           | 1.4           | mg/L         | SM 5310C      | 0.5 PQL   | none       | FGL            |                     |
| <b>Total Samples</b> |               |                   |                        |                     |             | <b>680</b>    |              |               |           |            |                |                     |
| Lower Matlija Creek  | LMC           | 11/14/2003 11:12  | Total Suspended Solids | Composite           | <           | 10            | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek  | UMC           | 11/14/2003 12:07  | Total Suspended Solids | Composite           | =           | 20            | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |

| <u>SiteName</u>     | <u>SiteID</u> | <u>SampleDate</u> | <u>ConstitFrac</u>     | <u>SampleMethod</u> |   | <u>Sign</u> | <u>Result</u> | <u>Units</u> | <u>Method</u> | <u>DL</u> | <u>DLT</u> | <u>LabQual</u> | <u>AnalyzingLab</u> |
|---------------------|---------------|-------------------|------------------------|---------------------|---|-------------|---------------|--------------|---------------|-----------|------------|----------------|---------------------|
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Total Suspended Solids | Composite           | = | 100         |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 10/6/2004 8:30    | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 10/6/2004 9:30    | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 10/28/2004 10:00  | Total Suspended Solids | Composite           | = | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 10/28/2004 10:15  | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 1/5/2005 9:30     | Total Suspended Solids | Composite           | < | 70          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 1/5/2005 10:30    | Total Suspended Solids | Composite           | < | 120         |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 1/27/2005 9:15    | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 1/27/2005 10:00   | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 2/14/2005 8:30    | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 2/14/2005 10:00   | Total Suspended Solids | Composite           | < | 10          |               | mg/L         | SM 2540D      | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 11/13/2003 9:00   | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 11/13/2003 10:00  | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 2/26/2004 12:00   | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 2/26/2004 13:00   | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 8/25/2004 9:30    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 8/25/2004 10:30   | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 10/5/2004 8:30    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 10/5/2004 9:30    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 10/27/2004 13:45  | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 10/27/2004 14:30  | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 1/4/2005 10:30    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 1/4/2005 11:30    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 1/26/2005 9:00    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 1/26/2005 10:00   | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Upper Matlija Creek | UMC           | 2/11/2005 8:15    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 2/11/2005 9:00    | TRPH                   | Grab                | < | 1           |               | mg/L         | EPA 418.1     | 1 DLR     | none       | AssocLabs      |                     |
| Lower Matlija Creek | LMC           | 11/14/2003 11:12  | Zinc - Dissolved       | Composite           | < | 1           |               | µg/L         | EPA 200.8     | 1 PQL     | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 11/14/2003 12:07  | Zinc - Dissolved       | Composite           | < | 10          |               | µg/L         | EPA 200.8     | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 2/27/2004 0:30    | Zinc - Dissolved       | Composite           | < | 10          |               | µg/L         | EPA 200.8     | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 2/27/2004 11:45   | Zinc - Dissolved       | Composite           | < | 10          |               | µg/L         | EPA 200.8     | 10 PQL    | none       | FGL            |                     |
| Upper Matlija Creek | UMC           | 8/27/2004 9:00    | Zinc - Dissolved       | Composite           | < | 10          |               | µg/L         | EPA 200.8     | 10 PQL    | none       | FGL            |                     |
| Lower Matlija Creek | LMC           | 8/27/2004 10:00   | Zinc - Dissolved       | Composite           | < | 10          |               | µg/L         | EPA 200.8     | 10 PQL    | none       | FGL            |                     |

| SiteName            | SiteID | SampleDate       | ConstitFrac      | SampleMethod | Sign | Result | Units | Method    | DL     | DLT  | LabQual | AnalyzingLab |
|---------------------|--------|------------------|------------------|--------------|------|--------|-------|-----------|--------|------|---------|--------------|
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Zinc - Dissolved | Composite    | <    | 10     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Zinc - Dissolved | Composite    | =    | 80     | µg/L  | EPA 200.8 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 11/14/2003 11:12 | Zinc - Total     | Composite    | <    | 20     | µg/L  | EPA 200.7 | 20 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 11/14/2003 12:07 | Zinc - Total     | Composite    | <    | 20     | µg/L  | EPA 200.7 | 20 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/27/2004 0:30   | Zinc - Total     | Composite    | =    | 20     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/27/2004 11:45  | Zinc - Total     | Composite    | =    | 80     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 8/27/2004 9:00   | Zinc - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 8/27/2004 10:00  | Zinc - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/6/2004 8:30   | Zinc - Total     | Composite    | =    | 60     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/6/2004 9:30   | Zinc - Total     | Composite    | =    | 40     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 10/28/2004 10:00 | Zinc - Total     | Composite    | =    | 20     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 10/28/2004 10:15 | Zinc - Total     | Composite    | =    | 20     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/5/2005 9:30    | Zinc - Total     | Composite    | =    | 50     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/5/2005 10:30   | Zinc - Total     | Composite    | =    | 50     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 1/27/2005 9:15   | Zinc - Total     | Composite    | =    | 60     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 1/27/2005 10:00  | Zinc - Total     | Composite    | =    | 70     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Upper Matlija Creek | UMC    | 2/14/2005 8:30   | Zinc - Total     | Composite    | =    | 80     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |
| Lower Matlija Creek | LMC    | 2/14/2005 10:00  | Zinc - Total     | Composite    | <    | 10     | µg/L  | EPA 200.7 | 10 PQL | none | none    | FGL          |



## **APPENDIX D – CHAINS OF CUSTODY**



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

312079 (1 of 2)

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District

SAMPLING DATE: 11-12-03 thru 11-14-03

SAMPLERS: D. THOMAS M. DAVIS

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|------------------|----------------------------|-------------------|--------------|----|----------------|------|--|--|--|--|-------------------|-------|-----------------------------|
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
| LMC              | 11-13-03 0900              | ✓                 | ✓            | ✓  | ✓              | ✓    |  |  |  |  | 4                 |       | 13.6°C                      |
| UMC              | 11-13-03 1000              | ✓                 | ✓            | ✓  | ✓              | ✓    |  |  |  |  | 4                 |       | 16.9°C                      |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |

|              |                                    |                       |
|--------------|------------------------------------|-----------------------|
| Signature    | Relinquished By<br><i>M. Davis</i> | Date/Time<br>11/13/03 |
| Printed Name | M. Davis                           |                       |
| Affiliation  | VCPD                               | 1155 hr               |
| Signature    | Received By<br><i>[Signature]</i>  | Date/Time<br>11/13/03 |
| Printed Name | B. [unclear]                       | 1155a                 |
| Affiliation  | FCCL                               |                       |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory



## QC LEVEL

[illegible]

## QC LEVEL

[illegible]

• Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District Event #2 (Wet) 1 OF 2  
SAMPLING DATE: 26-Feb-04  
SAMPLERS: Dara Wise, David Thomas, Mark Davis, Carla Were

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE ID | DATE/TIME COLLECTED |                   |              |    |                |      |  |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|-----------|---------------------|-------------------|--------------|----|----------------|------|--|--|--|--|--|-------------------|-------|-----------------------------|
|           |                     | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  |  |                   |       |                             |
| UML       | 2-26-04 12:00       | X                 | X            | X  | X              | X    |  |  |  |  |  | 4                 |       | 11.8°C                      |
| LMC       | " 13:00             | X                 | X            | X  | X              | X    |  |  |  |  |  | 4                 |       | 10.6°C                      |
| MCD-1     | " 12:45             | X                 | X            | X  | X              | X    |  |  |  |  |  | 4                 |       | 10.6°C                      |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |

|              |                                        |           |               |
|--------------|----------------------------------------|-----------|---------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time | 2-26-04 14:37 |
| Printed Name | DAVID F. THOMAS                        |           |               |
| Affiliation  | VCAPO                                  |           |               |
| Signature    | Received By <i>Sam Dutt</i>            | Date/Time | 2/26/04 1437  |
| Printed Name |                                        |           |               |
| Affiliation  |                                        |           |               |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory





Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Grab Toxicity Samples

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District

1 OF 1

SAMPLING DATE: 26-Feb-04

Event #2 (Wet)

SAMPLERS: Dara Wise, David Thomas, Mark Davis, Carla Were

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE ID | DATE/TIME |       | Acute Ceriodaphnia - 6.25, 12.5, 25, 50, 100 % |   |  |  |  |  |  |  |  |  | Chronic Echinodeerm Fertilization - 6.25, 12.5, 25, 50, 100 % |  |  |  |  |  |  | Number of 5 gal buckets | NOTES | Field H <sub>2</sub> O Temp |
|-----------|-----------|-------|------------------------------------------------|---|--|--|--|--|--|--|--|--|---------------------------------------------------------------|--|--|--|--|--|--|-------------------------|-------|-----------------------------|
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
| C         | 2-26-04   | 12:00 | X                                              | X |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       | 11.8° C                     |
| LMC       | "         | 13:00 | X                                              | X |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       | 10.6° C                     |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |
|           |           |       |                                                |   |  |  |  |  |  |  |  |  |                                                               |  |  |  |  |  |  |                         |       |                             |

|              |                                        |           |               |
|--------------|----------------------------------------|-----------|---------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time | 2-26-04 14:00 |
| Printed Name | DAVID F. THOMAS                        |           |               |
| Affiliation  | VCWPD                                  |           |               |
| Signature    | Received By <i>J. Mann</i>             | Date/Time | 2-26-04 14:00 |
| Printed Name | J. MANN                                |           |               |
| Affiliation  | AQUATIC BIOSCIENCE                     |           |               |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1 Bacteria Samples to Ventura County Health Care Agency Lab

un Tie if Tua is >1 for any 2 consecutive wet weather events or 1 dry weather event.

3. Ceriodaphnia range of Dilutions: 6.25% 12.5%, 25%, 50%, 100%



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Bacteriological Examination of Surface Water

CHAIN-OF-CUSTODY RECORD

1 OF 1

CLIENT: Ventura County Watershed Protection District

SAMPLING DATE: 26-Feb-04

Event #2 (Wet)

SAMPLERS: Dara Wise, David Thomas, Mark Davis, Carla Were

SAMPLE INFORMATION FOR GRAB SAMPLES

| LAB USE ONLY | LOCATION | DATE/TIME        | Total Coliform (25 Tube Method - MPNX ) | Fecal Coliform (25 Tube Method - MPNX ) | Enterococcus (Tray Method - WQ IDEXX ) | E-Coli (Tray Method - WQ IDEXX ) | Total Coliform (Tray Method - WQ IDEXX ) | Number of Bottles | NOTES |
|--------------|----------|------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------|------------------------------------------|-------------------|-------|
|              | UMC      | 2-26-04<br>12:00 | X                                       | X                                       | X                                      | X                                | X                                        | 1                 |       |
|              | LMC      | 2-26-04<br>13:00 | X                                       | X                                       | X                                      | X                                | X                                        | 1                 |       |
|              | MCD-1    | 2-26-04<br>13:00 | X                                       | X                                       | X                                      | X                                | X                                        | 1                 |       |
|              |          |                  |                                         |                                         |                                        |                                  |                                          |                   |       |
|              |          |                  |                                         |                                         |                                        |                                  |                                          |                   |       |

|              |                    |              |
|--------------|--------------------|--------------|
| Signature    | Relinquished By    | Date/Time    |
| Printed Name | <i>[Signature]</i> | 2-26-04 1440 |
| Affiliation  |                    |              |
| Signature    | Received By        | Date/Time    |
| Printed Name | <i>[Signature]</i> | 14:40        |
| Affiliation  |                    |              |

Additional Notes (Hazardous Materials, Quick turn-around time, etc.):



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District

Event #3

1 OF 2

SAMPLING DATE: 25-Aug-04

SAMPLERS: David Thomas

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|------------------|----------------------------|-------------------|--------------|----|----------------|------|--|--|--|--|--|-------------------|-------|-----------------------------|
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
| UML              | 8-25-04 09:30              | X                 | X            | X  | X              | X    |  |  |  |  |  | 4/8               |       | 20.4° C                     |
| LMC              | 8-25-04 10:30              | X                 | X            | X  | X              | X    |  |  |  |  |  | 4/8               |       | 22.6° C                     |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |

Signature  
Printed Name  
Affiliation

Relinquished By

DAVID F. THOMAS  
VCWPD

Date/Time

8-25-04 13:00

Signature  
Printed Name  
Affiliation

Received By

INEZ VARGAS  
FGB

Date/Time

8/25/04 13:00

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory



Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):



**Ventura County Watershed Protection District**  
**Matilija Dam Water Quality Monitoring Program**

## Bacteriological Examination of Surface Water

## CHAIN-OF-CUSTODY RECORD

**CLIENT:** Ventura County Watershed Protection District

**SAMPLING DATE:** 25-Aug-04

### Event #3

**SAMPLERS:** David Thomas

### SAMPLE INFORMATION FOR GRAB SAMPLES

[illegible]

Signature \_\_\_\_\_  
 Printed Name \_\_\_\_\_  
 Affiliation \_\_\_\_\_

Relinquished By

DAVID F. THOMAS  
VCWPD

Date/Time

B-25-04 12:30

Signature  
Printed Name  
Affiliation

Received By

y D Benar C

Date/Time

Date/Time 8/25/04 12:30

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District

Event #4

1 OF 2

SAMPLING DATE: 10-5-04

SAMPLERS: D. THOMAS M. DAVIS

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|------------------|----------------------------|-------------------|--------------|----|----------------|------|--|--|--|--|--|-------------------|-------|-----------------------------|
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
| UML              | 10-5-04 08:30              | X                 | X            | X  | X              | X    |  |  |  |  |  | 4                 |       | 18.3°C                      |
| LMC              | 10-5-04 09:30              | X                 | X            | X  | X              | X    |  |  |  |  |  | 4                 |       | 18.4°C                      |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |
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|                  |                            |                   |              |    |                |      |  |  |  |  |  |                   |       |                             |

|              |                                        |               |
|--------------|----------------------------------------|---------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time     |
| Printed Name | DAVID F. THOMAS                        | 10-5-04 11:25 |
| Affiliation  | VCWPD                                  |               |

|              |                                |              |
|--------------|--------------------------------|--------------|
| Signature    | Received By <i>[Signature]</i> | Date/Time    |
| Printed Name |                                | 10/5/04 1125 |
| Affiliation  |                                |              |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

COMPOSITE SAMPLES

CHAIN-OF-CUSTODY RECORD

2 OF 2

CLIENT: Ventura County Watershed Protection District

SAMPLING DATE: 10-5-04 thru 10-6-04 Event #4 (24 - HOUR)

SAMPLERS: D. THOMAS, M. DAVIS

SAMPLE INFORMATION FOR COMPOSITE SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED |                  |                            |                |                 |                 |                 |                 |     |  |  | NOTES |
|------------------|----------------------------|------------------|----------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----|--|--|-------|
|                  |                            | Dissolved Metals | Total Recoverable Metals * | EPA 8270 (625) | EPA 8081 (8080) | EPA 8141 (8140) | EPA 8151 (8150) | Conventional ** | TOC |  |  |       |
| UMC              | 10-6-04 8:30               | X                | X                          | X              | X               | X               | X               | X               | X   |  |  |       |
| LMC              | 10-6-04 9:30               | X                | X                          | X              | X               | X               | X               | X               | X   |  |  |       |
| LMC (MS/MSD)     | 10-6-04 9:30               |                  | X                          | X              | X               | X               | X               |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                 |     |  |  |       |

|              |                                        |               |
|--------------|----------------------------------------|---------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time     |
| Printed Name | DAVID F. THOMAS                        | 10-6-04 11:00 |
| Affiliation  | VCWPD                                  |               |

|              |                                |              |
|--------------|--------------------------------|--------------|
| Signature    | Received By <i>[Signature]</i> | Date/Time    |
| Printed Name |                                | 10-6-04 1100 |
| Affiliation  |                                |              |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

\* Hardness

\*\* Conventional: Bromide, BOD, Chloride, TKN, Nitrite as N, Nitrate as N, Nitrate-Nitrate as N, Orthophosphate,  
Tot and Dis Phosphorus, TDS, TSS



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Grab Toxicity Samples

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District

SAMPLING DATE: 10-5-04

Event #4

SAMPLERS: D. THOMAS M. DAVIS

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE ID | DATE/TIME COLLECTED | Toxicity Tests                                 |                                                              |  |  |  |  |  |  | Number of 5 gal buckets | NOTES | Field H <sub>2</sub> O Temp |
|-----------|---------------------|------------------------------------------------|--------------------------------------------------------------|--|--|--|--|--|--|-------------------------|-------|-----------------------------|
|           |                     | Acute Ceriodaphnia - 6.25, 12.5, 25, 50, 100 % | Chronic Echinoderm Fertilization - 6.25, 12.5, 25, 50, 100 % |  |  |  |  |  |  |                         |       |                             |
| MC        | 10-5-04 08:30       | X                                              | X                                                            |  |  |  |  |  |  | 1                       |       | 18.3°C                      |
| LMC       | 10-5-04 09:30       | X                                              | X                                                            |  |  |  |  |  |  | 1                       |       | 18.4°C                      |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                |                                                              |  |  |  |  |  |  |                         |       |                             |

Signature  
Printed Name  
Affiliation

Relinquished By

*David F. Thomas*  
DAVID F. THOMAS  
VCWPD

Date/Time

10-5-04 10:35

Signature  
Printed Name  
Affiliation

Received By

*Addie Lefors*  
Addie Lefors

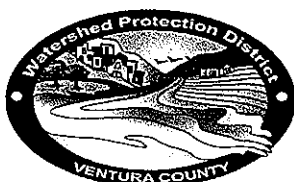
Date/Time

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Bacteria Samples to Ventura County Health Care Agency Lab

Run Tie if T<sub>ua</sub> is >1 for any 2 consecutive wet weather events or 1 dry weather event.

Ceriodaphnia range of Dilutions: 6.25% 12.5%, 25%, 50%, 100%



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Bacteriological Examination of Surface Water

CHAIN-OF-CUSTODY RECORD

AGENT: Ventura County Watershed Protection District

1 OF 1

SAMPLING DATE: \_\_\_\_\_ Event #4

SAMPLERS: \_\_\_\_\_

SAMPLE INFORMATION FOR GRAB SAMPLES

| LAB USE ONLY | LOCATION | DATE/TIME        | Total Coliform (25 Tube Method - MPNX ) | Fecal Coliform (25 Tube Method - MPNX ) | Enterococcus (Tray Method - WQ IDEXX ) | E-Coli (Tray Method - WQ IDEXX ) | Total Coliform (Tray Method - WQ IDEXX ) | Number of Bottles | NOTES |
|--------------|----------|------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------|------------------------------------------|-------------------|-------|
|              | UMC      | 10-5-04<br>08:30 | X                                       | X                                       | X                                      | X                                | X                                        | 1                 |       |
|              | LMC      | 10-5-04<br>09:30 | X                                       | X                                       | X                                      | X                                | X                                        | 1                 |       |
|              |          |                  |                                         |                                         |                                        |                                  |                                          |                   |       |
|              |          |                  |                                         |                                         |                                        |                                  |                                          |                   |       |
|              |          |                  |                                         |                                         |                                        |                                  |                                          |                   |       |

Signature  
Printed Name  
Affiliation

Relinquished By

*David F. Thomas*  
DAVID F. THOMAS  
VCHPD

Date/Time

10-5-04 11:00

Signature  
Printed Name  
Affiliation

Received By

*Patricia J. Barragan*  
PATRICIA J. BARRAGAN

Date/Time

10/5/04 11:00

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942  
SAMPLING DATE: 27-Oct-04 Event #5 (Wet)  
SAMPLERS: \_\_\_\_\_

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE ID | DATE/TIME COLLECTED | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|-----------|---------------------|-------------------|--------------|----|----------------|------|--|--|--|--|-------------------|-------|-----------------------------|
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
| UML       | 10-27-04 13:45      | X                 | X            | X  | X              | X    |  |  |  |  | 4                 |       | 16.4°C                      |
| LMC       | 10-27-04 14:30      | X                 | X            | X  | X              | X    |  |  |  |  | 4                 |       | 15.7°C                      |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|           |                     |                   |              |    |                |      |  |  |  |  |                   |       |                             |

|              |                                        |                |
|--------------|----------------------------------------|----------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time      |
| Printed Name | DAVID F. THOMAS                        | 10-27-04 15:55 |
| Affiliation  | VCWPD                                  |                |
| Signature    | Received By <i>S. Verk</i>             | Date/Time      |
| Printed Name | S. Verk                                | 10/27/04 1555  |
| Affiliation  | PHL                                    |                |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):  
1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory  
2. Bacteria Samples to Ventura County Health Care Agency Laboratory



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

COMPOSITE SAMPLES

411209

CHAIN-OF-CUSTODY RECORD

2 OF 2

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 26-Oct-04 thru 28-Oct-04 Event #5 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR COMPOSITE SAMPLES

| SAMPLE              | DATE/TIME      |                  |                            |                |                 |                 |                 |                  |     |  |  | NOTES |
|---------------------|----------------|------------------|----------------------------|----------------|-----------------|-----------------|-----------------|------------------|-----|--|--|-------|
|                     |                | Dissolved Metals | Total Recoverable Metals * | EPA 8270 (625) | EPA 8081 (8080) | EPA 8141 (8140) | EPA 8151 (8150) | Conventionals ** | TOC |  |  |       |
| ID                  | COLLECTED      |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
| UMC                 | 10-28-04 10:00 | X                | X                          | X              | X               | X               | X               | X                | X   |  |  |       |
| LMC                 | 10:15          | X                | X                          | X              | X               | X               | X               | X                | X   |  |  |       |
| MCB-1 (Field Blank) | 10:30          |                  | X                          |                |                 |                 |                 |                  |     |  |  | LMC   |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                     |                |                  |                            |                |                 |                 |                 |                  |     |  |  |       |

|              |                                        |           |                |
|--------------|----------------------------------------|-----------|----------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time | 10-28-04 13:50 |
| Printed Name | DAVID F. THOMAS                        |           |                |
| Affiliation  | VCWPD                                  |           |                |
| Signature    | Received By <i>S. Heck</i>             | Date/Time | 10/28/04 1350  |
| Printed Name | S. Heck                                |           |                |
| Affiliation  | VCWPD                                  |           |                |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

\* Hardness

\*\* Conventional: Bromide, BOD, Chloride, TKN, Nitrite as N, Nitrate as N, Nitrate-Nitrate as N, Orthophosphate,

Tot and Dis Phosphorus, TDS, TSS



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Grab Toxicity Samples

CHAIN-OF-CUSTODY RECORD

1 OF 1

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 27-Oct-04 Event #5 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE | DATE/TIME      |                                                     |                            |  |  |  |  |  |  |  |                         | NOTES | Field H <sub>2</sub> O Temp |
|--------|----------------|-----------------------------------------------------|----------------------------|--|--|--|--|--|--|--|-------------------------|-------|-----------------------------|
|        |                | Acute Ceriodaphnia dubia- 6.25, 12.5, 25, 50, 100 % | Chronic Ceriodaphnia dubia |  |  |  |  |  |  |  | Number of 5 gal buckets |       |                             |
| ID     | COLLECTED      |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
| UMC    | 10-27-04 13:45 | X                                                   | X                          |  |  |  |  |  |  |  |                         |       | 16.4°C                      |
| UC     | 10-27-04 14:30 | X                                                   | X                          |  |  |  |  |  |  |  |                         |       | 15.7°C                      |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |
|        |                |                                                     |                            |  |  |  |  |  |  |  |                         |       |                             |

Signature \_\_\_\_\_ Relinquished By David F. Thomas Date/Time 10-27-04 15:25  
Printed Name DAVID F. THOMAS  
Affiliation VCWPD

Signature \_\_\_\_\_ Received By Amel Damous Date/Time 10/27/04 1525  
Printed Name Amel Damous  
Affiliation Aquatic Biologists

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Run Tie if Tua or Tuc is >1

Ceriodaphnia range of Dilutions: 6.25% 12.5%, 25%, 50%, 100%



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Bacteriological Examination of Surface Water

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942  
SAMPLING DATE: 27-Oct-04 Evet #5 (Wet)  
SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| LAB USE ONLY                                                            | LOCATION | DATE/TIME         | Total Coliform (25 Tube Method - MPNX) | Fecal Coliform (25 Tube Method - MPNX) | Enterococcus (Tray Method - WQ IDEXX) | E-Coli (Tray Method - WQ IDEXX) | Total Coliform (Tray Method - WQ IDEXX) | Number of Bottles | NOTES             |
|-------------------------------------------------------------------------|----------|-------------------|----------------------------------------|----------------------------------------|---------------------------------------|---------------------------------|-----------------------------------------|-------------------|-------------------|
| 04:W0003966R<br>PW, R UMC<br>ENURMNT\OTHER<br>T. COLIFORM MM0<br>1 EC   | UMC      | 10-27-04<br>13:45 | X                                      | X                                      | X                                     | X                               | X                                       | 1                 |                   |
| 04:W0003967R<br>PW, R LMC<br>ENURMNT\OTHER<br>T. COLIFORM MM0<br>1 EC   | LMC      | 10-27-04<br>14:30 | X                                      | X                                      | X                                     | X                               | X                                       | 1                 |                   |
| 04:W0003968R<br>PW, R MBC-1<br>ENURMNT\OTHER<br>T. COLIFORM MM0<br>1 EC | MBC-1    | 10-27-04<br>14:30 | X                                      | X                                      | X                                     | X                               | X                                       | 1                 | LMC (FIELD BLANK) |
|                                                                         |          |                   |                                        |                                        |                                       |                                 |                                         |                   |                   |
|                                                                         |          |                   |                                        |                                        |                                       |                                 |                                         |                   |                   |

|              |                    |               |
|--------------|--------------------|---------------|
| Signature    | Relinquished By    | Date/Time     |
| Printed Name | <i>[Signature]</i> | 10/27/04 1500 |
| Affiliation  |                    |               |
| Signature    | Received By        | Date/Time     |
| Printed Name | <i>[Signature]</i> | 10/27/04 1530 |
| Affiliation  |                    |               |

Other Notes (Hazardous Materials, Quick turn-around time, etc.):



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942  
SAMPLING DATE: 04-Jan-05 Event #6 (Wet)  
SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|------------------|----------------------------|-------------------|--------------|----|----------------|------|--|--|--|--|-------------------|-------|-----------------------------|
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
| UML              | 1/4/05 10:30               | X                 | X            | X  | X              | X    |  |  |  |  | 4                 |       | 10.8 °C                     |
| LMC              | 1/4/05 11:30               | X                 | X            | X  | X              | X    |  |  |  |  | 4                 |       | 10.3 °C                     |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |

Relinquished By  
Signature: Debi McAlpine  
Printed Name: DEBI MCAIPINE  
Affiliation: VCWPD  
Date/Time: 1/4/05 1330

Received By  
Signature: [Signature]  
Printed Name: INCEVARGAS  
Affiliation: FGP  
Date/Time: 1/4/05 1330

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

COMPOSITE SAMPLES

CHAIN-OF-CUSTODY RECORD

2 OF 2

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 03-Jan-05 thru 05-Jan-05 Event #6 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR COMPOSITE SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED |                  |                            |                |                 |                 |                 |                  |     |  |  | NOTES |
|------------------|----------------------------|------------------|----------------------------|----------------|-----------------|-----------------|-----------------|------------------|-----|--|--|-------|
|                  |                            | Dissolved Metals | Total Recoverable Metals * | EPA 8270 (625) | EPA 8081 (8080) | EPA 8141 (8140) | EPA 8151 (8150) | Conventionals ** | TOC |  |  |       |
| UMC              | 1-5-05 9:30                | X                | X                          | X              | X               | X               | X               | X                | X   |  |  |       |
| UMC (MS/MSD)     | " "                        |                  |                            | X              | X               | X               | X               |                  |     |  |  |       |
| LMC              | 1-5-05 10:30               | X                | X                          | X              | X               | X               | X               | X                | X   |  |  | LMC   |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                  |                            |                  |                            |                |                 |                 |                 |                  |     |  |  |       |

|              |                                        |              |
|--------------|----------------------------------------|--------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time    |
| Printed Name | DAVID F. THOMAS                        | 1-5-05 11:20 |
| Affiliation  | VCWPD                                  |              |

|              |                                  |              |
|--------------|----------------------------------|--------------|
| Signature    | Received By <i>Rachel Harvey</i> | Date/Time    |
| Printed Name | Rachel Harvey                    | 1-5-05 11:20 |
| Affiliation  |                                  |              |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

\* Hardness

\*\* Conventional: Bromide, BOD, Chloride, TKN, Nitrite as N, Nitrate as N, Nitrate-Nitrate as N, Orthophosphate,  
Tot and Dis Phosphorus, TDS, TSS



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Grab Toxicity Samples

CHAIN-OF-CUSTODY RECORD

1 OF 1

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 04-Jan-05

Event #6 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE ID | DATE/TIME COLLECTED | DILUTIONS                                           |                            |  |  |  |  |  |  |  |  | Number of 5 gal buckets | NOTES | Field H <sub>2</sub> O Temp |
|-----------|---------------------|-----------------------------------------------------|----------------------------|--|--|--|--|--|--|--|--|-------------------------|-------|-----------------------------|
|           |                     | Acute Ceriodaphnia dubia- 6.25, 12.5, 25, 50, 100 % | Chronic Ceriodaphnia dubia |  |  |  |  |  |  |  |  |                         |       |                             |
| UMC       | 1/4/05 10:30        | X                                                   | X                          |  |  |  |  |  |  |  |  |                         |       | 10.8 °C                     |
| UMC       | 1/4/05 11:30        | X                                                   | X                          |  |  |  |  |  |  |  |  |                         |       | 10.3 °C                     |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |
|           |                     |                                                     |                            |  |  |  |  |  |  |  |  |                         |       |                             |

|              |                        |              |
|--------------|------------------------|--------------|
| Signature    | Relinquished By        | Date/Time    |
| Printed Name | <i>David F. Thomas</i> | 1-4-05 12:49 |
| Affiliation  | UMC                    |              |
| Signature    | Received By            | Date/Time    |
| Printed Name | <i>Jim Mann</i>        | 1-4-05 1249  |
| Affiliation  | AQUATIC BIOASSAY       |              |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

- 1. Run Tie if T<sub>ua</sub> or T<sub>uc</sub> is >1
- 2. Ceriodaphnia range of Dilutions: 6.25% 12.5%, 25%, 50%, 100%

Other Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

1 OF 2

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 26-Jan-05

Event #7 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE<br><br>ID | DATE/TIME<br><br>COLLECTED | Total Ammonia - N | Conductivity | pH | Oil and Grease | TRPH |  |  |  |  | Number of Bottles | NOTES | Field H <sub>2</sub> O Temp |
|------------------|----------------------------|-------------------|--------------|----|----------------|------|--|--|--|--|-------------------|-------|-----------------------------|
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
| UML              | 1-26-05 09:00              | X                 | X            | X  | X              | X    |  |  |  |  | 4                 |       | 13.5°C                      |
| LMC              | 1-26-05 10:00              | X                 | X            | X  | X              | X    |  |  |  |  | 4                 |       | 13.5°C                      |
| MCD-1 (Lab Dup)  | 1-26-05 10:00              | X                 | X            | X  | X              | X    |  |  |  |  | 4                 | LMC   | 13.5°C                      |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |
|                  |                            |                   |              |    |                |      |  |  |  |  |                   |       |                             |

Signature  
Printed Name  
Affiliation

Relinquished By

*David F. Thomas*  
DAVID F. THOMAS  
VCLWPD

Date/Time

1-26-05 12:05

Signature  
Printed Name  
Affiliation

Received By

*Steve S. Rock*  
Steve S. Rock  
VCLWPD

Date/Time

1-26-05 12:05

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

COMPOSITE SAMPLES

CHAIN-OF-CUSTODY RECORD

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942  
SAMPLING DATE: 26-Jan-05 thru 27-Jan-05 Event #7 (Wet)  
SAMPLERS: \_\_\_\_\_

SAMPLE INFORMATION FOR COMPOSITE SAMPLES

| SAMPLE          | DATE/TIME    |                  |                            |                |                 |                 |                 |                  |     |  |  | NOTES |
|-----------------|--------------|------------------|----------------------------|----------------|-----------------|-----------------|-----------------|------------------|-----|--|--|-------|
|                 |              | Dissolved Metals | Total Recoverable Metals * | EPA 8270 (625) | EPA 8081 (8080) | EPA 8141 (8140) | EPA 8151 (8150) | Conventionals ** | TOC |  |  |       |
| ID              | COLLECTED    |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
| UMC             | 1-27-05 9:15 | X                | X                          | X              | X               | X               | X               | X                | X   |  |  |       |
| UMC (MS/MSD)    | 9:15         |                  |                            | X              | X               | X               | X               |                  |     |  |  |       |
| LMC             | 10:00        | X                | X                          | X              | X               | X               | X               | X                | X   |  |  |       |
| MCD-1 (Lab Dup) | 10:00        | X                | X                          | X              | X               | X               | X               | X                | X   |  |  | LMC   |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |
|                 |              |                  |                            |                |                 |                 |                 |                  |     |  |  |       |

|              |                                        |           |               |
|--------------|----------------------------------------|-----------|---------------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time | 1-27-05 11:15 |
| Printed Name | DAVID F. THOMAS                        |           |               |
| Affiliation  | VCWPD                                  |           |               |
| Signature    | Received By <i>S. Lock</i>             | Date/Time | 1-27-05 11:15 |
| Printed Name | S. Lock                                |           |               |
| Affiliation  | VCWPD                                  |           |               |

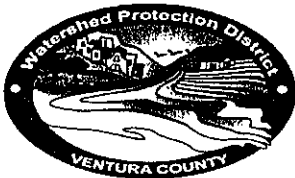
Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

\* Hardness

\*\* Conventional: Bromide, BOD, Chloride, TKN, Nitrite as N, Nitrate as N, Nitrate-Nitrate as N, Orthophosphate,  
Tot and Dis Phosphorus, TDS, TSS

**2. Ceriodaphnia range of Dilutions: 6.25% 12.5%, 25%, 50%, 100%**

**Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):**



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

GRAB SAMPLES

CHAIN-OF-CUSTODY RECORD

1 OF 2

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 11-Feb-05

Event #8 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE<br><br>ID               | DATE/TIME<br><br>COLLECTED | Total Ammonia - N | Conductivity | pH           | Oil and Grease | TRPH         |  |  |  |  | Number of Bottles | NOTES          | Field H <sub>2</sub> O Temp |
|--------------------------------|----------------------------|-------------------|--------------|--------------|----------------|--------------|--|--|--|--|-------------------|----------------|-----------------------------|
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
| UML                            | 2-11-05 08:15              | X                 | X            | X            | X              | X            |  |  |  |  | 4                 |                | 13.1°C                      |
| <del>MCB-1 (Field Blank)</del> | <del>2-11-05 08:15</del>   | <del>X</del>      | <del>X</del> | <del>X</del> | <del>X</del>   | <del>X</del> |  |  |  |  | <del>4</del>      | <del>UMG</del> | <del>13.1°C</del> 13.1°C    |
| LMC                            | 2-11-05 09:00              | X                 | X            | X            | X              | X            |  |  |  |  | 4                 |                | 12.3°C                      |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |
|                                |                            |                   |              |              |                |              |  |  |  |  |                   |                |                             |

|              |                                        |           |
|--------------|----------------------------------------|-----------|
| Signature    | Relinquished By <i>David F. Thomas</i> | Date/Time |
| Printed Name | DAVID F. THOMAS                        | 2-11-05   |
| Affiliation  | VCWPD                                  | 10:55     |
| Signature    | Received By <i>[Signature]</i>         | Date/Time |
| Printed Name | S. Jock                                | 2/11/05   |
| Affiliation  | HAC                                    | 10:55a    |

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):

1. Toxicity Samples to Aquatic Bioassay Consultants Laboratory

2. Bacteria Samples to Ventura County Health Care Agency Laboratory





Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Grab Toxicity Samples

CHAIN-OF-CUSTODY RECORD

1 OF 1

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 11-Feb-05

Event #8 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| SAMPLE | DATE/TIME     |                                                     |                            |  |  |  |  |  |  |   |                         | Field H <sub>2</sub> O Temp |
|--------|---------------|-----------------------------------------------------|----------------------------|--|--|--|--|--|--|---|-------------------------|-----------------------------|
|        |               | Acute Ceriodaphnia dubia- 6.25, 12.5, 25, 50, 100 % | Chronic Ceriodaphnia dubia |  |  |  |  |  |  |   | Number of 5 gal buckets |                             |
| ID     | COLLECTED     |                                                     |                            |  |  |  |  |  |  |   | NOTES                   |                             |
| UMC    | 2-11-05 08:15 | X                                                   | X                          |  |  |  |  |  |  | 1 |                         | 13.1°C                      |
| MC     | 2-11-05 09:00 | X                                                   | X                          |  |  |  |  |  |  | 1 |                         | 12.3°C                      |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |
|        |               |                                                     |                            |  |  |  |  |  |  |   |                         |                             |

Signature \_\_\_\_\_ Relinquished By David F. Thomas Date/Time 2-11-05 10:00  
Printed Name DAVID F. THOMAS  
Affiliation VCWPD

Signature \_\_\_\_\_ Received By Scott Johnson Date/Time \_\_\_\_\_  
Printed Name Scott Johnson  
Affiliation ABC Labs

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.): \_\_\_\_\_

1. Run Tie if Tua or Tuc is >1

2. Ceriodaphnia range of Dilutions: 6.25%, 12.5%, 25%, 50%, 100%



Ventura County Watershed Protection District  
Matilija Dam Water Quality Monitoring Program

Bacteriological Examination of Surface Water

CHAIN-OF-CUSTODY RECORD

1 OF 1

CLIENT: Ventura County Watershed Protection District - Manager: Darla Wise 654-3942

SAMPLING DATE: 11-Feb-05

Event #8 (Wet)

SAMPLERS:

SAMPLE INFORMATION FOR GRAB SAMPLES

| Laboratory:<br>Ventura Co. Public Health<br>2240 E. Gonzales Road<br>Oxnard, CA 93036 |          |                  |                                         |                                         |                                        |                                  |                                          |  |  |  |  |  |  |  |  |                   |                   |  |
|---------------------------------------------------------------------------------------|----------|------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------|------------------------------------------|--|--|--|--|--|--|--|--|-------------------|-------------------|--|
| LAB USE ONLY                                                                          | LOCATION | DATE/TIME        | Total Coliform (25 Tube Method - MPNX ) | Fecal Coliform (25 Tube Method - MPNX ) | Enterococcus (Tray Method - WQ IDEXX ) | E-Coli (Tray Method - WQ IDEXX ) | Total Coliform (Tray Method - WQ IDEXX ) |  |  |  |  |  |  |  |  | Number of Bottles | NOTES             |  |
|                                                                                       | UMC      | 2-11-05<br>08:15 | X                                       | X                                       | X                                      | X                                | X                                        |  |  |  |  |  |  |  |  | 1                 |                   |  |
|                                                                                       | LMC      | 2-11-05<br>09:00 | X                                       | X                                       | X                                      | X                                | X                                        |  |  |  |  |  |  |  |  | 1                 |                   |  |
|                                                                                       | MCB-1    | 2-11-05<br>08:15 | X                                       | X                                       | X                                      | X                                | X                                        |  |  |  |  |  |  |  |  | 1                 | UMC (Field Blank) |  |
|                                                                                       |          |                  |                                         |                                         |                                        |                                  |                                          |  |  |  |  |  |  |  |  |                   |                   |  |
|                                                                                       |          |                  |                                         |                                         |                                        |                                  |                                          |  |  |  |  |  |  |  |  |                   |                   |  |

Signature  
Printed Name  
Affiliation

Relinquished By

*David F. Thomas*  
DAVID F. THOMAS  
VCWPD

Date/Time

2-11-05  
10:30

Signature  
Printed Name  
Affiliation

Received By

*Sally Barragan*  
SALLY BARRAGAN  
P.H.-LMA

Date/Time

Miscellaneous Notes (Hazardous Materials, Quick turn-around time, etc.):



## APPENDIX E – SAMPLING SUMMARIES

# **Matilija Dam Water Quality Monitoring Project**

## **Monitoring Event #1 Dry (Baseline)**

**November 12 - 14, 2003**

**Sampling Duration = 48 Hours**

**Monitoring Dates = 11/12/03 AM to 11/14/03**

Grab Samples by David Thomas, Mark David

Composites by David Thomas

Dry conditions throughout the 48-hour monitoring event.

### **LMC (Lower Matilija Creek) Below Dam**

- Time duration sampling, 180 samples collected over 48 hours, one every 20 minutes, approximately 100 mls per sample for a total volume of 18 liters.
- Program started on 11-12-03 at 11:10 AM
- No flow data available at this site.
- Grab samples collected on 11-13-03 at 9:00 AM, temperature = 13.6 ° C
- No problems during this monitoring event at the Lower Site below the Dam.
- Program Stopped on 11-14-03 at 11:12 AM with 146 samples collected.
- Composite bottle volume collected = approximately 12-13 liters
- Composite bottle pulled and delivered to FGL on 11-14-03 at 13:25

### **UMC (Upper Matilija Creek)**

- Time duration sampling, 180 samples collected over 48 hours, one every 20 minutes, approximately 100 mls per sample for a total volume of 18 liters.
- Program started on 11-12-03 at 12:45 PM
- No flow data available at this site.
- Grab samples collected on 11/13/03 at 10:00 AM, temperature = 16.9 ° C
- No problems during this monitoring event at the upper site.
- Program stopped on 11-14-03 at 12:07 PM with 143 samples collected.
- Composite bottle volume collected = approximately 15-16 liters.
- Composite bottle pulled and delivered to FGL on 11-14-03 at 13:25

# **Matilija Dam Water Quality Monitoring Project**

## **Monitoring Event #2 Wet**

February 25-27 2004

**Sampling Duration = 48 Hours**

Grab Samples by David Thomas, Mark David

Composites by David Thomas

### **LMC (Lower Matilija Creek) Below Dam**

**MCD-1 (Field Dup) Composite volume required = 13.2 L**

- 2/25/04 @ 13:08: 6712 sampler: programmed for time paced sampling, 16 min., 100 mL per sample, 180 samples, start time 2/25/04 @ 13:22, volume looks good. power = 12.37v. weather = rain. dam = no flow.
- 2/26/04 @ 12:41: 6712 sampler: "sample 89 in 00:11:00" bottle =  $\frac{1}{2}$  full.
- grab samples taken 2/26/04 @ 13:00, temperature = 10.6 degrees C. power = 12.32v. weather = cloudy. dam = spilling, misty, wet.
- 2/27/04 @ 12:08: 6712 sampler: "sample 177 in 00:10:00", program stopped, bottle = 95% full. interrogate 6712 sampler, desiccant @ 20% moisture. pull composite 2/27/04 @ 12:30.

### **UMC (Upper Matilija Creek)**

**Composite volume required = 6.6 L**

- 2/25/04 @ 12:50: 6712 sampler: programmed for time paced sampling, 16 min., 100 mL per sample, 180 samples, start time 2/25/04 @ 12:54, volume looks good. power = 12.65v. weather = rain
- 2/26/04 @ 11:55: 6712 sampler: "sample 88 in 00:10:00", power = 12.50v. grab samples 2/26/04 @ 12:00, temperature = 11.8 degrees C, weather = partly cloudy. reference data: high water mark @ +3.0' above rock/intake line conduit.
- 2/27/04 @ 11:37: 6712 sampler: "sample 177 in 00:??:00", program stopped @ 11:34, bottle = 95% full, interrogate 6712 sampler. pull composite 2/27/04 @ 11:45.

# **Matilija Dam Water Quality Monitoring Project**

## **Monitoring Event #3 Dry**

**August 25-27 2004**

**Sampling Duration = 48 Hours**

Grab Samples by David Thomas

Composites by David Thomas

### **LMC (Lower Matilija Creek) Below Dam**

**Composite volume required = 6.6 L**

- 8/24/04 @ 15:25: 6712 sampler: programmed for time paced sampling, 16 min., 100 mL per sample, 180 samples, start time 8/25/04 @ 06:00, Set clock, 12 volt power = 12.33v. Install clean bottle, add ice, Weather = clear, Dam = no flow.
- 8/25/04 @ 10:05: 6712 sampler: "sample 17 in 00:06:00", "Errors have occurred during program" (flashing), bottle = 1/3 full. Grab samples taken @ 10:30, water temperature = 22.6 degrees C. 12 volt power = 12.26v. Weather = clear, hot, Dam = no flow. Re-calibrate sampler (100 mL), pour off to approx. 2 L in bottle (ref.  $18 \times 100 = 1.8$  L). Clean intake of moss/algae.
- 8/25/04 @ 15:10: 6712 sampler: "sample 36 in 00:19:00", volume looks good = approx 4 L, Add ice to composite bottle, 12 volt power = 12.25v.
- 8/26/04 @ 12:00: 6712 sampler: "sample 114 in 00:02:00, 12 volt power = 12.11v, 11.89v under load, change out 12 volt with new one = 12.36v @ 12:15 (ref.: sample 115)  
NOTE: County Fire training on Dam face - (see Photos)
- 8/27/04 @ 10:00 6712 sampler: "Program extended 1 is done", "Warning: replace pump tubing" & "Errors have occurred during program" (flashing) Bottle = full, pull composite, 12 volt power = 12.25v, pull first installed 12 volt battery, pump tubing = 1, 213,821 counts, clean intake line  $\text{NO}_3$  & Dist  $\text{H}_2\text{O}$ . Turn 6712 OFF

NOTE: County Fire training on Reservoir side of Dam today.

### UMC (Upper Matilija Creek)

#### **MCB-1 (Field Blank) Composite volume required = 6.6 L**

- 8/24/04 @ 14:15: 6712 sampler: programmed for time paced sampling, 16 min., 100 mL per sample, 180 samples, start time 8/25/04 @ 06:00, set clock, 100 mL grab sample collected, volume looks good. 12 volt power = 12.23v. Install clean bottle, add ice, Weather = clear
- 8/25/04 @ 09:08: 6712 sampler: "sample 13 in 00:04:00", grab samples 2/25/041 @ 09:30, temperature = 20.4 degrees C, weather = sunny, mild.
- 8/25/04 @14:43: 6712 sampler: "sample 34 in 00:04:30", volume = 3 L, 12 volt power = 12.27v, add ice.
- 8/26/04 @ 10:53: 6712 sampler: "sample 110 in 00:11:00", volume = 2/3 full. Pour off to  $\frac{1}{2}$  full to ensure remaining sample volume will not spill. 12 volt power = 12.27v

NOTE: spoke with local resident (Bill) on VCWPD sampler/sampling activities.

- 8/27/04 @ 09:00: 6712 sampler: "program: extended 1 is done", & "errors have occurred during program" (flashing). Volume - full, pull composite, metals field blank (MCB-1) taken @ 09:00, interrogate 6712 sampler, 12 volt power = 12.28v, clean intake line w/ NO<sub>3</sub> & distilled water, pull first installed 12 volt battery, pump tubing = 799,121 counts, clean intake line NO<sub>3</sub> & Dist H<sub>2</sub>O. Turn 6712 OFF

#### Grab samples:

ABC 8/25/04 @ 12:00

VCPHL 8/25/04 @ 12:30

FGL 8/25/04 @ 13:00

#### Composite samples:

FGL 8/27/04 @ 11:30

# **Matilija Dam Water Quality Monitoring Project**

## **Monitoring Event #4 Dry**

October 5-6, 2004

**Sampling Duration = 24 Hours**

Grab and Composite Samples by David Thomas, Mark Davis

### **LMC (Lower Matilija Creek) Below Dam**

**MS/MSD - Composite volume required = 14.6 L**

- 10/04/04 : 6712 sampler: programmed for time paced sampling, 15 min., 190 mL per sample, 96 samples, start time 10/05/04 @ 06:00. Install new pump tubing, calibrate volume, clean intake line. Install clean bottle, add ice. 12 volt power = 12.65v.
- 10/05/04 @ 09:25: 6712 sampler: "sample 15 in 00:01:00, bottle = 1.5 liters, add ice. Grab samples taken @ 09:30, water temperature = 18.4 degrees C. Weather = clear & warm, Dam = no flow.
- 10/05/04 @ 15:30: 6712 sampler: "sample 42 in 00:10:45", volume looks good, add ice.
- 10/06/04 @ 09:20: 6712 sampler: "program: extended 1 is done", bottle is full, pull composite for analysis, pump tubing = 647,015, 12 volt power = 12.39v, interrogate 6712, clean intake line.

### **UMC (Upper Matilija Creek)**

**Composite volume required = 6.6 L**

- 10/04/04 : 6712 sampler: programmed for time paced sampling, 15 min., 190 mL per sample, 96 samples, start time 10/05/04 @ 06:00. Install new pump tubing, calibrate volume, clean intake line. Install clean bottle, add ice. 12 volt power = 12.80v. Weather = clear & warm
- 10/05/04 @ 08:00: 6712 sampler: "sample 10 in 00:08:25, bottle = 4.5 liters, pour off to 2 liters, check grab volume = 190 mL, add ice. Grab samples taken @ 08:30, water temperature = 18.3 degrees C, Weather = clear & warm.
- 10/05/04 @ 15:00: 6712 sampler: "sample 38 in 00:13:005", volume @ 40-45% full, measure sample 38 = 220 mL, discarded sample. Stop program, reduce volume - 165 mL, restart program: 15 min., 165 mL per sample, 58 samples, start time = no delay. add ice.

- 10/06/04 @ 08:15: 6712 sampler: "program: extended 1 is done", bottle is full, pull composite for analysis, pump tubing = 442, 173, 12 volt power = 12.49v, pull battery, interrogate 6712, clean intake line.

**Grab samples:**

ABC 10/05/04 @ 10:35

VCPHL 10/05/04 @ 11:00

FGL 10/05/04 @ 11:25

**Composite samples:**

FGL 10/06/04 @ 11:00

**Matilija Dam Water Quality Monitoring Project**  
**Event #5 (Wet), October 26-29, 2004 Summary**  
**Sampling Duration = 48 Hours (Forecasted 2 - 4 inches rain)**

(Ref. NPDES Event 2 conducted during Matilija Event 5)

Grab and Composite Samples by David Thomas, Mark Davis

**LMC (Lower Matilija Creek) Below Dam**

**MCB-1 (Field Blanks) Composite volume required = 6.6 L**

- 10/25/04 @ 15:15: 6712: Programmed for time paced sampling, 30 min, 190 mL per sample, 96 samples, start time 10/26/04 @ 12:00 PM (noon). Install new battery = 12.86v, install clean 18.5 L bottle, install new pump tubing, calibrate, clean intake line, ice composite bottle, lid off. Run program
- 10/26/04 @ 16:00: 6712: "Sample 10 in 20:00", volume looks good.
- 10/27/04 @ 14:30: 6712: "Sample 54 in 02:00 ", Pump tubing alarm - 1,200,000, install new pump tubing, reset count = 0, bottle = 2/3 full. Grab samples @ 14:30, Water temperature = 15.7 degrees C. Dam almost spilling, trickles.
- 10/28/04 @ 10:15: 6712: "Sample 94 in 09:00", Stop program, bottle = 7/8 full, pull composite. MCB-1 (Field Blank) @ 10:30.
- Precipitation in this area approximately 1.82 inches (recorded at Matilija Dam rain gage, ID#610).
- Follow-up = none

**UMC (Upper Matilija Creek) Above Dam**

**Composite volume required = 6.6 L**

- 10/25/04 @ 14:00: 6712: Programmed for time paced sampling, 30 min, 190 mL per sample, 96 samples, start time = 10/26/04 @ 12:00 (noon). Install new battery = 12.96v, install clean 18.5 L bottle, install new pump tubing, calibrate, clean intake line, ice composite, lid off. Run program.
- 10/26/04 @ 15:45: 6712: "Sample 9 in 10:00", volume looks good.

### **UMC continued**

- 10/27/04 @ 13:30: 6712: "Sample 53 in 20:00", "Errors have occurred during program", View program= Samples 35 through sample 42' "No more liquid", bottle = full, overflowed = sample volume delivered is greater than 190 mL programmed, pour off sample into two 9.4 L pickle jars labeled UMC#1 and UMC#2. Place pickle jars in cooler, ice down. Re-install empty 18.5 L composite bottle, ice down, adjust volume = 150 mL per sample, resume program. Grab samples @ 13:45, Water temperature = 16.4 degrees C.
- 10/28/04 @ 09:50: 6712: "Sample 93 in 04:00", "Errors have occurred during program", stop program, bottle = full, pull composite bottle @ 10:00. Composite pickle jars UMC#1, UMC#2 and 18.5 L, all three, into one 20 L carboy @ ME-SCR site @ 13:00.
- Follow-up: Investigate possible causes for excessive volumes delivered. Re-calibrate and test calibration volumes delivered.

### **Grab samples:**

ABC 10/27/04 @ 15:55 dft, md

VCPHL 10/27/04 @ 15:00 md

FGL 10/27/04 @ 15:25 dft

### **Composite samples:**

FGL 10/28/04 @ 13:50

## **Matilija Dam Water Quality Monitoring Project Event #6 (Wet), January 3-5, 2005 Summary**

**Sampling Duration = 48 Hours**

**Forecasted rain:** Matilija 01/02/05 = 0.79, 01/03/05 = 0.64

Upper Matilija 01/02/05 = 1.27, 01/03/05 = 0.94

Heavy Rains during Late December 2004 and New Years have caused high stream flows in the watershed. Matilija Dam has been spilling since December 21, 2004.

Grab and Composite Samples by David Thomas, Mark Davis, Debi McAlpine

### **LMC (Lower Matilija Creek) Below Dam**

**Composite volume required = 6.6 L**

- 01/03/05 @ 16:00  
**6712:** Program for time paced sampling, 30 min., 190 mL, 96 samples, intake line disconnected at sampler and out of enclosure due to high flows. Re-connect intake line, calibrate volume, install clean 18 liter bottle, lid off, ice bottle. Start program @ 16:30, sample 1 observed = good.  
**Dam** spilling, flows are high, site very wet.  
**Weather:** overcast
- 01/04/05 @ 11:00:  
**6712:** sample 33 in 05:00, "Errors have occurred in program", bottle is full, pour off 1/2 volume. Calibrate volume = 190 mL.  
**Grab samples @ 11:30** d/s fish ladder. End of intake line and corrugated metal pipe under water. Water temperature = 10.3 degrees C.  
**Dam** spilling, site very wet.
- 01/05/05 @ 10:20:  
**6712:** sample 85 in 15:00, bottle = full,  
**Power:** 12.28v,  
**Pull composite** samples @ 10:30, pump tubing = 896,213. 6712 = off.  
**Dam** spilling, high flows have caused intake line conduit to be disconnected near large rock, Teflon line still in communication with Matilija Creek, site very wet due to dam spilling.
- **Precipitation** in this area approximately No rain, 0.00 inches (recorded at Matilija Dam rain gage, ID#610).
- **Follow-up:** Repair intake line conduit, replace with galvanized pipe.

### UMC (Upper Matilija Creek) Above Dam

(MS/MSD) Composite volume required = 14.6 L

- 01/03/05 @ 12:30:  
**6712:** Replace portable 6712 sampler with new one: s/n 000x00000, old one: s/n 201C00861. Program for time paced sampling, 30 min., 190 mL, 96 samples, calibrate volume attempted, communication with Matilija Creek not good, sand and sediment in intake line. Re-route intake line outside of conduit as intake line is buried in sediment. Calibrate volume = good, install clean 18 L bottle, add ice, start program @ 13:50, volume = good.  
**Weather:** overcast.
- 01/03/05 @ 17:00:  
**6712:** sample 8 in 20 min., volume = good.  
**Weather:** overcast.  
**NOTE:** Strong sulfur odor at site.
- 01/04/05 @ 10:24  
**6712:** sample 43 in 27 min, "Errors have occurred during program", intake line out of communication with creek, water level down 2'. Install stainless steel strainer to weigh down intake line for further level drops. Composite grab 500 mL = good.  
**Grab samples @ 10:30, Water temperature = 10.8 degrees C.**  
**Power:** 12.48v.  
**Weather:** sunny, cool.
- 01/05/05 @ 09:25:  
**6712:** sample 89 in 27 min., "Errors have occurred during program", bottle = 5/8 full, Stop program, pump tubing = 598,782, clock time was off: 11:25 @ 09:25. **NOTE:** Lost Data when time was corrected!  
**Pull composite samples @ 09:30, Clean intake line, pulled intake line and strainer out of water up to the box & conduit connection point.**
- **Follow-up:** Interrogate UMC and LMC samplers. Intake line and conduit repairs at both sites required.

### Grab samples:

ABC 12/04/04 @ 12:49 dft, md

VCPHL 12/04/04 @ 13:39 md

FGL 12/04/04 @ 13:30 dft

### Composite samples:

FGL 12/05/04 @ 11:20

## **Matilija Dam Water Quality Monitoring Project Event #7 (Wet), January 26-27, 2005 Summary**

**Sampling Duration = 24 Hours**

**Forecasted rain:** 01/25/05 05:42:10: Upr Ventura 1.59", Sespe 1.47"

01/26/05 06:05:15: Upr Ventura 1.24", Sespe 1.15"

Heavy Rains during Late December 2004 and January 2005 have caused high stream flows in the watershed. Matilija Dam has been spilling since December 21, 2004.

Grab and Composite Samples by David Thomas, Mark Davis

### **LMC (Lower Matilija Creek) Below Dam**

**Composite volume required = 14.6 L**

- 01/25/05 @ 15:00

**Repairs:** Re-Route intake line and conduit due to storm damages from 01/10/05 storm.

**6712:** Program for time paced sampling, 15 min., 190 mL, 96 samples, Start time: Wed., 01/26/05 @ 00:01, Start program @ 16:30.

**Power:** 12.60v

**Dam** spilling, flows are low, site very wet.

**Weather:** fine

- 01/26/05 @ 09:50:

**6712:** sample 40 in 07:00, bottle = 1/3 full.

**Power:** 12.47v

**Grab samples @ 10:00** d/s fish ladder.

Water temperature = 13.5 degrees C.

**Dam** spilling, site very wet.

**Weather:** cloudy

- 01/26/05 @ 13:50:

**6712:** sample 57 in 07:00, bottle = 1/2.

- 01/27/05 @ 09:30

**6712:** Pull composite bottle @ 10:00, bottle = full

Program stopped 01-26-05 @ 23:47, sample 96

- **Precipitation** in this area approximately 0.12 inches (recorded at Matilija Dam rain gage, ID#610).
- **Follow-up:** none

**UMC (Upper Matilija Creek) Above Dam**

**(MS/MSD) Composite volume required = 14.6 L**

- 01/25/05 @ 12:00  
**Repairs:** Re-Route intake line and conduit due to storm damages from 01/10/05 storm. Install repaired 6712 sampler head s/n 201C00861.  
**6712:** Program for time paced sampling, 15 min., 190 mL, 96 samples, Start time Wed., 01-26-05 @ 00:01.  
**Power:** 12.66v  
**Weather:** Overcast
- 01/26/05 @ 08:54:  
**6712:** sample 37 in 07:00, bottle = 1/3 full.  
**Power:** 12.64v  
**Grab samples @ 09:00.**  
Water temperature = 13.5 degrees C.  
**Weather:** Cloudy, cool.
- 01/26/05 @ 13:16:  
**6712:** sample 54 in 00:30, bottle = 1/2 full.
- 01/27/05 @ 09:10  
**6712:** Pull composite bottle @ 09:15, bottle = full  
Program stopped 01-26-05 @ 23:47, sample 96  
**Power:** 12.64v
- **Precipitation** in this area approximately 0.12 inches (recorded at Matilija Dam rain gage, ID#610).
- **Follow-up:** none

**Grab samples:**

ABC 01/26/05 @ 11:00 dft, md

VCPHL 01/26/05 @ 11:40 dft, md

FGL 01/26/05 @ 12:05 dft, md

**Composite samples:**

FGL 01/27/05 @ 11:15 dft, md, sg

# **Matilija Dam Water Quality Monitoring Project Event #8 (Wet), February 11-13, 2005 Summary**

**Sampling Duration = 48 Hours**

**Forecasted rain: 02/10/05 05:28:07: Upr Matilija 0.40"**

Heavy Rains during Late December 2004 and January 2005 have caused high stream flows in the watershed. Matilija Dam has been spilling since December 21, 2004.

Grab and Composite Samples by David Thomas, Mark Davis

## **LMC (Lower Matilija Creek) Below Dam**

**Composite volume required = 6.8 L**

- 02/10/05 @ 13:50  
**6712:** Program for time paced sampling, 30 min., 190 mL, 96 samples, Start time: Fri., 02/11/05 @ 06:00, Initiated program 02/10/05 @ 14:00.  
Pump tubing: 544,499  
**Power:** 12.64v  
**Dam** spilling, flows are low, site wet.  
**Weather:** cloudy, cool
- 02/11/05 @ 09:00:  
**6712:** sample 7 in 04:00, bottle volume = good.  
**Power:** 12.58v  
**Grab samples** @ 09:00 d/s fish ladder.  
Water temperature = 12.3 degrees C.  
**Dam** spilling, site wet.  
**Weather:** sprinkles
- 02/11/05 @ 12:30:  
**6712:** sample 14 observed, bottle = approx. 2 liters.
- 02/14/05 @ 10:00  
**6712:** Program done. Program completed 02-13-05 @ 05:30, at sample 96.  
Pull composite bottle 02-14-05 @ 10:00, bottle = full
- **Precipitation** in this area approximately 0.43 inches (recorded at Matilija Dam rain gage, ID#610).
- **Follow-up:** Site removal or continuation per Jeff Pratt's direction.

### UMC (Upper Matilija Creek) Above Dam

**MCB-1 (Field Blank) Composite volume required = 6.8 L**

- 02/10/05 @ 12:35  
**6712:** Program for time paced sampling, 30 min., 190 mL, 96 samples, Start time Fri., 02-11-05 @ 06:00, Initiated program 02/10/05 @ 13:05, Pump tubing = 473,184.  
**Power:** 12.64v  
**Weather:** Scattered clouds
- 02/11/05 @ 07:50:  
**6712:** sample 5 in 05:00, bottle volume = good.  
**Power:** 12.584v  
**Grab samples @ 08:15.**  
Water temperature = 13.1 degrees C.  
**Weather:** Sprinkles.
- 02/11/05 @ 12:00:  
**6712:** sample 13 observed, bottle volume = approx. 2 liters.
- 02/14/05 @ 08:30  
**6712:** Program done, Program completed 02-13-05 @ 05:30, at sample 96. Pull composite bottle 02-14-05 @ 08:30, bottle = full, pump tubing = 890,000.
- **Precipitation** in this area approximately 0.43 inches (recorded at Matilija Dam rain gage, ID#610).
- **Follow-up:** Site removal or continuation per Jeff Pratt's direction.

### Grab samples:

ABC 02/11/05 @ 10:00 dft, md

VCPHL 02/11/05 @ 10:30 dft, md

FGL 02/11/05 @ 10:55 dft, md

### Composite samples:

FGL 02/11/05 @ 12:15 dft, md