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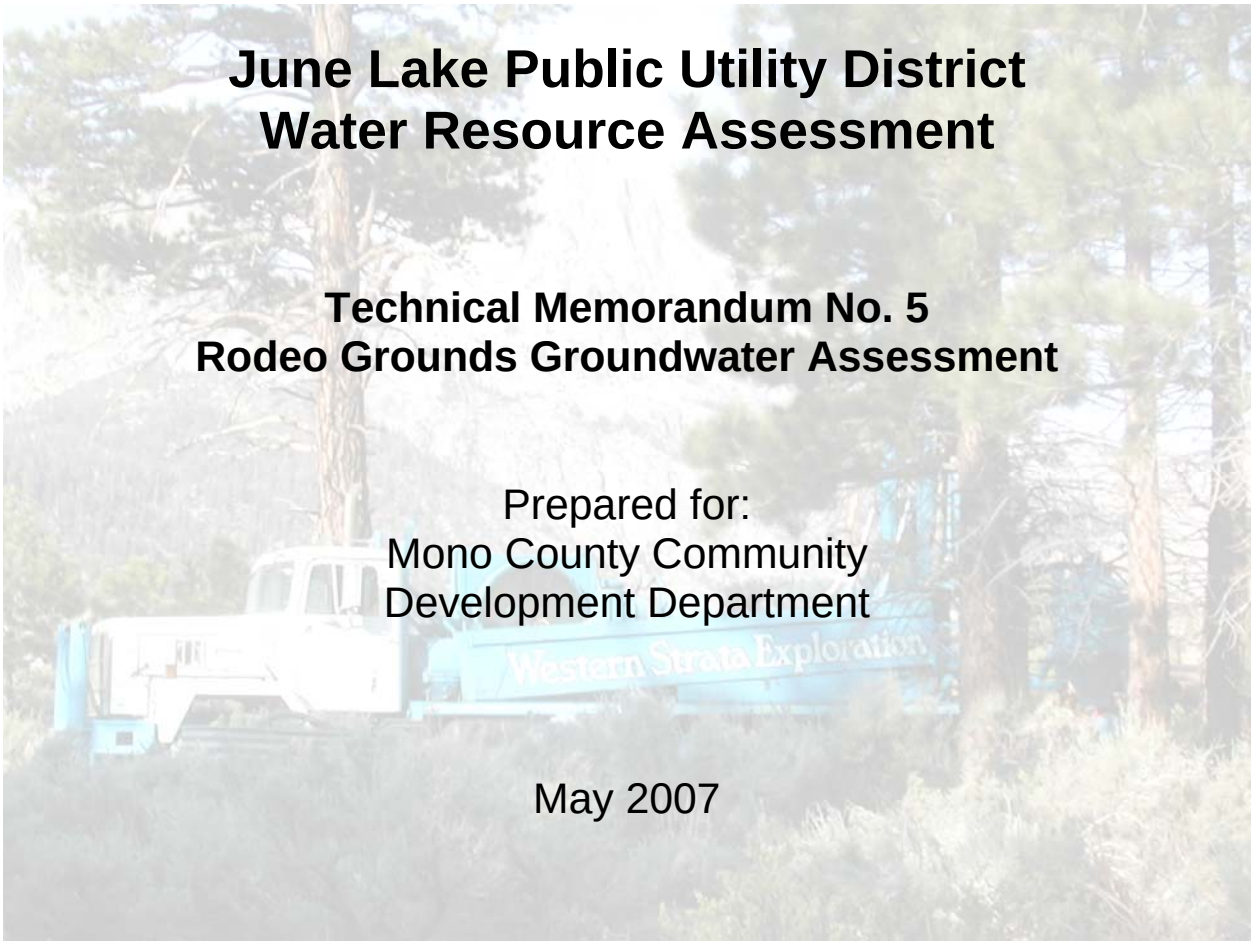

June Lake Public Utility District
Water Resource Assessment

Technical Memorandum No. 5
Rodeo Grounds Groundwater Assessment

Prepared for:
Mono County Community
Development Department

May 2007

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TECHNICAL MEMORANDUM NO. 5

SUBTASK 1 GROUNDWATER ASSESSMENT

PREPARED FOR: Mono County Community Development Department

SUBJECT: Results of exploratory well drilling and test pumping.

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DATE: May 14, 2007

PURPOSE AND SCOPE

The purpose of this subtask is to provide information regarding the groundwater resources potentially available to the proposed Rodeo Grounds development project. It examines the possibility of deriving the water supply for the project from wells on the property. The information contained within this memo is for review and discussion by Mono County Community Development Department (Mono County CDD).

ORGANIZATION OF THIS REPORT

This memo is organized into the following major sections:

- Summary and Conclusions
- Introduction
- Hydrogeologic Setting
- Well Drilling and Construction
- Well Testing
- Groundwater Chemistry
- Groundwater Availability

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1.0 SUMMARY AND CONCLUSIONS

1. Two exploratory wells were drilled on the property by the owner. Drilling was accomplished by air-rotary methods using down-the-hole hammers. The first well (Well 1) was drilled to the target depth of 600 feet. The second well (Well 2) was drilled to a depth of 387 feet. Both wells encountered groundwater in fractured metamorphic rocks. Well 1 derived groundwater from fractures in quartzite. Well 2 penetrated carbonaceous marble with a variable quartz sand content. Groundwater from Well 2 was derived from fractures in the marble. An estimated 175 gallons per minute (gpm) of groundwater was discharged from Well 1 by the time the target depth of 600 feet was achieved. Well 2 discharged more than an estimated 400 gpm by the time a depth of 387 feet was achieved. The large air-lift discharge from Well 2 caused drilling to be terminated before the target depth of 600 feet was reached.

2. Steel well casing with an outside diameter of 6 ⅝ inches was installed to a depth of 220 feet in Well 1 and to a depth of 200 feet in Well 2. The purpose of the casing was to house the test pump and prevent damage to or loss of the pump in the event of a borehole collapse during testing. The casing also enabled installation of sanitary and annular seals in the space surrounding the casing. Cement grout was placed in the annulus surrounding the well casing in each well from the land surface to a depth of 100 feet.

3. The completed exploratory wells were subjected to a series of pumping tests. The testing program included step-drawdown tests followed by 24-hour constant-discharge tests. Well 1 was pumped at rates ranging from 50 to 63 gpm during step testing and at 40 gpm during the constant-discharge test. Well 2 was pumped at rates ranging between 57 and 195 gpm during step testing and at 180 gpm during constant-discharge testing.

4. The aquifer transmissivity (the overall ability of the aquifer to transmit groundwater) of the fractured quartzite aquifer materials penetrated by Well 1 was calculated to be 121 $feet^2$/day (905 gallons per day per foot width of aquifer under a unit hydraulic gradient (gpd/ft)) and the coefficient of storage was estimated to range between approximately 0.03 to 0.05. These values are indicative of an unconfined to semi-confined aquifer with low transmissivity. Although the well penetrated fractured rock, it appeared to be fractured to the point that it responded to the stress of pumping similar to a porous medium.

5. The geologic materials penetrated by Well 2 exhibited a response to pumping that is referred to as “double-porosity” behavior. Double porosity describes fractured-rock aquifers comprised of randomly distributed porous blocks and fractures. Groundwater flow is associated with the fractures and storage is associated with the porous blocks. The transmissivity of the fracture portion of the porous-block-and-fracture aquifer was calculated to be 1,980 $feet^2$/day (14,363 gpd/ft) and the storativity was estimated to be approximately 0.035. These results indicate the carbonaceous marble geologic unit penetrated by Well 2 is significantly more permeable than the quartzite penetrated by Well 1.

6. Samples of the groundwater were collected from each well near the conclusion of the respective 24-hour duration aquifer stress tests. The samples were analyzed for the

chemical and physical characteristics regulated under Title 22 of the California Code of regulations. Overall groundwater quality is good with one notable exception; the concentration of arsenic in the groundwater exceeds the maximum contaminant level of 0.010 milligrams per liter. The concentration of arsenic for groundwater derived from Well 1 was 0.024 mg/l and the concentration of arsenic for groundwater derived from Well 2 was 0.014 mg/l. The water will require treatment to remove arsenic if it is to be used as a source of water supply.

7. A production well completed at the location of Well 2 has the potential to yield 300 gpm on a continual basis for several months and at least 100 gpm on a sustained basis (160 acre-feet per year or 52.56 million gallons per year). A production well completed at the location of Well 1 has the potential to yield 33 gpm on a sustained basis. Although the evidence strongly suggests the water supply for the project can be developed from wells on the property, production wells must be drilled and test pumped for an extended period of time in order to gain a consensus from the California Department of Health Services and Mono County Health Department regarding the yield rating of the subsequent production wells.

8. A spring is located on the property approximately 1,000 feet south-southeast of Well 2. The discharge from the spring was influenced by pumping Well 2 and the spring discharge declined from 12 gpm to 6.5 gpm during the testing of Well 2. Upon conclusion of the pumping test, the spring discharge increased. The spring-flow data collected during testing of the exploratory wells suggest that extended pumping is not expected cause the spring to cease flowing altogether.

9. Physical and isotope geochemical fingerprinting of groundwater (Well 1, Well 2, the ski area well, and the spring), as well as, surface water samples collected from the outlet of Gull Lake and Reversed Creek, provide substantive evidence that groundwater within the project area is not in direct hydraulic communication with Gull Lake, even though lake water elevations are higher than that of groundwater. Additionally, Spring water is isotopically and chemically distinct from Gull Lake and most similar to groundwater assessed at Well 2.

10. The physical and isotope geochemistry, together with the lack of an observation well response in either Well 1 or Well 2 during test pumping, the lack of a response in the spring during Test Well 1 Pumping, and the *observed* response of the spring during Well 2 pumping, indicates horizontal aquifer anisotropy. Accordingly, groundwater flow towards the wells is likely derived from fractures, controlled by geologic structure, with an orientation and preferential groundwater flow (higher transmissivity) roughly parallel to the fold axes and towards the northwest-southeast.

11. Stream water sampled down gradient of Gull Lake and near the Spring indicates that groundwater is locally discharging to Reversed Creek (gaining stream).

2.0 INTRODUCTION

The proposed Rodeo Grounds project is located in Mono County approximately one mile southwest of the community of June Lake, California (Figure 1). The property occupies approximately 90 acres within Section 15, Township 2 South, Range 26 East, M.D.B.&M. near the intersection of the June Lake Loop and North Shore Boulevard (Figure 2).

The June Lake area is situated within the eastern Sierra Nevada. The elevation of the property ranges between approximately 7,500 and 7,800 feet above sea level. The Rodeo Grounds site is characterized by low ridges with moderate slopes. The property is essentially undeveloped.

Groundwater is one possible source of water supply to the project, the other being the June Lake Public Utility District. The owner elected to drill and test pump two exploratory wells on the property to assess the groundwater resources potentially available to the project. Mono County retained ECO:LOGIC Consulting Engineers to provide engineering and hydrogeologic services related to the acquisition of information and data needed to evaluate the groundwater resources potentially available to the project. This work included:

- Assisting with the planning of the drilling and testing program.
- Reviewing the technical specifications for the drilling and testing program.
- Monitoring the drilling and construction of the wells.
- Preparing lithologic logs of the boreholes.
- Orchestrating the pumping tests of the wells.
- Analyzing the test data.
- Assessing the water resources potentially available to the project and the likely performance of production wells.

Western Strata Exploration, Inc. (WESTEX) of Clarksburg, California was engaged by the owner to drill, construct, and test pump the wells.

This report summarizes the drilling, construction and testing of the wells. It provides an evaluation of the test data, documents the chemical quality of the groundwater derived from the wells, and assesses the groundwater resources potentially available to the project. This assessment includes estimates of long-term performance of production wells that might be constructed on the property near the sites of the exploratory wells. Obviously, the long-term performance of any production wells constructed on the property will need to be verified through a comprehensive pumping test program of those wells.

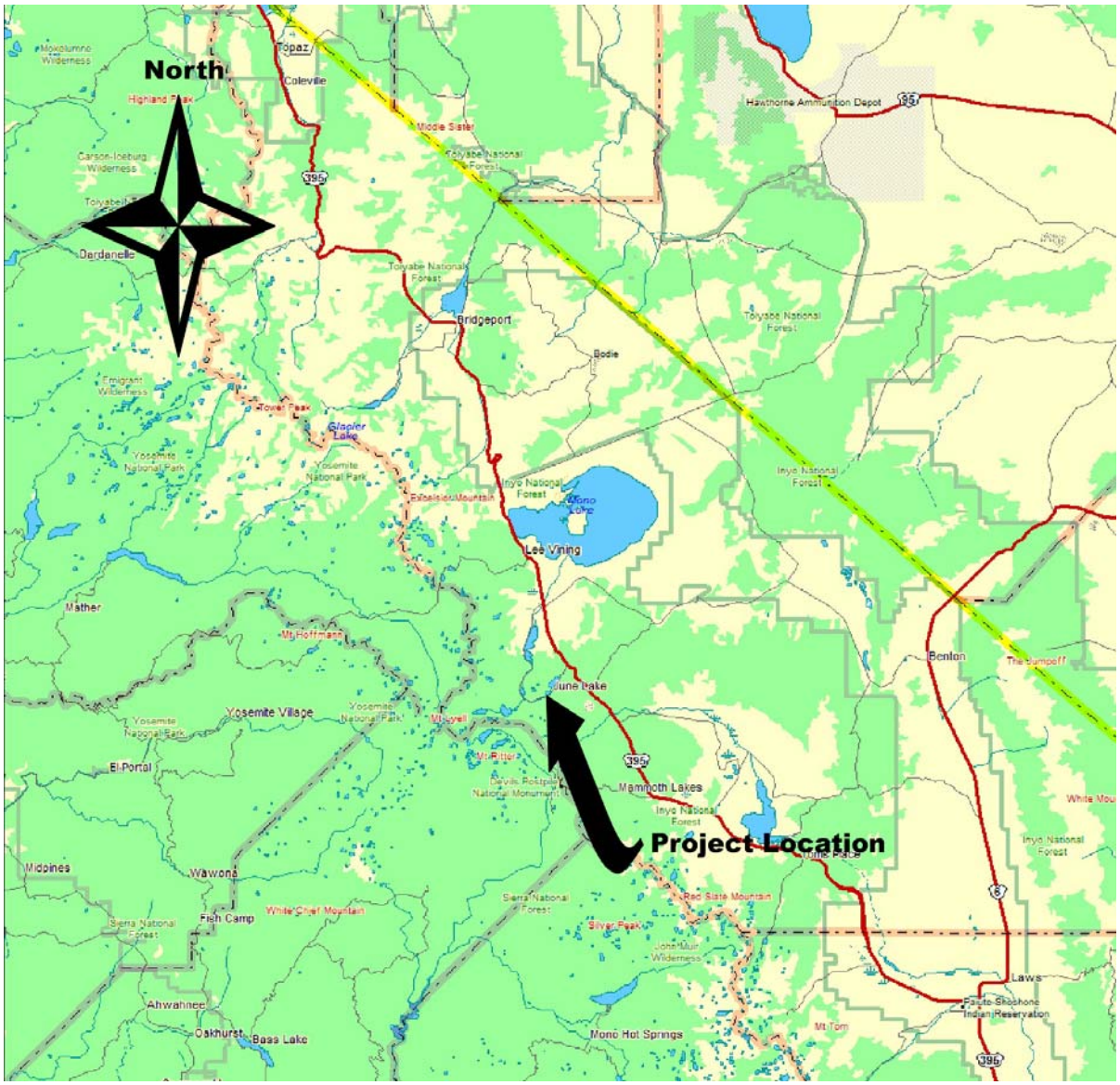

FIGURE 1: LOCATION MAP

FIGURE 2: SITE MAP

3.0 HYDROGEOLOGIC SETTING

The *Geologic Map of the Mono Craters Quadrangle, Mono and Tuolumne Counties, California* (Kistler, 1966) indicates that the geologic materials in the immediate vicinity of the Rodeo Grounds project area are primarily comprised of metamorphosed sedimentary rocks of the Gull Lake roof pendant. The metamorphic rocks formed when igneous rocks intruded Permian and Pennsylvanian-aged sedimentary rocks. On the property itself, the metamorphic rocks are overlain by till of Tioga glaciation (see Figure 3). The metamorphic rocks include quartzofeldspathic hornfels, carbonaceous marble, quartzite and calc-silicate hornfels. Locally, these have been intruded by the diabase of Reversed Creek and the quartz monzonite of Lee Vining.

The metamorphic rocks have been intensely deformed and folded into a northwesterly trending anticline west of the site and a syncline to the east. The anticline plunges to the southeast and the syncline plunges to the northwest. The beds dip steeply at more than 70 degrees. The deformation has resulted in large-scale fracturing and joints are visible where the rocks crop out at the cliffs northwest of the project.

The Rodeo Grounds property lies within the Reversed Creek watershed down-valley and west of Gull Lake, which in turn is west of June Lake. The elevation of Gull Lake is approximately 7,602 feet above sea level and the elevation of June Lake is approximately 7,621 feet above sea level based on the USGS topographic quadrangle (refer to Figure 2).

A developed spring is situated near the southeast corner of the property. Measurements taken during the course of this investigation show the spring discharges approximately 12 gpm.

3.1 Water-bearing Characteristics of the Rocks

Metamorphic and intrusive igneous rocks typically exhibit very little primary porosity and are relatively impermeable. Consequently, they usually do not store or transmit large quantities of groundwater compared to alluvial deposits or certain sedimentary rocks, nor do they typically yield large quantities of groundwater to wells. However, secondary porosity can develop if the rocks have been fractured due to deformation. Where the fractures or joints are interconnected, the rocks may develop significant permeability and yield moderate quantities of groundwater to wells. The metamorphic rocks in this area have been intensely deformed to the point that well-developed joints and fractures have been created. These are visible where the rocks crop out near the project. Fractures and joints can also develop as a consequence of faulting. No faults are mapped within the property boundaries, but the Silver Lake fault is located approximately one and one-half mile west of the property.

Under certain circumstances, solution channels develop in carbonate rocks where fractures and joints have been enlarged by dissolution of the rocks by groundwater flowing through the fractures. As a result, carbonate metamorphic rocks such as marble may exhibit greater permeability than silicate or calc-silicate rocks such as quartzite or hornfels. If so, they may yield more groundwater to wells than the other rocks in the area.

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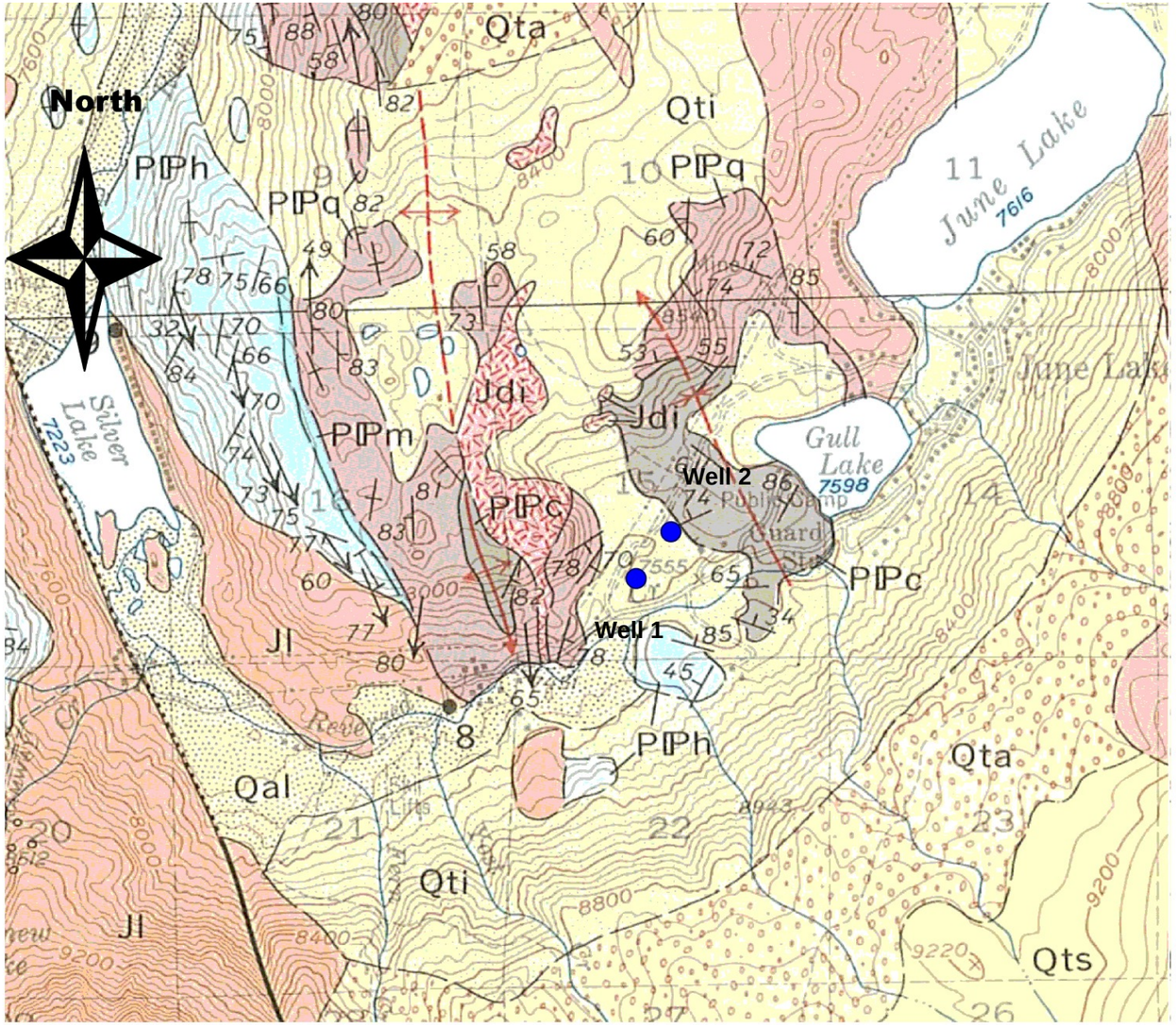


Contact
Dashed where approximately located; dotted where concealed

Fault
Bar and ball on downthrown block; dashed where approximately located; dotted where concealed

Mylonite zone

Anticline
Showing trace of axial plane and direction of plunge of fold axis. Dashed where approximately located

Overturned anticline
Showing trace of axial plane and direction of plunge of fold axis. Dashed where approximately located

Syncline
Showing trace of axial plane and direction of plunge of fold axis. Dashed where approximately located

Strike and dip of beds

Strike and dip of overturned beds

Strike of vertical beds

Strike and dip of foliation

Strike of vertical foliation

Strike and dip of foliation and parallel bedding

Strike and dip of cleavage

Strike and dip of vertical cleavage

Strike and dip of joints

Trend and plunge of small fold or lineation

Specimen locality of granitic rock with modal analysis

Qal | Qsl | Qts | Qt | Qrg | Qm

Surficial deposits
Qal, *alluvium and pumice*
Qsl, *landslide or inactive rock glacier*
Qts, *talus and slopewash*
Qt, *talus*

Qti

Till of the Tioga Glaciation
Dotted lines show moraine crests

Jdr

Diabase of Reversed Creek

Jr

Granodiorite of Rush Creek

Jw

Diorite of Waugh Lake

Jl

Quartz monzonite of Lee Vining Canyon
Pattern indicates autolith zones

Jd

Diorite of Bloody Canyon

PPh

Quartzofeldspathic hornfels

PPm

Carbonaceous marble

PPq

ile-silicate hornfels, quartzite, and quartzofeldspathic hornfels

PPc

Marble and calc-silicate hornfels

FIGURE 3: GEOLOGIC MAP

Information obtained via the drilling of the two test wells on the property indicate that the rocks beneath the site are fractured. Evidence of fractures includes large drill cuttings that exhibit obvious planar surfaces and instances where the formation material sloughed into the borehole causing the drill rods to bind up and chatter loudly. Groundwater present in the rocks was discharged from the boreholes as a consequence of the drilling process and the rate of groundwater discharge increased as more fractures were encountered.

4.0 WELL CONSTRUCTION SUMMARY

Western Strata Exploration, Inc. (WESTEX) of Clarksburg, California was contracted by the owner to drill and test pump two exploratory wells on the Rodeo Grounds property. The wells were drilled using a truck-mounted Ingersol-Rand TH 60 rotary drill. The boreholes were drilled by air-rotary methods using down-the-hole pneumatic hammers. The wells were started with a Centrex™ system that enabled drilling a 10 ¾-inch diameter borehole while advancing 10-inch diameter steel casing. The 10 ¾-inch diameter borehole was drilled through unconsolidated material overlying the bedrock. Once bedrock was encountered, the contractor switched to a conventional 8 ¼-inch diameter hammer. Drilling by the air-rotary method allows for relatively fast drilling rates in consolidated rocks compared to other methods. It also allows for a determination as to where water is encountered and permits estimates of well production to be made from the air-lift discharge from the well as the borehole is advanced.

Composite samples of the formation materials penetrated by the boreholes were collected from the air-lift discharge at least every five feet and logged by the onsite geologist.

Water derived from the boreholes during drilling was contained and dispersed on site via sprinklers so that no water ran off the site during the project. Drill cuttings (primarily chips of the formation material) were dispersed on the land surface at each site.

4.1 Chronology

June 27, 2007	The drill rig was moved on site and set up at the western well site (Well 1). The 10 ¾-inch diameter borehole was drilled and 10-inch diameter drive casing advanced to a depth of 67 feet. Below 67 feet, an 8 ¼-inch diameter borehole was drilled to 107 feet.
June 28	The 8 ¼-inch diameter borehole was advanced to 447 feet.
June 29	The 8 ¼-inch diameter borehole was advanced to the target depth of 600 feet.
June 30	6 ⅝ inch diameter well casing was installed to a depth of 220 feet below the land surface.
July 1	The annular space surrounding the well casing was filled with cement grout and the 10-inch diameter drive casing was extracted. The drill rig was moved to the eastern well site (Well 2). The 10 ¾-inch diameter borehole was drilled and 10-inch diameter casing was advanced to a depth of 27 feet.
July 5	The 8 ¼-inch diameter borehole was drilled to a depth of 150 feet.
July 6	The 8 ¼-inch diameter borehole was advanced to 377 feet.
July 7	The 8 ¼-inch diameter borehole was advanced to 387 feet. Drilling was terminated due to large quantities of groundwater discharged from the well.
July 9	Well 2 was air-lift pumped to clean the borehole and 6 ⅝ inch diameter blank well casing was installed to 200 feet.

July 10	The cement annular seal was installed and the 10-inch diameter drive casing was extracted.
July 11	Test pumps were installed in both wells.
July 12	Data loggers were installed in both wells and the step test of Well 1 was performed.
July 13	The constant-discharge test of Well 1 commenced.
July 14	A water sample was collected. The Well 1 constant-discharge test was terminated and water levels in the well were allowed to recover overnight.
July 15	The step test of Well 2 was performed.
July 16	The constant-discharge test of Well 2 commenced.
July 17	A water sample was collected. The constant-discharge test was terminated and water levels were allowed to recover overnight.
July 18	Recovery data collection was terminated and data loggers were retrieved from the wells.

4.2 Lithology

Well 1

The borehole for Well 1 penetrated glacial outwash comprising a mix of clay, silt, sand, gravel and boulders of granitic, metamorphic and volcanic rocks to a depth of 57 feet below the land surface. Below 57 feet, the borehole penetrated white, grey, green, brown and black quartzite. An abbreviated lithologic log is provided Figure 4. A photograph of the chip trays containing cuttings from Well 1 is provided in Figure 5. The complete lithologic log of the borehole is provided in Appendix A. The quartzite appeared to be fractured on the basis of large (larger than 2 inches in size) drill cuttings with noticeable fracture-plane surfaces. Some of the fracture planes were coated with a soft yellow mineral, possibly limonite.

Well 2

The borehole for Well 2 penetrated glacial outwash to a depth of approximately 17 feet. Grey-colored calcareous quartzite or sandy marble was encountered between 17 and 70 feet below the land surface. No calc-silicate minerals were observed in hand specimen. At a depth of 70 feet, dark grey to black carbonaceous marble was encountered. The carbonaceous marble is presumed to be part of map unit PPc as map unit PPm has not been mapped near the wells. An abbreviated lithologic log for Well 2 is provided Figure 6. A photograph of the chip trays containing cuttings from Well 2 is provided in Figure 7. The marble appeared to be fractured on the basis of large (larger than 2 inches in size) drill cuttings with obvious fracture-plane surfaces. Some of the fracture planes were coated with a soft yellow mineral, possibly limonite.

4.3 Construction Details

The details of well construction for the two Rodeo Grounds exploration wells are summarized in Table 1 and illustrated in Figures 4 and 6.

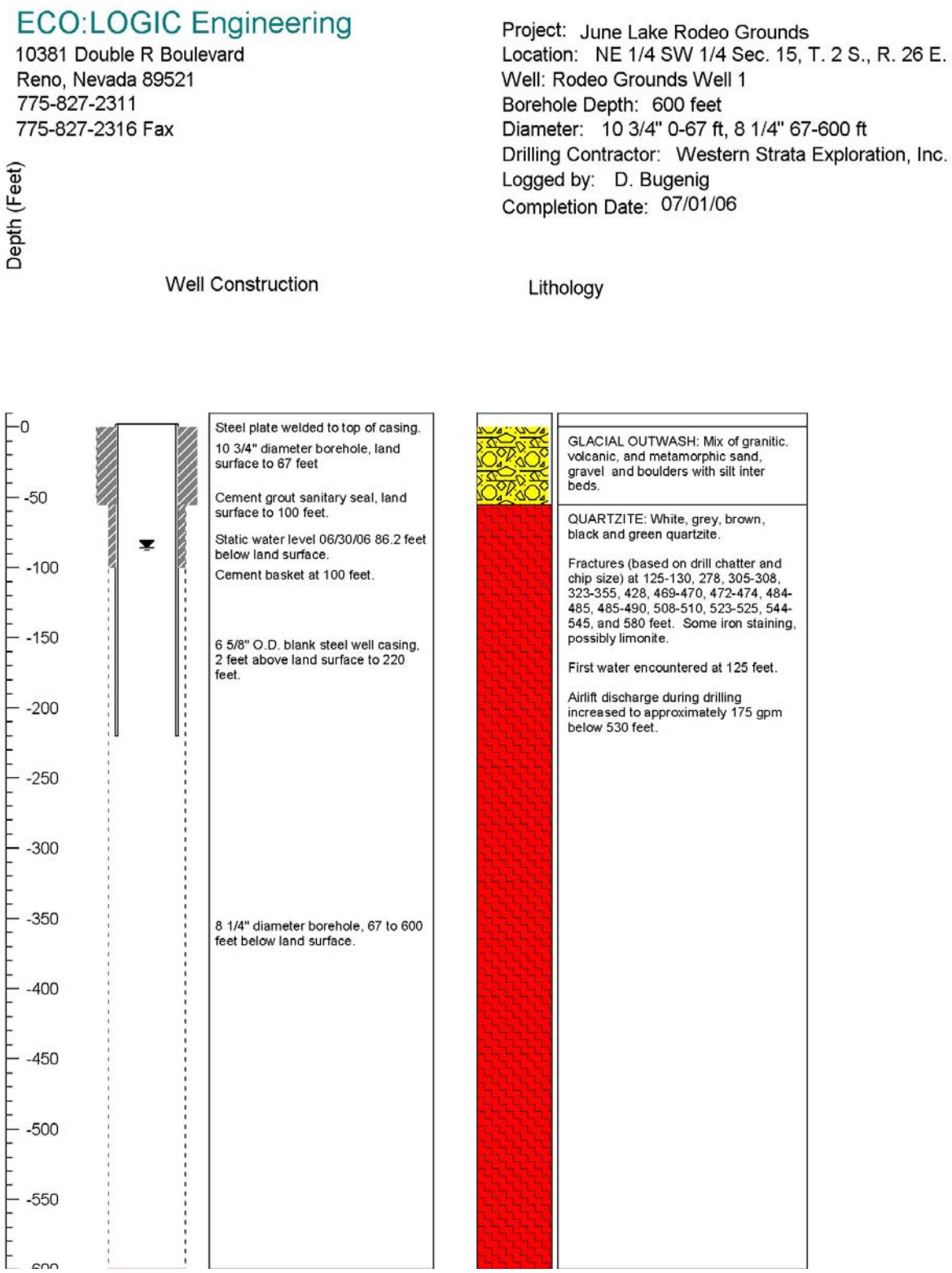


FIGURE 4: RODEO GROUNDS WELL 1 CONSTRUCTION DIAGRAM

FIGURE 5: PHOTOGRAPH OF WELL 1 CHIP TRAYS

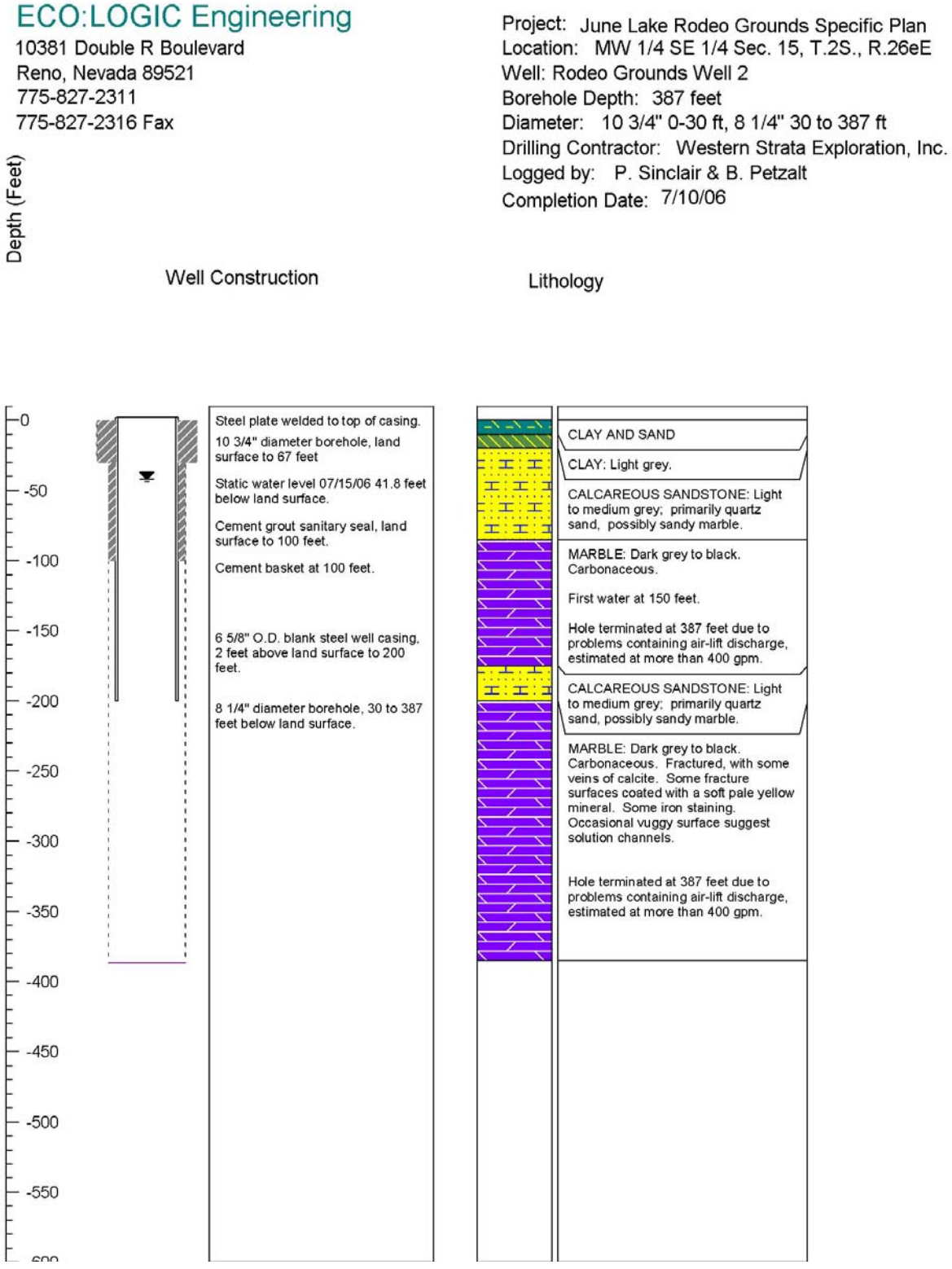


FIGURE 6: RODEO GROUNDS WELL 2 CONSTRUCTION DIAGRAM

FIGURE 7: PHOTOGRAPH OF WELL 2 CHIP TRAYS

TABLE 1: WELL CONSTRUCTION SUMMARY

WELL 1

Depth Interval (feet bgs.)	Description
0 to 67	10 ¾-inch diameter borehole.
67 to 600	8 ¼-inch diameter borehole.
+2 to 220	Blank 6 ⅝-inch outside diameter x 0.188-inch wall thickness blank steel well casing. Below the well casing, the well was completed "open hole."
OTHER	
0 to 67	**Cement grout sanitary seal**. Cement grout pumped via a tremie pipe.
67 to 100	**Cement grout annular seal**. Cement grout pumped via a tremie pipe.
100	**Cement basket.** An external packer surrounding the well casing to prevent cement from migrating down the well bore. Granular bentonite and a small amount of cement grout was placed above the cement basket and allowed to set overnight to ensure the placement of the annular seal.

WELL 2

Depth Interval (feet bgs.)	Description
0 to 27	10 ¾-inch diameter borehole.
27 to 387	8 ¼-inch diameter borehole.
+2 to 200	Blank 6 ⅝-inch outside diameter x 0.188-inch wall thickness blank steel well casing. Below the well casing, the well was completed "open hole."
OTHER	
0 to 27	**Cement grout sanitary seal**. Cement grout pumped via a tremie pipe.
27 to 100	**Cement grout annular seal**. Cement grout pumped to via a tremie pipe.
100	**Cement basket.** An external packer surrounding the well casing to prevent cement from migrating down the well bore. Granular bentonite and a small amount of cement grout was placed above the cement basket and allowed to set overnight to ensure the placement of the annular seal.

4.4 Well Development

The purpose of well development is to remove residual drilling fluids from a well after it has been constructed, reverse formation damage resulting from the well construction process, and enhance the hydraulic conductivity of the aquifer near the borehole/formation interface. Formation damage includes plugging of the formation due to invasion of drilling mud or a buildup of a "wall cake" of drilling mud on the formation/borehole interface. Because the Rodeo Grounds exploration wells were drilled in consolidated rocks by the air-rotary method, the potential for formation damage was minimal. Consequently, only a small amount of time was required for well development. The wells were simply air-lift pumped for a short period until the discharge was free of suspended material.

4.5 Plumbness and Alignment

No deviation surveys were performed of the completed exploratory wells because the plumbness and alignment criteria were very basic. The wells merely needed to be sufficiently plumb and straight to enable the test pumps to be installed to depths of approximately 220 for Well 1 and 200 feet for Well 2. In both cases, the wells were sufficiently straight and plumb for the test pumps and data loggers to be easily installed in the wells to the required depths. Therefore, the criteria were met.

5.0 WELL TESTING

5.1 Equipment

The wells were test pumped using submersible pumps provided by *WESTEX*. The pumps were powered by a portable "whisper quiet" generator also provided by *WESTEX*. The pumps were installed so that the pump intakes were positioned near the bottom of the blank casing: 200 feet bgs for Well 1 and 190 feet bgs for Well 2. Water levels in the wells were monitored with In-Situ MiniTROLL™ data loggers. The pumped well logger was equipped with a 100 p.s.i.g. pressure transducer and the observation well logger was fitted with a 30 p.s.i.g. pressure transducer. After the completion of Well 1 testing, the loggers were exchanged between wells. The data loggers were accessed through a laptop computer. The data logger measurements were periodically verified with manual measurements using an electric water-level sounder. The pumping rates were regulated with a gate valve and measured with an in-line totalizing flow meter. The discharge from the pump was conveyed to a portable tank. From the tank, centrifugal pumps were used to disperse the water on the land surface via sprinklers. Periodic inspection of the sprinkler field indicated no runoff of water from the site during testing.

5.2 Testing Summary

Testing included step and constant-discharge tests. The recovery of water levels in the wells following test pumping was also monitored. The complete set of water-data from both wells for both tests is provided in Figure 8 and provided in Excel© format on a CD-ROM in Appendix B.

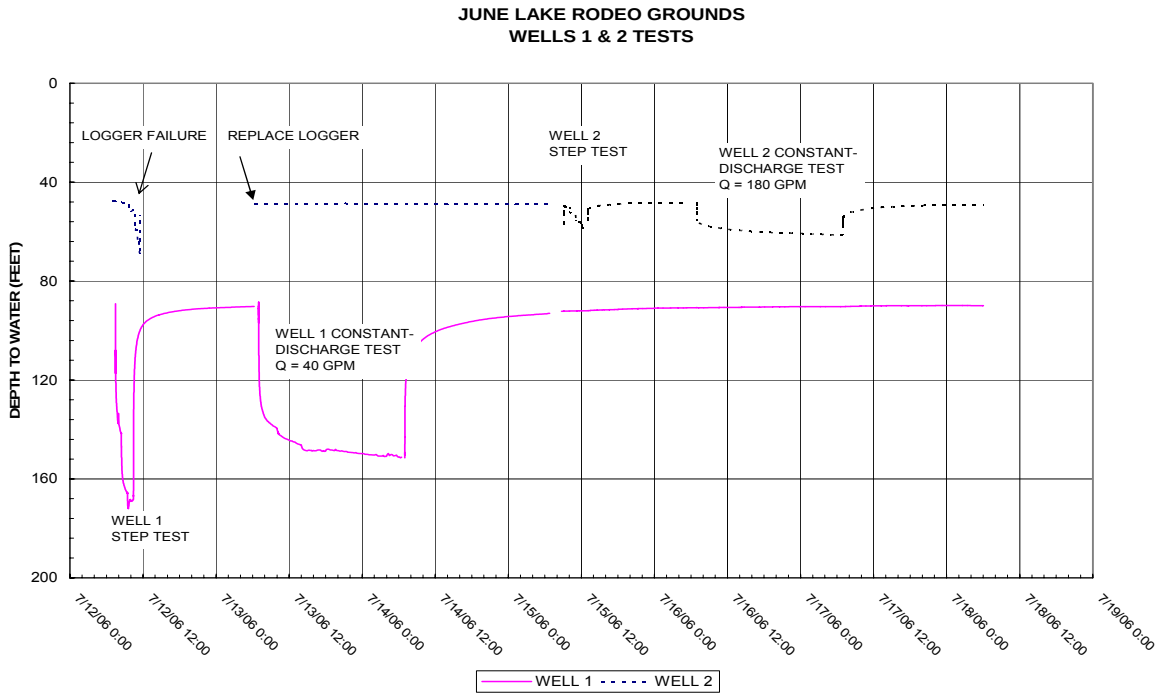


FIGURE 8: WATER LEVEL DATA FOR WELLS 1 & 2

5.2.1 Step-drawdown Testing

Step-drawdown testing entailed pumping the well at progressively higher rates while monitoring the water levels in the pumped well. The purpose of the step test was to evaluate the performance of the well over a range of pumping rates and to assess its overall hydraulic efficiency.

Well 1

The June Lake Rodeo Grounds Well 1 step-drawdown test comprised three steps of one hour each. The results are summarized below in Table 2 and Figure 9. Four steps had been planned, but the generator experienced problems and the test was terminated at the end of the third step.

- Pre-pumping water level: 89.2 feet below the top of the 6" casing (4.0 feet above land surface).
- Pumping commenced: 07:28 hours 7/12/06.
- Discharge rate: 50, 60 and 63 gpm.
- Test duration: 3 hours.

TABLE 2: WELL 1 STEP-DRAWDOWN TEST SUMMARY

Step	Duration, t (minutes)	Discharge, Q (gpm)	Drawdown, s (feet)	Specific Capacity, C_s (gpm/ft)
I	60	50	52.49	0.95
II	60	60	76.55	0.78
III	60	63	79.2	0.80

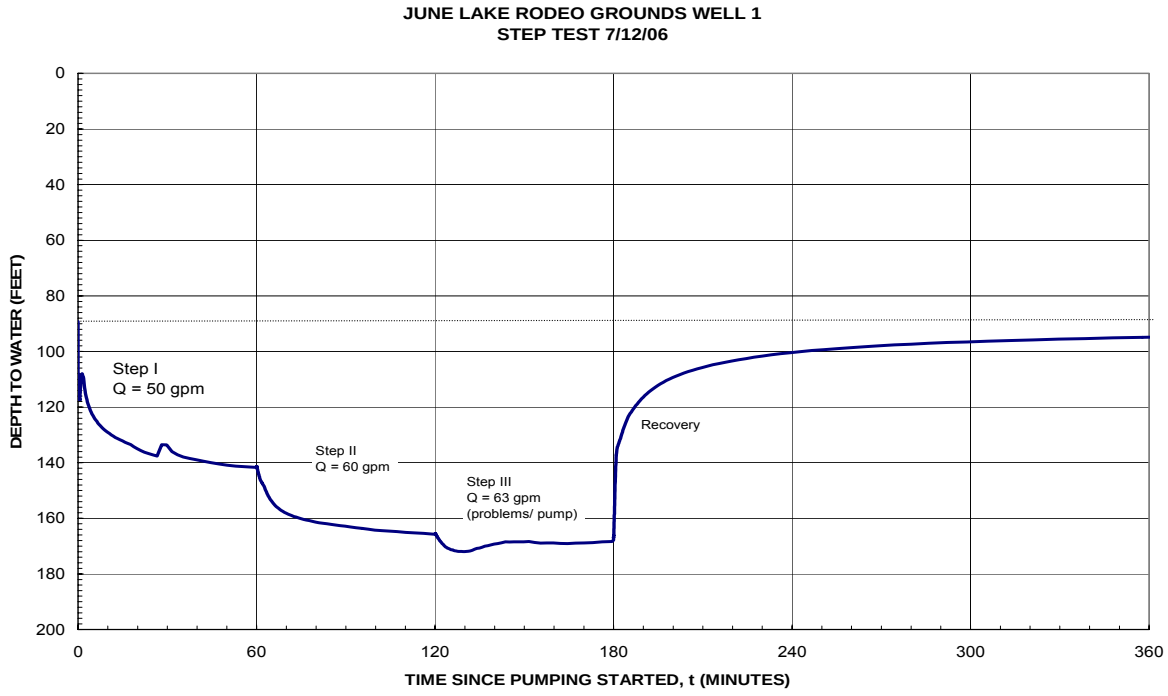


FIGURE 9: WELL 1 STEP-DRAWDOWN TEST WATER LEVEL DATA

Well 2

The June Lake Rodeo Grounds Well 2 step-drawdown test comprised four steps of one hour each. The results are summarized below in Table 3 and Figure 10.

- Pre-pumping water level: 48.2 feet below the top of the 6" casing (2.0 feet above land surface).
- Pumping commenced: 09:00 hours 7/15/06.
- Discharge rate: 57, 107, 165 and 195 gpm.
- Test duration: 4 hours.

Comparison of Tables 2 and 3 and Figures 9 and 10 show a significant difference in the performance of Wells 1 and 2. The performance of Well 2 as measured by specific capacity is more than 20 times that of Well 1. The variation is a result of the different hydrologic properties of the dissimilar geologic materials penetrated by the two wells.

TABLE 3: WELL 2 STEP-DRAWDOWN TEST SUMMARY

Step	Duration, t (minutes)	Discharge, Q (gpm)	Drawdown, s (feet)	Specific Capacity, C_s (gpm/ft)
I	60	57	2.03	28.08
II	60	107	4.72	22.67
III	60	165	8.31	19.98
IV	60	195	10.96	17.79

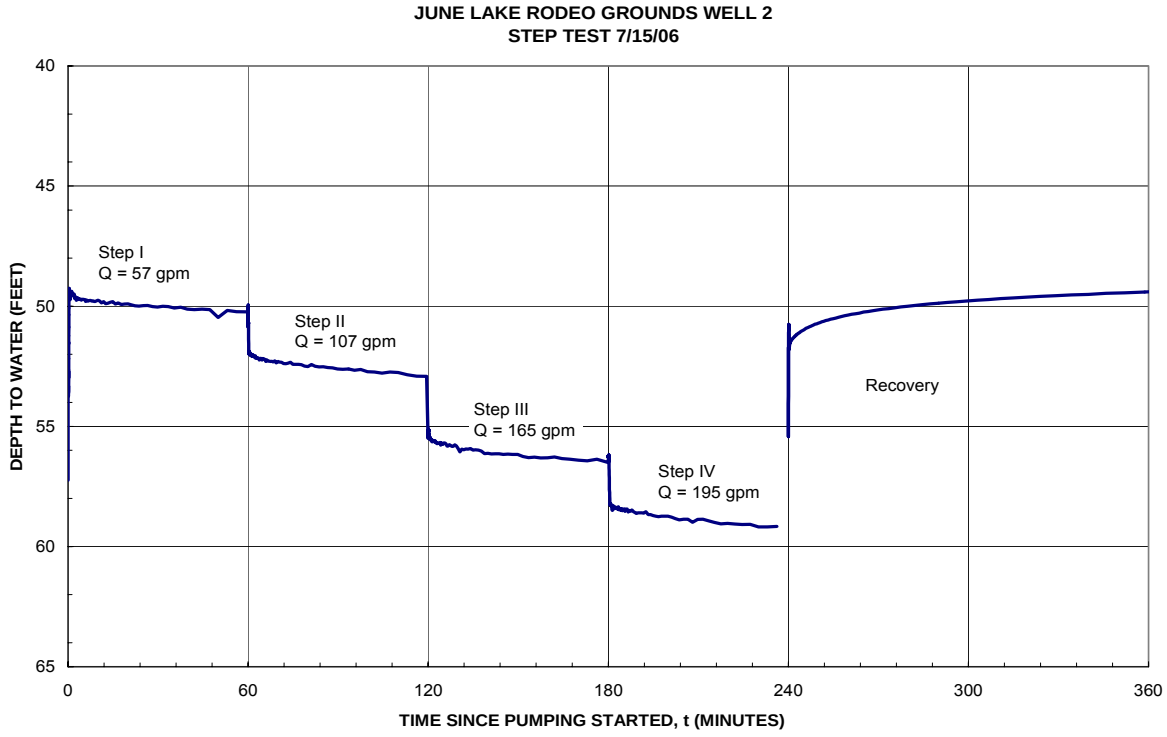


FIGURE 10: WELL 2 STEP-DRAWDOWN TEST WATER LEVEL DATA

5.2.2 Constant-Discharge Testing

The purpose of a constant-discharge test is to evaluate the hydraulic characteristics of the aquifer. These properties have a major influence over the long-term performance of a well. As the name implies, the constant-discharge test entails pumping the well at a uniform rate while monitoring water levels in the well and observation wells, if present. Water levels are also typically monitored for a period after pumping ceases.

Well 1

Water levels were monitored in the pumped well (Well 1) and one observation well (Well 2). The Well 1 constant-discharge test is summarized below:

- Well 1 pre-pumping water level: 90.11 feet below the top of the 6" casing (4 feet above land surface).
- Pumping commenced: 07:00 hours 01/13/06.
- Discharge rate: 40 gpm.
- Test duration: 24 hours.
- Pumping level at the conclusion of the pumping test: 151.27 feet below the measuring point (147.27 feet bgs).
- Drawdown in the pumped well at the conclusion of the pumping test: 61.16 feet.
- No response to the testing of Well 1 was observed in Well 2

The field data plot for the drawdown data is provided in Figure 11. All of the test data are provided in Excel© format on a CD-ROM in Appendix B.

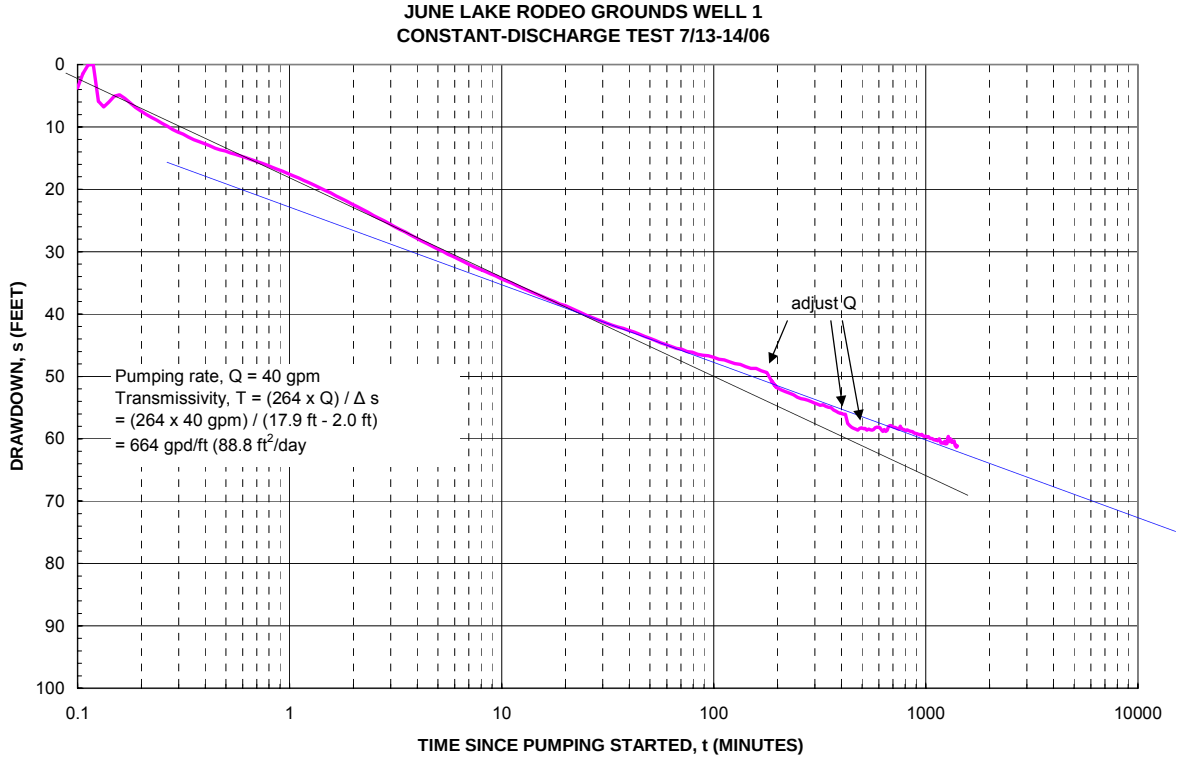


FIGURE 11: WELL 1 CONSTANT-DISCHARGE TEST DATA

Well 2

Water levels were monitored in the pumped well (Well 2) and one observation well (Well 1). The discharge from the nearby spring was also monitored. The Well 2 constant-discharge test is summarized below:

- Well 2 pre-pumping water level: 48.2 feet below the top of the 6" casing (2 feet above land surface).
- Pumping commenced: 07:00 hours 01/13/06.
- Discharge rate: 180 gpm.
- Test duration: 24 hours.
- Pumping level at the conclusion of the pumping test: 61.39 feet below the measuring point (59.39 feet bgs).
- Drawdown in the pumped well at the conclusion of the pumping test: 13.19 feet.
- No response to the testing of Well 2 was observed in Well 1.
- Spring discharge prior to the start of the test: 12 gpm.
- Spring discharge at the end of the test: 6.5 gpm.

The field data plot for the drawdown data is provided in Figure 12. All of the test data are provided in Excel© format on a CD-ROM in Appendix B.

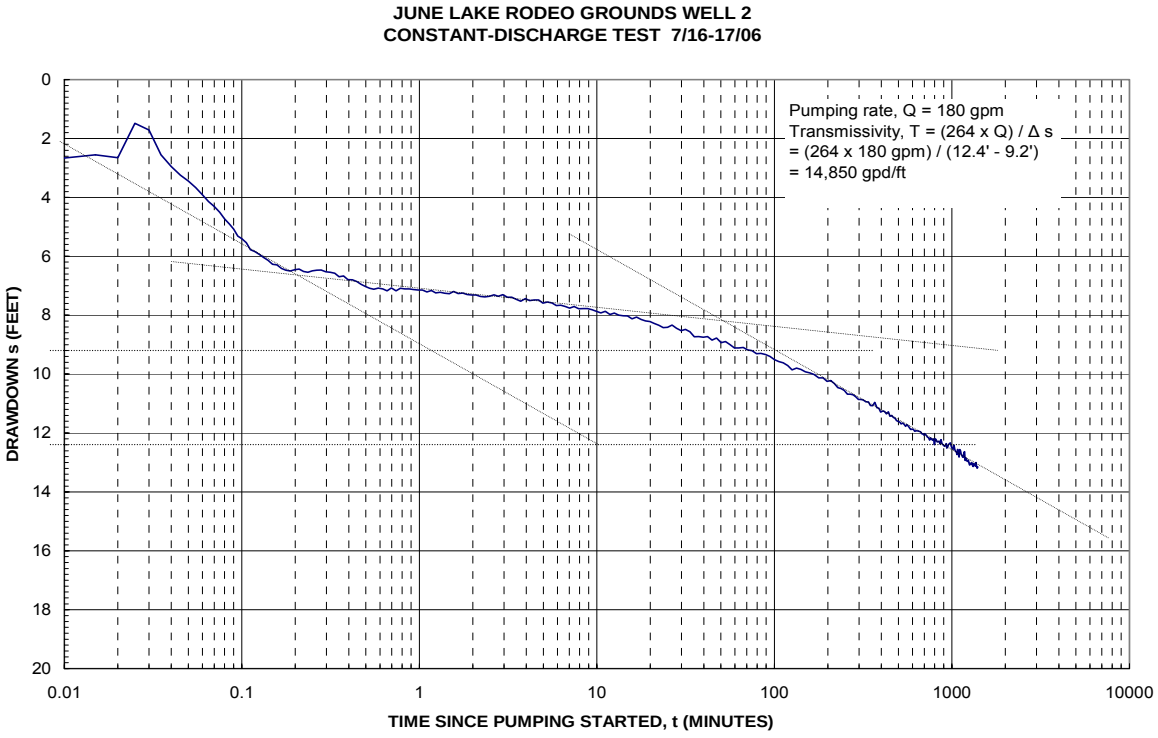


FIGURE 12: WELL 2 CONSTANT-DISCHARGE TEST DATA

5.3 Pumping-Test Data Analysis

Analysis of the test data was accomplished in two phases. The first phase entailed a graphical analysis of the data in the field as testing progressed utilizing classical methods (Driscoll, 1989) based on the Theis equation and its derivatives. The graphical field analyses are depicted in Figures 11 and 12 for Wells 1 and 2, respectively. The Theis equation and its offshoots were derived for wells discharging groundwater from a uniform, isotropic porous medium. Experience shows it can be applied to fractured-rock aquifers that are sufficiently fractured to behave as an equivalent porous medium. The second phase entailed numerical Laplace inversion of the test data using the computer program WHIP (Well Hydraulics Interpretation Package ver. 3.22: Hydro-Geo Chem, Inc., 1988). The program applies the Stehfest algorithm of the Laplace transform inversion to a range of problems pertinent to anlysis of well test data (Moench and Ogata, 1984). The field values for transmissivity were utilized as “seed values” for the numerical analysis.

5.3.1 Step-Drawdown Testing Results

Well 1

The results of analysis of the step-drawdown data are illustrated in Figure 13. These results suggest the presence of wellbore skin and very high turbulent flow losses. The wellbore skin may relate to plugging of fractures by mineral deposits. Drill cuttings showed the presence of mineral coatings on some fracture surfaces and it is possible these deposits may be restricting the flow of groundwater into the well. High turbulent-flow well losses in fractured rocks may relate to high ground-water velocities in very small aperture-width fractures. The simulated drawdown depicted in Figure 13 suggests the well is approximately 85% efficient at 63 gpm.

Well 2

The results of analysis of the step-drawdown data from Well 2 are illustrated in Figure 14. These results suggest the presence of a negative skin factor. A negative skin is normally associated with increased permeability in the vicinity of the well bore. In this case it is possible that the negative skin relates to the enlargement of fractures due to dissolution of the carbonate rocks or additional fracturing of the rocks due to the drilling process.

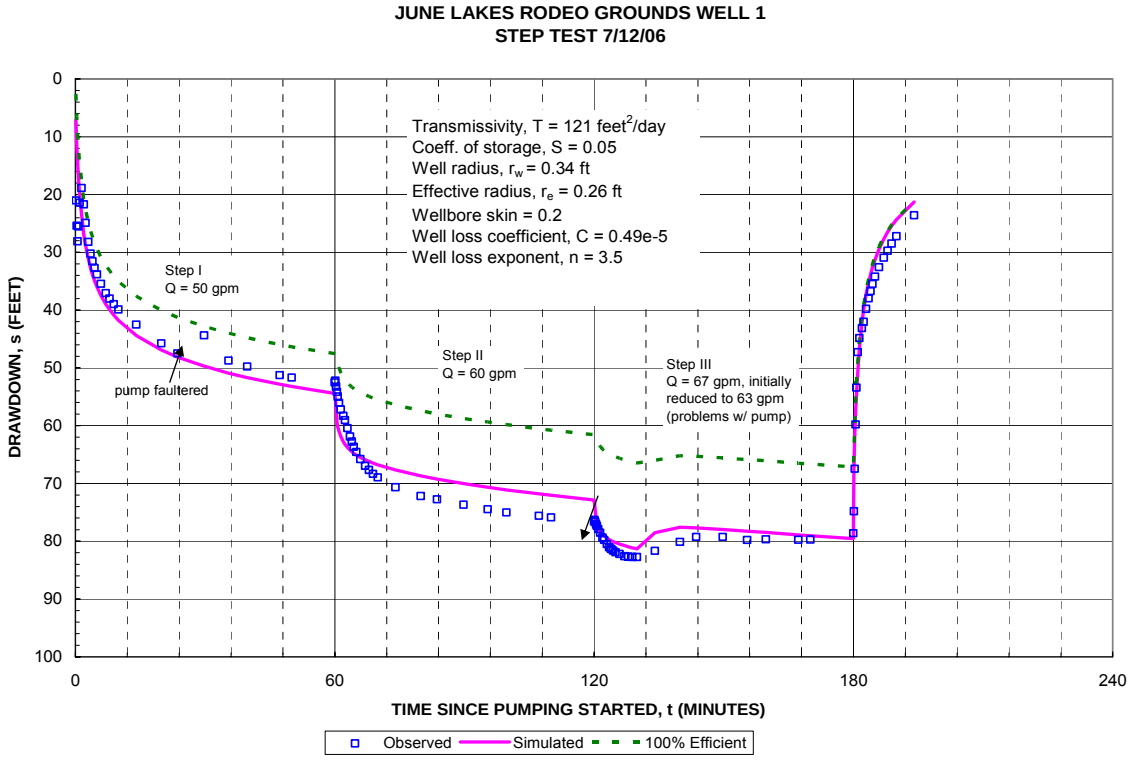


FIGURE 13: WELL 1 STEP-DRAWDOWN TEST ANALYSIS RESULTS

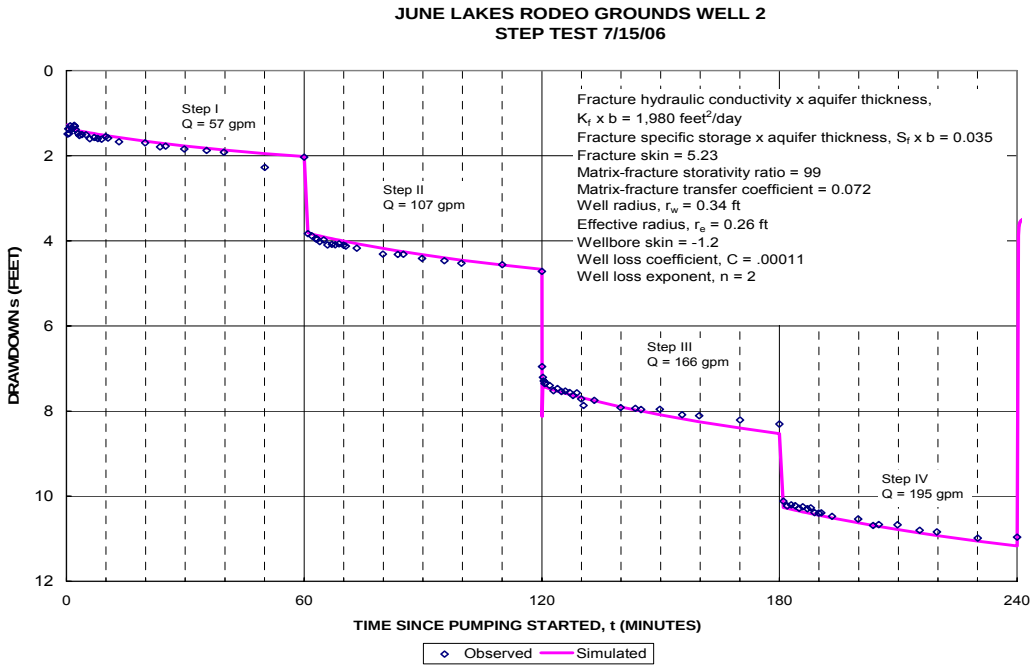


FIGURE 14: WELL 2 STEP-DRAWDOWN TEST ANALYSIS RESULTS

5.3.2 Constant-Discharge Testing Results

Well 1

The field analysis of Well 1 drawdown data illustrated in Figure 11 resulted in a value for transmissivity of 88.8 feet^2/day from early-time data. The value was utilized as an initial estimate of transmissivity for the subsequent numerical analysis. Results of the numerical analysis are:

Transmissivity: 121 feet^2/day (905 gallons per day per foot width of aquifer under a unit hydraulic gradient.

Coefficient of storage: 0.021 (dimensionless)

Well radius, r_w = 0.34 feet

Well effective radius, r_e = 0.26 feet

Wellbore skin = 0.2

Well loss coefficient, C = 0.49e-5

Well loss coefficient, n = 3.5

Note that the observation well (Well 2) did not respond to pumping of Well 1. Consequently, storage coefficient could not be solved directly and was estimated using a method of successive approximations.

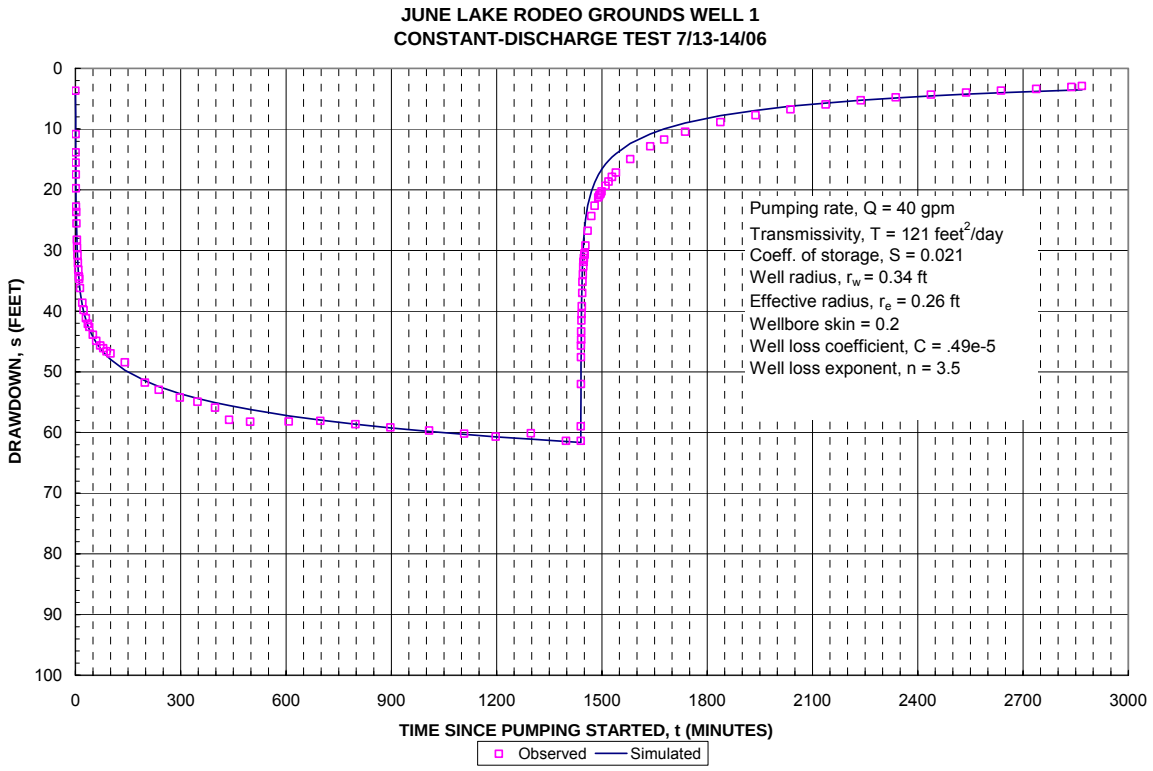
Observed and simulated drawdown for Well 1 are compared in Figure 15. A correlation coefficient of 0.99 suggests the simulated drawdown matches the observed drawdown reasonably well so there is a high level of confidence in the results.

Well 2

A plot of drawdown versus logarithm of time for an idealized aquifer generates a straight line. The field data plot for the Well 2 test (Figure 12) produces a line that can be broken down into three segments, which suggests the nature of the aquifer differs from the idealized aquifer described by the Theis equation. The shape of the drawdown plot suggests a characteristic of many fractured rock aquifers referred to as “double porosity.” Because it is not as common as the response observed in porous media, a discussion of double porosity is warranted. The discussion below is an excerpt from Walton [1991].

> “Flow behavior in fractured rock aquifers differs from that in uniformly porous aquifers such as sand and gravel deposits. Fractured rock aquifers possess, in addition to void spaces between mineral grains of rock and vesicular openings, fissures (cracks, crevices, joints, etc.) which make the pattern of porosity and hydraulic conductivity complex (Streltsova, 1988, pp. 357-364).
>
> In the double-porosity model, flow in a fractured rock aquifer is due almost entirely to the presence of fissures, while porosity and therefore storativity is mainly associated with the porous blocks. Fissures have an immediate elastic response to a sudden change in water levels, while porous blocks have an induced subsequent elastic response. Commonly, the actual

irregular network of interconnected blocks and fissures is simulated by a regular network of interconnected horizontal block and fissure units. Due to



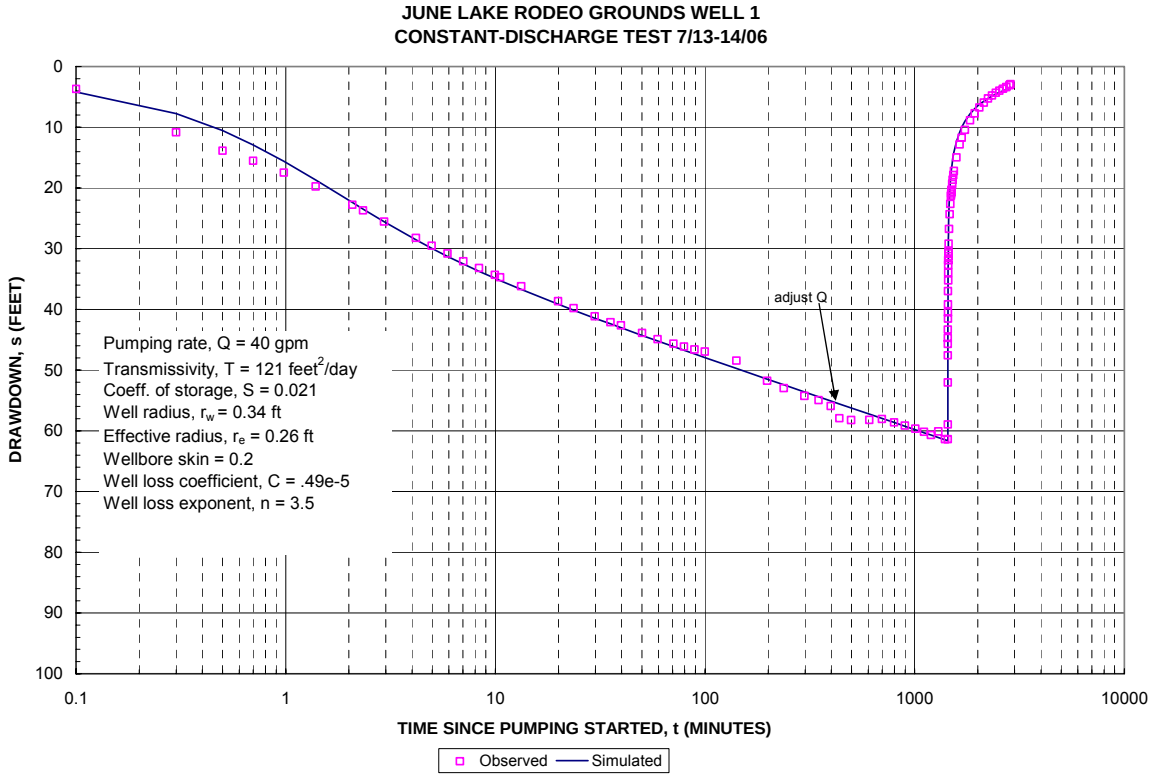


FIGURE 15: WELL 1 CONSTANT-DISCHARGE TEST ANALYSIS RESULTS

vertical symmetry, the fractured rock aquifer may be further simplified to [a] two layered model. The block unit has a thickness equal to the average thickness of the individual blocks in the actual fractured rock aquifer and the fissure has a thickness equal to the average thickness of the fissures in the actual fractured rock aquifer. Both the block and fissure average thicknesses and hydraulic characteristics are assumed to be constant in space.

Three time-drawdown segments in fractured rock aquifers have been identified. The first segment, representing the response of fractures to pumping, exists only at very early times and is often masked by wellbore storage impacts. The effective storativity during the first segment is the storativity of the fissure. The second segment represents the period during which the cone of depression slows in its rate of expansion (a quasi-steady state) as water stored in blocks reaches fractures. Block contribution is delayed because of low hydraulic conductivity. The third segment, approached asymptotically, represents the combined response of fractures and blocks to pumping as the cone of depression continues to expand. The effective storativity during the third segment is the fissure storativity plus the block storativity."

The field analysis provided in Figure 12 yielded a value for transmissivity of 1,985 feet^2/day from late-time data found in the third line segment. Subsequent numerical analysis of the Well 2 drawdown and recovery data yielded:

Fracture hydraulic conductivity x aquifer thickness, K_f x b = 1,980 feet^2/day

Fracture specific storage x aquifer thickness, S_f x b = 0.035

Fracture skin = 5

Matrix-fracture storativity ratio = 99

Matrix-fracture transfer coefficient = 0.044

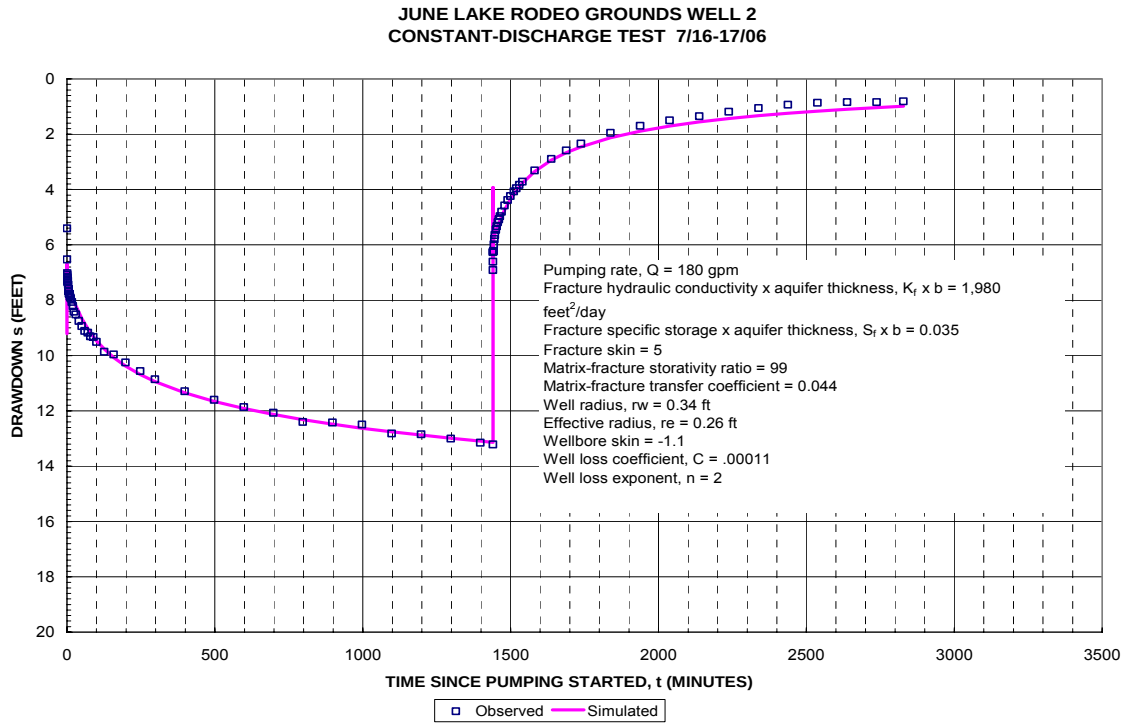
Well radius, r_w = 0.34 ft

Effective radius, r_e = 0.26 ft

Well loss exponent, n = 2

Note that no response to the pumping of Well 1 was observed in the data for Well 2. Consequently, storage coefficient could not be solved directly. Consequently, storage coefficient was estimated by a method of successive approximations.

Observed and simulated drawdown for Well 2 are compared in Figure 16. A correlation coefficient of 0.97 suggests the simulated drawdown matches the observed drawdown very well providing a high level of confidence in the aquifer properties.



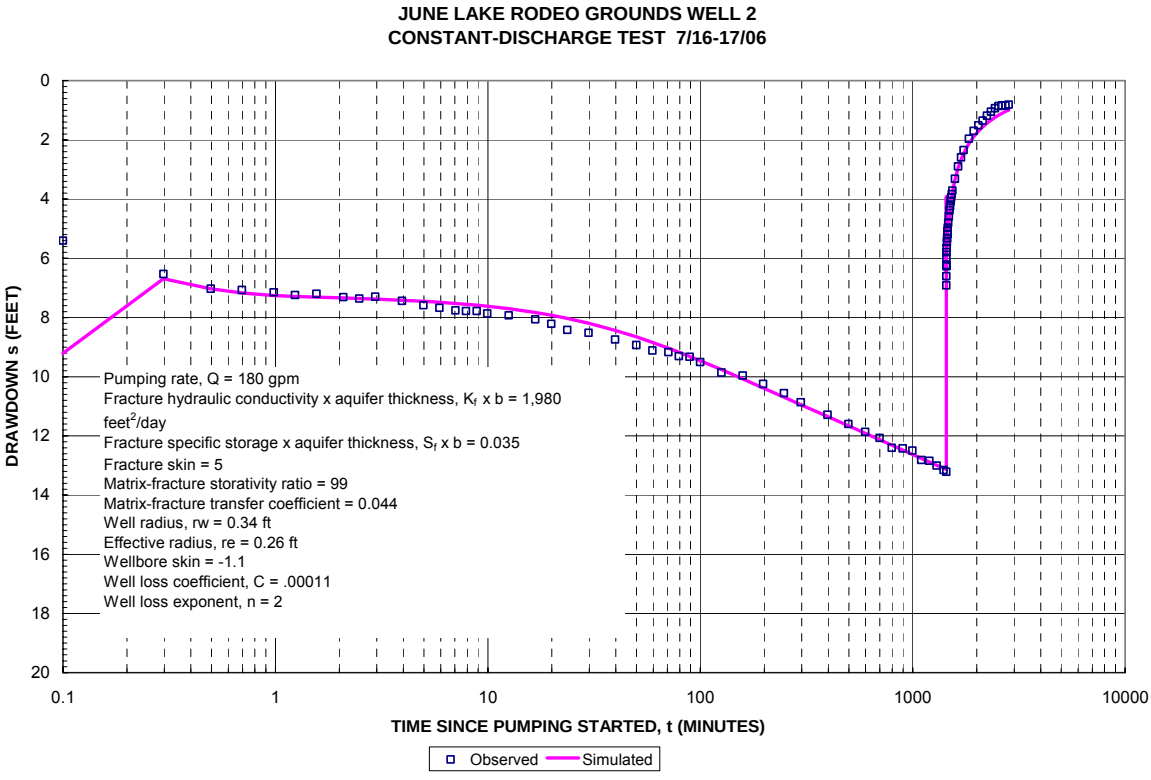


FIGURE 16: WELL 2 CONSTANT-DISCHARGE TEST ANALYSIS RESULTS

5.3.3 Discussion of Constant-Discharge Testing Results

In the vicinity of the Rodeo Grounds project, groundwater is present in fractures within metamorphic rocks. The occurrence and movement of groundwater in fractured-rock aquifers are inherently more complex than alluvial aquifers. The pumping tests conducted in the two exploration wells yielded results that allowed the observed changes in water level during testing to be simulated with a good level of confidence so that the calculated values for transmissivity are within the realm of possibilities. The test results indicate that the carbonate rocks penetrated by Well 2 are more transmissive than the quartzite penetrated by Well 1. Dissolution of the carbonate rocks along fractures in the marble may be responsible for the higher values for transmissivity compared to the quartzite.

The values for coefficient of storage should be viewed as estimates because storage coefficient can only be rigorously calculated from observation well data. No response was observed in the observation wells during either test, so storativity was estimated from the pumped well data using a method of successive approximations. The values of storage coefficient, however, are consistent with the lack of observation well response. In other words, the wells are close enough that a relatively large storage coefficient is one way to explain why pumping one well did not influence water levels in the other well. Alternatively, there may be some type of barrier boundary between the marble and the quartzite.

Alternatively, the lack of an observation well response for either test coupled with a response observed in a nearby spring during the Well 2 test may be indicative of horizontal anisotropy in the rocks in this area. That is, transmissivity is not uniform and is higher in one direction than it is in the other. For the Rodeo Grounds area, the major transmissivity tensor would be expected to be oriented roughly parallel the the axis of the folds because deformation, in this case folding, often causes fractures parallel to the axis of the fold (Compton, 1962). The axes of the anticline and syncline trend in a northwesterly direction, so that the transmissivity in a northwesterly-southeasterly direction may be greater than the transmissibity in an east-west direction. Consequently, the cone of depression that develops as a consequence of pumping a well would be expected to be elongated in a northwesterly-southeasterly direction. Conversely, the minor transmissivity tensor would be expected to be oriented in a roughly east-west direction, so that drawdown would be small to the east and west. This may explain why the spring south of Well 2 responded to pumping Well 2 and not pumping of Well 1.

6.0 WATER QUALITY

Water samples were collected from each exploration well's discharge near the conclusion of their respective pumping tests and submitted for analysis to Sierra Environmental Monitoring (SEM), of Reno, Nevada, a State of California certified laboratory. The samples were analyzed for physical characteristics and chemical constituents regulated under Title 22 of the California Code of Regulations (CCR) to determine the quality of the groundwater and to quantify the concentration of specific components of the groundwater. Additional analyses were performed for unregulated constituents in order to fully characterize the waters. The results of the chemical analysis are summarized in Table 4. The complete laboratory report is provided in Appendix C.

TABLE 4: EXPLORATION WELL WATER CHEMISTRY DATA SUMMARY

Analyte	Concentration (mg/l unless noted otherwise)		MCL (mg/l unless noted otherwise)
Source	Well 1	Well 2	
Date	07/14/06	07/17/06	
Time	05:30	05:30	
Temperature (°F)	49	52	
pH, lab (Std. Units)	7.57	8.05	6.5-8.5 (2)
Total Dissolved Solids	130	160	500/1,000(2)
Electrical Conductivity (µmhos/cm)	130	160	900/1,600(2)
Color (color units)	<5	<5	15(2)
Turbidity (ntu)	0.2	0.7	5(2)
Odor (ton)	0	0	3.0(2))
Major Cations			
Calcium	19	30	
Magnesium	2.8	2.4	125/150(2)
Sodium	6.2	6.8	
Potassium	2.5	1.9	
Major Anions			
Alkalinity (mg/L as $CaCO_3$)	63	91	
Sulfate	10	8.7	250/500(2)
Chloride	1.5	1.6	250/500(2)
Fluoride	0.3	0.4	2.0 (1)
Cyanide	<0.003	<0.005	0.2(1)
Nitrate	<0.5	<0.5	10 as (N) (1)
Nitrite	<0.5	<0.5	1 as (N) (1)
Metals			
Aluminum	<0.05	<0.05	1(1) 0.2(2)
Antimony	<0.001	<0.002	0.006(1)
Arsenic	0.024	0.014	0.010(1)
Barium	0.001	0.002	1(1)
Beryllium	<0.001	<0.001	0.004(1)
Cadmium	<0.001	<0.001	0.005(1)
Chromium	<0.001	<0.001	0.05(1)

Analyte	Concentration (mg/l unless noted otherwise)		MCL (mg/l unless noted otherwise)
Copper	0.003	<0.002	1(2)
Iron	<0.05	<0.05	0.3(2)
Lead	0.001	<0.001	0.015(3)
Manganese	<0.01	<0.01	0.05(2)
Mercury	<0.0002	<0.0002	0.002(1)
Nickel	<0.006	<0.001	0.1(1)
Selenium	<0.005	<0.005	0.05(1)
Silver	<0.001	<0.001	0.1(2)
Thallium	<0.0005	<0.0005	0.002(1)
Zinc	0.05	0.04	5(2)
Radionuclides			
Gross α activity (pCi/l)	0.874 ± 0.885	1.08 ± 1.06	15 pCi/l
Radium^{226} (pCi/l)	0.409 ± 0.491	0.748 ± 0.475	20 pCi/l
Uranium (mg/l)	<0.001	0.004	0.03
Gross β activity (pCi/l)	1.87 ± 1.90	1.94 ± 1.62	50 pCi/l
Other			
Silica	51	52	
Langlier Index	-0.79	0.4	
Surfactants (MBAS)	<0.05	<0.05	0.5(2)
Asbestos (fibers longer than 10 µm/liter)	<0.02	<0.02	7 million (fibers longer than 10 µm/liter) (1)
Organic Compounds (see lab report for complete listing and detection limits			
EPA 548.1 Endothal	<5		
EPA 547 Glyphosphate	<6		
EPA 525 Semivolatiles (see lab report for listing)	n.d	n.d	
EPA 531.2 Aldicarbs (see lab report for listing)	n.d.	n.d.	
EPA 549.2 Diquat & Paraquat	n.d.	n.d.	
EPA 504.1 DBCP & EDB	n.d..	n.d..	
EPA 515.4 Herbicides (see lab report for listing)	n.d.	n.d.	
EPA 505 Pesticides (see lab report for listing)	n.d.	n.d.	
EPA 524.2 Regulated VOCs plus Lists 1 & 3 (see lab report for listing)	n.d.	n.d.	

Table 4 Notes: nd signifies not detected.

(1) Primary Drinking Water Standard
(2) Secondary Drinking Water Standard (recommended/maximum concentration).
(3) Action level
(4) All results in mg/l unless otherwise indicated.

Groundwater assessed at these two locations is of calcium bicarbonate type, with relatively low total dissolved solids. No organic contaminants were detected and overall groundwater quality is good with one notable exception; the concentration of arsenic in the groundwater exceeds the maximum contaminant level of 0.010 milligrams per liter in both Well 1 and Well 2. The concentration of arsenic for groundwater derived from Well 1 was 0.024 mg/l and the concentration of arsenic for groundwater derived from Well 2 was 0.014 mg/l.

Arsenic removal is required if the water is to be used as a source of water supply. A discussion of water treatment options is beyond the scope of this report. However, the water appears to be treatable, but the elevated concentration of silica will likely complicate some treatment processes (Mike Wilkin, 2006).

7.0 WATER SUPPLY AVAILABILITY

7.1 Long-Term Production Well Yield

The probable performance of production wells at the each of the exploratory well sites was evaluated by calculating drawdown using the computer program WHIP (the same program used to analyze the test data). The simulated response to pumping each hypothetical production well is discussed below.

Well 2

The calculations assumed pumping rates of 33, 100, 200 and 300 gpm

The principal assumptions for the calculations include:

The well is constructed with 10 ¾-inch outside diameter casing within an 18-inch diameter borehole.

The well is 100 per cent efficient.

No recharge to the aquifer occurs during the pumping period.

The aquifer is represented by a 2,500 feet wide strip of fractured rocks. This is based on the mapped width of map unit PPc, in which the observed carbonaceous marble appears to be located. The aquifer has the following properties:

Fracture hydraulic conductivity x aquifer thickness, K_f x b is 1,980 $feet^2$/day.

Fracture specific storage x aquifer thickness, S_f x b is 0.035.

Fracture skin is 5.

Matrix-fracture storativity ratio is 99.

Matrix-fracture transfer coefficient is 0.044.

The results of the simulation are illustrated in Figure 17. At the end of one year of pumping at a constant rate of 33 gpm, a production well constructed near Test Well 2 may be expected to experience approximately 3.5 feet of drawdown, which is minor compared the thickness of the aquifer penetrated by Well 2. Assuming a static water level of approximately 46 feet below the land surface, the pumping level would be expected to approach 49.5 feet below the land surface.

After continuously pumping for a period of one year at a rate of 100 gpm (52.56 million gallons per year or 160 acre-feet per year),a production well at this site is expected to experience approximately 10.5 feet of drawdown. This translates to a pumping level of approximately of 56.5 feet below the land surface. The simulation also suggests that a production well at this site might be capable of pumping at higher rates, as much as 300 gpm, for shorter periods of time. For example, after 90 days of continuous pumping at 300 gpm, the drawdown would be expected to approach 28 feet, a pumping level of 74 feet below the land surface. The advantage of pumping at a higher rate is faster filling of water storage tanks following periods of high demand.

In all likelihood, the well will not be 100% efficient, so the pumping levels are expected to be lower than the simulated levels. However, because Well 2 was terminated at a depth of 387 feet, a deeper production well may be even more productive. Furthermore, because some recharge to the aquifer is certain to occur, the long-term yield of a well may be better than

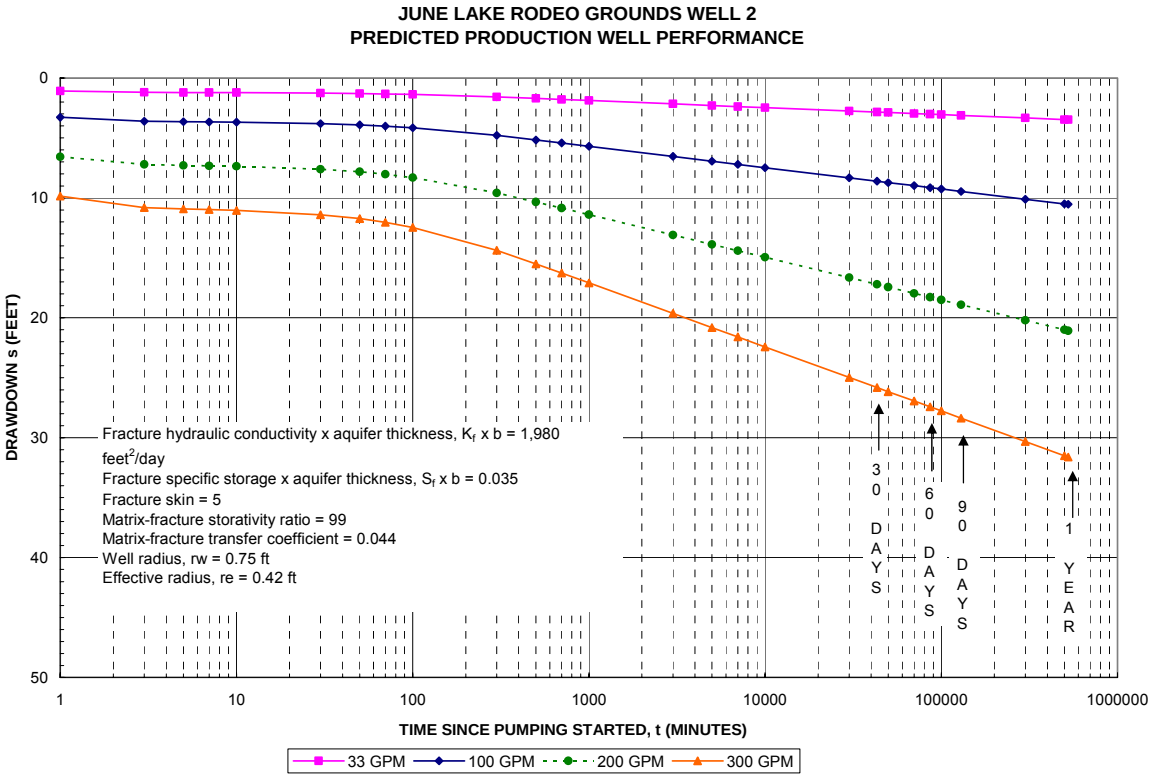


FIGURE 17: PREDICTED PERFORMANCE OF A PRODUCTION WELL AT THE LOCATION OF JUNE LAKE RODEO GROUNDS WELL 2

the simulation suggests. However, the exact performance of a production well must await the construction of the well and extended-duration testing to demonstrate the reliable yield of the production well to the satisfaction of the State of California Department of Health Services and Mono County.

Well 1

The quartzite aquifer materials near Well 1 are not as transmissive as the carbonaceous marble aquifer materials near Well 2. Consequently, a production well at this site is expected to yield less water than a production well at the Well 2 site.

The computer program WHIP (the same program used to analyze the test data) was used to calculate the long-term performance of a production well constructed near Test Well 1.

The principal assumptions for the calculations include:

The well is constructed with 6 ⅝ -inch outside diameter casing within an 8 ¼-inch diameter borehole.

No recharge to the aquifer occurs during the pumping period

The aquifer has the following properties:

Transmissivity is 121 feet^2/day

Coefficient of storage: 0.013 (dimensionless)

Wellbore skin is 0.2

Well loss coefficient, C is 0.49e-5

Well loss coefficient, n is 3.5

The results of the simulation, illustrated in Figure 18, indicate that at the end of one year of pumping at a constant rate of 33 gpm a production well constructed near Test Well 1 may be expected to experience approximately 75 feet of drawdown. Assuming a static water level of approximately 84 feet below the land surface, the pumping level would be expected to approach 159 feet below the land surface. Consequently, a production well at this locale might be used to provide the water supply during periods of low water demand. Because the yield of a production well will be relatively small, there is little reason to construct a large diameter well.

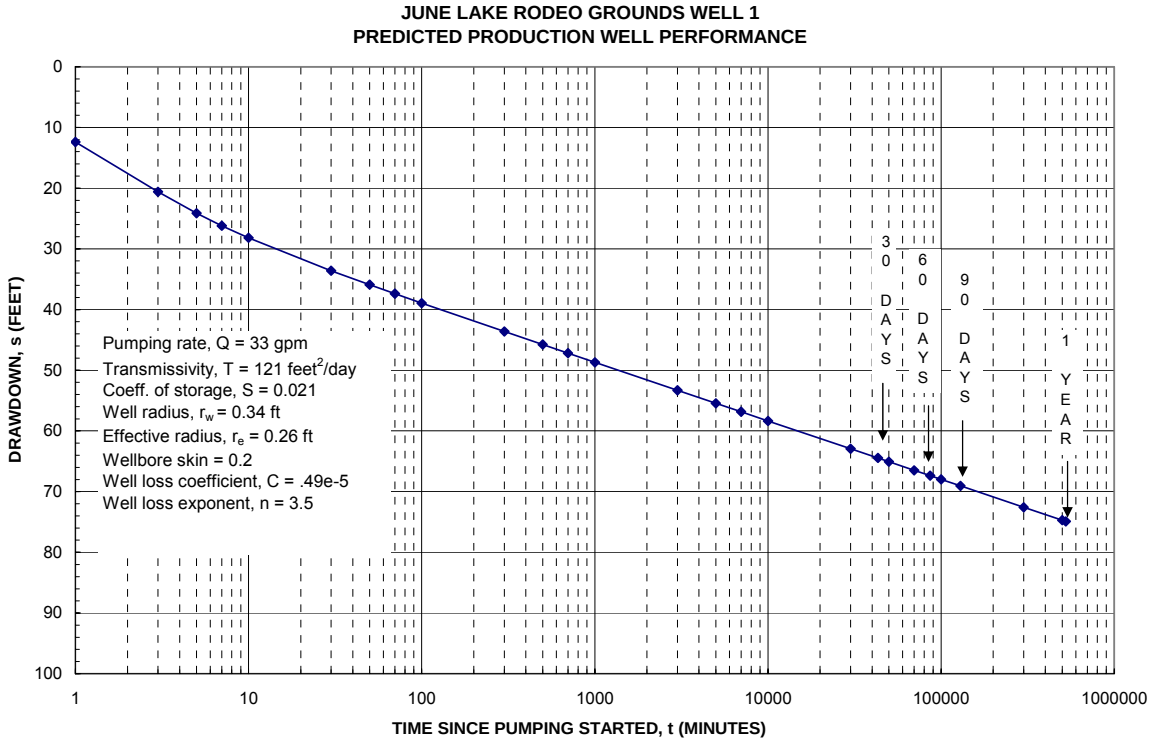


FIGURE 18: PREDICTED PERFORMANCE OF A PRODUCTION WELL AT THE LOCATION OF JUNE LAKE RODEO GROUNDS WELL 1

7.2 Potential Impacts

The elevation of the land surface at the Well 2 site is approximately 7,612 feet above mean sea level. The water level in the well was measured at approximately 46 feet below the land surface, so that the elevation of the piezometric level in Well 2 is approximately 7,566 feet above sea level. The depth to water in Well 1 is approximately 85 feet below the land surface and the elevation of the land surface is approximately 7,641 feet. This yields an

elevation of the piezometric level in Well 1 of approximately 7,556 feet. By comparison, the elevation of Gull Lake is approximately 7,602 feet above sea level. Because the elevation of groundwater at the site is lower than the elevation of Gull Lake, there is no potential for groundwater extractions from wells at the test well sites to intercept groundwater flow moving toward Gull Lake. Furthermore, it is not possible to determine the precise groundwater gradient beneath the project because there are only two wells on the property.

Higher lake water elevations may however indicate a potential for groundwater extraction to induce flow from Gull Lake. However elevations alone only indicate a *potential,* based on limited data, not that actual transmission of groundwater along a particularly vector exist. In order to evaluate the potential for hydraulic communication between Gull Lake and groundwater/spring resources in the immediate area, physical and isotopic chemistry data were evaluated.

Pumping Well 2 at 180 gpm reduced the flow of the spring on the property from 12 gpm to 6.5 gpm after 24 hours of pumping (see Figure 19). The reduction in flow is probably due to a reduction in the piezometric head in the aquifer in the vicinity of the spring. All else being equal, spring flow reduction will be proportional to the decrease in head, so that the greater the drawdown near the spring, the greater the head reduction. Because drawdown in the aquifer due to pumping a well increases with the logarithm of time, and spring discharge will decrease in proportion to the drawdown in the vicinity of the spring, a plot of spring discharge versus logarithm of time (Figure 19) can be used to estimate reductions in spring flow due to pumping a well near the site of exploration Well 2. Extrapolating the observed trend into the future suggests it would take several years of continuous pumping at 180 gpm to cause the spring to cease flowing, if no recharge were to occur during that period. At lower pumping rates, the potential effect would be less.

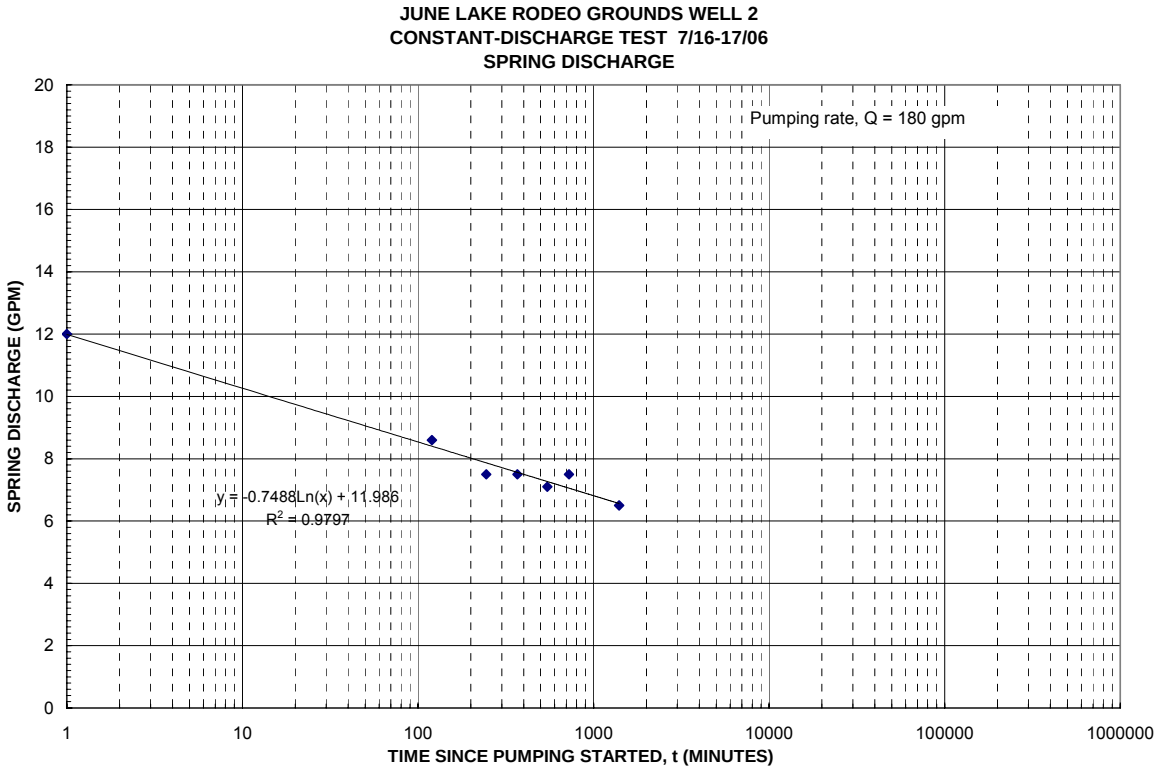


FIGURE 19: SPRING FLOW REDUCTIONS ASSOCIATED WITH JUNE LAKE RODEO GROUNDS WELL 2 TESTING

7.3 Fingerprinting Groundwater and Surface Water

The elevation of groundwater measured in Well 1 and Well 2 is lower than the water levels of Gull Lake, indicating a potential for groundwater at these sites to be derived from, or in hydraulic communication with, Gull Lake. However, as stated above, water elevation alone, only indicates a potential for groundwater movement and does not provide any information on whether actual transmission along an interpolated vector is occurring. In order to evaluate whether Gull Lake is indeed a source of groundwater at Well 1 and Well 2 and if subsequent pumping will have a potential influence on lake levels, both physical (major cations and anions) and isotope chemistry were evaluated (Table 5). Groundwater samples from the Ski Area well, the on-site spring, as well as, surface water from Reversed Creek were also collected and assessed as part of this analysis. The sample locations are illustrated in Figure 20 for reference.

TABLE 5: SUMMARY OF SELECT GENERAL CHEMISTRY, MAJOR CATIONS/ANIONS, AND STABLE ISOTOPES OF WATER

Sample Location	Well 1	Well 2	Ski Area Well	Spring	Reversed Creek/Gull Lake	Reversed Creek (downstream)
pH	7.57	8.05	7.59	8.01	7.72	7.70
TDS (mg/L)	130	160	120	150	120	110
Ca (mg/L)	19	30	23	30	22	21
Mg (mg/L)	2.8	2.4	2.1	2.0	1.5	1.5
Na (mg/L)	6.2	6.8	4.7	6.4	8.5	7.3
K (mg/L)	2.5	1.9	1.9	2.0	2.9	2.5
Total Alkalinity as $CaCO_3$ (mg/L)	63	91	64	89	74	71
SO_4 (mg/L)	10	8.7	8.0	8.0	6.2	6.47
Cl (mg/L)	1.5	1.6	1.2	1.2	2.6	2.2
$\delta^{18}O$ (‰, VSMOW)	-16.63	-17.05	-16.76	-16.94	-12.19	-13.92
$\delta^{2}H$ (‰, VSMOW)	-124.5	-126.8	-126.6	-126.6	-104.5	-111.4

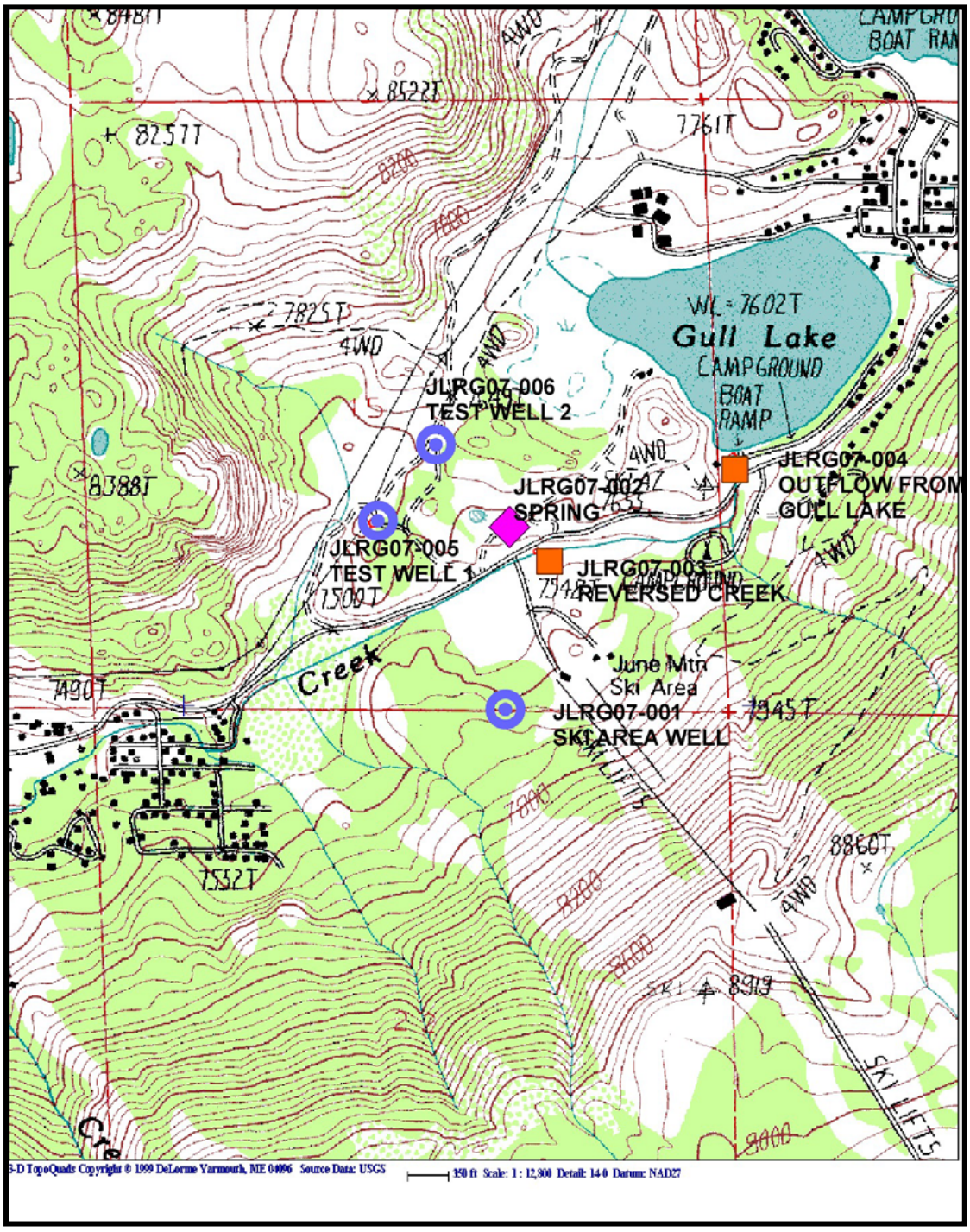


FIGURE 20: IDENTIFICATION OF GROUNDWATER AND SURFACE WATER SAMPLES COLLECTED FOR GEOFORENSIC ANALYSIS

7.3.1 Major Cations and Anions

A Piper Diagram, which graphically displays the percent relative composition of major cations (Ca, Mg, Na, K) and anions (Cl, SO_4, HCO_3, CO_3) in solution, was prepared to initially evaluate the water chemistry at the site (Figure 21). In constructing such a diagram, the miliequivalents of major cations and anions are first plotted on the lower left and right hand trilinear diagrams, respectively. A line is then projected from each of these trilinear plots from the corresponding sample and parallel to the Mg and SO_4 axes. The intersection of these two lines defines the sample location on the diamond shaped field. The chemical composition of the water sample is a reflection of water-rock interactions and/or anthropogenic contamination and indicates the hydrochemical facies (dominant ions, water type). In this case, it is clear that the dominant ions in both surface and groundwater are calcium and bicarbonate (Ca-HCO_3 type water), typical of geochemically "young" water. Furthermore, there appears to be some indication of groundwater mixing with Gull Lake water within Reversed Creek, suggesting groundwater discharge to the stream (gaining stream). This is not surprising considering the presence of the nearby spring and the fact that the potentiometric surfaces at Well 1 and Well 2 are higher than the elevation of the creek. The preliminary assessment of major cations and anions alone however does not provide conclusive evidence as to whether Gull Lake is a source of water at the Rodeo Grounds. In order to better understand the source of Rodeo Grounds groundwater, the stable isotopes of water were also investigated.

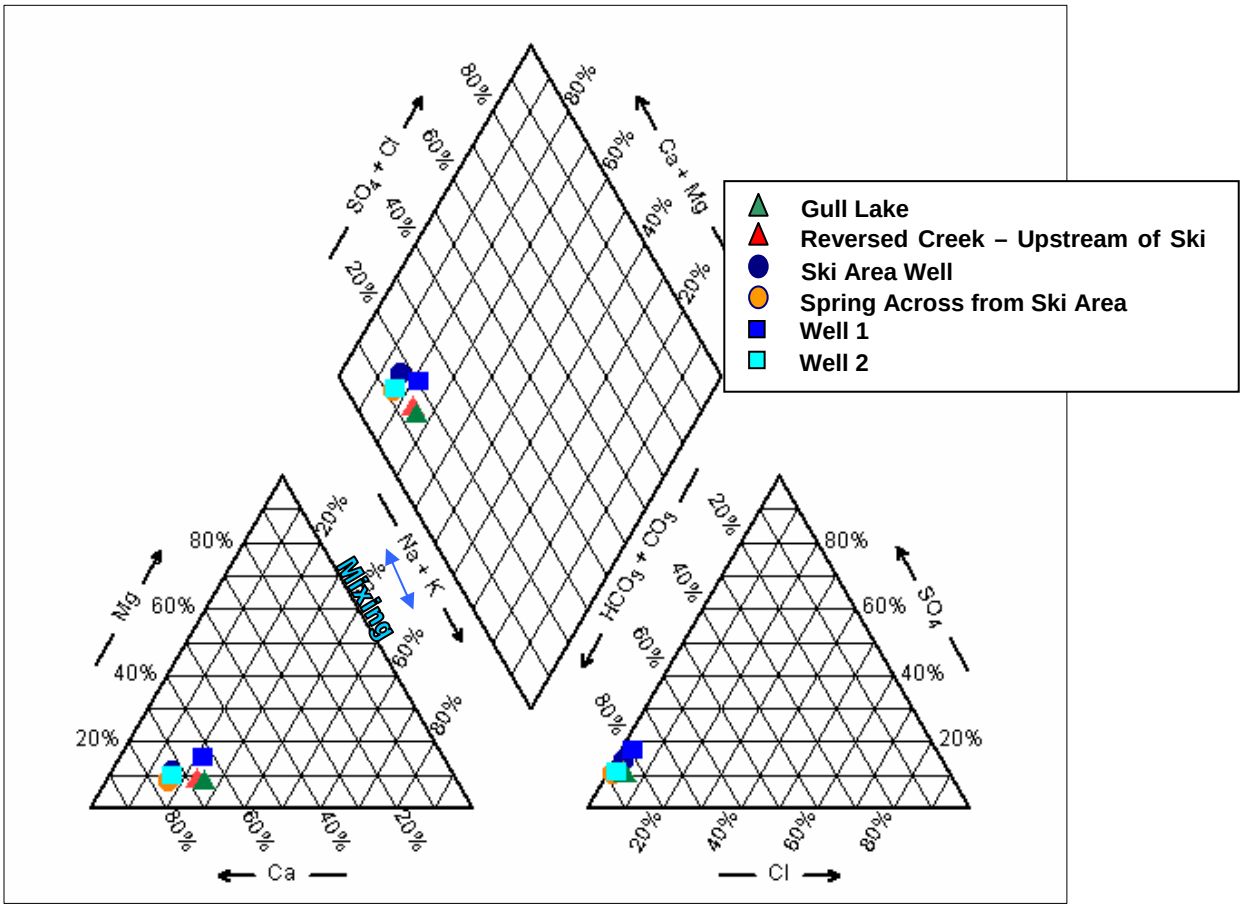


FIGURE 21: PIPER DIAGRAM ILLUSTRATING MAJOR WATER CHEMISTRY

7.3.2 Stable Isotope of Water

The stable isotopic ratios of the water molecule ($^{18}O/^{16}O$ and $^{2}H/^{1}H$) were assessed at the University of California at Davis, Geology Stable Isotope Lab and compared to the reference standard Vienna Surface Mean Ocean Water (VSMOW) and reported in the conventional delta (δ) notation with the units permil (‰) via the following relationship:

$$\delta R = (R_{sample}/R_{VSMOW} - 1) \times 1000$$

were R_{sample} and R_{VSMOW} are the isotopic ratios of $^{18}O/^{16}O$ and $^{2}H/^{1}H$ of the sample and the standard, respectively. δR values are typically used when discussing isotope ratios as measuring absolute isotope ratios or abundances is not easily accomplished and can result in significant problems when comparing data sets from different laboratories, instruments, or sample runs on the same instrument (instrument drift). These issues are overcome by simply measuring a known reference standard at the same time as the sample, thereby allowing precise comparison between samples, analytical instruments, and laboratories. The results of the isotope analysis of groundwater and surface water samples collected within and nearby the Rodeo Grounds project area are graphically illustrated in Figure 22 and summarized in Table 5.

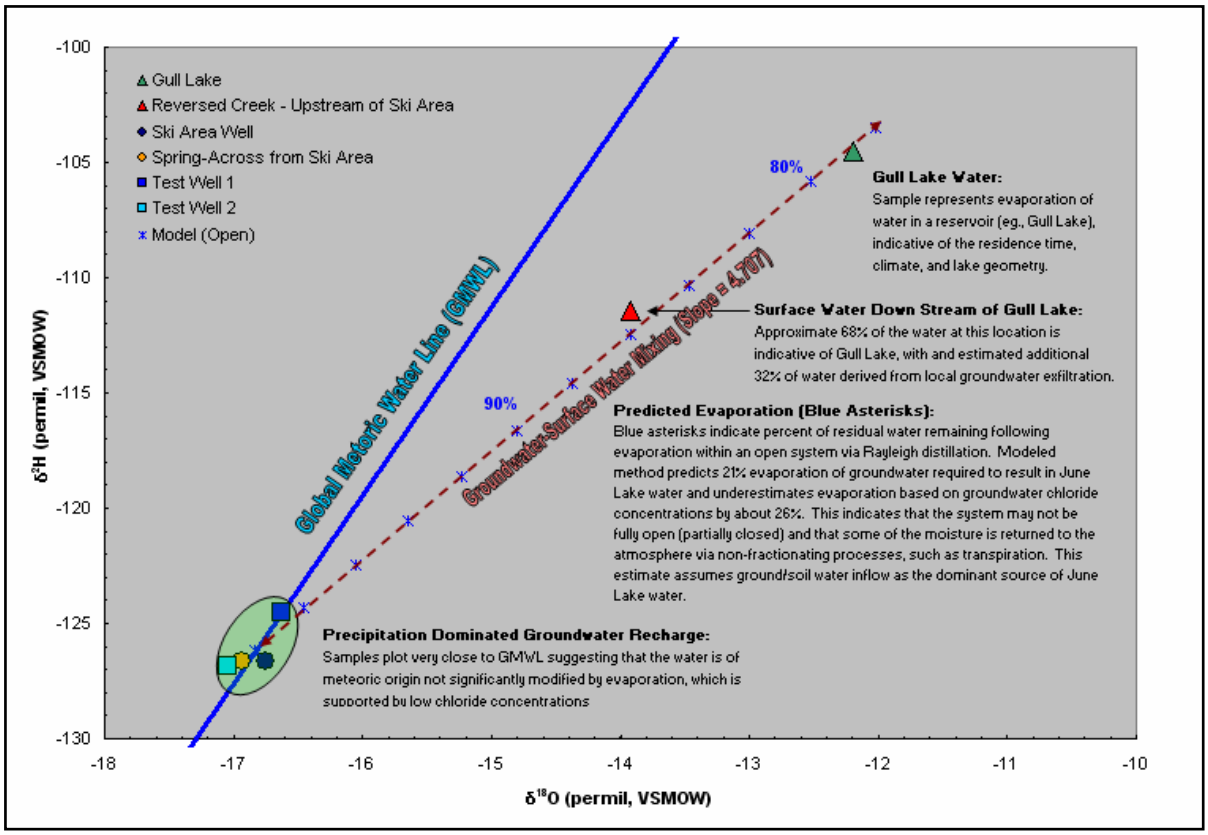


FIGURE 22: PLOT OF THE STABLE ISOTOPES OF GROUNDWATER AND SURFACE WATER, THE GLOBAL METEORIC WATER LINE, AND MODELED EVAPORATION TREND

As can be seen from Figure 22, all of the groundwater/spring samples plot near/on the Global Meteoric Water Line (GMWL), reflecting the average isotopic composition of infiltrated precipitation (recharge). Furthermore, surface water collected from the Gull Lake outlet to Reversed Creek is isotopically distinct from groundwater/spring samples, attributed to evaporation, which fractionates isotopes, preferentially retaining the heavier isotope in liquid water relative to the vapor phase, a fractionation process typical of open bodies of water, such as lakes. It should be noted that the spring sample is most similar to, both with regards to its isotopic composition as well as major cations and anions, Well 2 water.

7.3.3 Evaporative Origin of Gull Lake and Source of Rodeo Grounds Groundwater

As previously stated, evaporation is a fractionating process, in contrast to plant transpiration, which is a net non-fractionating process, and therefore does not modify the isotopic composition of the residual water in the soil/aquifer. So where evaporation will modify both the solute concentration and the isotopic signature, transpiration will only influence the concentration of solutes. Additionally, evaporative fractionation can be an equilibrium process at humidity values approaching 100% and dependent on temperature. Assuming either a closed (vapor and water are in contact for the entire phase change) or open (vapor is continuously removed) system, evaporative fractionation may be estimated. As all of the groundwater samples plot very close to one another, and on the GMWL, it can be assumed that the average of these samples reasonably reflects the average initial isotopic composition of precipitation, and groundwater recharged by precipitation, entering Gull Lake. Additionally, by knowing the average annual temperature, in this case recorded for the nearby community of Lee Vining (Weather Underground, 2007), a model of estimated open system evaporative fractionation can be constructed. As humidity within the project area is far less than 100% (Weather Underground, 2007), kinetic fractionation also needs to be considered. While equilibrium fractionation near 100% humidity approaches a slope similar to the GMWL, progressively lower humidity values result in a reduction of the evaporative trend line slope (Figure 22). Successive values for humidity can then be modeled until the evaporative trend aligns the source water samples (groundwater) and evaporated (Gull Lake) samples. In this case, an average estimated humidity value of around 38%, for an open system, results in a slope of the evaporative trend line that intersects the isotopic composition of Gull Lake. It is interesting to note that this modeled humidity value corresponds to the measured average humidity at Lee Vining of 49% (Weather Underground, 2007). The difference from the modeled humidity and the average annual humidity may be explained through spatial differences in humidity at Lee Vining, compared to Gull Lake, as well as significant seasonal differences in humidity and evaporation potential from that of the annual averages.

It should be noted, however, that chloride mass balance of groundwater and Gull Lake indicates more evaporation likely occurs within the lake than that predicted based simply on the open system model (Rayleigh equation) assumption. For instance, under a closed model scenario, isotopic fractionation is much less than in an open system and therefore more evaporation needs to take place in order to arrive at a given isotopic composition, in this case, Gull Lake. In reality, most systems are not truly open or closed and in fact are "partially" open/closed, which is likely true in this case as well. Additionally, transpiration will concentrate solutes such as chloride along the shallow (root zone) groundwater/soil flow paths, increasing chloride concentrations as they enter the lake, without modifying the isotopic composition. Regardless of the particular model (open, closed, partially open/closed), the isotopic composition of Gull Lake can be obtained through simple evaporation of water similar in isotopic composition to that measured locally in groundwater.

Together, the significant differences in the isotopic composition of Gull Lake (water isotopically heavier in Gull Lake due to evaporation than groundwater) and groundwater provides substantive evidence that Gull Lake is not a current source of water to the wells/springs assessed as part of this analysis, including the Rodeo Grounds, Ski Area, and unnamed spring. If Gull Lake were a significant source of groundwater for the Rodeo Grounds, groundwater assessed at Well 1 and Well 2 would reflect the isotopic composition of this lake source, which it does not. As one would expect, the evaporative model also suggest that, although Gull Lake is not a source of recharge water to the Rodeo Grounds project area, its isotopic composition can be derived through simple evaporation of local meteoric water and exfiltration of groundwater, recharged by precipitation, to the lake.

It is important to note that the source of groundwater recharge to the lake cannot however be derived from the Rodeo Grounds project area as the potentiometric surface at Well 1 and Well 2 is between approximately 36 to 46 feet lower than Gull Lake (water will not flow uphill). Accordingly, analysis of these data support the conclusion stated in Section 5.3.3 that the dominant mode of groundwater transmission is along preferential fractures controlled by geologic structure, that is the fractures are likely aligned parallel to the fold axis of anticlines and synclines located within/near the project area and along a northwesterly – southeasterly trend. This is further supported by the fact that neither Well 1 nor Well 2 had an observed response during pumping of the other respective well, regardless of the relatively close proximity of the two test wells. Additionally, the spring discharge was only affected by pumping of Well 2, not well 1, further supporting the preferential transmission of groundwater along a northwesterly-southeasterly trend. These data provide evidence that recharge of Rodeo Grounds groundwater is likely derived from the hills towards the northwest and not Gull Lake.

7.3.4 Gull Lake and Groundwater Mixing – Reversed Creek

The stable isotopes of water can also be used to conservatively evaluate mixing between two isotopically distinct sources. In Figure 22, this was accomplished by assuming a simple two component mixing model with end members indicative of Gull Lake and the average isotopic composition of groundwater dominated by meteoric recharge. This mixing analysis indicates that, at the time of sampling, the Reversed Creek sample, collected downstream of Gull Lake and upstream of the Ski Area, was composed of a computed 68% Gull Lake water and 32% groundwater discharge to the stream. This corresponds very well to the mixing analysis using chloride as a conservative ion tracer, which indicates approximately 67% Gull Lake and 33% groundwater discharge at this location. These data indicate that Reversed Creek is a gaining stream in the vicinity of the Rodeo Grounds project area, at least during the period of sampling (January), which is again supported by the observation that the creek elevation is lower than the groundwater elevations in Well 1 and Well 2 as well as the presence of a surface spring.

SOURCES OF INFORMATION

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APPENDIX A

WELL CONSTRUCTION SUMMARY & FIELD LITHOLOGIC LOG

CONSTRUCTION SUMMARY FOR WELL [illegible]

LOCATION OR COORDS.: NW¼ SE¼ Sec 15, T.2S., R.26E

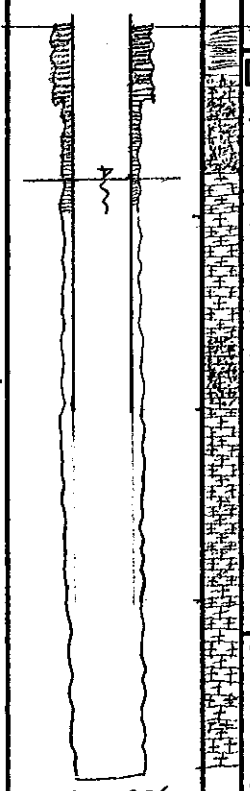
ELEVATION: GROUND LEVEL 7566 ft ±

TOP OF CASING

PROJECT June Lake Rodeo Grounds

LOCATION ~2 mi. south west of June Lake, CA

PERSONNEL P. Sinclair & B. Retzlaff



DRILLING SUMMARY:

TOTAL DEPTH 387 ft

BOREHOLE DIAMETER 8 3/4" OD to 390' below TOC (temp)

DRILLER Western Strata Exploration Clarksburg, CA

RIG TH-60

BIT(S) 10 3/4" centrix, 8 1/4" hammer

DRILLING FLUID air

SURFACE CASING temp 10' steel to 30'

WELL DESIGN:

BASIS: GEOLOGIC LOG X

BASIS: GEOPHYSICAL LOG

CASING STRING(S) C=CASING S=SCREEN

C1+4 — 200'

CASING: C1 6 5/8" OD x 0.188 A53B

C2

C3

C4

S1 none

S2

S3

S4

CENTRALIZERS none

FILTER MATERIAL none

CEMENT neat cement grout to 100' (4 sacks)

OTHER shale trap @ 100 ft below TOC

CONSTRUCTION TIME LOG:

TASK	START DATE	START TIME	END DATE	END TIME
DRILLING:				
10"	7/1		7/1	
8"	7/5	13:15	7/8	10:00
GEOPHYS. LOGGING:				
CASING:				
6 5/8"	~~7/06/06~~		~~7/08/06~~	
FILTER PLACEMENT:				
CEMENTING	7/8		7/10	
DEVELOPMENT				
OTHER:				

WELL DEVELOPMENT:

Air lift until clean

COMMENTS:

- Open hole below 200 ft
- grout ran to 100' on 7/8 to hold casing in place
- 7/10 grout inspection

Lithologic Log - Boring Number: JLRG-2

Project: June Lake Rodeo Grounds	**Location:**
Drilling Contractor: Western Strata Exploration	**Legal Description:** 1/4 1/4 Section , Township N/S, Range E.
Drilling Method / Rig Type: Air-Rotary IR TH 60	**Coordinates:** Northing/Lattitude: Easting/Longitude:
Logged By: Sinclair & Pytzelt **Geophysical Log:** yes (no)	**Start Date/Time:** 7/01/06 11:03 **Finish Date/Time:**
Bit Size/Type: 10 3/4" Centrex, 8 3/4" hammer	**Borehole Diameter:** 10 3/4" 0-37', 8 3/4" **Drilling fluid:** Air
Total Depth of Borehole from Surface: 387 ft	**Water Level (Date):**
Final Construction: See Contruction Summary: X other:	**Casing Depth:** 200 ft **Elevation (TOC):**

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, *etc.*)	Lithology graphic
	11:03			0	50	10	4		sub ang.				/	gray/ black	~50% clay, 50% sand, 1% obsidian	
5					75	20	5		"				/	grey	Sandy clay	
10	11:20				100								damp	"	100% clay	
15					100								"	"	100% clay	
20					75							25% chips	"	grey/ black		
25	11:30 12:20				75							25% chips	"	"		
30					75								"	"	some water injected to cool bit calcareous quartz sand or sandy marble	
35					25							75 chips	some	black	gravel sized chips	
40					75							25% chips		grey black		
45					75							25% chips		"		
50																

Additional Comments:

Logged By:_____ Date:_____

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fracture, etc.)	Lithology graphic
					5							95% chips		black	Sandy marble or calcareous sandstone	
55					75								mud	"	"	
60													little		"	
65													"		"	
70													"		marble - carbonaceous	
	kill															
75													"			
80													"			
85													"			
90													"			
															Chips 72.9'	
95													"			
100																

Additional Comments:

Logged By:_____ Date:_____

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractions, etc.)	Lithology graphic
												all chips		black dark grey	carbonaceous marble	
105														"	"	
110														"	" w/ calcite veins	
115														"	"	
120														"	" w/ calcite veins	
125														"	"	
130														"	"	
135														"	"	
140														"	" some Fe staining	
145														"		
7/5/06 150	18:00															

Additional Comments: End 7/5/06 @ 18:00 hrs

Logged By: _____ Date: 7/5/06

ECO:LOG gineering

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
												80% chips			carbonaceous marble water in the well over night	
	07:20			trace												
155												"		black/ grey	hole is making some water	
												"			"	
160												90% chips		"	"	
165												"		"	"	
	07:37															
170	07:37											"		"	"	
															Chips getting larger	
															@ ~ 175 ft	
175												"		grey	chips slightly larger - calcareous qtz sand or sandy marble	
														"	Pale yellow mineral coating & some calcite veins	
180														"	No Sample	
185												95% chips		"	calc ~~qtz~~ sandstone	
															clasts still getting larger	
	08:06														chips show thin bedding	
190												"		"		
															more irregularities in this part of the formation	
195															pale yellow soft mineral coating	
												95% chips		"	qtz	
200																

Additional Comments: Start 07/06/06 @ 07:20 Water was standing in the hole on 7/6 @ 44 ft

Logged B. _____ Date: _____ _____

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
												Mostly chips		black grey	carbonaceous marble	
205												"		"	"	
210												"		"	"	
215												"		"	large chips pale yellow mineral coating on fracture surface	
220												"		"	"	
225														"	"	
230														"	"	
235	10:46													"	"	
240														"	mineral coating on	
245														"	"	
250	11:35													"	sparse green mineral coating	

Additional Comments:

Logged b: B. II Pettit Date: 07/06/06

ECO:LOG ngineering

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
												Mostly Chips		black/ grey	carbonaceous marble	
	12:35														veins w/ calcite	
255												"		"	"	
260												"		"	"	
265												"		"	"	
270	13:10											"		"	"	
275												"		"	" Some calcite veins	
280												"		"	"	
285												"			"	
290												"			"	
295	14:45											"			" chips show fracture plane surfaces	
300	Additional Comments:															

Logged B. Bill Petzalt Date: 07/06/06

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
												mostly chips		black/ gray	carbonaceous marble	
															vuggy surface on some chips – Solution channel surface?	
305												"		"	"	
	15:37														Some iron staining	
310												"		"	"	
315												"		"	"	
320												"		"	"	
325												"		"	"	
330												"		"	"	
	17:05															
335												"		"		
															more chatter on the bit, fracture zone	
340												"		"	"	
															some iron staining on fracture face	
345												"		"	"	
350																

Additional Comments:

Logged By: Bill Paltzlt Date: 07/06/06

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
												all chips		black grey	Carbonaceous marble	
															larger, cobble-sized cuttings	
355												"				
															possible fr	
360												"				
365												"				
7/6															Large volume water discharged from well	
370 7/7												"				
375												"				
380												"			No samples	
7/7 385 7/8				Lyttle								"				
															End @ 387 ft due to problems	
390															containing air-lift discharge	
395																
400																

Additional Comments: Drill to 375 on 7/6/06. W.L. 7/7/06 = 44 ft

Logged E. Bill Petzold Date: 7/6-8/06

CONSTRUCTION SUMMARY FOR WELL TLRG-1

LOCATION OR COORDS.: NW¼ SW¼ Sec 15, T.2S., R.26E.

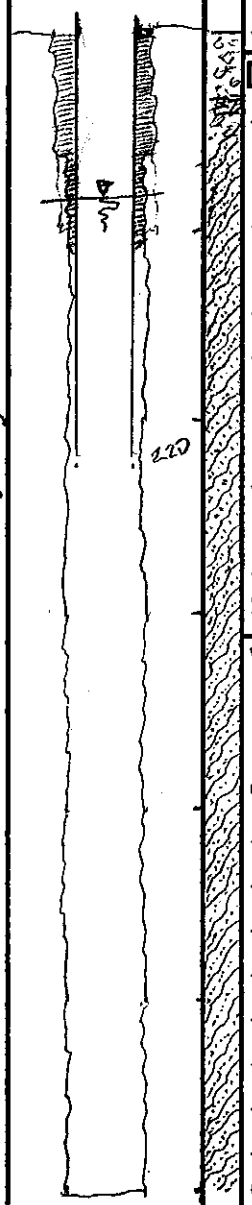
ELEVATION: GROUND LEVEL 7,641 ft ±

TOP OF CASING

PROJECT June Lake Radar Ground 3
Monopole-2011 Test Wells

LOCATION 3 Mi Southeast of June Lake, CA

PERSONNEL D. Burgess



DRILLING SUMMARY:

TOTAL DEPTH 600 FT

BOREHOLE DIAMETER 10¾" 0-67'
8¾" 67-

DRILLER Western Strata Exploration
Clarksburg, CA

RIG TH-60

BIT(S) 10¾" Centrix, 8¾" hammer

DRILLING FLUID Air

SURFACE CASING Temporary

WELL DESIGN:

BASIS: GEOLOGIC LOG X

BASIS: GEOPHYSICAL LOG

CASING STRING(S) C=CASING S=SCREEN

+2	220			

CASING: C1 6⅝" OD x 0.188" A53B

C2

C3

C4

S1

S2

S3

S4

CENTRALIZERS A

FILTER MATERIAL None

CEMENT

OTHER Shale trap @ 100 ft bls

CONSTRUCTION TIME LOG:

TASK	START DATE	START TIME	END DATE	END TIME
DRILLING:				
10"	6/27/06	10:10	6/27	15:55
8"	6/27	16:40	6/29	17:00
GEOPHYS. LOGGING:				
CASING:				
6⅝" O.D	6/30/06		6/30/06	
FILTER PLACEMENT:				
CEMENTING				
DEVELOPMENT				
OTHER:				

WELL DEVELOPMENT:

Air-lift pump until clean

COMMENTS:

Open hole below 220 ft bls

SWL 85 ft b.l.s.

Lithologic Log - Boring Number: JLRG-1 Page 1 of

Project: June Lake Rodeo Grounds
Drilling Contractor: Western Strata Exploration
Drilling Method / Rig Type: Concentrix 0- /TH-60
Logged By: D. Bugeaud Geophysical Log: yes (no)
Bit Size/Type: 10 3/4" Centrix hammer, 8 1/4" button hammer
Total Depth of Borehole from Surface: 600 ft
Final Construction: See Contruction Summary: X other:

Location:
Legal Description: 1/4 1/4 Section , Township N/S, Range E.
Coordinates: Northing/Lattitude: Easting/Longitude:
Start Date/Time: 06/27/06 10:00 Finish Date/Time: 6/29/06 17:00
Borehole Diameter: 10 3/4 0-67, 8 1/4 67-TD Drilling fluid: Air
Water Level (Date): 87 ft 6/29/06 86.2' bls 08:55 06/30/06
Casing Depth: 220 ft Elevation (TOC):

Depth (logs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
	10:00						40 0.1"	60 1 3/4"	angular					lt grey	sandy gravel Glacial outwash	
5	10:20 10:47				5		25	70 2 3/4	sub angs to sub rnd				dump		clayey sandy gravel	
10	10:52				tr.	5	40	55	"					lt brn	granitic sand & volc gravel sand- Mostly qtz Gravelly sand	
15	10:52 10:55			tr.		tr	55	45						lt brn	ditto trace of water @ 18'	
20															gravel - mostly dark volcanics sand - granitic sandy gravel	
25	11:12						10	30	60				trace GW		similar but w/ some dense silt	
30						60	40	tr 0.1-				10 c 90 g			@ 32 to dk brown sandy silt Mix of blk volcs & granitics	
35	11:30 11:45				10	30	30	1" 30 mixed rnd	rnd			10 c 90 g		redbrn	same @ 39' - slow - because of soft fm	
40								75 3" mixed	sub ang.			60 40		dark green/brn	- @ 43 granitic chips silty, sandy gravel, then bedrock?	
45	12:25 14:38				tr	tr	10 fine	90 boulders to 8"				all chips 90 c 10 g			@ 46', includes black volcs	
50	14:34														glacial outwash	

Additional Comments:

Logged By: D. Bugeaud Date: 06/27/08

ECO:LOGIC Engineering

Lithologic Log - Boring Number:

Page 2 of ____

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
				0	tr	tr	2-3	boulders & similar				90/10			boulders to 51' Mix of black & brown volcanics & granitics Matrix of grey silty sand	
55	11:55-12:16											All chips		brn & green	silicified fine grained rk, brittle, hard chert? quartzite or highly silicified siltstone? drills moderately quick compared to granitic boulders	
60												"		brown	similar, but all brown	
65	15:58-16:40											"		brown & grey-brown	same some silt/clay sand on rock surface	
70	16:57				trace							"		green & brown	similar, w more green trace of white qtz	
75	17:29				"							"		green brown & grey	same, w/ ~ 2-3% qtz	
80	17:41				"							"		green & brown	sand - chips 1" minus - some fracture faces	
85	17:47-17:55				"							"		"	same - small chips, ¼" minus	
90	17:40				"										same - mostly small chips 1/4" minus	
95	17:45				"										same	
100																

Additional Comments:

4 to 8¼" hammer @ 67'

Logged By: D. Bugeau Date: 06/27/08

ECO:LOGIC Engineering

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
				0								all chips		brown & green	2" Minus w/ fractures planar	
105	1755															
	6/27/ 1805											K		brown w/ trace green	chips 0.2" minus, similar to above	
	6/28 0705															
110	0712														~~clean~~ quartzite	
												"		brown gray green	Same	
115												"		"	Same	
120												"		"	Same	
125	6722 0740			trace								"		"	larger chips (1½") green stain on fracture faces	
130	0745			2±										"	Similar - smaller chips some Fe stain	
135	0752													mostly brown & dark grey	"	
140															"	
145	0755 0822														D in water color to lt brown	
150	0830														Similar, w/ Fe stain	

Additional Comments: Stopped @ 107' end of 06/27/08.

Logged By: D. Burgeson Date: 06/27/08

ECO:LOGIC Engineering

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fracture, etc.)	Lithology graphic
155	0833			5+								All chips		Mostly lt grey	bangings rod @ 151 ~~theory~~ quartzite	
160	0841											11		Mostly lt grey & green grey	rough @ 159.	
165	0903			15								11		same	Chips 2" Minus rough very hard	
170	0909 0917 0920											11		same	chatter @ 165.5' hard	
175												11		11 11	~~theory~~ – hard small chips quartzite	
180												11		11	same	
185	0950											11		11	11	
190	0959 1007 1011											11		Mostly as above some black	Similar quartzite @ 189' some black ~~theory~~ w/ Fe stain	
195	1021											11		lt grey & green trace black	mostly as above some black.	
200	1025													lt grey & green trace brown	chips 1/2" minus	

Additional Comments:

Logged By: D. Bugenig Date: 06/27/06

Lithologic Log - Boring Number:

Page 5 of _____

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
205	1033			15								all Chips		green & lt grey	some Yellow stain; quartzite chert - hard	
	1037 1045 1050			25								"		green & lt grey trace brown	Same chatter ~ 208'	
210												"		same	Chips ½" minus. Some Fe staining on fracture surfaces	
215	1200											"		mostly green	few chips ~1" Fe staining	
220	1109											"		"	Same — EVAN NIKIRK & TOM WATTES	
225	1113											"		"		
	11:20											"		"	Same	
230												"		"	Same	
235														"	Same	
	11:40													"	Same Some Fe stain on fracture face	
240	11:45													"	Same	
															chips 0.2" minus	
245	11:53														Same	
	11:57 1203															
250	12:06															

Additional Comments:

Logged By: D. Bugenig Date: 6/27/06

ECO:LOGIC Engineering

Lithologic Log - Boring Number:

Page 6 of ____

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
255	12:10			25								All chips		H grey green trace brown	same chips ~ 0.2" minus	
260	12:16											"		"	same	
265	12:24											"		"	same	
270	12:30 / 12:42 / 12:45											"		"	same	
275												"		"	same	
280				30								"		"	same fractures @ 278' - longer chips	
285	12:58											"		"	~~chips~~ - chips mostly 0.2" minus quartzite	
290	13:04 / 13:13 / 13:16			35								"			same some Fe stain	
295															same	
300	13:25			50											Fractures - Fe-stain w/ limonite?	

Additional Comments:

Logged By: D. Burgess Date: 6/22/06

ECO:LOGIC Engineering

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fractures, etc.)	Lithology graphic
305	13:35			28*								all chips		Hgray & green	~~Short~~ quartz. tr soft @ 305	
	13:40											"		"	Chatter 305-309 limonite on fracture surfaces	
310	13:50											"		"		
315	13:52			30								"		"	Chips 2" minus Fe coating on fracture surface	
320				30*								"		"	Chatter @ 323' - Fractures	
325	14:14											"		"	~~Chert~~ as above qtz. tr	
330												"		"	~~Chert~~, as above qtz. tr	
335	14:35											"		"	rough @ 335' Some fractures have been healed	
340	14:38											"		"	Discharge changed from white to yellow	
345	14:42													green & brown	rods tonged up @ 342.5' Very rough chips - 1" minus	
350	14:45 14:58														rough 345-347' banging @ 348'	

Additional Comments: * Q measured w/ 5-gal bucket

Logged By: D. Bugenis Date: 4/27/06

Lithologic Log - Boring Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Description: Clay %	Silt %	Sand % (size)	gravel/cobbles % (size)	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description and Remarks (rock types, formation name, fracture, etc.)	Lithology graphic
355	15:07			35								all chips		H gray & green	Chert bit is binding, but only smaller chips	
	15:11											"		"	Chips - 1/2" minus still rough discharge color is white again	
360												"		"	chips 1/4" minus	
365	15:43											"		"	same	
370												"		"	same	
375												"		"	same	
380												"		"	same	
385	16:05 16:12											"		"	same Rough - driller says "cuttings around the bit Rough.	
390														"	"	
395	16:26													mostly green some pale yellow	Stop @ 16:30 for minor repair - resume @ 16:40 Sandstone	
400	16:46			50												

Additional Comments:

Logged By: D Eugenis Date: 1/27/06

Lithologic Log - ~~Boring~~ Number:

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Composition: Clay %	Silt %	Sand % (vf to cs)	gravel/cobbles % diam, shape	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description (rock types, formation name)	Lithology graphic
405	16:50			50								all chips		green	Chips ½" minus smooth ~~chert~~ qtzite	
410	16:55 17:04 17:07			75								"		lt grey grey & green	~~chert~~ chips 3/8" minus	
415												"		green	~~chert~~ chips 0.2" minus qtzite	
420												"		"	"	
425	17:30											"		Green w/ trace of black	"	
430	17:36 17:44 17:55											"		"	Same old stuff rough @ 428' smooth	
435	18:00			75								"		lt grey green trace black	~~chert~~ qtzite ch.ps mostly <0.2" black ~~chert~~ ch.ps 3/8 - ½" qtzite	
440	18:09			75								"		green	~~chert~~ qtzite larger frags suggest some fracture	
445	1815											"			Same	
6/28 6/29 450	1825 0756 0803			75								"			same	

Additional Comments: SWL 06:58 hrs 6/29/06 = 87.5' below TDC - 3' = 84.5'

Logged By: D. Burgeson Date: 06/28/06 thru 447'. 6/29/06 447 +

Lithologic Log - Boring Number:

Page 1D of ____

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Composition: Clay %	Silt %	Sand % (vf to cs)	gravel/cobbles % diam, shape	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description (rock types, formation name)	Lithology graphic
				75-100								all chips		lt grey & green	~~chert~~ qtzite chips ¼" minus uniform drilling	
455	0810														shut down 'til 08:30 to tighten air-line	
	0832											"		green & grey some brown	chert chips ¾" minus, larger chips show fracture surfaces	
460	0839											"		mostly green	~~chert~~ qtzite chips ½" minus	
465	0850														drilled uniformly smooth	
	0856			100								"		"	~~chert~~ chips Minor Fe Stain (1 chip)	
	0909														little chatter @ 469-470	
470	0910											"		"	slightly more Fe staining than 465-470'	
475	0916														little chatter @ 472 & 474	
												"		"	No Fe stain uniform drilling	
480	0925														chatter @ 479 few larger (1") chips	
														"	chips ⅞" minus w/ flat surfaces	
485	0931														moderately rough 484-485'	
	09:38													green & brown	chatter - 1" chips w/ fracture surfaces. Fe + Mn? stain	
	09:50														Discharge & color to yellow brown	
490	09:56														possible slickensides on brown chip	
															Discharge is fairly clean, not yellow any longer chatter or cuttings less fractured than 485-490	
495	1005			125												
														lt grey & green	chips ½" minus Fe (limonite?) stain	
500	1013															

Additional Comments:

Logged By: D. Bugenig Date: 06/29/08

ECO:LOGIC Engineering

Lithologic Log - Boring Number:

Page 11 of ____

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Composition: Clay %	Silt %	Sand % (vf to cs)	gravel/cobbles % diam, shape	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description (rock types, formation name)	Lithology graphic
				150								all chips		lt. gray green brown	Chips 3/8" Some Fe Stain little chatter every 05' or so	
505	10:30 13:05 13:09													same	chips 3/8" minus 2 chips of granitic slough rock stop to pump out pond Rough 508-510	
510														"	Same discharge a'd to light yellow rods lurch every few inches	
515	1316													"	Chips 1/4" minus stain on some chips	
520	1322													brown, black grey green	Chips 3/8" minus chatter 523-525 change to mostly brown-colored chert, mottled w/ black	
525	1331													"	Chips 1/2" minus w/ Fe Stain	
530	1337 1348 1357			175										mostly brown	Same but smaller chips	
535	1354													"	similar to above, but more staining 13:58 stop to tighten air swivel hose 14:11 resume drilling	
540	1416													"	Smaller chips less stain	
545	1422													/	rough 544-545	
550	1425 1430 1435														Stop to repair air hose, blew hose a 2nd time Fixed again @ 15:16	

Additional Comments:

Logged By: Dale CB Date: 6/29/06

ECO:LOGIC Engineering

Lithologic Log - Boring Number:

Page 12 of ____

Depth (bgs)	Penetration time	Circulation: Returns	Circulation: Loss	Airlift Q (GPM)	Unconsolidated Sediment Composition: Clay %	Silt %	Sand % (vf to cs)	gravel/cobbles % diam, shape	Roundness	Plasticity	Cementation	Chips vs. grains	Moisture	Color	Description (rock types, formation name)	Lithology graphic
				175								all chips		brown w/ some black & green	~~chert~~ quartzite	
555	1525											"		"	increased green chips ½" minus	
	1544														- blew hose again	
560												"		"	Chips ~0.2" minus	
															occassionally, hammer bangs / hangs up.	
565	1552											"		mostly brown	Chips ½" Minus, stained	
	1608															
570												"			rough discharge color d'k to yellow mixed chert & lt brown siltstone	
	1615															
575												"			siltstone - lt brown, friable, interbedded w/ ~~chert~~ qtzite	
															mostly chert 579 rods binding 580'	
580												"			siltstone & ~~chert~~ 20/80 ~~siltstone~~ - lt brown, friable chert - brown & green qtzite	
	1633															
585												"		white black brown grey	includes white ~~chert~~ or fine grained intrusive one chip of granitic (contamination?)	
	1638														Mostly black 587-590' qtz. ~~chert~~ only	
	1648															
590	1652													black w/ white brown & green	~~chert~~ - some larger chips include fractures that have healed	
595															sand	
600	1700															

Additional Comments:

Logged By: Pete Bengeyfield Date: 04/25/06

ECO:LOGIC Engineering

APPENDIX B

PUMPING TEST DATA AND ANALYSIS RESULTS

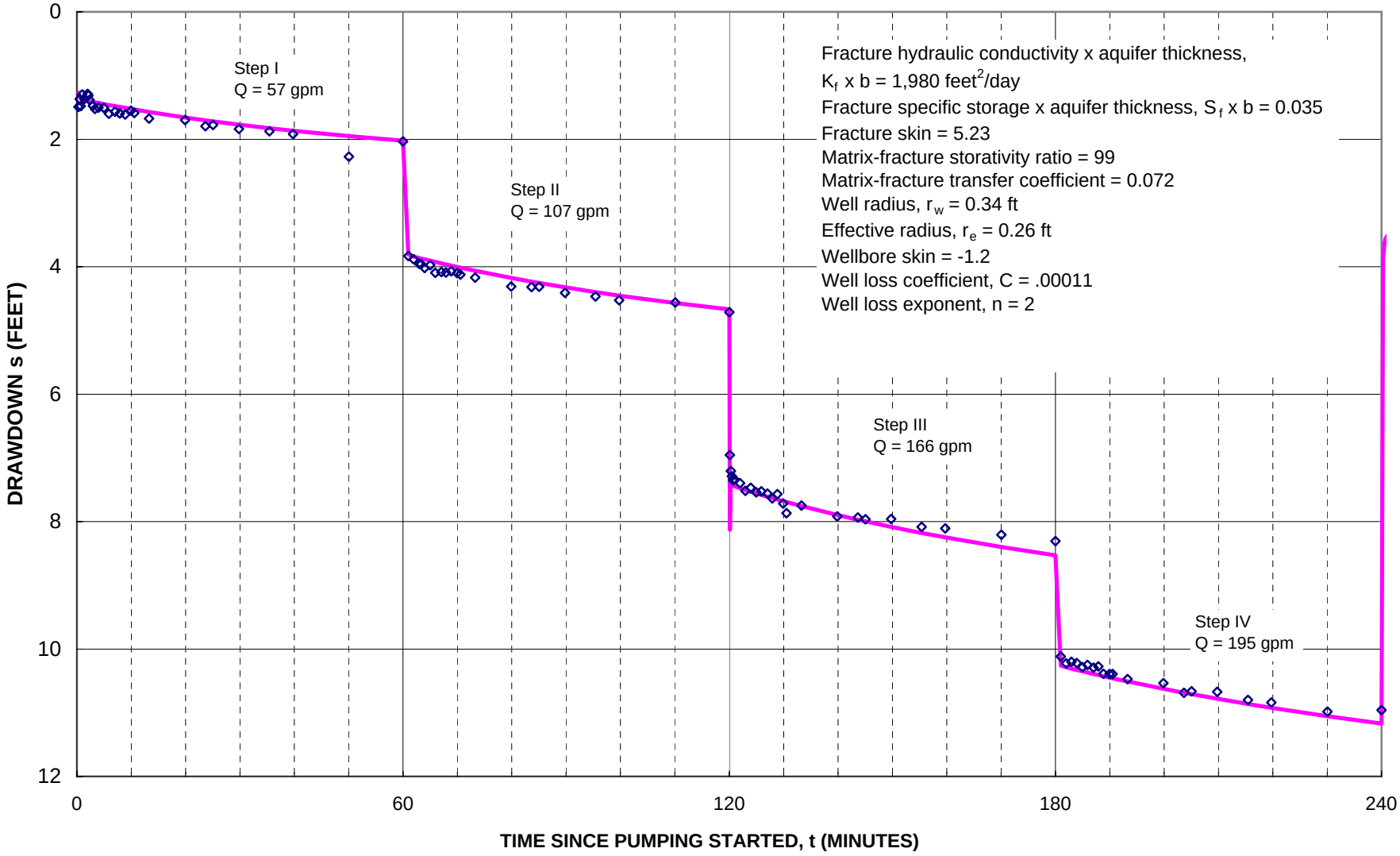
(CD-ROM in Excel© format)

APPENDIX C

LABORATORY REPORT OF WATER ANALYSES

(CD-ROM in PDF format)

JUNE LAKES RODEO GROUNDS WELL 2
STEP TEST 7/15/06



Laboratory Report
Report ID: 77124

Sierra Environmental Monitoring, Inc.

Eco Logic Consulting Engineers	**Date:**	8/17/2006
Attn: Dale Bugenig	**Client:**	ECO-500
10381 Double R Blvd.	**Taken by:**	Client
Reno, NV 89521	**PO #:**	

Dear Dale Bugenig,

It is the policy of Sierra Environmental Monitoring, Inc to strictly adhere to a comprehensive Quality Assurance Plan that insures the data presented in this report are both accurate and precise. Sierra Environmental Monitoring, Inc. maintains accreditation in the State of Nevada (NV-15) and the State of California (ELAP 2526).

The data presented in this report were obtained from the analysis of samples received under a chain of custody. Unless otherwise noted below, samples were received in good condition, properly preserved and within the hold time for the requested analyses. Any anomalies associated with the analysis of the samples have been flagged with appropriate explanation in the Analysis Report section of this Laboratory Report.

General Comments:

- There are no general comments for this report.

Individual Sample Comments:

- There are no specific comments that are associated with these samples.

Approved By: **Date:**

Sierra Environmental Monitoring, Inc. 8/17/2006

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

John Kobza, Ph.D.
Laboratory Director

1135 Financial Blvd.
Reno, NV 89502-2348
Phone (775) 857-2400
FAX (775) 857-2404
sem@sem-analytical.com

John C. Seher
Special Consultant
Quality Assurance Manager

Laboratory Report
Report ID: 77124

Sierra Environmental Monitoring, Inc.

Eco Logic Consulting Engineers
Attn: Dale Bugenig
10381 Double R Blvd.
Reno, NV 89521

Date: 8/17/2006
Client: ECO-500
Taken by: Client
PO #:

Analysis Report

Sample ID:	Customer Sample ID	Date Sampled	Time Sampled	Date Received
S200607-0615	JLRG-1	7/14/2006	5:30 AM	7/14/2006

Parameter	Method	Result	Units	MCL	Analyst	Date Analyzed	Data Flag
Alkalinity, Total	SM 2320 B	63	mg/L CaCO3		Pacheco	7/14/2006	
Alkalinity/Bicarbonate	SM 2320 B	63	mg/L CaCO3		Pacheco	7/14/2006	
Alkalinity/Carbonate	SM 2320 B	<2	mg/L CaCO3		Pacheco	7/14/2006	
Alkalinity/Hydroxide	SM 2320 B	<2	mg/L CaCO3		Pacheco	7/14/2006	
Aluminum - ICP-OES	EPA 200.7	<0.05	mg/L	0.05/0.2 mg/L	Keller	7/21/2006	
Antimony - ICP-MS	EPA 200.8	<0.001	mg/L	0.006 mg/L	Li	8/4/2006	
Arsenic - ICP-MS	EPA 200.8	0.024	mg/L	0.01 mg/L	Li	8/4/2006	
Asbestos	Subcontract	See Report				8/1/2006	
Barium - ICP-MS	EPA 200.8	0.001	mg/L	2.0 mg/L	Li	8/4/2006	
Beryllium - ICP-MS	EPA 200.8	<0.001	mg/L	0.004 mg/L	Li	8/4/2006	
Cadmium - ICP-MS	EPA 200.8	<0.001	mg/L	0.005 mg/L	Li	8/4/2006	
Calcium - ICP-OES	EPA 200.7	19	mg/L		Keller	7/21/2006	
Carbamates (ML531) (EPA 531.1)	Subcontract	See Report				8/17/2006	
Chloride - Ion Chromatography	EPA 300.0	1.5	mg/L	250/400 mg/L	Henderson	7/18/2006	
Chromium - ICP-MS	EPA 200.8	<0.001	mg/L	0.1 mg/L	Li	8/4/2006	
Color Apparent	EPA 110.2	<5	Color Units	15	Hellmann	7/15/2006	
Conductivity	SM 2510 B	130	µmhos/cm		Pacheco	7/19/2006	
Copper - ICP-MS	EPA 200.8	0.003	mg/L	1.0 mg/L	Li	8/4/2006	
Cyanide,Total	SM 4500 CN C	<0.005	mg/L	0.2 mg/L	Hellmann	7/27/2006	
Diquat (EPA 549.2)	Subcontract	See Report				8/17/2006	
EDB-DBC (EPA 504.1)	Subcontract	See Report				8/17/2006	
Endothall (EPA 548.1)	Subcontract	See Report				8/17/2006	
Fluoride - Ion Chromatography	EPA 300.0	0.3	mg/L	2.0/4.0 mg/L	Henderson	7/18/2006	
Glyphosate (EPA 547)	Subcontract	See Report				8/17/2006	
Gross Alpha and Beta Radiological	Subcontract	See Report				8/10/2006	
Hardness, as CACO3	SM 2340 C	59	mg/L CaCO3		Seher	7/25/2006	
Herbicides (NPS3) (EPA 515.1)	Subcontract	See Report				8/17/2006	
Iron - ICP-OES	EPA 200.7	<0.05	mg/L	0.3/0.6 mg/L	Keller	7/21/2006	
Langelier Index	SEM - SOP	-0.79			Seher	7/27/2006	
Lead - ICP-MS	EPA 200.8	0.001	mg/L	0.015 mg/L	Li	8/4/2006	
Magnesium - ICP-OES	EPA 200.7	2.8	mg/L	150 mg/L	Keller	7/21/2006	
Manganese - ICP-MS	EPA 200.8	<0.01	mg/L	0.05/0.10 mg/L	Li	8/4/2006	B
MBAS Surfactants	SM 5540 C	<0.05	mg/L	0.5 mg/L	Kobza	7/15/2006	
Mercury - AA Cold Vapor	EPA 245.1	<0.0002	mg/L	0.002 mg/L	Kleinworth	7/26/2006	

John Kobza, Ph.D.
Laboratory Director

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John C. Seher
Special Consultant
Quality Assurance Manager

Laboratory Report
Report ID: 77124

Sierra Environmental Monitoring, Inc.

Eco Logic Consulting Engineers
Attn: Dale Bugenig
10381 Double R Blvd.
Reno, NV 89521

Date: 8/17/2006
Client: ECO-500
Taken by: Client
PO #:

Analysis Report

Sample ID:	Customer Sample ID	Date Sampled	Time Sampled	Date Received
S200607-0615	JLRG-1	7/14/2006	5:30 AM	7/14/2006

Parameter	Method	Result	Units	MCL	Analyst	Date Analyzed	Data Flag
Nickel - ICP-MS	EPA 200.8	<0.006	mg/L	0.1 mg/L	Li	8/4/2006	B
Nitrate-N - Ion Chromatography	EPA 300.0	<0.5	mg/L N	10 mg/L as N	Henderson	7/17/2006	
Nitrite-N - Ion Chromatography	EPA 300.0	<0.5	mg/L N	1 mg/L as N	Henderson	7/17/2006	
Odor	SM 2150	0	T.O.N.	3 T.O.N.	Hellmann	7/15/2006	
Pesticides and PCBs (PESTSDW) (E	Subcontract	See Report				8/17/2006	
pH	SM 4500 H+B	7.57	pH Units	6.5 to 8.5	Pacheco	7/14/2006	
pH - Temperature	SM 4500 H+B	18.4	°C		Pacheco	7/14/2006	
Potassium - ICP-OES	EPA 200.7	2.5	mg/L		Keller	7/21/2006	
Radium 226 - Radiological	Subcontract	See Report				8/10/2006	
Radium 228 - Radiological	Subcontract	See Report				8/10/2006	
Selenium - ICP-MS	EPA 200.8	<0.005	mg/L	0.05 mg/L	Li	8/4/2006	
Silver - ICP-MS	EPA 200.8	<0.001	mg/L	0.1 mg/L	Li	8/4/2006	
Sodium - ICP-OES	EPA 200.7	6.2	mg/L		Keller	7/21/2006	
Sulfate - Ion Chromatography	EPA 300.0	10	mg/L	250/500 mg/L	Henderson	7/18/2006	
SVOCs (ML525) (EPA 525)	Subcontract	See Report				8/17/2006	
Thallium - ICP-MS	EPA 200.8	<0.0005	mg/L	0.002 mg/L	Li	8/4/2006	
Total Dissolved Solids	SM 2540 C	130	mg/L	500/1000 mg/L	Pacheco	7/17/2006	
Total Recoverable Metals - Acid Dig	EPA 200.2	Completed			Kleinworth	7/24/2006	
Turbidity	SM 2130 B	0.2	NTU		Hellmann	7/15/2006	
Uranium - ICP-MS	EPA 200.8	<0.001	mg/L	0.03 mg/L	Li	8/4/2006	
VOCs (VOASDWA) (EPA 524.2)	Subcontract	See Report				8/17/2006	
Zinc - ICP-MS	EPA 200.8	0.05	mg/L	5 mg/L	Li	8/4/2006	B

SAMPLE WATER AS TESTED ____ DID _X_ DID NOT MEET DRINKING WATER STANDARDS for Arsenic

Data Flag Legend:

B - Element or compound also found in associated Method Blank.

John Kobza, Ph.D.
Laboratory Director

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Phone (775) 857-2400
FAX (775) 857-2404
sem@sem-analytical.com

John C. Seher
Special Consultant
Quality Assurance Manager

Laboratory Report
Report ID: 77124

Sierra Environmental Monitoring, Inc.

Eco Logic Consulting Engineers
Attn: Dale Bugenig
10381 Double R Blvd.
Reno, NV 89521

Date: 8/17/2006
Client: ECO-500
Taken by: Client
PO #:

Quality Control Report

Parameter	*LCS, % Recovery*	*MS, % Recovery*	*MSD, % Recovery*	*RPD, %*	*Method Blank*	
Alkalinity, Total	102.0			0.00		
Alkalinity/Bicarbonate				0.00		
Alkalinity/Carbonate				0.00		
Alkalinity/Hydroxide				0.00		
Aluminum - ICP-OES	102.0	101.0	102.0	1.18		
Antimony - ICP-MS	105.0	101.0	104.0	2.93	<0.001	mg/L
Arsenic - ICP-MS	102.0	104.0	104.0	0.00	<0.001	mg/L
Barium - ICP-MS	101.0	100.0	104.0	3.93	<0.001	mg/L
Beryllium - ICP-MS	101.0	101.0	103.0	1.96	<0.001	mg/L
Cadmium - ICP-MS	100.0	102.0	103.0	0.98	<0.001	mg/L
Calcium - ICP-OES	99.0	94.0	96.0	1.57		
Chloride - Ion Chromatography	102.0	103.0	103.0	0.19	<0.5	mg/L
Chromium - ICP-MS	102.0	102.0	103.0	0.98	<0.001	mg/L
Conductivity	99.0			1.24		
Copper - ICP-MS	102.0	103.0	104.0	0.97	<0.001	mg/L
Cyanide,Total	85.0	94.0			<0.005	mg/L
Fluoride - Ion Chromatography	100.0	101.0	102.0	0.59	<0.1	mg/L
Iron - ICP-OES	102.0	103.0	104.0	1.16		
Lead - ICP-MS	105.0	105.0	106.0	0.95	<0.001	mg/L
Magnesium - ICP-OES	99.0	102.0	103.0	1.47		
Manganese - ICP-MS	102.0	102.0	108.0	5.71	<0.01	mg/L
MBAS Surfactants	96.0				<0.05	mg/L
Mercury - AA Cold Vapor	99.0	109.0	110.0	0.66	<0.0002	mg/L
Nickel - ICP-MS	101.0	102.0	104.0	1.94	<0.006	mg/L
Nitrate-N - Ion Chromatography	102.0	101.0	102.0	0.99	<0.05	mg/L
Nitrite-N - Ion Chromatography	98.0	98.0	98.0	0.00	<0.05	mg/L
pH				0.13		
pH - Temperature				2.20		
Potassium - ICP-OES	100.0	100.0	102.0	0.99		
Selenium - ICP-MS	102.0	102.0	104.0	2.14	<0.005	mg/L

John Kobza, Ph.D.
Laboratory Director

1135 Financial Blvd.
Reno, NV 89502-2348
Phone (775) 857-2400
FAX (775) 857-2404
sem@sem-analytical.com

John C. Seher
Special Consultant
Quality Assurance Manager

Laboratory Report
Report ID: 77124

Sierra Environmental Monitoring, Inc.

Eco Logic Consulting Engineers
Attn: Dale Bugenig
10381 Double R Blvd.
Reno, NV 89521

Date: 8/17/2006
Client: ECO-500
Taken by: Client
PO #:

Quality Control Report

Parameter	*LCS, % Recovery*	*MS, % Recovery*	*MSD, % Recovery*	*RPD, %*	*Method Blank*	
Silver - ICP-MS	101.0	95.0	99.0	4.12	<0.001	mg/L
Sodium - ICP-OES	97.0	99.0	100.0	0.50		
Sulfate - Ion Chromatography	100.0	101.0	101.0	0.00	<0.2	mg/L
Thallium - ICP-MS	102.0	105.0	105.0	0.00	<0.0005	mg/L
Total Dissolved Solids		99.0		7.11	<10	mg/L
Turbidity	102.0			1.77		
Uranium - ICP-MS	100.0	98.0	998.0	164.10	<0.001	mg/L
Zinc - ICP-MS	110.0	101.0	102.0	0.99	<0.03	mg/L

Legend: ***LCS- Laboratory Control Standard*** ***MS- Matrix Spike*** ***MSD- Matrix Spike Duplicate***
RPD- Relative Percent Difference

John Kobza, Ph.D.
Laboratory Director

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sem@sem-analytical.com

John C. Seher
Special Consultant
Quality Assurance Manager

Forensic Analytical

ANALYSIS REPORT
ASBESTOS IN DRINKING WATER
Transmission Electron Microscopy*

Client:	Sierra Environmental Monitoring	Page:	1 of 1
Contact:	John Kobza	Client Number:	A30514
Street:	1135 Financial Blvd	Report Number:	T010883
City/state/zip:	Reno NV 89502	Date/time Received:	7/18/06 1026

Site:	JLRG-1	Date/time filtered:	7/18/06 1343
Job ID:	S200607	Analyst(s):	RE
P.O. #:	06-469	Date Analyzed:	7/19/06
Date/time collected:	7/14/06 1730	Date Reported:	7/19/06
Hold time, hrs	>48		
Filter type:	25mm Mixed Cellulose Ester		
Pore size	0.22 µm		

ANALYTICAL RESULTS	
Client Sample Number	S200607-0615
Lab Sample Number	20042507
Volume Filtered, mL	30
Filter Area, mm2	190
Grid Opening Area, mm2	0.0093
Number of Grids Analyzed	4
Area Analyzed, mm2	0.0372
# Asbestos Fibers ≥10um	0
Analytical Sensitivity, MFL	0.2
Asbestos Concentration, ≥10um in length, MFL	**<0.2**
Asbestos Type(s) Detected**	**ND**
Water Blank Conc., MFL	n/a
95% Upper Conf. Limit	0.6
95% Lower Conf. Limit	0

Mark S. Floyd, EM Supervisor, Hayward Laboratory

* Method 100.2 (EPA/600/R-94/134). Results are reported in Millions of Fibers per Liter (MFL) over 10 µm in length.

** Asbestos types: CH=chrysotile; AM=amosite; CR=crocidolite; AC=actinolite; TR=tremolite; AN=anthophyllite; ND=none detected.

3777 Depot Road, Suite 409, Hayward, California 94545 Telephone: 510-887-8828 Fax: 510-887-4218

Sierra Environmental Monitoring, Inc.
1135 Financial Blvd. - Reno - Nevada - 89502
Phone: (775) 857-2400 Fax: (775) 857-2404 Email: sem@sem-analytical.com

Forensic Laboratory Sub-Contract Chain of Custody Report

PO #06-469

Sampled By: D. Bugenig Compliance:

Date Sampled	Time Sampled	Sample Type	Sample Identification	Analyses Requested	Remarks	Turn Around Time
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Asbestos		Normal

Okay to run out of Bulk per Client

	Signature	Print Name	Company	Date	Time
Relinquished By:		Booker	SEM	7-19-06	1530
Received By:		Nicole Lawrence		7-18-06	1026
Relinquished By:					
Received By:					

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

SEMI001 Sierra Environmental Monitoring, Inc.

Client SDG: 167369 GEL Work Order: 167369

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

ND The analyte concentration is not detected above the detection limit.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

J M Harley

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Sierra Env. Monitoring, Inc
Address : 1135 Financial Boulevard
Reno, Nevada 89502

Report Date: August 8, 2006

Contact: Mr. John Kobza
Project: **Drinking Water Radiochem Analysis**

Client Sample ID:	JLRG-1/S200607-0615	Project:	SEMI00204
Sample ID:	167369001	Client ID:	SEMI001
Matrix:	Drinking Water (Potable)		
Collect Date:	14-JUL-06 05:30		
Receive Date:	19-JUL-06		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Gas Flow Proportional Counting											
Gross Alpha/Beta in Drinking Water EPA 900.0											
Alpha	U	0.874	+/-0.885	1.58	3.00	pCi/L		JXS4 08/02/06	1035	549712	1
Beta	U	1.87	+/-1.90	3.88	4.00	pCi/L					
Radium-228 in Drinking Water EPA 904.0											
Radium-228	U	0.118	+/-0.274	0.633	1.00	pCi/L		AXD1 07/31/06	1457	550324	2
Rad Radium-226											
Radium-226 in Drinking Water EPA 903.1 (De-emanati											
Radium-226	U	0.409	+/-0.491	0.810	1.00	pCi/L		SG 08/04/06	2105	549548	3

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 900.0	
2	EPA 904.0	
3	EPA 903.1	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Radium-228	Radium-228 in Drinking Water EPA 904.0			72	(25%-125%)

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: August 8, 2006

Sierra Env. Monitoring, Inc
1135 Financial Boulevard
Reno, Nevada

Contact: Mr. John Kobza

Workorder: 167369

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow											
Batch 549712											
QC1201139177 167365002 DUP											
Alpha		U	0.673 +/-0.791	U	0.113 +/-1.20	pCi/L	0		(0%-20%)	JXS4	07/22/06 12:12
Beta		U	1.94 +/-1.29	U	2.65 +/-1.77	pCi/L	0		(0%-20%)		
QC1201139178 167104005 DUP											
Alpha		U	0.0163 +/-0.378	U	-0.0964 +/-0.443	pCi/L	0		(0%-20%)		07/23/06 12:05
Beta			1.29 +/-0.589	U	1.52 +/-0.813	pCi/L	16		(0%-20%)		
QC1201139181 LCS											
Alpha	35.9				32.7 +/-3.44	pCi/L		91	(80%-120%)		07/22/06 10:44
Beta	105				103 +/-5.02	pCi/L		98	(80%-120%)		
QC1201139176 MB											
Alpha				U	-0.236 +/-0.396	pCi/L					07/22/06 12:12
Beta				U	-0.555 +/-0.827	pCi/L					
QC1201139179 167104005 MS											
Alpha	216	U	0.0163 +/-0.378		163 +/-20.1	pCi/L		76	(70%-130%)		07/22/06 10:44
Beta	629		1.29 +/-0.589		618 +/-30.1	pCi/L		98	(70%-130%)		
QC1201139180 167104005 MSD											
Alpha	216	U	0.0163 +/-0.378		178 +/-20.9	pCi/L	9	83	(0%-20%)		
Beta	629		1.29 +/-0.589		624 +/-30.4	pCi/L	1	99	(0%-20%)		
Batch 550324											
QC1201140701 167361001 DUP											
Radium-228			5.05 +/-0.721		5.89 +/-0.743	pCi/L	15		(0%-20%)	AXD1	07/31/06 14:56
QC1201140703 LCS											
Radium-228	8.36				9.12 +/-0.969	pCi/L		109	(80%-120%)		07/31/06 16:02
QC1201140700 MB											
Radium-228				U	0.372 +/-0.298	pCi/L					07/31/06 14:56
QC1201140702 167361001 MS											
Radium-228	29.3		5.05 +/-0.721		35.4 +/-3.21	pCi/L		103	(70%-130%)		
Rad Ra-226											

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 167369

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Ra-226											
Batch 549548											
QC1201138767 167365001 DUP											
Radium-226		U	0.158 +/-0.400		0.900 +/-0.572	pCi/L	140*		(0%-20%)	SG	08/05/06 14:40
QC1201138769 LCS											
Radium-226	41.8				43.7 +/-2.51	pCi/L		104	(80%-120%)		08/06/06 18:24
QC1201138766 MB											
Radium-226				U	0.169 +/-0.262	pCi/L					08/05/06 14:40
QC1201138768 167365001 MS											
Radium-226	83.7	U	0.158 +/-0.400		89.8 +/-4.97	pCi/L		107	(80%-120%)		08/06/06 18:24

Notes:
The Qualifiers in this report are defined as follows:

*	A quality control analyte recovery is outside of specified acceptance criteria
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
H	Analytical holding time was exceeded
J	Value is estimated
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Sierra Environmental Monitoring, Inc.
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Phone: (775) 857-2400 Fax: (775) 857-2404 Email: sem@sem-analytical.com

167369-1

General Engineering Sub-Contract Chain of Custody Report

PO #06-471

Sampled By: D. Bugenig

Compliance:

Date Sampled	Time Sampled	Sample Type	Sample Identification	Analyses Requested	Remarks	Turn Around Time
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Gross Alpha and Beta Radiological		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Radium 226 - Radiological		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Radium 228 - Radiological		Normal

	Signature	Print Name	Company	Date	Time
Relinquished By:			SEM	7-14-06	1530
Received By:	Marian Gallegos	Marian Gallegos	GEL	7-18-06	930
Relinquished By:					
Received By:					

MWH Laboratories
A Division of MWH Americas, Inc.

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: 626 386 1100
Fax: 626 386 1101
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Sierra Environmental Monitoring, Inc.
1135 Financial Blvd.

Reno , NV 89502

Attention: John Kobza
Fax: (775) 857-2404

DATE OF ISSUE
AUG 1 4 2006
MWH LABORATORIES

YOM Yolanda Martin
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac 01114CA

Report#: 179167
DRINKING

Laboratory certifies that the test results meet all **NELAC** requirements unless noted in the Comments section or the Case Narrative. Following the cover page are Comments,QC Report,QC Summary,Data Report,Hits Report, totaling 37 page[s].

179167

Sierra Environmental Monitoring, Inc.

1135 Financial Blvd. - Reno - Nevada - 89502

Phone: (775) 857-2400 Fax: (775) 857-2404 Email: sem@sem-analytical.com

MWH Laboratory Sub-Contract Chain of Custody Report

PO #06-470

Sampled By: D. Bugenig

Compliance: No

Date Sampled	Time Sampled	Sample Type	Sample Identification	Analyses Requested	Remarks	Turn Around Time
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Carbamates (ML531) (EPA 531.1)	Req Sac	Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Diquat (EPA 549.2)		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	EDB-DBC (EPA 504.1)		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Endothall (EPA 548.1)	CA Sample	Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Glyphosate (EPA 547)		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Herbicides (NPS3) (EPA 515.1)		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	Pesticides and PCBs (PESTSDW) (EPA 508)		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	SVOCs (ML525) (EPA 525)		Normal
7/14/2006	5:30:00 AM	Drinking Water	S200607-0615 - JLRG-1	VOCs (VOASDWA) (EPA 524.2)		Normal

6°C

	Signature	Print Name	Company	Date	Time
Relinquished By:		Brooker	SEM	7-17-06	1530
Received By:					
Relinquished By:					
Received By:		Fidel Chavez	MWH	7-18-06	10:30

MWH Laboratories
750 Royal Oaks Drive, Monrovia, CA 91016
PHONE: 626-386-1100/FAX: 626-386-1101

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Sierra Environmental Monitoring, Inc.
1135 Financial Blvd.
Reno, NV 89502
Attn: John Kobza
Phone: (775) 857-2400

Customer Code: SIERRAENV
PO#: 06-470
Group#: 179167
Project#: DRINKING
Proj Mgr: Yolanda Martin
Phone: (626) 386-1104

The following samples were received from you on **07/18/06**. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using MWH Laboratories.

Sample#	Sample Id	Matrix	Sample Date
	Tests Scheduled		
2607180168	S200607-0615-JLRG-1	Water	14-jul-2006 05:30:00
	@DIQUAT @EDB-DBC @ML505 @ML515.4 @ML525 @ML531.2 @VOASDWA ENDOTHAL GLYPHOS		
2607180205	TRAVEL BLANK-ANALYZE	Water	14-jul-2006 00:00:00
	@EDB-DBC @VOASDWA		

Test Acronym Description

Test Acronym	Description
@DIQUAT	Diquat and Paraquat
@EDB-DBC	EDB and DBCP by GC-ECD
@ML505	Pesticides by EPA 505
@ML515.4	Herbicides by 515.4
@ML525	525 Semivolatiles by GC/MS
@ML531.2	Aldicarbs by 531.2
@VOASDWA	Regulated VOCs plus Lists 1&3
ENDOTHAL	Endothall
GLYPHOS	Glyphosate

MWH Laboratories
A Division of MWH Americas, Inc.

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: 626 386 1100
Fax: 626 386 1101
1 800 566 LABS (1 800 566 5227)

Report
Comments
#179167

(QC Ref#: 2607180168)

Test: Di-n-Butylphthalate (ML/EPA 525.2)

L3- The associated blank spike recovery was above method acceptance limits.

Test: Methoxychlor (ML/EPA 505)

L4- The associated blank spike recovery was below method acceptance limits.

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1 800 566 LABS (1 800 566 5227)

Laboratory
Hits Report
#179167

Sierra Environmental Monitoring, Inc.
John Kobza
1135 Financial Blvd.
Reno , NV 89502

Samples Received

18-jul-2006 14:41:23

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2607180168	S200607-0615-JLRG-1				
	2607180205	TRAVEL BLANK-ANALYZE				

SUMMARY OF POSITIVE DATA ONLY.

MWH Laboratories
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750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
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1 800 566 LABS (1 800 566 5227)

Laboratory
Data Report
#179167

Sierra Environmental Monitoring, Inc.
John Kobza
1135 Financial Blvd.
Reno , NV 89502

Samples Received

07/18/06

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
S200607-0615-JLRG-1 (2607180168) Sampled on 07/14/06 05:30								
07/19/06	07/26/06 00:00	327594	(ML/EPA 548.1)	Endothall	ND	ug/l	5.0	1
	07/24/06 00:00	327078	(ML/EPA 547)	Glyphosate	ND	ug/l	6.0	1
525 Semivolatiles by GC/MS								
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	2,4-Dinitrotoluene	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	alpha-Chlordane	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Diazinon (Qualitative)	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Acenaphthylene	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Alachlor	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Aldrin	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Anthracene	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Atrazine	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Benz(a)Anthracene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Benzo(a)pyrene	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Benzo(b)Fluoranthene	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Benzo(g,h,i)Perylene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Benzo(k)Fluoranthene	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Di(2-Ethylhexyl)phthalate	ND	ug/l	0.6	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Butylbenzylphthalate	ND	ug/l	0.5	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Bromacil	ND	ug/l	0.2	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Butachlor	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Caffeine by method 525mod	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Chrysene	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Dibenz(a,h)Anthracene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Di-(2-Ethylhexyl)adipate	ND	ug/l	0.6	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Diethylphthalate	ND	ug/l	0.5	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Dieldrin	ND	ug/l	0.2	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Dimethylphthalate	ND	ug/l	0.5	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Dimethoate	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Di-n-Butylphthalate	ND(L3)	ug/l	1.0	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Endrin	ND	ug/l	0.1	1

MWH Laboratories
A Division of MWH Americas, Inc.

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Sierra Environmental Monitoring, Inc.
(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Fluoranthene	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Fluorene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	gamma-Chlordane	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Hexachlorobenzene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Hexachlorocyclopentadiene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Heptachlor	ND	ug/l	0.04	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Heptachlor Epoxide (isomer B)	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Indeno(1,2,3,c,d)Pyrene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Isophorone	ND	ug/l	0.5	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Lindane	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Methoxychlor	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Metribuzin	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Molinate	ND	ug/l	0.1	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Metolachlor	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	trans-Nonachlor	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Pentachlorophenol	ND	ug/l	1.0	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Phenanthrene	ND	ug/l	0.02	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Propachlor	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Pyrene	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Simazine	ND	ug/l	0.05	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Thiobencarb	ND	ug/l	0.2	1
07/21/06	07/25/06 21:13	327689	(ML/EPA 525.2)	Trifluralin	ND	ug/l	0.1	1
			(ML/EPA 525.2)	Perylene-d12(70-130)	86	% Rec		
			(ML/EPA 525.2)	Triphenylphosphate(70-130)	117	% Rec		
			(ML/EPA 525.2)	1.3-dimethyl-2-nbenz(70-130)	102	% Rec		
				Aldicarbs by 531.2				
	07/28/06 11:54	328540	(ML/EPA 531.2)	3-Hydroxycarbofuran	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Aldicarb (Temik)	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Aldicarb sulfone	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Aldicarb sulfoxide	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Baygon (Propoxur)	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Carbofuran (Furadan)	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Carbaryl	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Methiocarb	ND	ug/l	0.5	1

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Sierra Environmental Monitoring, Inc.
(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
	07/28/06 11:54	328540	(ML/EPA 531.2)	Methomyl	ND	ug/l	0.5	1
	07/28/06 11:54	328540	(ML/EPA 531.2)	Oxamyl (Vydate)	ND	ug/l	0.5	1
			(ML/EPA 531.2)	BDMC(70-130)	110	% Rec		
			Diquat and Paraquat					
07/19/06	07/26/06 00:00	327543	(ML/EPA 549.2)	Diquat	ND	ug/l	0.4	1
07/19/06	07/26/06 00:00	327543	(ML/EPA 549.2)	Paraquat	ND	ug/l	2.0	1
			EDB and DBCP by GC-ECD					
07/22/06	07/22/06 14:22	327032	(ML/EPA 504.1)	Dibromochloropropane (DBCP)	ND	ug/l	0.01	1
07/22/06	07/22/06 14:22	327032	(ML/EPA 504.1)	Ethylene Dibromide (EDB)	ND	ug/l	0.01	1
			Herbicides by 515.4					
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	2,4,5-T	ND	ug/l	0.2	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	2,4,5-TP (Silvex)	ND	ug/l	0.2	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	2,4-D	ND	ug/l	0.1	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	2,4-DB	ND	ug/l	2.0	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Dichlorprop	ND	ug/l	0.5	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Acifluorfen	ND	ug/l	0.2	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Bentazon	ND	ug/l	0.5	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Dalapon	ND	ug/l	1.0	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	3,5-Dichlorobenzoic acid	ND	ug/l	0.5	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Tot DCPA Mono&Diacid Degradate	ND	ug/l	1.0	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Dicamba	ND	ug/l	0.08	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Dinoseb	ND	ug/l	0.2	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Pentachlorophenol	ND	ug/l	0.04	1
07/21/06	07/25/06 00:00	326940	(ML/EPA 515.4)	Picloram	ND	ug/l	0.1	1
			(ML/EPA 515.4)	2.4-DCPAA (70-130)	104	% Rec		
			(ML/EPA 515.4)	4.4-Dibrombiphenyl(60-140)	100	% Rec		
			Pesticides by EPA 505					
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1016 Aroclor	ND	ug/l	0.07	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1221 Aroclor	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1232 Aroclor	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1242 Aroclor	ND	ug/l	0.1	1

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Sierra Environmental Monitoring, Inc.
(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1248 Aroclor	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1254 Aroclor	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	PCB 1260 Aroclor	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Alachlor (Alanex)	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Aldrin	ND	ug/l	0.01	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Chlordane	ND	ug/l	0.1	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Dieldrin	ND	ug/l	0.01	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Endrin	ND	ug/l	0.01	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Heptachlor	ND	ug/l	0.01	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Heptachlor Epoxide	ND	ug/l	0.01	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Lindane (gamma-BHC)	ND	ug/l	0.01	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Methoxychlor	NA(L4)	ug/l	0.05	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Total PCBs	ND	ug/l	0.07	1
07/20/06	07/21/06 15:33	326872	(ML/EPA 505)	Toxaphene	ND	ug/l	0.5	1
				Regulated VOCs plus Lists 1&3				
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1,1-Trichloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1,2-Trichloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1-Dichloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1-Dichloroethylene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,1-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,2,3-Trichloropropane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,2-Dichloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,2-Dichloropropane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	1,3-Dichloropropane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	2,2-Dichloropropane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	2-Butanone (MEK)	ND	ug/l	5.0	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	o-Chlorotoluene	ND	ug/l	0.5	1

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(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
	07/20/06 08:20	326175	(ML/EPA 524.2)	p-Chlorotoluene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/l	5.0	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Benzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Bromobenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Bromoethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Chlorobenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Carbon Tetrachloride	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Bromoform	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Bromochloromethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Chloroethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Chlorodibromomethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Dibromomethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Bromodichloromethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Dichloromethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Di-isopropyl ether	ND	ug/l	3.0	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Ethyl benzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Dichlorodifluoromethane	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Fluorotrichloromethane-Freon11	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Hexachlorobutadiene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Isopropylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	m,p-Xylenes	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Naphthalene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	n-Butylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	n-Propylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	o-Xylene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	p-Isopropyltoluene	ND	ug/l	0.5	1

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(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
	07/20/06 08:20	326175	(ML/EPA 524.2)	sec-Butylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Styrene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	tert-amyl Methyl Ether	ND	ug/l	3.0	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/l	3.0	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	tert-Butylbenzene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Trichloroethylene (TCE)	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Trichlorotrifluoroethane(Freon	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Toluene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Total THM	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Total xylenes	ND	ug/l	0.5	1
	07/20/06 08:20	326175	(ML/EPA 524.2)	Vinyl chloride (VC)	ND	ug/l	0.3	1
			(EPA 524.2)	Toluene-d8(70-130)	103	% Rec		
			(EPA 524.2)	1.2-Dichloroethane-d4(70-130)	116	% Rec		
			(EPA 524.2)	4-Bromofluorobenzene(70-130)	110	% Rec		

TRAVEL BLANK-ANALYZE (2607180205) Sampled on 07/14/06 00:00

EDB and DBCP by GC-ECD

07/22/06	07/22/06 15:53	326849	(ML/EPA 504.1)	Dibromochloropropane (DBCP)	ND	ug/l	0.01	1
07/22/06	07/22/06 15:53	326849	(ML/EPA 504.1)	Ethylene Dibromide (EDB)	ND	ug/l	0.01	1

Regulated VOCs plus Lists 1&3

	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1,1-Trichloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1,2-Trichloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1-Dichloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1-Dichloroethylene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,1-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,2,3-Trichloropropane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/l	0.5	1

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(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,2-Dichloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,2-Dichloropropane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	1,3-Dichloropropane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	2,2-Dichloropropane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	2-Butanone (MEK)	ND	ug/l	5.0	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	o-Chlorotoluene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	p-Chlorotoluene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/l	5.0	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Benzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Bromobenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Bromoethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Chlorobenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Carbon Tetrachloride	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Bromoform	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Bromochloromethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Chloroethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Chlorodibromomethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Dibromomethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Bromodichloromethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Dichloromethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Di-isopropyl ether	ND	ug/l	3.0	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Ethyl benzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Dichlorodifluoromethane	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Fluorotrichloromethane-Freon11	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Hexachlorobutadiene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Isopropylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/l	0.5	1

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Laboratory
Data Report
#179167

Sierra Environmental Monitoring, Inc.
(continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
	07/20/06 08:48	326175	(ML/EPA 524.2)	m,p-Xylenes	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Naphthalene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	n-Butylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	n-Propylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	o-Xylene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	p-Isopropyltoluene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	sec-Butylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Styrene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	tert-amyl Methyl Ether	ND	ug/l	3.0	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/l	3.0	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	tert-Butylbenzene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Trichloroethylene (TCE)	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Trichlorotrifluoroethane(Freon	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Toluene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Total THM	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Total xylenes	ND	ug/l	0.5	1
	07/20/06 08:48	326175	(ML/EPA 524.2)	Vinyl chloride (VC)	ND	ug/l	0.3	1
			(EPA 524.2)	Toluene-d8(70-130)	102	% Rec		
			(EPA 524.2)	1.2-Dichloroethane-d4(70-130)	115	% Rec		
			(EPA 524.2)	4-Bromofluorobenzene(70-130)	109	% Rec		

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Laboratory
QC Summary
#179167

Sierra Environmental Monitoring, Inc.

QC Ref #326175 - Regulated VOCs plus Lists 1&3 Analysis Date: 07/20/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: rpd
2607180205	TRAVEL BLANK-ANALYZE	Analyzed by: rpd

QC Ref #326849 - EDB and DBCP by GC-ECD Analysis Date: 07/22/2006

2607180205	TRAVEL BLANK-ANALYZE	Analyzed by: sal

QC Ref #326872 - Pesticides by EPA 505 Analysis Date: 07/21/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: jrb

QC Ref #326940 - Herbicides by 515.4 Analysis Date: 07/25/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: szz

QC Ref #327032 - EDB and DBCP by GC-ECD Analysis Date: 07/22/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: sal

QC Ref #327078 - Glyphosate Analysis Date: 07/24/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: phk

QC Ref #327543 - Diquat and Paraquat Analysis Date: 07/26/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: phk

QC Ref #327594 - Endothall Analysis Date: 07/26/2006

2607180168	S200607-0615-JLRG-1	Analyzed by: crw

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Sierra Environmental Monitoring, Inc.
(continued)

QC Ref #327689 - 525 Semivolatiles by GC/MS Analysis Date: 07/25/2006

2607180168 S200607-0615-JLRG-1 Analyzed by: gwg

QC Ref #328540 - Aldicarbs by 531.2 Analysis Date: 07/28/2006

2607180168 S200607-0615-JLRG-1 Analyzed by: lhz

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Laboratory
QC Report
#179167

Sierra Environmental Monitoring, Inc.

QC Ref #326175 Regulated VOCs plus Lists 1&3

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
LCS1	1,1,1,2-Tetrachloroethane	5	5.01	UGL	100.2	(70-130)	
LCS2	1,1,1,2-Tetrachloroethane	5	4.94	UGL	98.8	(70-130)	
MBLK	1,1,1,2-Tetrachloroethane	ND	<0.5	UGL			
RPD_LCS	1,1,1,2-Tetrachloroethane	100.200	98.800	UGL	1.4	(0-20)	
LCS1	1,1,1-Trichloroethane	5	5.22	UGL	104.4	(70-130)	
LCS2	1,1,1-Trichloroethane	5	5.31	UGL	106.2	(70-130)	
MBLK	1,1,1-Trichloroethane	ND	<0.5	UGL			
RPD_LCS	1,1,1-Trichloroethane	104.400	106.200	UGL	1.7	(0-20)	
LCS1	1,1,2,2-Tetrachloroethane	5	5.37	UGL	107.4	(70-130)	
LCS2	1,1,2,2-Tetrachloroethane	5	5.34	UGL	106.8	(70-130)	
MBLK	1,1,2,2-Tetrachloroethane	ND	<0.5	UGL			
RPD_LCS	1,1,2,2-Tetrachloroethane	107.400	106.800	UGL	0.6	(0-20)	
LCS1	1,1,2-Trichloroethane	5	4.74	UGL	94.8	(70-130)	
LCS2	1,1,2-Trichloroethane	5	4.88	UGL	97.6	(70-130)	
MBLK	1,1,2-Trichloroethane	ND	<0.5	UGL			
RPD_LCS	1,1,2-Trichloroethane	94.800	97.600	UGL	2.9	(0-20)	
LCS1	1,1-Dichloroethane	5	5.11	UGL	102.2	(70-130)	
LCS2	1,1-Dichloroethane	5	5.09	UGL	101.8	(70-130)	
MBLK	1,1-Dichloroethane	ND	<0.5	UGL			
RPD_LCS	1,1-Dichloroethane	102.200	101.800	UGL	0.4	(0-20)	
LCS1	1,1-Dichloroethylene	5	5.09	UGL	101.8	(70-130)	
LCS2	1,1-Dichloroethylene	5	5.22	UGL	104.4	(70-130)	
MBLK	1,1-Dichloroethylene	ND	<0.5	UGL			
RPD_LCS	1,1-Dichloroethylene	101.800	104.400	UGL	2.5	(0-20)	
LCS1	1,1-Dichloropropene	5	4.76	UGL	95.2	(70-130)	
LCS2	1,1-Dichloropropene	5	4.70	UGL	94.0	(70-130)	
MBLK	1,1-Dichloropropene	ND	<0.5	UGL			
RPD_LCS	1,1-Dichloropropene	95.200	94.000	UGL	1.3	(0-20)	
LCS1	1,2,3-Trichlorobenzene	5	5.04	UGL	100.8	(70-130)	
LCS2	1,2,3-Trichlorobenzene	5	4.88	UGL	97.6	(70-130)	
MBLK	1,2,3-Trichlorobenzene	ND	<0.5	UGL			
RPD_LCS	1,2,3-Trichlorobenzene	100.800	97.600	UGL	3.2	(0-20)	

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining. Criteria for MS and DUP are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

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Sierra Environmental Monitoring, Inc.
(continued)

LCS1	1,2,3-Trichloropropane	5	5.59	UGL	111.8	(70-130)
LCS2	1,2,3-Trichloropropane	5	5.63	UGL	112.6	(70-130)
MBLK	1,2,3-Trichloropropane	ND	<0.5	UGL		
RPD_LCS	1,2,3-Trichloropropane	111.800	112.600	UGL	0.7	(0-20)
LCS1	1,2,4-Trichlorobenzene	5	4.86	UGL	97.2	(70-130)
LCS2	1,2,4-Trichlorobenzene	5	4.78	UGL	95.6	(70-130)
MBLK	1,2,4-Trichlorobenzene	ND	<0.5	UGL		
RPD_LCS	1,2,4-Trichlorobenzene	97.200	95.600	UGL	1.7	(0-20)
LCS1	1,2,4-Trimethylbenzene	5	5.10	UGL	102.0	(70-130)
LCS2	1,2,4-Trimethylbenzene	5	5.04	UGL	100.8	(70-130)
MBLK	1,2,4-Trimethylbenzene	ND	<0.5	UGL		
RPD_LCS	1,2,4-Trimethylbenzene	102.000	100.800	UGL	1.2	(0-20)
LCS1	1,2-Dichloroethane	5	5.32	UGL	106.4	(70-130)
LCS2	1,2-Dichloroethane	5	5.49	UGL	109.8	(70-130)
MBLK	1,2-Dichloroethane	ND	<0.5	UGL		
RPD_LCS	1,2-Dichloroethane	106.400	109.800	UGL	3.1	(0-20)
LCS1	1,2-Dichloropropane	5	4.81	UGL	96.2	(70-130)
LCS2	1,2-Dichloropropane	5	4.74	UGL	94.8	(70-130)
MBLK	1,2-Dichloropropane	ND	<0.5	UGL		
RPD_LCS	1,2-Dichloropropane	96.200	94.800	UGL	1.5	(0-20)
LCS1	1,3,5-Trimethylbenzene	5	5.22	UGL	104.4	(70-130)
LCS2	1,3,5-Trimethylbenzene	5	4.94	UGL	98.8	(70-130)
MBLK	1,3,5-Trimethylbenzene	ND	<0.5	UGL		
RPD_LCS	1,3,5-Trimethylbenzene	104.400	98.800	UGL	5.5	(0-20)
LCS1	1,3-Dichloropropane	5	4.99	UGL	99.8	(70-130)
LCS2	1,3-Dichloropropane	5	5.18	UGL	103.6	(70-130)
MBLK	1,3-Dichloropropane	ND	<0.5	UGL		
RPD_LCS	1,3-Dichloropropane	99.800	103.600	UGL	3.7	(0-20)
LCS1	p-Dichlorobenzene (1,4-DCB)	5	6.16	UGL	123.2	(70-130)
LCS2	p-Dichlorobenzene (1,4-DCB)	5	6.20	UGL	124.0	(70-130)
MBLK	p-Dichlorobenzene (1,4-DCB)	ND	<0.5	UGL		
RPD_LCS	p-Dichlorobenzene (1,4-DCB)	123.200	124.000	UGL	0.6	(0-20)
LCS1	2,2-Dichloropropane	5	4.81	UGL	96.2	(70-130)
LCS2	2,2-Dichloropropane	5	4.76	UGL	95.2	(70-130)
MBLK	2,2-Dichloropropane	ND	<0.5	UGL		

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(continued)

RPD_LCS	2,2-Dichloropropane	96.200	95.200	UGL	1.0	(0-20)
LCS1	2-Butanone (MEK)	50	47.3	UGL	94.6	(70-130)
LCS2	2-Butanone (MEK)	50	46.6	UGL	93.2	(70-130)
MBLK	2-Butanone (MEK)	ND	<5.0	UGL		
RPD_LCS	2-Butanone (MEK)	94.600	93.200	UGL	1.5	(0-20)
LCS1	o-Chlorotoluene	5	6.12	UGL	122.4	(70-130)
LCS2	o-Chlorotoluene	5	5.78	UGL	115.6	(70-130)
MBLK	o-Chlorotoluene	ND	<0.5	UGL		
RPD_LCS	o-Chlorotoluene	122.400	115.600	UGL	5.7	(0-20)
LCS1	p-Chlorotoluene	5	5.72	UGL	114.4	(70-130)
LCS2	p-Chlorotoluene	5	5.81	UGL	116.2	(70-130)
MBLK	p-Chlorotoluene	ND	<0.5	UGL		
RPD_LCS	p-Chlorotoluene	114.400	116.200	UGL	1.6	(0-20)
LCS1	4-Methyl-2-Pentanone (MIBK)	50	46.4	UGL	92.8	(70-130)
LCS2	4-Methyl-2-Pentanone (MIBK)	50	46.6	UGL	93.2	(70-130)
MBLK	4-Methyl-2-Pentanone (MIBK)	ND	<5.0	UGL		
RPD_LCS	4-Methyl-2-Pentanone (MIBK)	92.800	93.200	UGL	0.4	(0-20)
LCS1	Benzene	5	5.11	UGL	102.2	(70-130)
LCS2	Benzene	5	4.93	UGL	98.6	(70-130)
MBLK	Benzene	ND	<0.5	UGL		
RPD_LCS	Benzene	102.200	98.600	UGL	3.6	(0-20)
LCS1	Bromobenzene	5	6.34	UGL	126.8	(70-130)
LCS2	Bromobenzene	5	6.21	UGL	124.2	(70-130)
MBLK	Bromobenzene	ND	<0.5	UGL		
RPD_LCS	Bromobenzene	126.800	124.200	UGL	2.1	(0-20)
LCS1	Bromomethane (Methyl Bromide)	5	5.17	UGL	103.4	(70-130)
LCS2	Bromomethane (Methyl Bromide)	5	5.13	UGL	102.6	(70-130)
MBLK	Bromomethane (Methyl Bromide)	ND	<0.5	UGL		
RPD_LCS	Bromomethane (Methyl Bromide)	103.400	102.600	UGL	0.8	(0-20)
LCS1	cis-1,2-Dichloroethylene	5	4.83	UGL	96.6	(70-130)
LCS2	cis-1,2-Dichloroethylene	5	4.91	UGL	98.2	(70-130)
MBLK	cis-1,2-Dichloroethylene	ND	<0.5	UGL		
RPD_LCS	cis-1,2-Dichloroethylene	96.600	98.200	UGL	1.6	(0-20)
LCS1	Chlorobenzene	5	5.15	UGL	103.0	(70-130)
LCS2	Chlorobenzene	5	5.13	UGL	102.6	(70-130)

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MBLK	Chlorobenzene	ND	<0.5	UGL		
RPD_LCS	Chlorobenzene	103.000	102.600	UGL	0.4	(0-20)
LCS1	Carbon Tetrachloride	5	5.24	UGL	104.8	(70-130)
LCS2	Carbon Tetrachloride	5	5.35	UGL	107.0	(70-130)
MBLK	Carbon Tetrachloride	ND	<0.5	UGL		
RPD_LCS	Carbon Tetrachloride	104.800	107.000	UGL	2.1	(0-20)
LCS1	cis-1,3-Dichloropropene	5	4.14	UGL	82.8	(70-130)
LCS2	cis-1,3-Dichloropropene	5	4.31	UGL	86.2	(70-130)
MBLK	cis-1,3-Dichloropropene	ND	<0.5	UGL		
RPD_LCS	cis-1,3-Dichloropropene	82.800	86.200	UGL	4.0	(0-20)
LCS1	Bromoform	5	5.44	UGL	108.8	(70-130)
LCS2	Bromoform	5	5.64	UGL	112.8	(70-130)
MBLK	Bromoform	ND	<0.5	UGL		
RPD_LCS	Bromoform	108.800	112.800	UGL	3.6	(0-20)
LCS1	Chloroform (Trichloromethane)	5	5.11	UGL	102.2	(70-130)
LCS2	Chloroform (Trichloromethane)	5	5.26	UGL	105.2	(70-130)
MBLK	Chloroform (Trichloromethane)	ND	<0.5	UGL		
RPD_LCS	Chloroform (Trichloromethane)	102.200	105.200	UGL	2.9	(0-20)
LCS1	Bromochloromethane	5	5.49	UGL	109.8	(70-130)
LCS2	Bromochloromethane	5	5.63	UGL	112.6	(70-130)
MBLK	Bromochloromethane	ND	<0.5	UGL		
RPD_LCS	Bromochloromethane	109.800	112.600	UGL	2.5	(0-20)
LCS1	Chloroethane	5	4.65	UGL	93.0	(70-130)
LCS2	Chloroethane	5	4.62	UGL	92.4	(70-130)
MBLK	Chloroethane	ND	<0.5	UGL		
RPD_LCS	Chloroethane	93.000	92.400	UGL	0.6	(0-20)
LCS1	Chloromethane(Methyl Chloride)	5	4.87	UGL	97.4	(70-130)
LCS2	Chloromethane(Methyl Chloride)	5	4.95	UGL	99.0	(70-130)
MBLK	Chloromethane(Methyl Chloride)	ND	<0.5	UGL		
RPD_LCS	Chloromethane(Methyl Chloride)	97.400	99.000	UGL	1.6	(0-20)
LCS1	Chlorodibromomethane	5	4.90	UGL	98.0	(70-130)
LCS2	Chlorodibromomethane	5	5.01	UGL	100.2	(70-130)
MBLK	Chlorodibromomethane	ND	<0.5	UGL		
RPD_LCS	Chlorodibromomethane	98.000	100.200	UGL	2.2	(0-20)
LCS1	Dibromomethane	5	5.01	UGL	100.2	(70-130)

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Sierra Environmental Monitoring, Inc.
(continued)

LCS2	Dibromomethane	5	5.38	UGL	107.6	(70-130)
MBLK	Dibromomethane	ND	<0.5	UGL		
RPD_LCS	Dibromomethane	100.200	107.600	UGL	7.1	(0-20)
LCS1	Bromodichloromethane	5	4.71	UGL	94.2	(70-130)
LCS2	Bromodichloromethane	5	4.77	UGL	95.4	(70-130)
MBLK	Bromodichloromethane	ND	<0.5	UGL		
RPD_LCS	Bromodichloromethane	94.200	95.400	UGL	1.3	(0-20)
LCS1	Dichloromethane	5	5.02	UGL	100.4	(70-130)
LCS2	Dichloromethane	5	5.16	UGL	103.2	(70-130)
MBLK	Dichloromethane	ND	<0.5	UGL		
RPD_LCS	Dichloromethane	100.400	103.200	UGL	2.8	(0-20)
LCS1	Di-isopropyl ether	5	4.44	UGL	88.8	(70-130)
LCS2	Di-isopropyl ether	5	4.51	UGL	90.2	(70-130)
MBLK	Di-isopropyl ether	ND	<3.0	UGL		
RPD_LCS	Di-isopropyl ether	88.800	90.200	UGL	1.6	(0-20)
LCS1	Ethyl benzene	5	4.76	UGL	95.2	(70-130)
LCS2	Ethyl benzene	5	4.78	UGL	95.6	(70-130)
MBLK	Ethyl benzene	ND	<0.5	UGL		
RPD_LCS	Ethyl benzene	95.200	95.600	UGL	0.4	(0-20)
LCS1	Dichlorodifluoromethane	5	5.09	UGL	101.8	(70-130)
LCS2	Dichlorodifluoromethane	5	5.07	UGL	101.4	(70-130)
MBLK	Dichlorodifluoromethane	ND	<0.5	UGL		
RPD_LCS	Dichlorodifluoromethane	101.800	101.400	UGL	0.4	(0-20)
LCS1	Fluorotrichloromethane-Freon11	5	5.59	UGL	111.8	(70-130)
LCS2	Fluorotrichloromethane-Freon11	5	5.58	UGL	111.6	(70-130)
MBLK	Fluorotrichloromethane-Freon11	ND	<0.5	UGL		
RPD_LCS	Fluorotrichloromethane-Freon11	111.800	111.600	UGL	0.2	(0-20)
LCS1	Hexachlorobutadiene	5	5.59	UGL	111.8	(70-130)
LCS2	Hexachlorobutadiene	5	5.40	UGL	108.0	(70-130)
MBLK	Hexachlorobutadiene	ND	<0.5	UGL		
RPD_LCS	Hexachlorobutadiene	111.800	108.000	UGL	3.5	(0-20)
LCS1	Isopropylbenzene	5	5.42	UGL	108.4	(70-130)
LCS2	Isopropylbenzene	5	5.35	UGL	107.0	(70-130)
MBLK	Isopropylbenzene	ND	<0.5	UGL		
RPD_LCS	Isopropylbenzene	108.400	107.000	UGL	1.3	(0-20)

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Sierra Environmental Monitoring, Inc.
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LCS1	m-Dichlorobenzene (1,3-DCB)	5	6.19	UGL	123.8	(70-130)
LCS2	m-Dichlorobenzene (1,3-DCB)	5	6.15	UGL	123.0	(70-130)
MBLK	m-Dichlorobenzene (1,3-DCB)	ND	<0.5	UGL		
RPD_LCS	m-Dichlorobenzene (1,3-DCB)	123.800	123.000	UGL	0.6	(0-20)
LCS1	m,p-Xylenes	10	10.1	UGL	101.0	(70-130)
LCS2	m,p-Xylenes	10	10.2	UGL	102.0	(70-130)
MBLK	m,p-Xylenes	ND	<0.5	UGL		
RPD_LCS	m,p-Xylenes	101.000	102.000	UGL	1.0	(0-20)
LCS1	Methyl Tert-butyl ether (MTBE)	5	4.47	UGL	89.4	(70-130)
LCS2	Methyl Tert-butyl ether (MTBE)	5	4.61	UGL	92.2	(70-130)
MBLK	Methyl Tert-butyl ether (MTBE)	ND	<0.5	UGL		
RPD_LCS	Methyl Tert-butyl ether (MTBE)	89.400	92.200	UGL	3.1	(0-20)
LCS1	Naphthalene	5	4.39	UGL	87.8	(70-130)
LCS2	Naphthalene	5	4.31	UGL	86.2	(70-130)
MBLK	Naphthalene	ND	<0.5	UGL		
RPD_LCS	Naphthalene	87.800	86.200	UGL	1.8	(0-20)
LCS1	n-Butylbenzene	5	4.07	UGL	81.4	(70-130)
LCS2	n-Butylbenzene	5	4.11	UGL	82.2	(70-130)
MBLK	n-Butylbenzene	ND	<0.5	UGL		
RPD_LCS	n-Butylbenzene	81.400	82.200	UGL	1.0	(0-20)
LCS1	n-Propylbenzene	5	5.49	UGL	109.8	(70-130)
LCS2	n-Propylbenzene	5	5.33	UGL	106.6	(70-130)
MBLK	n-Propylbenzene	ND	<0.5	UGL		
RPD_LCS	n-Propylbenzene	109.800	106.600	UGL	3.0	(0-20)
LCS1	o-Xylene	5	4.69	UGL	93.8	(70-130)
LCS2	o-Xylene	5	4.83	UGL	96.6	(70-130)
MBLK	o-Xylene	ND	<0.5	UGL		
RPD_LCS	o-Xylene	93.800	96.600	UGL	2.9	(0-20)
LCS1	o-Dichlorobenzene (1,2-DCB)	5	5.13	UGL	102.6	(70-130)
LCS2	o-Dichlorobenzene (1,2-DCB)	5	5.27	UGL	105.4	(70-130)
MBLK	o-Dichlorobenzene (1,2-DCB)	ND	<0.5	UGL		
RPD_LCS	o-Dichlorobenzene (1,2-DCB)	102.600	105.400	UGL	2.7	(0-20)
LCS1	Tetrachloroethylene (PCE)	5	6.00	UGL	120.0	(70-130)
LCS2	Tetrachloroethylene (PCE)	5	5.99	UGL	119.8	(70-130)
MBLK	Tetrachloroethylene (PCE)	ND	<0.5	UGL		

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RPD_LCS	Tetrachloroethylene (PCE)	120.000	119.800	UGL	0.2	(0-20)
LCS1	p-Isopropyltoluene	5	4.91	UGL	98.2	(70-130)
LCS2	p-Isopropyltoluene	5	4.81	UGL	96.2	(70-130)
MBLK	p-Isopropyltoluene	ND	<0.5	UGL		
RPD_LCS	p-Isopropyltoluene	98.200	96.200	UGL	2.1	(0-20)
LCS1	sec-Butylbenzene	5	5.10	UGL	102.0	(70-130)
LCS2	sec-Butylbenzene	5	5.11	UGL	102.2	(70-130)
MBLK	sec-Butylbenzene	ND	<0.5	UGL		
RPD_LCS	sec-Butylbenzene	102.000	102.200	UGL	0.2	(0-20)
LCS1	Styrene	5	4.31	UGL	86.2	(70-130)
LCS2	Styrene	5	4.32	UGL	86.4	(70-130)
MBLK	Styrene	ND	<0.5	UGL		
RPD_LCS	Styrene	86.200	86.400	UGL	0.2	(0-20)
LCS1	trans-1,2-Dichloroethylene	5	5.24	UGL	104.8	(70-130)
LCS2	trans-1,2-Dichloroethylene	5	5.40	UGL	108.0	(70-130)
MBLK	trans-1,2-Dichloroethylene	ND	<0.5	UGL		
RPD_LCS	trans-1,2-Dichloroethylene	104.800	108.000	UGL	3.0	(0-20)
LCS1	tert-amyl Methyl Ether	5	4.34	UGL	86.8	(70-130)
LCS2	tert-amyl Methyl Ether	5	4.51	UGL	90.2	(70-130)
MBLK	tert-amyl Methyl Ether	ND	<3.0	UGL		
RPD_LCS	tert-amyl Methyl Ether	86.800	90.200	UGL	3.8	(0-20)
LCS1	tert-Butyl Ethyl Ether	5	4.21	UGL	84.2	(70-130)
LCS2	tert-Butyl Ethyl Ether	5	4.31	UGL	86.2	(70-130)
MBLK	tert-Butyl Ethyl Ether	ND	<3.0	UGL		
RPD_LCS	tert-Butyl Ethyl Ether	84.200	86.200	UGL	2.3	(0-20)
LCS1	tert-Butylbenzene	5	5.17	UGL	103.4	(70-130)
LCS2	tert-Butylbenzene	5	4.91	UGL	98.2	(70-130)
MBLK	tert-Butylbenzene	ND	<0.5	UGL		
RPD_LCS	tert-Butylbenzene	103.400	98.200	UGL	5.2	(0-20)
LCS1	Trichloroethylene (TCE)	5	5.62	UGL	112.4	(70-130)
LCS2	Trichloroethylene (TCE)	5	5.63	UGL	112.6	(70-130)
MBLK	Trichloroethylene (TCE)	ND	<0.5	UGL		
RPD_LCS	Trichloroethylene (TCE)	112.400	112.600	UGL	0.2	(0-20)
LCS1	Trichlorotrifluoroethane(Freon	5	5.22	UGL	104.4	(70-130)
LCS2	Trichlorotrifluoroethane(Freon	5	5.13	UGL	102.6	(70-130)

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MBLK	Trichlorotrifluoroethane(Freon	ND	<0.5	UGL		
RPD_LCS	Trichlorotrifluoroethane(Freon	104.400	102.600	UGL	1.7	(0-20)
LCS1	trans-1,3-Dichloropropene	5	4.14	UGL	82.8	(70-130)
LCS2	trans-1,3-Dichloropropene	5	4.23	UGL	84.6	(70-130)
MBLK	trans-1,3-Dichloropropene	ND	<0.5	UGL		
RPD_LCS	trans-1,3-Dichloropropene	82.800	84.600	UGL	2.2	(0-20)
LCS1	Toluene	5	5.00	UGL	100.0	(70-130)
LCS2	Toluene	5	5.03	UGL	100.6	(70-130)
MBLK	Toluene	ND	<0.5	UGL		
RPD_LCS	Toluene	100.000	100.600	UGL	0.6	(0-20)
LCS1	Vinyl chloride (VC)	5	4.71	UGL	94.2	(70-130)
LCS2	Vinyl chloride (VC)	5	4.70	UGL	94.0	(70-130)
MBLK	Vinyl chloride (VC)	ND	<0.3	UGL		
RPD_LCS	Vinyl chloride (VC)	94.200	94.000	UGL	0.2	(0-20)

QC Ref #326849 EDB and DBCP by GC-ECD

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 26	07180273	NONE		(0-0)	
LCS1	Dibromochloropropane (DBCP)	0.01	0.0116	UGL	116.0	(70-130)	
LCS2	Dibromochloropropane (DBCP)	0.25	0.271	UGL	108.4	(70-130)	
MBLK	Dibromochloropropane (DBCP)	ND	<0.01	UGL			
MS	Dibromochloropropane (DBCP)	0.25	0.239	UGL	95.6	(65-135)	
MSD	Dibromochloropropane (DBCP)	0.25	0.258	UGL	103.2	(65-135)	
RPD_MS	Dibromochloropropane (DBCP)	95.600	103.200	UGL	7.6	(0-20)	
LCS1	Ethylene Dibromide (EDB)	0.01	0.0128	UGL	128.0	(70-130)	
LCS2	Ethylene Dibromide (EDB)	0.25	0.248	UGL	99.2	(70-130)	
MBLK	Ethylene Dibromide (EDB)	ND	<0.01	UGL			
MS	Ethylene Dibromide (EDB)	0.25	0.232	UGL	92.8	(65-135)	
MSD	Ethylene Dibromide (EDB)	0.25	0.234	UGL	93.6	(65-135)	
RPD_MS	Ethylene Dibromide (EDB)	92.800	93.600	UGL	0.9	(0-20)	
LCS1	1,2-dibromopropane (surr)	100	114	%R	114.0	(74-149)	
LCS2	1,2-dibromopropane (surr)	100	107	%R	107.0	(74-149)	
MBLK	1,2-dibromopropane (surr)	100	101	%R	101.0		

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Sierra Environmental Monitoring, Inc.
(continued)

MS	1,2-dibromopropane (surr)	100	106	%R	106.0	(60-140)
MSD	1,2-dibromopropane (surr)	100	113	%R	113.0	(60-140)
RPD_MS	1,2-dibromopropane (surr)	106.000	113.000	%R	6.4	(0-20)

QC Ref #326872 Pesticides by EPA 505

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
LCS2	PCB 1242 Aroclor	0.5	0.512	UGL	102.4	(70-130)	
MBLK	PCB 1242 Aroclor	ND	<0.1	UGL			
MRL_CHK	PCB 1242 Aroclor	0.100	0.117	UGL	117.0	(50-150)	
MS	PCB 1242 Aroclor	0.5	0.389	UGL	77.8	(65-135)	
MS	Spiked sample	Lab # 26	07180168	NONE		(0-0)	
LCS2	Alachlor (Alanex)	1.0	0.879	UGL	87.9	(70-130)	
MBLK	Alachlor (Alanex)	ND	<0.1	UGL			
MRL_CHK	Alachlor (Alanex)	0.100	0.124	UGL	124.0	(50-150)	
MS	Alachlor (Alanex)	0.2	0.202	UGL	101.0	(65-135)	
LCS2	Aldrin	0.10	0.088	UGL	88.0	(70-130)	
MBLK	Aldrin	ND	<0.01	UGL			
MRL_CHK	Aldrin	0.010	0.011	UGL	110.0	(50-150)	
MS	Aldrin	0.02	0.015	UGL	75.0	(65-135)	
LCS2	Dieldrin	0.10	0.100	UGL	100.0	(70-130)	
MBLK	Dieldrin	ND	<0.01	UGL			
MRL_CHK	Dieldrin	0.010	0.009	UGL	90.0	(50-150)	
MS	Dieldrin	0.02	0.021	UGL	105.0	(65-135)	
LCS2	Endrin	0.10	0.085	UGL	85.0	(70-130)	
MBLK	Endrin	ND	<0.01	UGL			
MRL_CHK	Endrin	0.010	0.010	UGL	100.0	(50-150)	
MS	Endrin	0.02	0.018	UGL	90.0	(65-135)	
LCS2	Heptachlor	0.10	0.093	UGL	93.0	(70-130)	
MBLK	Heptachlor	ND	<0.01	UGL			
MRL_CHK	Heptachlor	0.010	0.013	UGL	130.0	(50-150)	
MS	Heptachlor	0.02	0.016	UGL	80.0	(65-135)	
LCS2	Heptachlor Epoxide	0.10	0.098	UGL	98.0	(70-130)	
MBLK	Heptachlor Epoxide	ND	<0.01	UGL			

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Sierra Environmental Monitoring, Inc.
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MRL_CHK	Heptachlor Epoxide	0.010	0.008	UGL	80.0	(50-150)
MS	Heptachlor Epoxide	0.02	0.019	UGL	95.0	(65-135)
LCS2	Lindane (gamma-BHC)	0.10	0.085	UGL	85.0	(70-130)
MBLK	Lindane (gamma-BHC)	ND	<0.01	UGL		
MRL_CHK	Lindane (gamma-BHC)	0.010	0.008	UGL	80.0	(50-150)
MS	Lindane (gamma-BHC)	0.02	0.016	UGL	80.0	(65-135)
LCS2	Methoxychlor	0.50	0.316	UGL	63.2	(70-130)
MBLK	Methoxychlor	ND	<0.05	UGL		
MRL_CHK	Methoxychlor	0.050	0.037	UGL	74.0	(50-150)
MS	Methoxychlor	0.10	0.034	UGL	34.0	(65-135)

QC Ref #326940 Herbicides by 515.4

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
CCCH	2,4,5-T	4.0	4.00	UGL	100.0	(70-130)	
LCS2	2,4,5-T	3.0	2.80	UGL	93.3	(70-130)	
MBLK	2,4,5-T	ND	<0.2	UGL			
MRL_CHK	2,4,5-T	0.200	0.223	UGL	111.5	(50-150)	
MS	2,4,5-T	3.0	3.11	UGL	103.7	(70-130)	
MSD	2,4,5-T	3.0	3.12	UGL	104.0	(70-130)	
RPD_LCS	2,4,5-T		93.333	UGL		(0-20)	
RPD_MS	2,4,5-T	103.667	104.000	UGL	0.3	(0-20)	
CCCH	2,4,5-TP (Silvex)	4.0	4.01	UGL	100.2	(70-130)	
LCS2	2,4,5-TP (Silvex)	3.0	2.89	UGL	96.3	(70-130)	
MBLK	2,4,5-TP (Silvex)	ND	<0.2	UGL			
MRL_CHK	2,4,5-TP (Silvex)	0.200	0.214	UGL	107.0	(50-150)	
MS	2,4,5-TP (Silvex)	3.0	2.98	UGL	99.3	(70-130)	
MSD	2,4,5-TP (Silvex)	3.0	2.98	UGL	99.3	(70-130)	
RPD_LCS	2,4,5-TP (Silvex)		96.333	UGL		(0-20)	
RPD_MS	2,4,5-TP (Silvex)	99.333	99.333	UGL	0.0	(0-20)	
CCCH	2,4-D	2.0	2.00	UGL	100.0	(70-130)	
LCS2	2,4-D	1.5	1.57	UGL	104.7	(70-130)	
MBLK	2,4-D	ND	<0.1	UGL			
MRL_CHK	2,4-D	0.100	0.0903	UGL	90.3	(50-150)	

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Sierra Environmental Monitoring, Inc.
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MS	2,4-D	1.50	1.41	UGL	94.0	(70-130)
MSD	2,4-D	1.50	1.28	UGL	85.3	(70-130)
RPD_LCS	2,4-D		104.667	UGL		(0-20)
RPD_MS	2,4-D	94.000	85.333	UGL	9.7	(0-20)
CCCH	2,4-DB	40.0	37.7	UGL	94.3	(70-130)
LCS2	2,4-DB	30.0	23.0	UGL	76.7	(70-130)
MBLK	2,4-DB	ND	<2.0	UGL		
MRL_CHK	2,4-DB	2.000	2.31	UGL	115.5	(50-150)
MS	2,4-DB	30.0	29.0	UGL	96.7	(70-130)
MSD	2,4-DB	30.0	29.0	UGL	96.7	(70-130)
RPD_LCS	2,4-DB		76.667	UGL		(0-20)
RPD_MS	2,4-DB	96.667	96.667	UGL	0.0	(0-20)
CCCH	Dichlorprop	10.0	9.84	UGL	98.4	(70-130)
LCS2	Dichlorprop	7.5	7.62	UGL	101.6	(70-130)
MBLK	Dichlorprop	ND	<0.5	UGL		
MRL_CHK	Dichlorprop	0.500	0.598	UGL	119.6	(50-150)
MS	Dichlorprop	7.50	7.37	UGL	98.3	(70-130)
MSD	Dichlorprop	7.50	7.53	UGL	100.4	(70-130)
RPD_LCS	Dichlorprop		101.600	UGL		(0-20)
RPD_MS	Dichlorprop	98.267	100.400	UGL	2.1	(0-20)
MS	Spiked sample	Lab # 26	07170169	NONE		(0-0)
CCCH	Acifluorfen	4.0	3.91	UGL	97.8	(70-130)
LCS2	Acifluorfen	3.0	2.86	UGL	95.3	(70-130)
MBLK	Acifluorfen	ND	<0.2	UGL		
MRL_CHK	Acifluorfen	0.200	0.210	UGL	105.0	(50-150)
MS	Acifluorfen	3.0	2.90	UGL	96.7	(70-130)
MSD	Acifluorfen	3.0	2.92	UGL	97.3	(70-130)
RPD_LCS	Acifluorfen		95.333	UGL		(0-20)
RPD_MS	Acifluorfen	96.667	97.333	UGL	0.7	(0-20)
CCCH	Bentazon	10.0	9.82	UGL	98.2	(70-130)
LCS2	Bentazon	7.5	5.47	UGL	72.9	(70-130)
MBLK	Bentazon	ND	<0.5	UGL		
MRL_CHK	Bentazon	0.500	0.506	UGL	101.2	(50-150)
MS	Bentazon	7.50	6.98	UGL	93.1	(70-130)
MSD	Bentazon	7.50	6.99	UGL	93.2	(70-130)

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Sierra Environmental Monitoring, Inc.
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RPD_LCS	Bentazon		72.933	UGL		(0-20)
RPD_MS	Bentazon	93.067	93.200	UGL	0.1	(0-20)
CCCH	Dalapon	20.0	19.7	UGL	98.5	(70-130)
LCS2	Dalapon	15.0	14.2	UGL	94.7	(70-130)
MBLK	Dalapon	ND	<1.0	UGL		
MRL_CHK	Dalapon	1.000	1.14	UGL	114.0	(50-150)
MS	Dalapon	15.0	13.4	UGL	89.3	(70-130)
MSD	Dalapon	15.0	13.5	UGL	90.0	(70-130)
RPD_LCS	Dalapon		94.667	UGL		(0-20)
RPD_MS	Dalapon	89.333	90.000	UGL	0.7	(0-20)
CCCH	3,5-Dichlorobenzoic acid	10.0	9.86	UGL	98.6	(70-130)
LCS2	3,5-Dichlorobenzoic acid	7.5	7.50	UGL	100.0	(70-130)
MBLK	3,5-Dichlorobenzoic acid	ND	<0.5	UGL		
MRL_CHK	3,5-Dichlorobenzoic acid	0.500	0.551	UGL	110.2	(50-150)
MS	3,5-Dichlorobenzoic acid	7.50	7.26	UGL	96.8	(70-130)
MSD	3,5-Dichlorobenzoic acid	7.50	7.13	UGL	95.1	(70-130)
RPD_LCS	3,5-Dichlorobenzoic acid		100.000	UGL		(0-20)
RPD_MS	3,5-Dichlorobenzoic acid	96.800	95.067	UGL	1.8	(0-20)
CCCH	Tot DCPA Mono&Diacid Degradate	2.0	1.97	UGL	98.5	(70-130)
LCS2	Tot DCPA Mono&Diacid Degradate	3.0	2.20	UGL	73.3	(70-130)
MBLK	Tot DCPA Mono&Diacid Degradate	ND	<1.0	UGL		
MRL_CHK	Tot DCPA Mono&Diacid Degradate	0.100	0.103	UGL	103.0	(50-150)
MS	Tot DCPA Mono&Diacid Degradate	1.50	1.60	UGL	106.7	(70-130)
MSD	Tot DCPA Mono&Diacid Degradate	1.50	1.61	UGL	107.3	(70-130)
RPD_LCS	Tot DCPA Mono&Diacid Degradate		73.333	UGL		(0-20)
RPD_MS	Tot DCPA Mono&Diacid Degradate	106.667	107.333	UGL	0.6	(0-20)
CCCH	Dicamba	1.0	0.999	UGL	99.9	(70-130)
LCS2	Dicamba	0.75	0.795	UGL	106.0	(70-130)
MBLK	Dicamba	ND	<0.08	UGL		
MRL_CHK	Dicamba	0.050	0.0567	UGL	113.4	(50-150)
MS	Dicamba	0.75	0.801	UGL	106.8	(70-130)
MSD	Dicamba	0.75	0.812	UGL	108.3	(70-130)
RPD_LCS	Dicamba		106.000	UGL		(0-20)
RPD_MS	Dicamba	106.800	108.267	UGL	1.4	(0-20)
CCCH	Dinoseb	4.0	3.89	UGL	97.2	(70-130)

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LCS2	Dinoseb	3.0	2.73	UGL	91.0	(70-130)
MBLK	Dinoseb	ND	<0.2	UGL		
MRL_CHK	Dinoseb	0.200	0.288	UGL	144.0	(50-150)
MS	Dinoseb	3.0	2.79	UGL	93.0	(70-130)
MSD	Dinoseb	3.0	2.79	UGL	93.0	(70-130)
RPD_LCS	Dinoseb		91.000	UGL		(0-20)
RPD_MS	Dinoseb	93.000	93.000	UGL	0.0	(0-20)
CCCH	Pentachlorophenol	0.8	0.803	UGL	100.4	(70-130)
LCS2	Pentachlorophenol	0.60	0.590	UGL	98.3	(70-130)
MBLK	Pentachlorophenol	ND	<0.04	UGL		
MRL_CHK	Pentachlorophenol	0.040	0.0507	UGL	126.8	(50-150)
MS	Pentachlorophenol	0.60	0.546	UGL	91.0	(70-130)
MSD	Pentachlorophenol	0.60	0.552	UGL	92.0	(70-130)
RPD_LCS	Pentachlorophenol		98.333	UGL		(0-20)
RPD_MS	Pentachlorophenol	91.000	92.000	UGL	1.1	(0-20)
CCCH	Picloram	2.0	1.94	UGL	97.0	(70-130)
LCS2	Picloram	1.5	1.42	UGL	94.7	(70-130)
MBLK	Picloram	ND	<0.1	UGL		
MRL_CHK	Picloram	0.100	0.122	UGL	122.0	(50-150)
MS	Picloram	1.50	1.77	UGL	118.0	(70-130)
MSD	Picloram	1.50	1.68	UGL	112.0	(70-130)
RPD_LCS	Picloram		94.667	UGL		(0-20)
RPD_MS	Picloram	118.000	112.000	UGL	5.2	(0-20)
CCCH	2,4-Dichlorophenylacetic acid	100	102	%R	102.0	(70-130)
LCS2	2,4-Dichlorophenylacetic acid	100	84	%R	84.0	(70-130)
MBLK	2,4-Dichlorophenylacetic acid	100	100	%R	100.0	
MRL_CHK	2,4-Dichlorophenylacetic acid	100	101	%R	101.0	(70-130)
MS	2,4-Dichlorophenylacetic acid	100	98	%R	98.0	(70-130)
MSD	2,4-Dichlorophenylacetic acid	100	101	%R	101.0	(70-130)
RPD_LCS	2,4-Dichlorophenylacetic acid		84.000	%R		(0-20)
RPD_MS	2,4-Dichlorophenylacetic acid	98.000	101.000	%R	3.0	(0-20)
CCCH	4,4'-Dibromooctafluorobiphenyl	100	100	%R	100.0	(50-150)
LCS2	4,4'-Dibromooctafluorobiphenyl	100	101	%R	101.0	(70-130)
MBLK	4,4'-Dibromooctafluorobiphenyl	100	98	%R	98.0	
MRL_CHK	4,4'-Dibromooctafluorobiphenyl	100	101	%R	101.0	(50-150)

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QC Report
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Sierra Environmental Monitoring, Inc.
(continued)

MS	4,4'-Dibromooctafluorobiphenyl	100	100	%R	100.0	(50-150)
MSD	4,4'-Dibromooctafluorobiphenyl	100	98	%R	98.0	(50-150)
RPD_LCS	4,4'-Dibromooctafluorobiphenyl		101.000	%R		(0-20)
RPD_MS	4,4'-Dibromooctafluorobiphenyl	100.000	98.000	%R	2.0	(0-20)

QC Ref #327032 EDB and DBCP by GC-ECD

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
DUP	Spiked sample	Lab # 26	07180095	NONE		(0-0)	
MS	Spiked sample	Lab # 26	07180094	NONE		(0-0)	
DUP	Dibromochloropropane (DBCP)	ND	ND	UGL		(0-20)	
LCS1	Dibromochloropropane (DBCP)	0.01	0.0119	UGL	119.0	(70-130)	
LCS2	Dibromochloropropane (DBCP)	0.25	0.252	UGL	100.8	(70-130)	
MBLK	Dibromochloropropane (DBCP)	ND	<0.01	UGL			
MS	Dibromochloropropane (DBCP)	0.25	0.253	UGL	101.2	(65-135)	
DUP	Ethylene Dibromide (EDB)	ND	ND	UGL		(0-20)	
LCS1	Ethylene Dibromide (EDB)	0.01	0.0133	UGL	133.0	~~(70-130)~~ (50-150%) 4-8/14/01	
LCS2	Ethylene Dibromide (EDB)	0.25	0.248	UGL	99.2	(70-130)	
MBLK	Ethylene Dibromide (EDB)	ND	<0.01	UGL			
MS	Ethylene Dibromide (EDB)	0.25	0.249	UGL	99.6	(65-135)	
DUP	1,2-dibromopropane (surr)	100	107	%R	107.0	(60-140)	
LCS1	1,2-dibromopropane (surr)	100	122	%R	122.0	(74-149)	
LCS2	1,2-dibromopropane (surr)	100	110	%R	110.0	(74-149)	
MBLK	1,2-dibromopropane (surr)	100	101	%R	101.0		
MS	1,2-dibromopropane (surr)	100	97	%R	97.0	(60-140)	

QC Ref #327078 Glyphosate

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 26	07180262	UGL		(0-0)	
LCS1	Glyphosate	10	10.7	UGL	107.0	(80-117)	
MBLK	Glyphosate	ND	<6.0	UGL			
MRL_CHK	Glyphosate	6.00	6.49	UGL	108.2	(50-150)	

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MS	Glyphosate	10	10.6	UGL	106.0	(80-117)
MSD	Glyphosate	10	10.9	UGL	109.0	(80-117)
RPD_MS	Glyphosate	106.000	109.000	UGL	2.8	(0-20)

QC Ref #327543 Diquat and Paraquat

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS_2ND	Spiked sample	Lab # 26	07180280	NONE		(0-0)	
MS	Spiked sample	Lab # 26	07180168	NONE		(0-0)	
LCS1	Diquat	5.0	4.57	UGL	91.4	(70-130)	
MBLK	Diquat	ND	<0.4	UGL			
MRL_CHK	Diquat	0.400	0.41	UGL	102.5	(50-150)	
MS	Diquat	5.0	4.86	UGL	97.2	(70-130)	
MSD	Diquat	5.0	4.72	UGL	94.4	(70-130)	
MS_2ND	Diquat	5.0	4.56	UGL	91.2	(70-130)	
RPD_MS	Diquat	97.200	94.400	UGL	2.9	(0-20)	
LCS1	Paraquat	5.0	4.07	UGL	81.4	(70-130)	
MBLK	Paraquat	ND	<2.0	UGL			
MRL_CHK	Paraquat	2.00	1.75	UGL	87.5	(50-150)	
MS	Paraquat	5.0	4.49	UGL	89.8	(70-130)	
MSD	Paraquat	5.0	4.42	UGL	88.4	(70-130)	
MS_2ND	Paraquat	5.0	3.91	UGL	78.2	(70-130)	
RPD_MS	Paraquat	89.800	88.400	UGL	1.6	(0-20)	

QC Ref #327594 Endothall

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 26	07170103	UGL		(0-0)	
LCS1	Endothall	25	23.6	UGL	94.4	(66-120)	
MBLK	Endothall	ND	<5.0	UGL			
MRL_CHK	Endothall	5.00	4.98	UGL	99.6	(50-150)	
MS	Endothall	25	24.3	UGL	97.2	(66-120)	
MSD	Endothall	25	24.6	UGL	98.4	(66-120)	

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MS_2ND	Endothall	25	23.3	UGL	93.2	(66-120)
RPD_MS	Endothall	97.200	98.400	UGL	1.2	(0-20)

QC Ref #327689 525 Semivolatiles by GC/MS

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
LCS1	2,4-Dinitrotoluene	2	2.18	UGL	109.0	(70-130)	
LCS2	2,4-Dinitrotoluene	2	2.32	UGL	116.0	(70-130)	
MBLK	2,4-Dinitrotoluene	ND	<0.1	UGL			
MS	2,4-Dinitrotoluene	2	2.12	UGL	106.0	(70-130)	
RPD_LCS	2,4-Dinitrotoluene	109.000	116.000	UGL	6.2	(0-20)	
LCS1	alpha-Chlordane	2	2.36	UGL	118.0	(70-130)	
LCS2	alpha-Chlordane	2	2.37	UGL	118.5	(70-130)	
MBLK	alpha-Chlordane	ND	<0.05	UGL			
MS	alpha-Chlordane	2	2.54	UGL	127.0	(70-130)	
RPD_LCS	alpha-Chlordane	118.000	118.500	UGL	0.4	(0-20)	
LCS1	Diazinon (Qualitative)	2	2.10	UGL	105.0	(70-130)	
LCS2	Diazinon (Qualitative)	2	2.27	UGL	113.5	(70-130)	
MBLK	Diazinon (Qualitative)	ND	<0.1	UGL			
MS	Diazinon (Qualitative)	2	2.29	UGL	114.5	(70-130)	
RPD_LCS	Diazinon (Qualitative)	105.000	113.500	UGL	7.8	(0-20)	
MS	Spiked sample	Lab # 26	07150012	NONE		(0-0)	
LCS1	Acenaphthylene	2	2.03	UGL	101.5	(70-130)	
LCS2	Acenaphthylene	2	2.09	UGL	104.5	(70-130)	
MBLK	Acenaphthylene	ND	<0.1	UGL			
MS	Acenaphthylene	2	2.04	UGL	102.0	(70-130)	
RPD_LCS	Acenaphthylene	101.500	104.500	UGL	2.9	(0-20)	
LCS1	Alachlor	2	2.48	UGL	124.0	(70-130)	
LCS2	Alachlor	2	2.52	UGL	126.0	(70-130)	
MBLK	Alachlor	ND	<0.05	UGL			
MS	Alachlor	2	2.57	UGL	128.5	(70-130)	
RPD_LCS	Alachlor	124.000	126.000	UGL	1.6	(0-20)	
LCS1	Aldrin	2	2.22	UGL	111.0	(70-130)	
LCS2	Aldrin	2	2.29	UGL	114.5	(70-130)	

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MBLK	Aldrin	ND	<0.05	UGL		
MS	Aldrin	2	2.23	UGL	111.5	(70-130)
RPD_LCS	Aldrin	111.000	114.500	UGL	3.1	(0-20)
LCS1	Anthracene	2	1.91	UGL	95.5	(70-130)
LCS2	Anthracene	2	1.98	UGL	99.0	(70-130)
MBLK	Anthracene	ND	<0.02	UGL		
MS	Anthracene	2	1.98	UGL	99.0	(70-130)
RPD_LCS	Anthracene	95.500	99.000	UGL	3.6	(0-20)
LCS1	Atrazine	2	2.07	UGL	103.5	(70-130)
LCS2	Atrazine	2	2.37	UGL	118.5	(70-130)
MBLK	Atrazine	ND	<0.05	UGL		
MS	Atrazine	2	2.35	UGL	117.5	(70-130)
RPD_LCS	Atrazine	103.500	118.500	UGL	13.5	(0-20)
LCS1	Benz(a)Anthracene	2	1.85	UGL	92.5	(70-130)
LCS2	Benz(a)Anthracene	2	1.99	UGL	99.5	(70-130)
MBLK	Benz(a)Anthracene	ND	<0.05	UGL		
MS	Benz(a)Anthracene	2	2.00	UGL	100.0	(70-130)
RPD_LCS	Benz(a)Anthracene	92.500	99.500	UGL	7.3	(0-20)
LCS1	Benzo(a)pyrene	2	1.56	UGL	78.0	(70-130)
LCS2	Benzo(a)pyrene	2	1.71	UGL	85.5	(70-130)
MBLK	Benzo(a)pyrene	ND	<0.02	UGL		
MS	Benzo(a)pyrene	2	1.78	UGL	89.0	(70-130)
RPD_LCS	Benzo(a)pyrene	78.000	85.500	UGL	9.2	(0-20)
LCS1	Benzo(b)Fluoranthene	2	1.77	UGL	88.5	(70-130)
LCS2	Benzo(b)Fluoranthene	2	1.97	UGL	98.5	(70-130)
MBLK	Benzo(b)Fluoranthene	ND	<0.02	UGL		
MS	Benzo(b)Fluoranthene	2	1.95	UGL	97.5	(70-130)
RPD_LCS	Benzo(b)Fluoranthene	88.500	98.500	UGL	10.7	(0-20)
LCS1	Benzo(g,h,i)Perylene	2	1.72	UGL	86.0	(70-130)
LCS2	Benzo(g,h,i)Perylene	2	1.93	UGL	96.5	(70-130)
MBLK	Benzo(g,h,i)Perylene	ND	<0.05	UGL		
MS	Benzo(g,h,i)Perylene	2	1.83	UGL	91.5	(70-130)
RPD_LCS	Benzo(g,h,i)Perylene	86.000	96.500	UGL	11.5	(0-20)
LCS1	Benzo(k)Fluoranthene	2	1.70	UGL	85.0	(70-130)
LCS2	Benzo(k)Fluoranthene	2	1.87	UGL	93.5	(70-130)

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MBLK	Benzo(k)Fluoranthene	ND	<0.02	UGL		
MS	Benzo(k)Fluoranthene	2	1.85	UGL	92.5	(70-130)
RPD_LCS	Benzo(k)Fluoranthene	85.000	93.500	UGL	9.5	(0-20)
LCS1	Di(2-Ethylhexyl)phthalate	2	2.19	UGL	109.5	(70-130)
LCS2	Di(2-Ethylhexyl)phthalate	2	2.37	UGL	118.5	(70-130)
MBLK	Di(2-Ethylhexyl)phthalate	ND	<0.6	UGL		
MS	Di(2-Ethylhexyl)phthalate	2	2.30	UGL	115.0	(70-130)
RPD_LCS	Di(2-Ethylhexyl)phthalate	109.500	118.500	UGL	7.9	(0-20)
LCS1	Butylbenzylphthalate	2	2.18	UGL	109.0	(70-130)
LCS2	Butylbenzylphthalate	2	2.31	UGL	115.5	(70-130)
MBLK	Butylbenzylphthalate	ND	<0.5	UGL		
MS	Butylbenzylphthalate	2	2.39	UGL	119.5	(70-130)
RPD_LCS	Butylbenzylphthalate	109.000	115.500	UGL	5.8	(0-20)
LCS1	Bromacil	2	2.36	UGL	118.0	(70-130)
LCS2	Bromacil	2	2.59	UGL	129.5	(70-130)
MBLK	Bromacil	ND	<0.2	UGL		
MS	Bromacil	2	2.48	UGL	124.0	(70-130)
RPD_LCS	Bromacil	118.000	129.500	UGL	9.3	(0-20)
LCS1	Butachlor	2	2.33	UGL	116.5	(70-130)
LCS2	Butachlor	2	2.47	UGL	123.5	(70-130)
MBLK	Butachlor	ND	<0.05	UGL		
MS	Butachlor	2	2.45	UGL	122.5	(70-130)
RPD_LCS	Butachlor	116.500	123.500	UGL	5.8	(0-20)
LCS1	Caffeine by method 525mod	2	1.97	UGL	98.5	(83-125)
LCS2	Caffeine by method 525mod	2	2.35	UGL	117.5	(83-125)
MBLK	Caffeine by method 525mod	ND	<0.02	UGL		
MS	Caffeine by method 525mod	2	2.35	UGL	117.5	(83-125)
RPD_LCS	Caffeine by method 525mod	98.500	117.500	UGL	17.6	(0-20)
LCS1	Chrysene	2	2.01	UGL	100.5	(70-130)
LCS2	Chrysene	2	2.07	UGL	103.5	(70-130)
MBLK	Chrysene	ND	<0.02	UGL		
MS	Chrysene	2	2.09	UGL	104.5	(70-130)
RPD_LCS	Chrysene	100.500	103.500	UGL	2.9	(0-20)
LCS1	Dibenz(a,h)Anthracene	2	1.72	UGL	86.0	(70-130)
LCS2	Dibenz(a,h)Anthracene	2	1.91	UGL	95.5	(70-130)

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Sierra Environmental Monitoring, Inc.
(continued)

MBLK	Dibenz(a,h)Anthracene	ND	<0.05	UGL		
MS	Dibenz(a,h)Anthracene	2	1.71	UGL	85.5	(70-130)
RPD_LCS	Dibenz(a,h)Anthracene	86.000	95.500	UGL	10.5	(0-20)
LCS1	Di-(2-Ethylhexyl)adipate	2	2.18	UGL	109.0	(70-130)
LCS2	Di-(2-Ethylhexyl)adipate	2	2.42	UGL	121.0	(70-130)
MBLK	Di-(2-Ethylhexyl)adipate	ND	<0.6	UGL		
MS	Di-(2-Ethylhexyl)adipate	2	2.37	UGL	118.5	(70-130)
RPD_LCS	Di-(2-Ethylhexyl)adipate	109.000	121.000	UGL	10.4	(0-20)
LCS1	Diethylphthalate	2	2.21	UGL	110.5	(70-130)
LCS2	Diethylphthalate	2	2.31	UGL	115.5	(70-130)
MBLK	Diethylphthalate	ND	<0.5	UGL		
MS	Diethylphthalate	2	2.32	UGL	116.0	(70-130)
RPD_LCS	Diethylphthalate	110.500	115.500	UGL	4.4	(0-20)
LCS1	Dieldrin	2	2.25	UGL	112.5	(70-130)
LCS2	Dieldrin	2	2.29	UGL	114.5	(70-130)
MBLK	Dieldrin	ND	<0.2	UGL		
MS	Dieldrin	2	2.34	UGL	117.0	(70-130)
RPD_LCS	Dieldrin	112.500	114.500	UGL	1.8	(0-20)
LCS1	Dimethylphthalate	2	2.21	UGL	110.5	(70-130)
LCS2	Dimethylphthalate	2	2.30	UGL	115.0	(70-130)
MBLK	Dimethylphthalate	ND	<0.5	UGL		
MS	Dimethylphthalate	2	2.22	UGL	111.0	(70-130)
RPD_LCS	Dimethylphthalate	110.500	115.000	UGL	4.0	(0-20)
LCS1	Dimethoate	2	1.78	UGL	89.0	(80-123)
LCS2	Dimethoate	2	2.11	UGL	105.5	(80-123)
MBLK	Dimethoate	ND	<0.1	UGL		
MS	Dimethoate	2	1.88	UGL	94.0	(80-123)
RPD_LCS	Dimethoate	89.000	105.500	UGL	17.0	(0-20)
LCS1	Di-n-Butylphthalate	2	2.76	UGL	138.0	(70-130)
LCS2	Di-n-Butylphthalate	2	2.91	UGL	145.5	(70-130)
MBLK	Di-n-Butylphthalate	ND	<1.0	UGL		
MS	Di-n-Butylphthalate	2	3.33	UGL	166.5	(70-130)
RPD_LCS	Di-n-Butylphthalate	138.000	145.500	UGL	5.3	(0-20)
LCS1	Endrin	2	2.36	UGL	118.0	(70-130)
LCS2	Endrin	2	2.52	UGL	126.0	(70-130)

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(continued)

MBLK	Endrin	ND	<0.1	UGL		
MS	Endrin	2	2.67	UGL	133.5	(70-130)
RPD_LCS	Endrin	118.000	126.000	UGL	6.6	(0-20)
LCS1	Fluoranthene	2	2.16	UGL	108.0	(70-130)
LCS2	Fluoranthene	2	2.24	UGL	112.0	(70-130)
MBLK	Fluoranthene	ND	<0.1	UGL		
MS	Fluoranthene	2	2.27	UGL	113.5	(70-130)
RPD_LCS	Fluoranthene	108.000	112.000	UGL	3.6	(0-20)
LCS1	Fluorene	2	2.04	UGL	102.0	(70-130)
LCS2	Fluorene	2	2.12	UGL	106.0	(70-130)
MBLK	Fluorene	ND	<0.05	UGL		
MS	Fluorene	2	2.09	UGL	104.5	(70-130)
RPD_LCS	Fluorene	102.000	106.000	UGL	3.8	(0-20)
LCS1	gamma-Chlordane	2	2.27	UGL	113.5	(70-130)
LCS2	gamma-Chlordane	2	2.39	UGL	119.5	(70-130)
MBLK	gamma-Chlordane	ND	<0.05	UGL		
MS	gamma-Chlordane	2	2.56	UGL	128.0	(70-130)
RPD_LCS	gamma-Chlordane	113.500	119.500	UGL	5.2	(0-20)
LCS1	Hexachlorobenzene	2	2.11	UGL	105.5	(70-130)
LCS2	Hexachlorobenzene	2	2.22	UGL	111.0	(70-130)
MBLK	Hexachlorobenzene	ND	<0.05	UGL		
MS	Hexachlorobenzene	2	2.27	UGL	113.5	(70-130)
RPD_LCS	Hexachlorobenzene	105.500	111.000	UGL	5.1	(0-20)
LCS1	Hexachlorocyclopentadiene	2	1.50	UGL	75.0	(70-130)
LCS2	Hexachlorocyclopentadiene	2	1.63	UGL	81.5	(70-130)
MBLK	Hexachlorocyclopentadiene	ND	<0.05	UGL		
MS	Hexachlorocyclopentadiene	2	1.82	UGL	91.0	(70-130)
RPD_LCS	Hexachlorocyclopentadiene	75.000	81.500	UGL	8.3	(0-20)
LCS1	Heptachlor	2	2.36	UGL	118.0	(70-130)
LCS2	Heptachlor	2	2.41	UGL	120.5	(70-130)
MBLK	Heptachlor	ND	<0.04	UGL		
MS	Heptachlor	2	2.61	UGL	130.5	(70-130)
RPD_LCS	Heptachlor	118.000	120.500	UGL	2.1	(0-20)
LCS1	Heptachlor Epoxide (isomer B)	2	2.42	UGL	121.0	(70-130)
LCS2	Heptachlor Epoxide (isomer B)	2	2.52	UGL	126.0	(70-130)

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(continued)

MBLK	Heptachlor Epoxide (isomer B)	ND	<0.02	UGL		
MS	Heptachlor Epoxide (isomer B)	2	2.54	UGL	127.0	(70-130)
LCS1	Indeno(1,2,3,c,d)Pyrene	2	1.72	UGL	86.0	(70-130)
LCS2	Indeno(1,2,3,c,d)Pyrene	2	1.94	UGL	97.0	(70-130)
MBLK	Indeno(1,2,3,c,d)Pyrene	ND	<0.05	UGL		
MS	Indeno(1,2,3,c,d)Pyrene	2	1.81	UGL	90.5	(70-130)
RPD_LCS	Indeno(1,2,3,c,d)Pyrene	86.000	97.000	UGL	12.0	(0-20)
LCS1	Isophorone	2	2.14	UGL	107.0	(70-130)
LCS2	Isophorone	2	2.25	UGL	112.5	(70-130)
MBLK	Isophorone	ND	<0.5	UGL		
MS	Isophorone	2	2.15	UGL	107.5	(70-130)
RPD_LCS	Isophorone	107.000	112.500	UGL	5.0	(0-20)
LCS1	Lindane	2	2.27	UGL	113.5	(70-130)
LCS2	Lindane	2	2.28	UGL	114.0	(70-130)
MBLK	Lindane	ND	<0.02	UGL		
MS	Lindane	2	2.21	UGL	110.5	(70-130)
RPD_LCS	Lindane	113.500	114.000	UGL	0.4	(0-20)
LCS1	Methoxychlor	2	1.88	UGL	94.0	(70-130)
LCS2	Methoxychlor	2	2.11	UGL	105.5	(70-130)
MBLK	Methoxychlor	ND	<0.1	UGL		
MS	Methoxychlor	2	2.22	UGL	111.0	(70-130)
RPD_LCS	Methoxychlor	94.000	105.500	UGL	11.5	(0-20)
LCS1	Metribuzin	2	2.34	UGL	117.0	(70-130)
LCS2	Metribuzin	2	2.43	UGL	121.5	(70-130)
MBLK	Metribuzin	ND	<0.05	UGL		
MS	Metribuzin	2	2.27	UGL	113.5	(70-130)
RPD_LCS	Metribuzin	117.000	121.500	UGL	3.8	(0-20)
LCS1	Molinate	2	2.18	UGL	109.0	(70-130)
LCS2	Molinate	2	2.25	UGL	112.5	(70-130)
MBLK	Molinate	ND	<0.1	UGL		
MS	Molinate	2	2.17	UGL	108.5	(70-130)
RPD_LCS	Molinate	109.000	112.500	UGL	3.2	(0-20)
LCS1	Metolachlor	2	2.38	UGL	119.0	(70-130)
LCS2	Metolachlor	2	2.49	UGL	124.5	(70-130)
MBLK	Metolachlor	ND	<0.05	UGL		

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Sierra Environmental Monitoring, Inc.
(continued)

MS	Metolachlor	2	2.49	UGL	124.5	(70-130)
RPD_LCS	Metolachlor	119.000	124.500	UGL	4.5	(0-20)
LCS1	trans-Nonachlor	2	2.28	UGL	114.0	(70-130)
LCS2	trans-Nonachlor	2	2.35	UGL	117.5	(70-130)
MBLK	trans-Nonachlor	ND	<0.05	UGL		
MS	trans-Nonachlor	2	2.45	UGL	122.5	(70-130)
RPD_LCS	trans-Nonachlor	114.000	117.500	UGL	3.0	(0-20)
LCS1	Pentachlorophenol	8	8.50	UGL	106.2	(70-130)
LCS2	Pentachlorophenol	8	9.46	UGL	118.3	(70-130)
MBLK	Pentachlorophenol	ND	<1.0	UGL		
MS	Pentachlorophenol	8	9.68	UGL	121.0	(70-130)
RPD_LCS	Pentachlorophenol	106.250	118.250	UGL	10.7	(0-20)
LCS1	Phenanthrene	2	2.20	UGL	110.0	(70-130)
LCS2	Phenanthrene	2	2.24	UGL	112.0	(70-130)
MBLK	Phenanthrene	ND	<0.02	UGL		
MS	Phenanthrene	2	2.29	UGL	114.5	(70-130)
RPD_LCS	Phenanthrene	110.000	112.000	UGL	1.8	(0-20)
RPD_LCS	Prometryn	9.000	9.000	UGL	0.0	(0-20)
LCS1	Propachlor	2	2.24	UGL	112.0	(70-130)
LCS2	Propachlor	2	2.41	UGL	120.5	(70-130)
MBLK	Propachlor	ND	<0.05	UGL		
MS	Propachlor	2	2.32	UGL	116.0	(70-130)
RPD_LCS	Propachlor	112.000	120.500	UGL	7.3	(0-20)
LCS1	Pyrene	2	2.10	UGL	105.0	(70-130)
LCS2	Pyrene	2	2.22	UGL	111.0	(70-130)
MBLK	Pyrene	ND	<0.05	UGL		
MS	Pyrene	2	2.22	UGL	111.0	(70-130)
RPD_LCS	Pyrene	105.000	111.000	UGL	5.6	(0-20)
LCS1	Simazine	2	2.06	UGL	103.0	(70-130)
LCS2	Simazine	2	2.37	UGL	118.5	(70-130)
MBLK	Simazine	ND	<0.05	UGL		
MS	Simazine	2	2.32	UGL	116.0	(70-130)
RPD_LCS	Simazine	103.000	118.500	UGL	14.0	(0-20)
LCS1	Perylene-d12	100	75	%R	75.0	(70-130)
LCS2	Perylene-d12	100	79	%R	79.0	(70-130)

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Sierra Environmental Monitoring, Inc.
(continued)

MS	Aldicarb (Temik)	10.0	10.8	UGL	108.0	(70-130)
MSD	Aldicarb (Temik)	10.0	10.9	UGL	109.0	(70-130)
RPD_MS	Aldicarb (Temik)	108.000	109.000	UGL	0.9	(0-20)
LCS2	Aldicarb sulfone	10.0	9.36	UGL	93.6	(70-130)
MBLK	Aldicarb sulfone	ND	<0.5	UGL		
MRL_CHK	Aldicarb sulfone	0.50	0.554	UGL	110.8	(50-150)
MS	Aldicarb sulfone	10.0	10.3	UGL	103.0	(70-130)
MSD	Aldicarb sulfone	10.0	10.2	UGL	102.0	(70-130)
RPD_MS	Aldicarb sulfone	103.000	102.000	UGL	1.0	(0-20)
LCS2	Aldicarb sulfoxide	10.0	9.41	UGL	94.1	(70-130)
MBLK	Aldicarb sulfoxide	ND	<0.5	UGL		
MRL_CHK	Aldicarb sulfoxide	0.50	0.581	UGL	116.2	(50-150)
MS	Aldicarb sulfoxide	10.0	10.3	UGL	103.0	(70-130)
MSD	Aldicarb sulfoxide	10.0	10.3	UGL	103.0	(70-130)
RPD_MS	Aldicarb sulfoxide	103.000	103.000	UGL	0.0	(0-20)
LCS2	Baygon (Propoxur)	10.0	9.39	UGL	93.9	(70-130)
MBLK	Baygon (Propoxur)	ND	<0.5	UGL		
MRL_CHK	Baygon (Propoxur)	0.50	0.612	UGL	122.4	(50-150)
MS	Baygon (Propoxur)	10.0	10.4	UGL	104.0	(70-130)
MSD	Baygon (Propoxur)	10.0	10.3	UGL	103.0	(70-130)
RPD_MS	Baygon (Propoxur)	104.000	103.000	UGL	1.0	(0-20)
LCS2	Carbofuran (Furadan)	10.0	9.56	UGL	95.6	(70-130)
MBLK	Carbofuran (Furadan)	ND	<0.5	UGL		
MRL_CHK	Carbofuran (Furadan)	0.50	0.641	UGL	128.2	(50-150)
MS	Carbofuran (Furadan)	10.0	10.3	UGL	103.0	(70-130)
MSD	Carbofuran (Furadan)	10.0	10.5	UGL	105.0	(70-130)
RPD_MS	Carbofuran (Furadan)	103.000	105.000	UGL	1.9	(0-20)
LCS2	Carbaryl	10.0	9.30	UGL	93.0	(70-130)
MBLK	Carbaryl	ND	<0.5	UGL		
MRL_CHK	Carbaryl	0.50	0.548	UGL	109.6	(50-150)
MS	Carbaryl	10.0	10.2	UGL	102.0	(70-130)
MSD	Carbaryl	10.0	10.5	UGL	105.0	(70-130)
RPD_MS	Carbaryl	102.000	105.000	UGL	2.9	(0-20)
LCS2	Methiocarb	10.0	8.84	UGL	88.4	(70-130)
MBLK	Methiocarb	ND	<0.5	UGL		

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SIERRA ENVIRONMENTAL MONITORING, INC.
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7124

CHAIN OF CUSTODY RECORD

Client Name	Purchase Order	Turnaround Time	Compliance Monitoring
Intrawest Placemaking		Standard: X Other: ___ Rush: 24 Hr ___ 48 Hr ___	Yes: ___ No: X
Address: 6900 South McCarran Blvd Ste 3000	Phone/Fax #: 775-332-1247 Fax 332-1199		
City: Reno State: NV Zip: 89509	Report Attention: Dale Bugenig ECOLOGIC		
Sampled by: Dale Bugenig	Signature: Dale CB		Lab Use Only Sub-Sample pH <2 / >12

Date Sampled	Time Sampled	Sample Type *	Sample Identification	Preservative* See Key Below	Number of Containers	CA Title 22 Contaminants (Metals)	Major Cations + Anions	Gross α, β, Ra 226/228	U	SOC, VOC	As Speciation			Remarks	pH <2	pH >12
7/14/06	0530	1	JLRG-1	1,3,4,6,7	3	X	X	X						OK to run Asbestos beyond hold time	SS	SS

	Signature	Print Name	Company	Date	Time
Relinquished By:	Dale CB	Dale C. Bugenig	ECOLOGIC	07/14/06	09:13
Received By:					
Relinquished By:					
Received By:					
Relinquished By:					
Received By Laboratory:	Stacey Smithson	Stacey Smithson	SEM	7/14/06	09:13

Custody Seal Intact
Yes ___ No ___ None X

Sample Temperature

Degrees C _____

Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The analytical results associated with this COC apply only to the samples as they are received by the laboratory. The liability of the laboratory is limited to the amount paid for the report.
Terms: Net thirty days on approved credit.

*KEY: Sample Type: 1=Drinking Water, 2=Surface Water, 3=Ground Water, 4=Waste Water, 5=Soil, 6=RCRA, 7=Other
Preservative: 1=NaOH, 2=NaOH + ZnOAC, 3=HNO3, 4=H2SO4, 5=Na2S2O3, 6=None, 7=Other

SEM COC Form Revised 02/01