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Installation and Implementation of a Comprehensive Groundwater Monitoring Program for the Indian Wells Valley, California

Prepared for
Local Groundwater Assistance Program AB 303
State of California

Prepared by
Indian Wells Valley Cooperative
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Naval Facilities Engineering Command Southwest

FOREWORD

This document presents information on the groundwater monitoring program in the Indian Wells Valley, California. The work performed in this document was funded by the 2001/2002 AB 303 Grant obtained on behalf of the Indian Wells Valley Cooperative Groundwater Management Group.

This document was reviewed for technical accuracy by Mike Stoner, Public Works Department, Naval Facilities Engineering Command Southwest.

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(U) This study builds on the 2001/2002 AB 303 Indian Wells Valley (IWV) conceptual groundwater model by filling hydrogeologic data gaps, refining the model, and evaluating the groundwater resource as a reliable, long-term source of potable water. Findings support discounting the basin model in favor of a more conventional closed model with recharge principally from Sierra Nevada precipitation, supplemented by sources in surrounding mountains.

(U) Researchers evaluated the following elements: geologic conditions along western and southwestern portions of the IWV, vertical and horizontal water quality conditions in areas along the Sierra Nevada, groundwater flow path and travel time from potential recharge areas to extraction areas, and potential degradation of water quality in extraction areas.

(U) Project tasks included installing new monitoring wells in possible recharge areas, collecting water quality and isotopic samples in new and previously sampled wells, interpreting new data and comparing new historical data to determine trends, conducting continuous water-level and water quality monitoring in extraction areas, and making recommendations for improved water management strategies.

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1.0 INTRODUCTION

The Indian Wells Valley Project proposal was prepared for submittal under the Local Groundwater Assistance Grant Program funded by Assembly Bill (AB) 303 on behalf of the Indian Wells Valley Cooperative Groundwater Management Group. The Indian Wells Valley (IWV) groundwater basin is located in the northern Mojave Desert, approximately 150 miles north of the City of Los Angeles, California (Figure 1.1). Groundwater is the only source of potable water for the IWV. Most of the water is supplied to residents of the area by Indian Wells Valley Water District, City of Ridgecrest, Naval Air Weapons Station (NAWS) China Lake, Inyokern Community Services District, and numerous private wells. Groundwater is also extracted from the IWV for use by Searles Valley Minerals Corporation for their domestic water system and mining operations in the Searles Valley, located about 25 miles east of the IWV. To protect the current groundwater resource and develop a plan to assure a safe and reliable water supply for IWV residents, a Cooperative Groundwater Management Group was formed in 1995, and a Cooperative Groundwater Management Plan (Appendix A) was signed and approved by several private and public entities in September 1995, with additional members joining through 2003. The Plan was the first step in determining best management practices of the IWV groundwater resource.

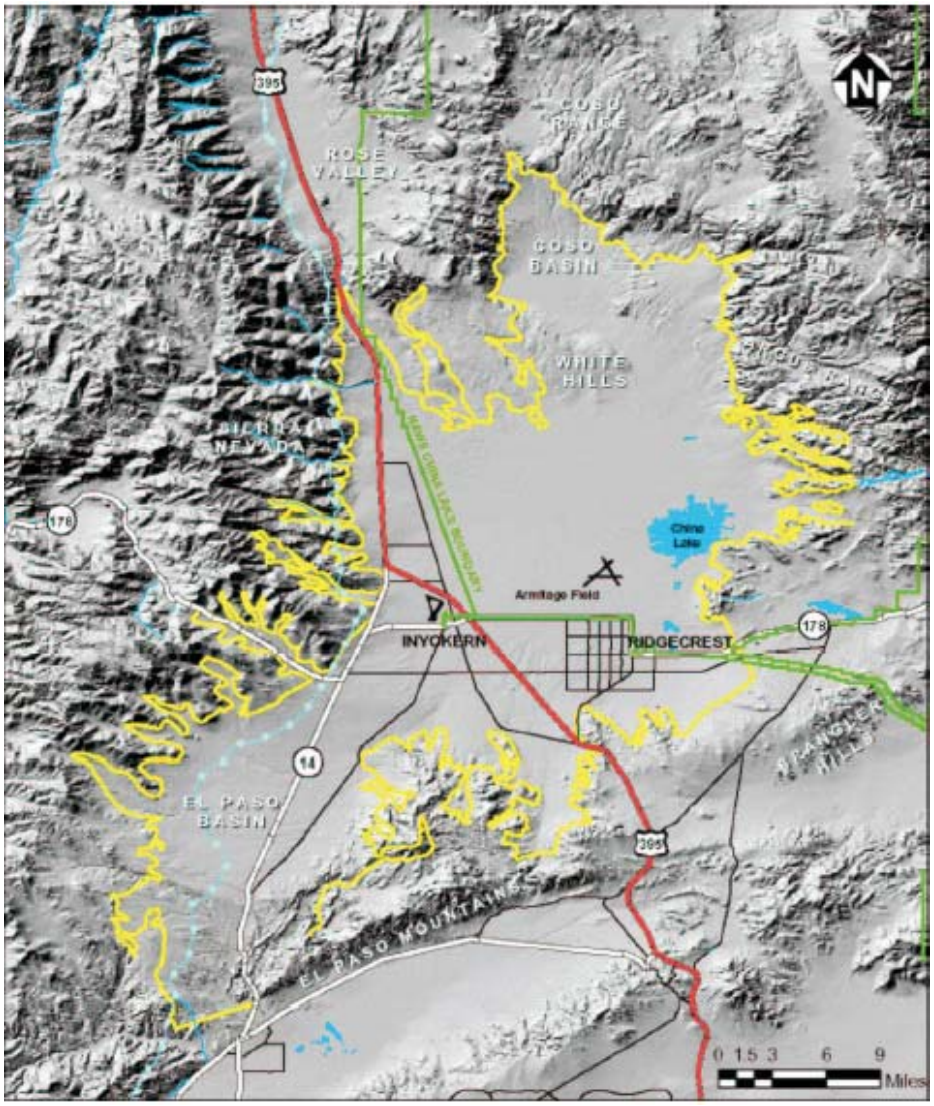

FIGURE 1.1. Location of the AB 303 Project in the IWV, California.

1.1 SCOPE

In 2001/2002, the Eastern Kern County Resources Conservation District obtained an AB 303 grant on behalf of the Indian Wells Valley Cooperative Groundwater Management Group. The grant funding was used to survey wells used for groundwater monitoring, to develop a Geographical Information Systems (GIS) management system to archive, track, and present data and to develop a website to allow public access to information. Funding was also used to develop a conceptual groundwater model based on existing information collected in earlier studies throughout the IWV. The conceptual model and compiled information were documented in a final report entitled "Groundwater Management in the Indian Wells Valley Basin" (June 2003) (Reference 1).

Among data gaps identified within this 2001/2002 AB 303 report, one of the more significant was the lack of monitoring wells and associated hydrogeologic data in areas along the western and southwestern portions of the IWV. Additionally, minimal water quality and isotope chemistry data are available for most areas of the IWV with the exception of the areas located on Naval Air Weapons Station (NAWS) property. Tetra Tech-EMI conducted extensive water sampling (water quality and isotopes) at NAWS during the 2003 Basewide Hydrogeologic Characterization Study (BHCS) (Reference 2). Unfortunately, this BHCS effort focused on existing/new monitoring wells within the NAWS property boundaries only and did not extend into the potential recharge areas along the mountain fronts. However, understanding the complex hydrogeologic conditions along the western and southwestern portions of the IWV is important in managing its total water resources.

In addition to understanding the water's chemical properties, the effects of long-term pumping in areas of the basin where most of the water has been extracted must also be considered. There is some concern that water quality may be degraded by migration of poor quality water into the well fields from the playa and low permeability areas due to continuous decrease in water levels and by up-coning of poor quality water from depth during periods of high extraction. Both long-term (historical) and short-term (seasonal, during low and high demand) pumping need evaluation to develop an extraction plan, if impacts exist, that considers the volume and rate of recharge into the valley.

In order to assess and manage the IWV groundwater resource, a phased approach has been developed:

1. Phase 1 included development of a conceptual groundwater model (performed as part of the 2001/2002 AB 303 grant).
2. Phase 2, the subject of this project, consists of a groundwater study to gather data in areas identified as data gaps and to refine the conceptual model.
3. Phase 3 will use the refined conceptual groundwater model to update the current Groundwater Management Plan.
4. Phase 4 will involve implementation of the groundwater management plan, continued long-term monitoring, and plan updates as needed.

This groundwater study (Phase 2) evaluated the following points:

1. Geologic conditions along the western and southwestern portions of the IWV.
2. Vertical and horizontal water quality conditions in areas along the Sierra Nevada.
3. Groundwater flow path and travel time from potential recharge areas to extraction areas.
4. Potential degradation of water quality in extraction areas.

1.2 GOALS AND OBJECTIVES

The goals and objectives of this groundwater study mimic the Purpose of the Indian Wells Valley Cooperative Groundwater Management Plan: "…to further develop (cooperatively or individually) the technical data and analytical capabilities to better understand the nature and characteristics of the watershed and aquifer system." This project also follows Planning Objective #6 of the Plan: "Continue cooperative efforts to develop information and data which contributes to further defining and better understanding the groundwater resource in the Indian Wells Valley;" and "The Parties will continue to cooperate, to the fullest extent possible, in data gathering and analysis projects focusing on groundwater recharge, discharge, storage, quality, quantity, transmissivity, and storativity as it pertains to the groundwater resources of the Indian Wells Valley."

Two of the primary goals of this groundwater study, therefore, are to refine the conceptual groundwater model and to evaluate the groundwater resource as a reliable, long-term source of potable water for the IWV. Study results will then be used to evaluate management practices, which may include treatment and/or importation to maintain a reliable water supply (Phase 3). The objectives of this study are to install monitoring wells in areas where recharge may be occurring; to collect water quality and isotopic samples in new and previously sampled wells; to interpret new data and compare new to historical data to determine trends; to conduct continuous water-level and water quality monitoring in the vicinity of extraction areas; and to make recommendations for improved management strategies to ensure a safe, reliable water supply to the IWV.

To accomplish the points specified in the Scope section of this study, the following task-based work proposed for the Indian Wells Valley Groundwater Study has been completed:

Task 1: Environmental Documentation
Task 2: Monitoring-well Construction
Task 3: Water Sampling
Task 4: Continuous Water-level Monitoring
Task 5: Geohydrologic Data Review and Interpretation
Task 6: Quarterly Progress Report Preparation
Task 7: Final Report Preparation

2.0 METHODOLOGY

2.1 ENVIRONMENTAL DOCUMENTATION

All of the drill sites are located on federal lands and were documented with the Bureau of Land Management (BLM) in 2006/07. Relevant environmental issues were addressed, including biological and cultural resources, site flood potential, ingress/egress points, well-site rehabilitation, and locking surface/well caps. Monitoring well sites were selected to provide hydrogeologic data that would expand the understanding of IWV groundwater resources. Potential sites were selected from available federal lands with previously disturbed areas, limited hydrogeologic data (data gaps) found in the entire southwestern portion of the valley, and downgradient adjacency to the Sierra Nevadas (potential recharge areas).

Each site consisted of an area approximately 150 by 150 feet (22,500 square feet) and was drilled on previously disturbed areas where possible. All eight sites have been visited, field surveyed, and documented with BLM (Ridgecrest Regional Office) and U.S. Navy environmental personnel.

Biological and cultural surveys were performed at each well site by Navy and/or BLM personnel familiar with the National Environmental Policy Act (NEPA) methodologies. The BLM is a signatory to the Indian Wells Valley Cooperative Groundwater Management Plan and has always been cooperative in accomplishing all necessary permitting and NEPA reviews. All work performed by BLM and Navy personnel is considered in-kind.

The Kern County Environmental Health Department waived all well permit fees involving U.S. Navy SeaBee drilling. Kern County understands the nature of the SeaBee drilling training classes and that all environmental documentation has been completed. All monitoring wells were completed per County and State regulations.

2.2 MONITORING-WELL CONSTRUCTION

Ten monitoring wells were scheduled to be drilled for this project. Due to an unforeseen scheduling conflict, the U.S. Navy SeaBees could only drill nine holes. Eight monitoring wells were completed, and new well T27S/R38E-10C01 was destroyed due to a collapsed casing. As previously stated, the well locations were chosen within areas where hydrogeologic data was sparse (data gaps identified in the 2001/2002 AB 303 grant study) and where recharge to the IWV is likely to occur. Two of the eight wells were

paired with existing U.S. Navy-drilled monitoring wells. These two wells were drilled and completed to depths between 380 to 1,045 feet below land surface (bls) in a means similar to the original well design and will be used for future aquifer testing.

All eight wells were drilled using a direct mud rotary method. Labor was provided by the U.S. Navy (Navy Seabees Water Well Drilling Crews) as in-kind services. Material costs were provided by grant funds. Each well was developed using swabbing and airlifting techniques until natural formation water was clear for some time. All decisions regarding the duration of well development were made by the on-site U.S. Navy field geologist.

A comprehensive suite of downhole geophysical logs, including but not limited to spontaneous potential (SP), resistivity (long and short normal), gamma logs, and caliper logs were completed on each borehole drilled. Costs associated with the electric logs were part of in-kind services provided by Searles Valley Minerals Corporation.

2.3 GROUNDWATER SAMPLING

Upon completion of the monitoring wells, each well was sampled for water quality and isotopic analyses. Sample collection was conducted by U.S. Navy personnel familiar with approved sampling protocols using the following guidelines:

1. Prior to sampling, a water-level measurement was taken from each well. Water levels were used to construct a water-elevation contour map and to determine water volume in the well.
2. Wells were purged with a submersible pump until 3 to 5 well volumes of water (not including development) were removed or until consecutive readings of conductivity, temperature, pH, and dissolved oxygen were within 10 percent of the previous two readings. Readings were collected every 5 to 10 minutes, depending on the discharge rate, by passing water through a flow-through cell connected to a meter. At least five consecutive readings were collected regardless of field parameters.
3. Samples were filtered in the field (where possible) with a disposable in-line 0.45-micron filter prior to storage in the sample container.
4. Samples for water quality analysis (including chemical and isotopic) were collected in appropriate containers.
5. Each sample container was labeled with the well number/location, date, and time of collection and was delivered to the lab under chain of custody.

As discussed, field parameters of conductivity, pH, temperature, and dissolved oxygen were monitored during purging. Samples were then filtered and preserved as specified for each analyte and shipped to the appropriate laboratories for analysis.

Each monitoring well drilled and completed during this project was sampled for general minerals and selected isotopes. Laboratory analysis for general chemistry included Na, Ca, Mg, K, Fe, Cl, HCO_3, CO_3, SO_4, F, B, NO_3, arsenic (As), hardness, alkalinity, conductivity, and total dissolved solids. Analyses were performed using the Environmental Protection Agency (EPA) SW-846 certified or equivalent methods. All general minerals and general physical samples were overnight shipped to BC Laboratories in Bakersfield, California, for analysis of general mineral, general physical, and inorganic chemicals (metals).

Stable isotope measurements were performed for carbon, hydrogen, oxygen, sulfur, and boron. All stable isotopic measurements except boron and carbon were made in the Department of Geosciences Isotope Geochemistry Laboratory at the University of Arizona. The following stable isotopic analyses with indicated precision were performed on a Finnigan Delta mass spectrometer: hydrogen (δD, 0.9‰), oxygen ($\delta^{18}O$, 0.08‰), and sulfur ($\delta^{34}S$, 0.2‰), whereby ‰ is the standard permil notation. The measurement for boron ($\delta^{11}B$) with a 1-sigma precision of 0.5‰ was performed on a VG Thermal Ionization Mass Spectrometer (TIMS) in the laboratory of Geochemical Technologies Corporation, Wheat Ridge, Colorado.

The radioactive isotope of carbon (^{14}C) was measured using the Tandem Accelerator Mass Spectrometer in the Physics Department at the University of Arizona; $\delta^{13}C$ measurements accompanied this analysis. Tritium (^{3}H) was enriched then measured by beta counting with a detection limit of approximately 0.5 tritium units (TU) in the Isotope Geochemistry Laboratory in the Geochemistry Department of the University of Arizona.

2.4 CONTINUOUS MONITORING

To determine the impact of pumping in the vicinity of the pumping centers during high and low extraction periods, nine data loggers will be set in key wells. Data loggers will record daily water and temperature levels for a continuous period of one year (as part of the proposal) using Solinst© (or equivalent) data loggers. The collected data will be downloaded monthly and interpreted by the Technical Advisory Committee (TAC). A hydrographic presentation of the data will be compared with physical water-level readings for calibration. The data will also be used in conjunction with bi-annual water-level data for contour maps constructed by the Kern County Water Agency (KCWA) and stored in the KCWA database. Hydrographs appear as Figures 3.3 through 3.5.

2.5 HYDROGEOLOGIC DATA REVIEW AND INTERPRETATION

All drilling and electric logs were reviewed and compared with mud return formation samples by the field geologist and mud logger to determine subsurface geology and well construction designs. Mud return formation samples were collected every

5 feet. Cuttings were described, placed in sealed bags, and labeled with well number, date, and depth of sample. All cuttings/samples were packaged and sent to the State Core Repository in Bakersfield, California, for future reference.

All data, including logs, field chemistry, and laboratory analytical results, were reviewed for technical validity by the Groundwater Management Group Technical Advisory Committee (TAC), made up of four experienced geologists and hydrogeologists, at least two of whom are California Professional Geologists/Certified Hydrogeologists. TAC members also interpreted well logs, lithologic logs (described herein both verbally and graphically), and geophysical logs.

All isotopic data available for the western area of the valley were reviewed by an experienced geochemist. New data were compiled and compared with previously collected data from the same locations to verify reproducibility of the samples. The data were compared to the BHCS data collected at NAWS and published in Reference 2. The isotopic results, including age of water and recommendations for additional sample locations where unforeseen data gaps may exist, is provided in the Conclusions section of this report.

3.0 RESULTS

3.1 ENVIRONMENTAL DOCUMENTATION

Biological and cultural surveys are required for the NEPA process, and all results are documented at the Ridgecrest Office of the Bureau of Land Management.

3.2 CONSTRUCTION OF MONITORING WELLS

In order to understand the hydrogeologic and geologic conditions in the outlying area and to obtain water quality and isotope samples, all eight monitoring wells were drilled in the southwestern portion of the IWV. Based on current but limited water elevation data, some recharge to extraction areas would most likely originate in the southern Sierra Nevada and migrate through the southwest study area. These monitoring wells have yielded data on geologic conditions and water levels that will be used to fill in data gaps on groundwater elevation maps that currently show an anomalously high gradient in the southwest area. Additional monitoring wells are planned (to be drilled by the U.S. Navy) throughout the El Paso basin to fulfill the goals and objectives of the Cooperative Groundwater Management Plan.

Nine well sites were drilled, eight monitoring wells were completed, and one well (T27S/R38E-10C01) was destroyed. Two of the eight wells were paired with existing wells. The completed well locations are listed below and located in Figure 3.1:

1. Township 27 South/Range 38 East-Section 09 C01
2. Township 27 South/Range 38 East-Section 09 Q02 (Well Pair)
3. Township 27 South/Range 38 East-Section 10 C01 (Well Destroyed)
4. Township 27 South/Range 38 East-Section 10 C02
5. Township 27 South/Range 38 East-Section 13 A02 (Well Pair)
6. Township 27 South/Range 38 East-Section 14 M01
7. Township 27 South/Range 38 East-Section 17 A01
8. Township 27 South/Range 38 East-Section 21 L01
9. Township 27 South/Range 38 East-Section 27 M01

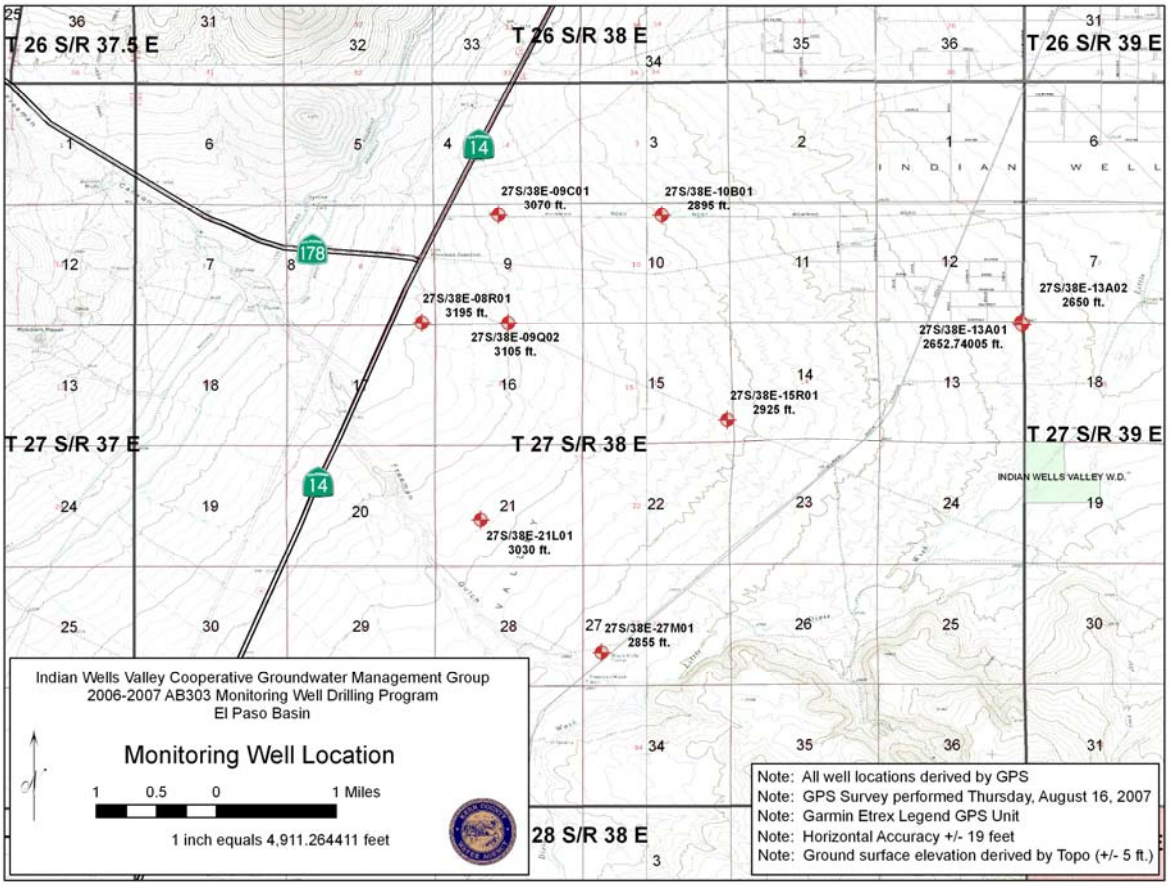

FIGURE 3.1. Location Map for New Monitoring Wells Drilled in this Project.

TABLE 3.1. Summary of AB 303 Project Monitoring Well Drilling, IWV.

Well Location	Location Description	Drilling Method	Well Depth, bls	Screened Interval(s)
1. T27S/R38E-13 A02	3.7 mi. southwest of Inyokern	Mud Rotary	690 feet	232-272, 372-472, 632-690
2. T27S/R38E-09 Q02	0.75 mi. east of Crowley Site	Mud Rotary	490 feet	380-480
3. T27S/R38E-10 C02 (Plotted as 10 B02 on Figure 3.1)	1.25 mi. east of Hwy 14	Mud Rotary	872 feet	452-552, 752-852
4. T27 S/R38E-09 C01	0.30 mi. east of Hwy 14	Mud Rotary	601 feet	501-581
5. T27S/R38E-21 L01	1.5 mi. south of Crowley Site	Mud Rotary	1045 feet	905-1005
6. T27S/R38E-14 M01 (Plotted as 15 R01 on Figure 3.1)	2.2 mi. south of Bowman Rd.	Mud Rotary	380 feet	280-340
7. T27S/R38E-27 M01	0.25 mi. north of Freeman Wash	Mud Rotary	625 feet	320-360
8. T27S/R38E-17 A01 (Plotted as 08 R01 on Figure 3.1)	0.20 mi. east of Crowley Site	Mud Rotary	1000 feet	720-820

The well logs for the nine wells drilled in the AB 303 project are described in the following sections.

Well T27S/R38E-Section 09 C01

Well 09 C01 was drilled to 601 feet bls and cased to the same depth. The perforation interval is 501 to 581 feet based on the mud return formation samples and electric logs. The water level at Well 09 C01 was measured at 386.3 feet TOC* bls. The geology consists of mostly poorly sorted, unconsolidated younger alluvium with slight color changes throughout the section. From land surface to 105 feet bls, the section consists of well sorted, sub-angular grains dominated by granitic materials (quartz, feldspars, micas, hornblendes) with mafic material increasing with depth. From 105 to 360 feet bls, the materials become a mixed sample of fine-grained to coarse granitic material. A color change from moderate brown to dark yellowish-brown reflects the inclusion of a higher percentage of mafics. From 360 to 460 feet bls, the section grades up to very coarse sands with gravel and changes to a light gray color. The color change appears to be a change in the percentage of quartz in the sample but did not reflect a change of provenance. From 460 to 601 feet bls, the samples reflect a slightly larger grain size (coarse sands and gravels) with increases in mafic material creating a color change at a depth of 550 feet bls. In general, the materials encountered are granitic in nature with mafic fragments included throughout the column. Quartz, feldspars, and micas dominate the formation samples with little changes in lithology other than the fine-grained materials described.

*Top of Casing (TOC)

Well T27S/R38E-Section 09 Q02

Well 09 Q02 was drilled as a well pair for Well 09 Q01, which was drilled by the U.S. Navy SeaBees in 1998. Well 09 Q02 was drilled to 490 feet bls and completed with the screened interval at 380 to 480 feet. Water-level measurements collected after drilling was completed indicate the static water level at 424.0 feet (TOC). From land surface to 280 feet in depth, the geology consists of medium to very coarse granitic sand and gravel. The grains are composed of predominately quartz and feldspar (plagioclase and orthoclase) with biotite mica and are very pale orange in color. The size, angularity, and lack of sorting throughout this upper section indicate a high-energy depositional environment (fluvial). This well site is adjacent to the intersection of Highway 14 and 178, and the existing surface geology indicates the identical type of depositional environment with heavy sand materials, water-cut gullies, and rills and is located in an occasional high energy (flash flood) environment. From 280 to 310 feet bls, the section reflects a lower-energy depositional environment with finer-grained material composed of granitic material including a minor brown silty-clay matrix at 290 feet bls. There was no color change with the inclusion of the brown silty-clay matrix, which may indicate drilling muds in the sample. In general, the remaining samples from 310 to 490 feet bls consisted of very coarse, unsorted, sub-angular granitic material.

Well T27S/R38E-Section 10 C01 (Destroyed)

This borehole was drilled to 500 feet bls. The borehole was logged using mud return formation samples and a suite of electric logs. Once the electric logs were completed, the borehole failed at 400 feet bls (borehole sloughing). The U.S. Navy geologist determined the borehole should be properly destroyed and a new hole started at the same location. Equipment failure and a constrained training class schedule were major parts of that decision. The borehole was backfilled with Hole-Plug to within 50 feet of the land surface and then completed with a concrete/bentonite slurry to land-surface.

Data from the failed borehole showed unconsolidated, non-cemented younger alluvium to 175 feet bls. From 175 to 200 feet bls, a light olive-gray silty clay was encountered. This lacustrine deposit may indicate a former shallow lakebed and is one of the only lacustrine deposits encountered in the eight wells completed in the study area. The remaining samples from the borehole deeper than 200 feet consisted of unconsolidated alluvial material composed of poorly graded sand and gravel deposits.

Well T27S/R38E-Section 10 C02

Well 10 C02 was drilled to 1,029 feet bls. The well was cased to 872 feet with perforations from 452 to 552 feet and 752 to 852 feet. From the surface to a depth of 200 feet, the alluvium consists of coarse sands to gravel, indicating dominant fluvial depositional processes such as increases in surface water flow at the time of deposition and/or possible intermittent flood conditions. The provenance of the sand and gravel

appear to be the southern Sierra Nevada. From 200 to 605 feet bls, the material throughout the section increases in fine- to medium-sized sand grains. There was a distinct color change (from a pale yellowish-brown to a dusky yellowish-brown) in the sediments at 250 feet bls but no indication in the samples of a change in provenance. The material from 605 to 805 feet is a fine-grained sand with minor silt. A color change at 685 feet indicates a possible lacustrine influence due to the size (low-energy deposition) and olive-green nature of the material. Small ephemeral lakebeds existed throughout the region during the Pleistocene Epoch, and the deposits described in this section may correlate to this type of low-energy deposition. The remaining sections (below 795 feet to the borehole bottom at 1,029 feet) indicate deposition influences from fluvial and aoelian processes.

Well T27S/R38E-Section 13 A02

This well was drilled as the pair to a previously drilled well completed in 1998. The original well was drilled by the U.S. Navy SeaBees and has been included in the Kern County Water Agency Annual Water Level Monitoring program. Well 13 A02 was started in May and finished in early June 2006. This was the first of the eight monitoring wells drilled by the U.S. Navy SeaBees in the study area. Well 13 A02 was drilled to 960 feet and completed to 690 feet bls. The well was cased using Schedule 80 PVC (Certalock) and is perforated from 232 to 272 feet, 372 to 472 feet, and 632 to 690 feet. The perforation intervals were designed using the mud return formation samples and electric logs and utilizing the original well (T27S/R38E-13 A01) design to match perforation intervals. These wells will be used for future aquifer tests to gather additional hydrogeologic data within the study area. Based on the suite of logs, mud return formation samples, and drilling character, the geology in the upper 770 feet of the borehole has been described as mostly comprised of poorly graded, non-cemented sands composed of angular to sub-rounded granitic materials (quartz and feldspar dominate). The deposits in the upper borehole consist of younger alluvium as described in Reference 3. Finer material represented by silt and silty-clay is present from 770 to 835 feet and near the bottom of the borehole from 915 to 960 feet. All of the fine material is tan in color and probably represents fluvial and aeolian deposits of eroded volcanic material from the adjacent El Paso Mountains. No lacustrine deposits are present within the borehole. Water levels were collected after drilling operation completion, and the static water level was 219.4 feet to TOC.

Well T27S/R38E-Section 14 M01

Well 14 M01 was drilled to 390 feet with the perforated interval located from 280 to 340 feet. The water level, collected after drilling operation completion, was measured at 278.0 feet bls. The mud return formation samples indicate mostly non-cemented, unconsolidated, alluvium material comprised of granitic sands. The upper 170 feet of material is comprised of well-sorted, medium- to coarse-grained, pale yellowish-brown sands. The material from 170 to 295 feet consists of mostly well-sorted, fine to medium

sands. From 295 to 380 feet, fine sands with a pale yellowish-brown, silty-clayey matrix dominate, but the material remains a pale yellowish-brown (no color change), which could indicate an influence from drilling mud in the samples. The last 10 feet of the well consists of an unsorted, sub-angular, dark yellowish-brown medium to coarse sand.

Well T27S/R38E-Section 17 A01

Well 17 A01 was drilled and cased to 1,000 feet. The screened interval is from 720 to 820 feet. Water-level measurements taken after the well was completed indicate the static water level to be in excess of 500 feet. The entire section is composed of pale yellowish-brown and pale yellowish-orange granitic material ranging from fine grains to very coarse sand with pebbles to 1 inch in length. Generally, the coarser material (gravels) range in depth from the land surface to 110 feet and from 260 to 295 feet. The rest of the section reflects fine to coarse sands throughout. Most of the section indicates a high-energy depositional environment. Well 17 A01 is located near the intersection of Highways 14 and 178, where the section's depositional environment can be observed by examining the existing surface geology.

Well T27S/R38E-Section 21 L01

Well 21 L01 is located about 1.5 miles south of the Father Crowley Site. This well was drilled to 1,045 feet bls and is perforated from 905 to 1,005 feet. From land surface to 295 feet, the geology consists of unconsolidated, medium- to coarse-grained granitic material, which is moderately yellow brown in color and typically unsorted with sub-angular grains. From 295 to 380 feet, unconsolidated fine-medium granitic material is encountered. This material is well sorted and has sub-angular grains. The moderate yellowish-brown color continues through 380 feet. Medium-coarse sands are exhibited from 380 to 480 feet. This section is also dominated by granitic materials with little sorting and sub-angular grains. From 480 to 555 feet, a color change to light olive gray with grain sizes decreasing to fine sands, silt, and clay indicates a low-energy depositional environment that is very shallow (thin) in nature. The section from 555 to 830 feet changes back to a pale yellowish-brown color with grain sizes increasing to medium-coarse sizes. Clay with silt and very fine sand appears at 870 feet and continues to 930 feet bls. The clay is again reflected by grain size and distinct color change to light olive gray. The bottom of the section from 930 to 1,045 feet consists of fine sand with a silty matrix but appears as a pale yellow-brown color.

Well T27S/R38E-Section 27 M01

Well 27 M01 was drilled to 625 feet bls and cased to 380 feet bls. The perforation interval is 320 to 360 feet. The water level, collected after well completion, is 198 feet TOC. From land surface to 85 feet, the geology consists of fine- to medium-grained granitic material with minor gravel. Quartz and feldspars (plagioclase and orthoclase) dominate the samples. From 85 to 490 feet, the section is dominated by medium-coarse

sized grains with limited sorting, sub-angular grains, and moderately yellowish-brown in color. From 490 to 925 feet, the section alternates between high-energy deposits (medium-coarse sands) and low-energy deposits (clay and silt). This well site is located adjacent to the El Paso Mountains where the alternating sequences may be explained by high-energy material deposited out of the Little Dixie Wash and low-energy sediments (decomposed volcanic material) washed out of the El Paso Mountains.

All electrical logs performed on the wells can be seen in Appendix B.

3.3 GROUNDWATER SAMPLING

Forty-six samples were collected from the wells listed in Table 3.2 for general mineral, general physical, and inorganic chemicals (metals). The reports of complete analyses including isotopes are provided in Appendix C. Twenty-seven samples were collected for isotopic analysis, shown in Table 3.3. This table also includes the new wells installed as part of this project. These data will be used to update the current groundwater conceptual model generated with the previous AB 303 grant investigation.

TABLE 3.2. Summary of AB 303 Project Monitoring Well Water Quality Characteristics (New Wells).

Well Name	Screened Interval, feet	pH	EC, uS/cm	TDS, mg/L	Hardness, mg/L
1. T27S/R38E-13 A02	232-272, 372-472, 632-690	7.94	461	300	120
2. T27S/R38E-09 Q02	380-480	8.32	1400	980	130
3. T27S/R38E-10 C02	452-552, 752-852	7.20	490	300	7.2
4. T27S/R38E-09 C01	501-581	8.34	610	460	70
5. T27S/R38E-21 L01	905-1,005	8.26	536	510	39
6. T27S/R38E-14 M01	280-340	8.20	425	290	74
7. T27S/R38E-27 M01	320-360	8.02	367	260	140
8. T27S/R38E-17 A01	580-680	7.90	574	390	9.8

EC = electrical conductivity TDS = total dissolved solids

TABLE 3.3. Summary of the Water Quality Characteristics for Both Surface and Groundwater Sampling Sites.

Sampling Site	Type	pH	EC, uS/cm	TDS, mg/L	Hardness, mg/L
Southwest Area					
1. Big Spring	Surface	7.82	419	270	160
2. Cow Haven	Surface	8.22	363	240	140
3. Sage Cyn	Surface	8.08	696	410	310
4. Horse Canyon	Surface	7.84	593	360	210
5. Pennix Well	Groundwater	8.10	420	290	110
6. T27S/R38E-13 A02	Groundwater	7.94	461	300	130
7. T27S/R38E-09 Q02	Groundwater	8.32	1400	980	130
8. T27S/R38E-10 C02	Groundwater	7.20	490	300	7.2
9. T27S/R38E-09 C01	Groundwater	8.34	610	460	70
10. T27S/R38E-21 L01	Groundwater	8.26	536	510	39
11. T27S/R38E-14 M01	Groundwater	8.20	425	290	74
12. T27S/R38E-27 M01	Groundwater	8.02	367	260	140
13. T27S/R38E-17 A01	Groundwater	7.90	574	390	9.8
14. T27S/R38E-09 Q01	Groundwater	8.08	680	430	250
15. WD 31	Groundwater	7.96	369	260	85
16. T28S/R38E-18 F01	Groundwater	9.02	960	630	5.8
17. BR 1 (Deep)	Groundwater	10.24	342	190	9.3
Northwest Area					
1. Little Lake Outlet	Surface	8.60	2100	1300	440
2. Five Mile Canyon	Surface	8.27	1000	740	410
3. Nine Mile Canyon	Surface	8.38	1100	640	530
4. No Name Canyon	Surface	8.08	1200	720	520
5. Sand Canyon	Surface	8.38	810	480	300
6. Short Canyon	Surface	8.16	524	390	200
7. Sawmill Well	Groundwater	8.13	2000	1100	330
8. T25S/R38E-03 G01	Groundwater	7.69	910	520	410
9. Childers Well	Groundwater	8.18	990	600	320
10. Standard Well	Groundwater	8.23	890	560	200
11. T25S/R39E-31 R01	Groundwater	8.04	900	550	220
12. T25S/R39E-13 J01	Groundwater	8.32	510	280	53
West Area					
1. Indian Well Canyon	Surface	8.34	779	610	360
2. Marquardt Well	Groundwater	9.98	280	180	4.5
3. Campbell Well	Groundwater	8.16	930	560	220
4. Navy 15 (Inyokern)	Groundwater	8.07	540	380	140
5. Navy 27 (Inyokern)	Groundwater	8.11	490	350	120
6. Navy Well 30 (substation)	Groundwater	8.14	340	270	93
7. Navy Well 31	Groundwater	8.14	310	220	57
8. WD Well 30	Groundwater	8.11	328	220	59

TABLE 3.3. (Contd.)

Central area					
Sampling Site	Type	pH	EC, uS/cm	TDS, mg/L	Hardness, mg/L
1. T25S/R39E-04 R01	Groundwater	8.22	1200	790	280
2. T26S/R39E-09 M01	Groundwater	8.86	300	180	6.1
3. T26S/R39E-09 H01	Groundwater	8.11	550	340	120
4. T26S/R39E-14 P01	Groundwater	7.96	360	250	120
5. Navy Well 28	Groundwater	9.24	281	190	31
6. Navy Well 18	Groundwater	8.65	349	230	59
7. WD Well 08	Groundwater	8.94	401	280	22
8. WD Well 10	Groundwater	8.82	417	280	28
9. WD Well 11	Groundwater	8.52	769	470	40
10. Weiler Well	Groundwater	7.41	220	1500	410

TABLE 3.4. Summary of the Isotopic Data Collected for this Current Project.

Location	Sampling Date	Gen Min, BC Labs	TDS	$\delta^{18}O$, UA	δD, UA	$\delta^{34}S$, UA	$\delta^{11}B$, GTC	$\delta^{13}C$, UA	^{14}C, UA	Pmc, UA	Tritium, UA
26/39-14 P01	1/11/2007		250	-14.6	-95	16.4	11.9	-17.7	21170	0.0717	<0.4
26/39-09 H01	1/11/2007		340	-12.6	-96	4.7	14.7	Broken			<0.3
26/39-09 M01	1/11/2007		190	-13.0	-96	27.1	3.0	-28.1	21040	0.7029	<0.3
25/39-31 R01	1/11/2007		33	-12.4	-95	6.8	19.8	-10.0	11210	0.2477	<0.4
25/38-13 J01	1/12/2007		280	-10.6	-78	11.0	16.0	-5.8	2119	0.7682	<0.8
Navy Well 15 (26/39-19 P02)	1/14/2007		790	-12.5	-95	4.4	23.9	-7.3	8485	0.3478	<0.6
Navy Well 30 (26/39-20 R01)	1/14/2007		560	-12.6	-93	5.8	12.3	-7.5	12799	0.2033	<0.3
Navy Well 31 (26/39-21 Q01)	1/14/2007		430	-12.7	-95	5.8	9.9	-10.0	10874	0.2583	<0.4
Navy Well LB (25/39-03 M01)	1/15/2007		980	-12.0	-92	9.2	11.4	-1.9	12826	0.2026	<0.4
26/38-12 R01 (Campbell Ranch)	2/2/2007		560	-12.3	-95	5.3	19.4	-15.4	9788	0.2957	<0.4
27/38-09 Q01 (Father Crowley East)	2/2/2007		430	-12.1	-91	3.3	25.1	1.5	11505	0.2388	<0.5
27/38-09 Q02 (Father Crowley West)	2/2/2007		980	-12.2	-92	4.3	28	-6.5			<0.3
28/38-18 F01	2/2/2007		630	-12.7	-97	14.5	-20.9	-8.9	26590	0.036	<0.8
27/38-09 C01	2/3/2007		460	-12.3	-92	2.5	20.2	-4.0	14509	0.1643	<0.4
27/38-10 C02	2/3/2007		300	-12.7	-97	-1.4	27.3	Broken			<0.4
25/39-14 H01 (Childers Well)	2/3/2007		600	-11.0	-85	6.8	19.6	-7.2	1786	0.8006	0.04
26/38-01 J01 (Standard Well)	2/3/2007		560	-12.3	-95	6.9	9.7	-7.0	9739	0.2975	<0.4
24/38-15 M01 (Sawmill Well)	2/4/2007		1100	-11.9	-95	8.2	3.1	1.1	9299	0.3142	<0.6
23/38-17 E01 (Little Lake Outlet)	2/4/2007		1300	-7.4	-74	7.7	7.6				<0.8
25/38-03 G01	2/7/2007		520	-11.9	-92	3.4	-4.1	2.1	9809	0.2949	<0.5
26/38-35 L01 (Marquardt)	2/7/2007		180	-13.4	-105	6.1	26.3	-9.4	19430	0.089	<0.9
26/39-31 R0101 (Pennix)	2/7/2007		290	-12.3	-93	5.1	19.7	-0.4	14678	0.1609	0.7
24/38-07 F01 (Deadfoot Canyon)	2/19/2007		740	-10.4	-88	4.2	31.2				2.4
24/38-N01 (Nine-Mile Canyon)	2/19/2007		640	-11.4	-90	10.9	35.3	2.5			0.7
24/38-30 P01 (No Name Canyon)	2/19/2007		720	-11.3	-89	6.0	26.1	4.6			0.8
25/38-08 K01 (Sand Canyon)	2/19/2007		480	-10.9	-85	12.4	19	-1.0			1
27/38-20 C1	nr							-9.4	8765		

TABLE 3.4. (Contd.)

Location	Sampling Date	Gen Min BC Labs	TDS	$\delta^{18}O$ UA	δD UA	$\delta^{34}S$ UA	$\delta^{11}B$ GTC	$\delta^{13}C$ UA	^{14}C UA	pmc UA	Tritium UA
27/38-27 M1	7/9/2007						7.5	-9.2	2417		
27/38-14 M1	nr						22				
27/38-17 A1	nr						20.1				
Short Canyon	4/9/2007			-11.4	-88	9.3	24.8				0.6
Indian Wells Canyon	4/9/2007			-10.8	-86	9.7	30.1	-10.1			0.9
Freeman Canyon (Soldier Sp)	nr							nr			
Cow Haven Canyon	7/9/2007			-12.1	-89	5.9		-11.3			
Sage Canyon	7/9/2007			-11.4	-85	16.8		-10.9			
Horse Canyon	7/9/2007			-11.5	-86	5.2		-9.3			
Soldier Spring	4/9/2007			-11.6	-89	3.3	26.7				<0.4
Weiler Well	7/9/2007			-11.9	-97	12.7					
26/40-33 P1 (IWVWD 7)	4/4/2007			-12.9	-99						0.9
26/40-30 K (IWVWD 8)	4/4/2007			-13.4	-102						<0.6
26/40-34 N1 (IWVWD 19)	4/4/2007			-12.7	-98						0.6
26/39-27 D1 (IWVWD 30)	4/4/2007			-13	-98						<0.5
26/39-28 R1 (IWVWD 31)	4/4/2007										<0.6
27/39-8 (IWVWD 33)	nr			-12.4	-94						
IWVWD 9a	nr			-13.6	-103						
26/40-30 K (IWVWD 10)	4/4/2007			-13.3	-102						
26/40-32 (IWVWD 11)	4/4/2007			-13.6	-103						
IWVWD 12	nr			-13.8	-105						
IWVWD 13	nr			-13.8	-105						
IWVWD 16	nr			-12.6	-95						
IWDWD 17	nr			-13.2	-99						
BR1 (DEEP)	8/27/2007			-13.5	-102						
27/38-13 A2	8/27/2007			-12.5	-93						
27/38-21 L1	8/27/2007			-12.6	-96						

nr = not recorded

Extraction-area Sampling

Key wells were selected in areas of high groundwater extraction (Navy and Water District [WD] wells) to provide data in the vicinity of the pumping centers. The data was to be compared with previous data to determine any changes in water quality occurring through time. Due to the unavailability and/or difficulty of securing key water quality results in the study area (other than from the production wells themselves), this portion of the project has been postponed until data can be collected. When this is achieved, the TAC will provide a water quality analysis at low (winter) and high (summer) water-production levels and present this data to the Cooperative Groundwater Committee.

3.4 CONTINUOUS MONITORING

To evaluate any impacts from pumping in the IWV during high and low extraction periods, nine transducers were set in the wells listed in Table 3.5. This table includes the approximate depth of the transducer probe and the initial depth to water at the time the transducer was installed. The locations of the well sites with transducers are found in Figure 3.2.

TABLE 3.5. Wells with Installed Transducers.

Transducer Locations	Well Name	Approximate Depth of Transducer, feet	Initial Depth to Water, feet	Status, as of December 2007
27S/38E-23 F04	USBR1 S?	240	185.60	Collecting Data
27S/38E-13 A01	13 A01	250	224.30	Collecting Data
27S/38E-13 A02	13 A02	250	221.90	Collecting Data
26S/39E-27 D01	MW 32 Shallow	280	260.00	Collecting Data
26S/39E-26 A01	USBR4	280	260.00	Collecting Data
26S/39E-14 P01	14 P01	250	195.05	Collecting Data
26S/39E-23 G01	23 G01	260	225.55	Collecting Data
26S/39E-13 R03	13 R03	250	147.45	Collecting Data
26S/40E-19 N03	19 N03	260	205.75	Collecting Data

Transducers recorded relative depth to water (in feet) and groundwater temperature once every 24 hours for several months. Data will eventually be used in conjunction with biannual depth to water-level data, which are collected by the KCWA for contour maps and calibration of manual data. The data will be stored in the KCWA database.

Transducers (manufactured by In-Situ) were installed within nine wells (see Table 3.2 and Figure 3.2 for locations and descriptions) to evaluate possible impact to groundwater elevations due to nearby production wells. Transducers recorded relative depth to water levels and temperature every 24 hours for 6 months or more. Relative depth to water data and groundwater temperature are presented in hydrographs shown in Figures 3.3 through 3.10.

The transducers collected data from the wells with an accuracy of 0.05%. Five of the nine transducers experienced errors during downloading in the field and had to be returned to the manufacturer to recover data. Most of the data for the monitoring period was recovered. The results are presented herein. The other transducers continue to collect data that can be used for long-term evaluation of water levels. Some of the wells were also sampled during the monitoring period, which required the removal of the transducers to prevent damage to them and to provide better access to the wells. Hydrograph data show these events as anomalies, and they are noted upon the hydrographic figures (Figures 3.3 through 3.5).

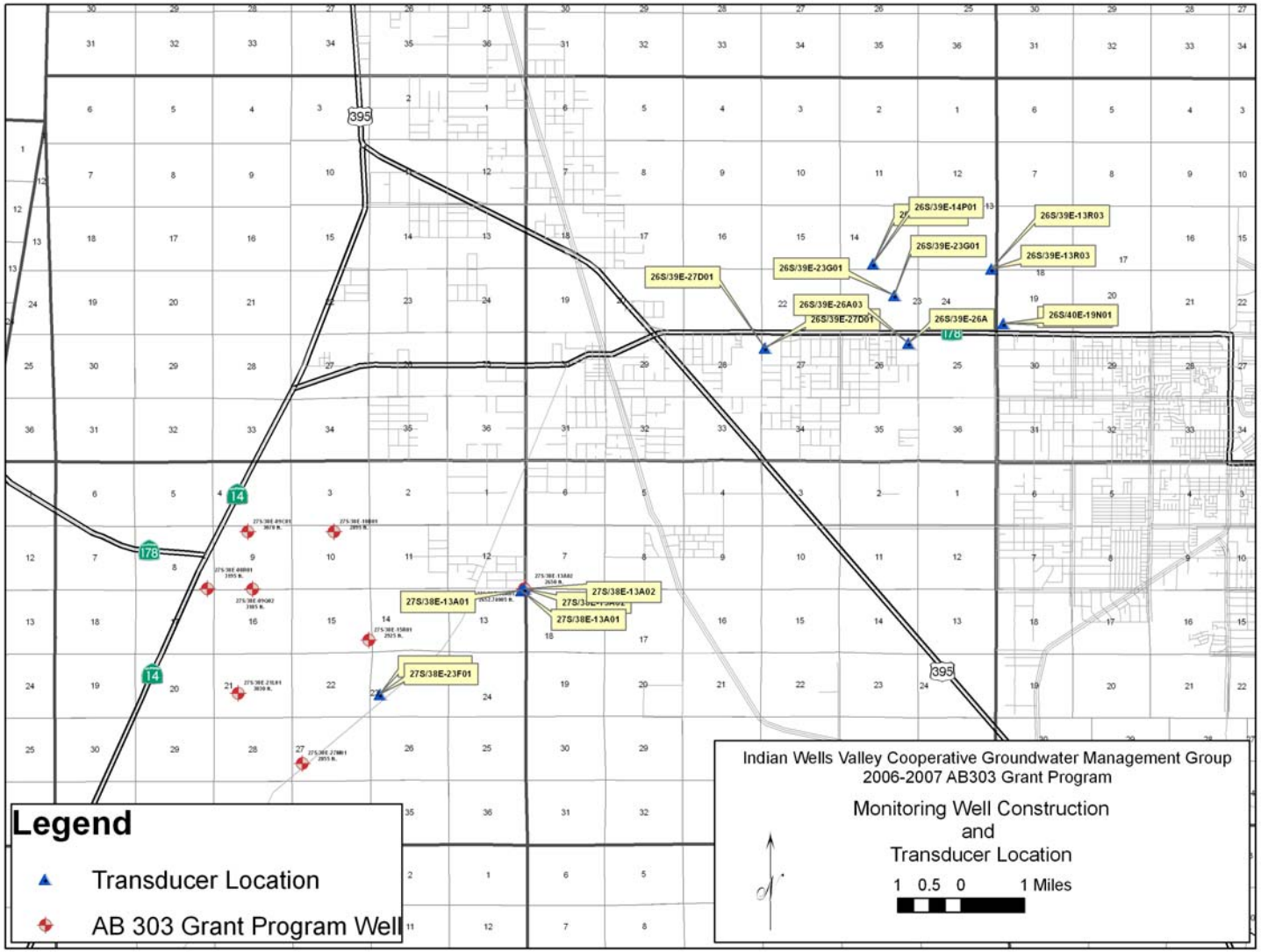

FIGURE 3.2. Location of Transducers.

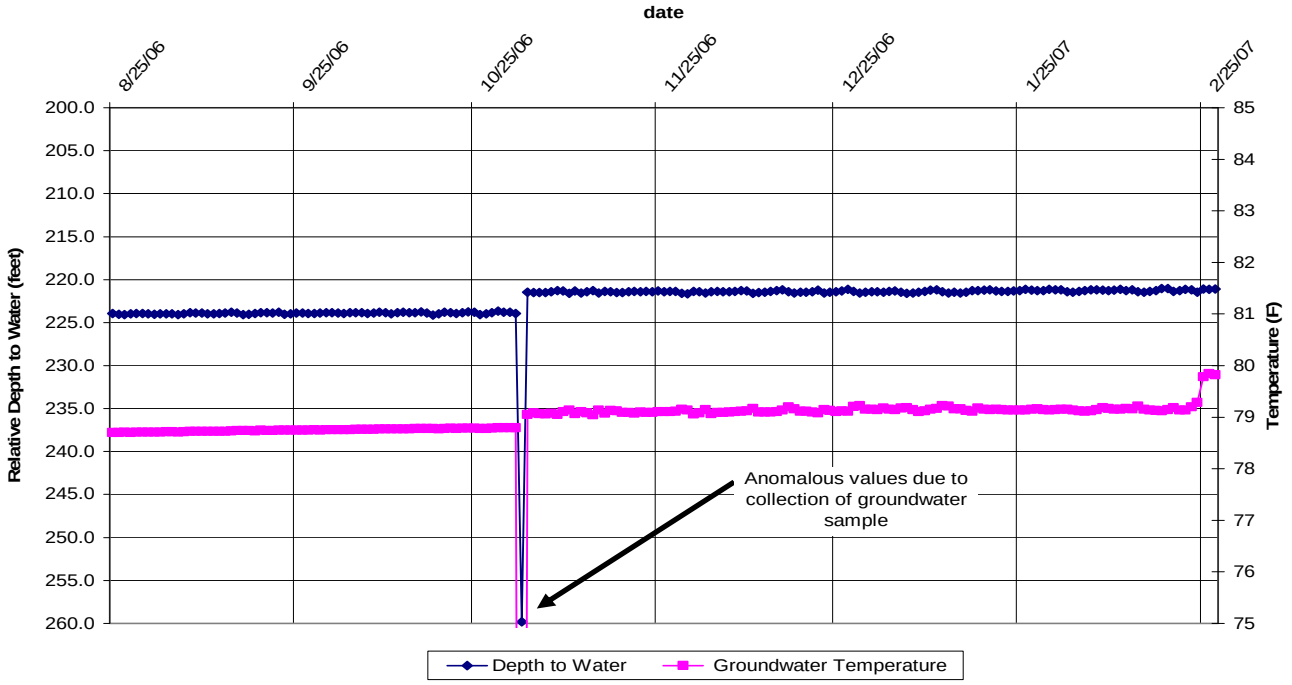

FIGURE 3.3. Hydrograph Data Collected From Well Location 27S/38E-13 A01.

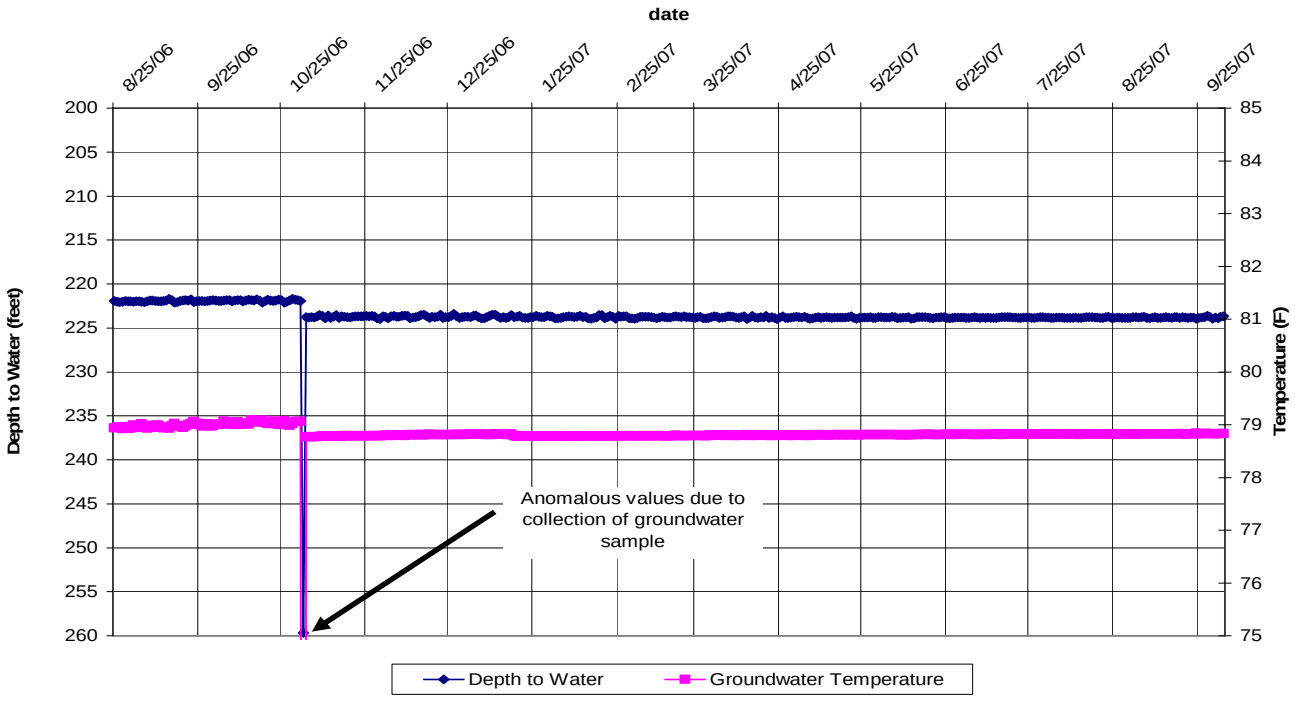

FIGURE 3.4. Hydrograph Data Collected From Well Location 27S/38E-13 A02.

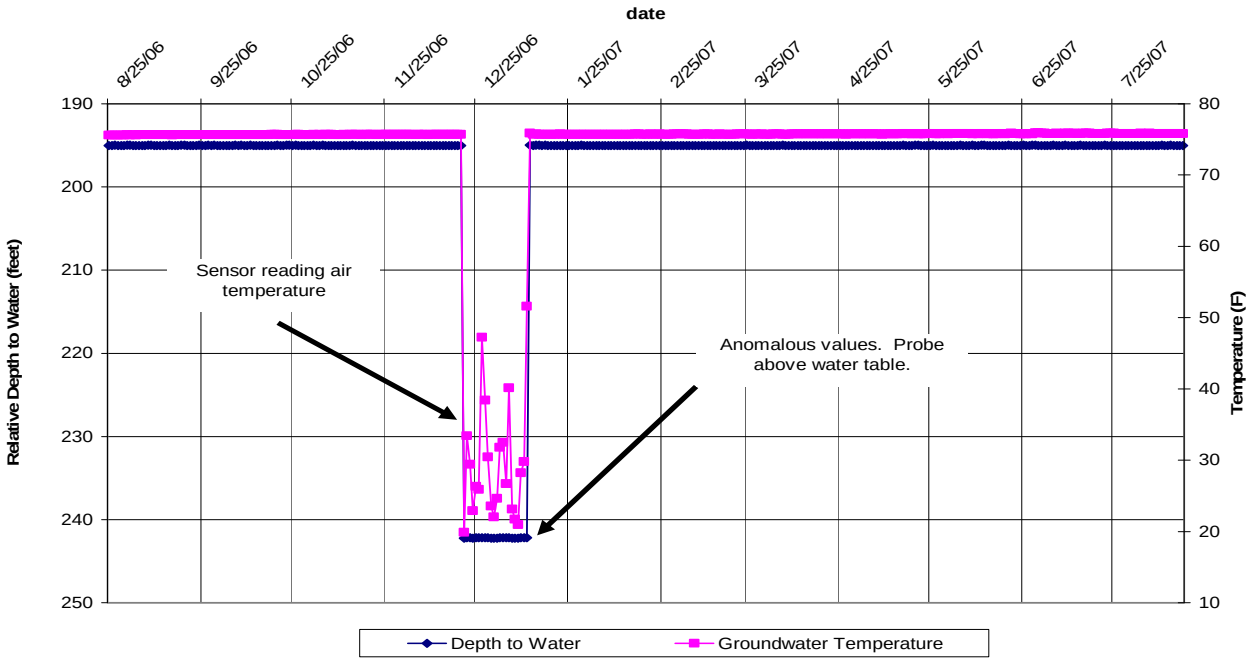

FIGURE 3.5. Hydrograph Data Collected From Well Location 26S/39E-14 P04.

Most of the hydrographs show no change in water level over the time period monitored with the exception of the data collected from the well located at Township 26 south, Range 39 east, Section 23G01. The hydrograph data collected from this well shows seasonal pumping influence, indicated by a decline in water levels during the summer months and a recovery in water levels during the winter and spring months (Figure 3.6). The remaining hydrographs are shown in Figures 3.7 through 3.10.

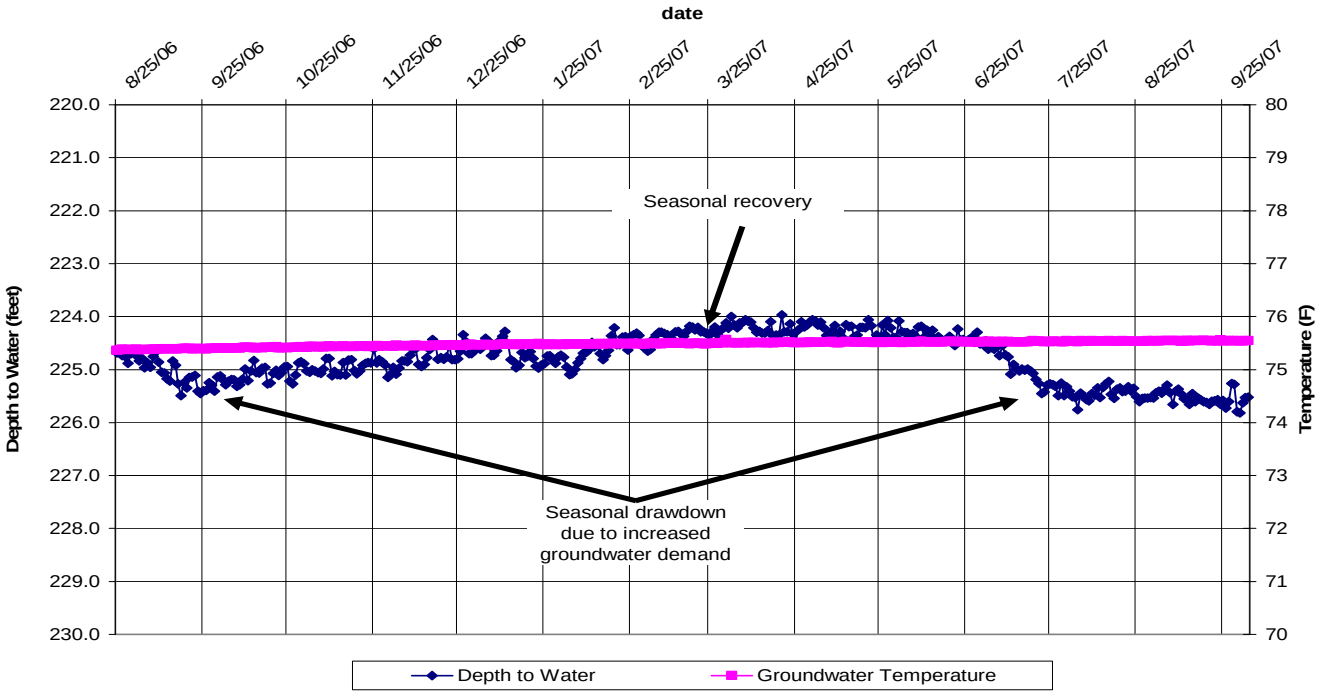

FIGURE 3.6. Hydrograph Data Collected From Well Location 26S/39E-23 G01.

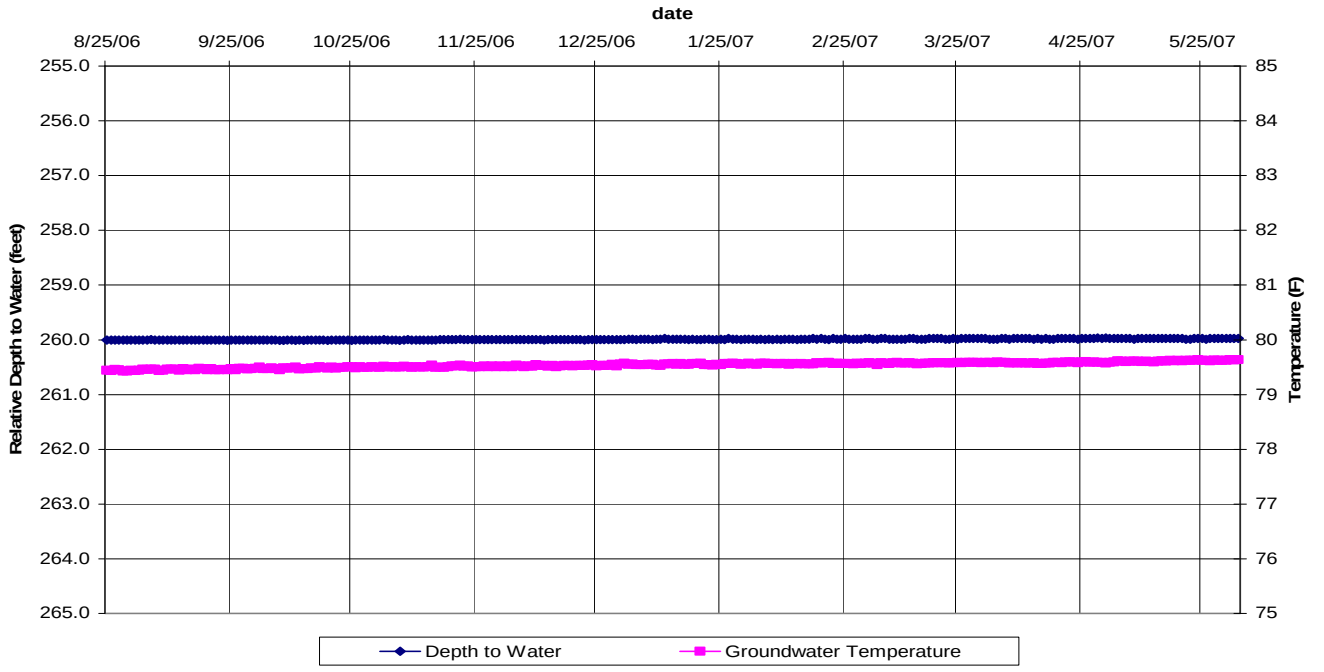

FIGURE 3.7. Hydrograph Data Collected From Well Location 26S/39E-27 D01 (Also Known as MW 32 Shallow).

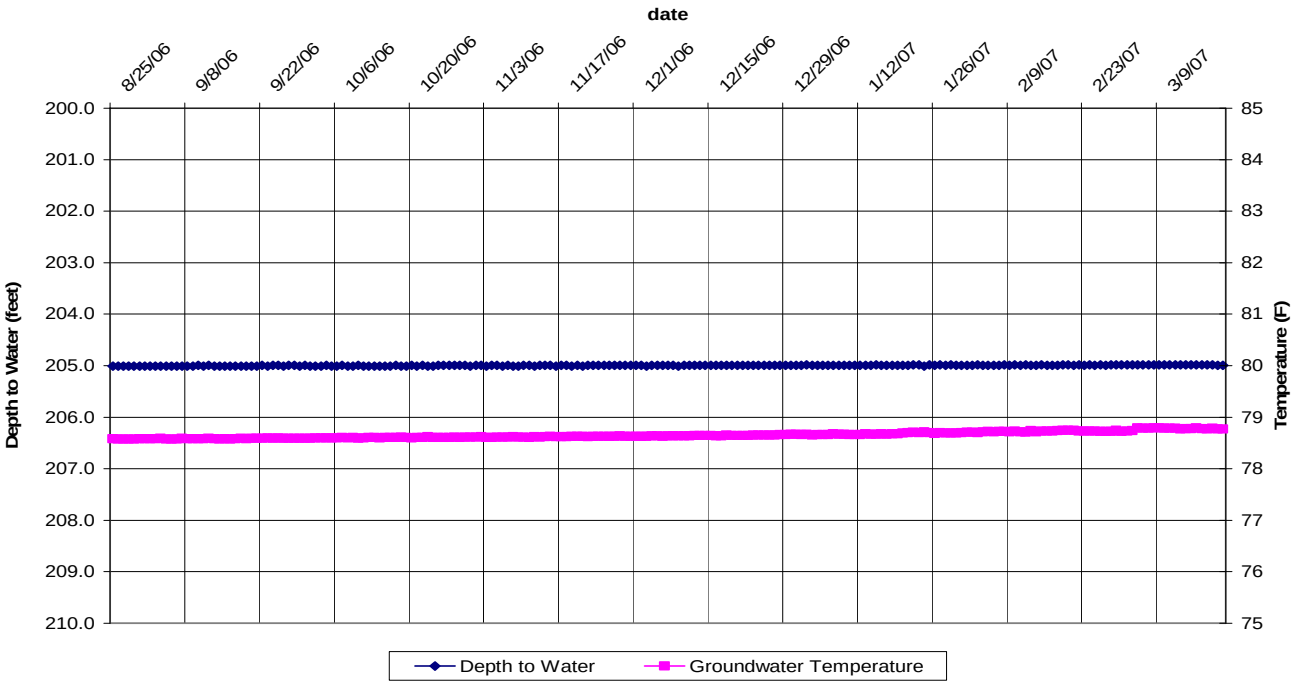

FIGURE 3.8. Hydrograph Data Collected From Well Location 26S/40E-19 N03.

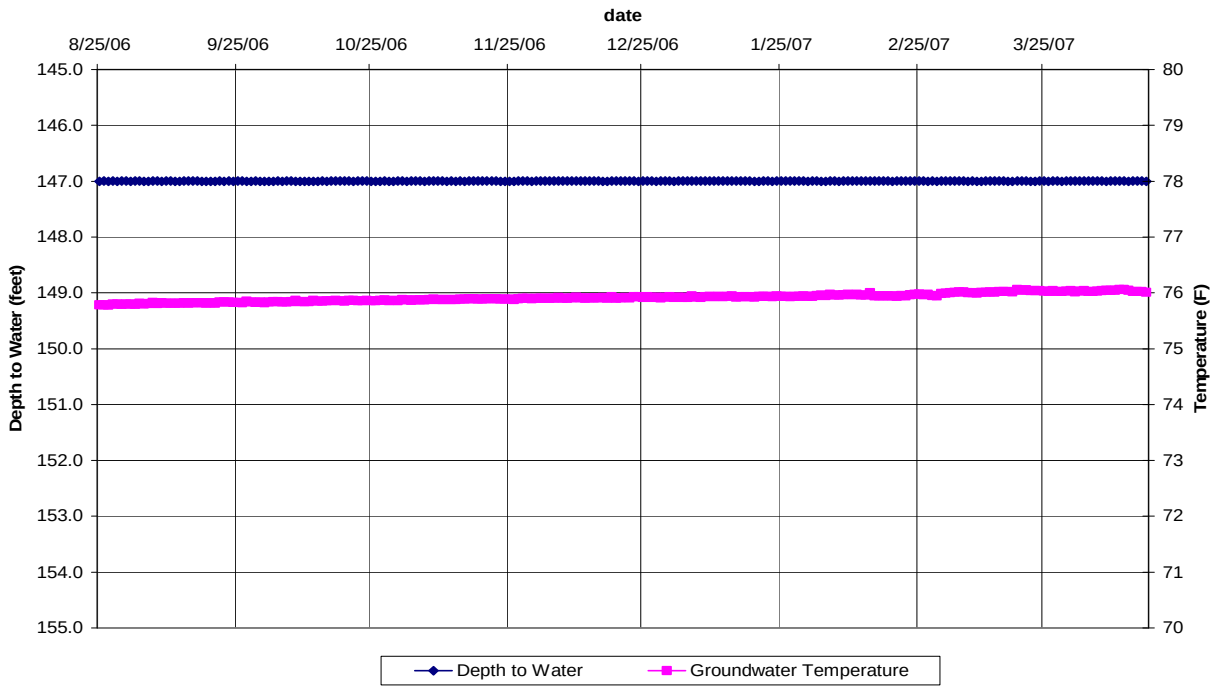

FIGURE 3.9. Hydrograph Data Collected From Well Location 26S/39E-13 R03.

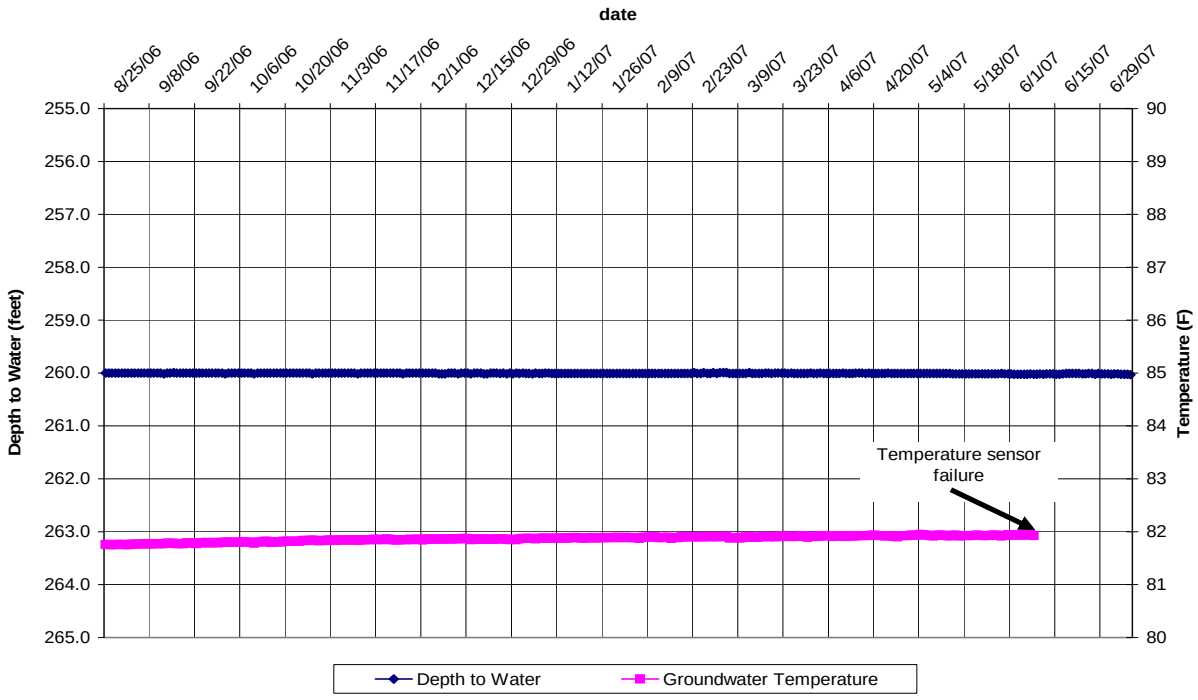

FIGURE 3.10. Hydrograph Data Collected From Well Location 26S/39E-26 A01 (BOR 4).

Recommendations

Continuous monitoring of water levels should be expanded to include additional monitoring wells near areas of groundwater extraction. Data collection for this study was conducted on a daily basis; however, future data could be collected less frequently. Based on the data collected for this study, weekly data collection would be sufficient to evaluate seasonal changes due to groundwater extraction. Daily collection of data may be recommended if well interference requires evaluation.

Because it appears transducer failure may be an issue, data download should be performed on a quarterly basis at a minimum. More frequent downloading of data would assure minimal data loss should the transducers fail.

3.5 HYDROGEOLOGIC DATA REVIEW AND INTERPRETATION

The available isotopic analyses for the IWV in the open literature and contrast reports have been reviewed to the extent possible and included in a flatfile, along with the accompanying chemical compositions and hydraulic data. This file includes all isotopic data acquired for this project and is the source of data used for interpretations within the project. Prior to this effort, a single-location repository for isotopic data related to IWV investigations did not exist. This file will be continuously updated and expanded as new

data are located or acquired. The numerous publications that reported only chemical analyses for ground and surface water for the IWV without isotopic values, however, have not been included.

4.0 GEOHYDROLOGY OF THE PROJECT AREA

The IWV is located in the extreme southwestern portion of the Basin and Range Geophysical Province. The valley extends for approximately 35 miles in a north-south direction and up to approximately 15 miles from west to east (Figure 1.1). The valley is surrounded by mountains on all sides with the Sierra Nevada to the west, Coso Range on the north, Argus Range along the east, and the Rademacher and El Paso Ranges to the south. Geographic relief in the region is great, with Owens Peak (8,453 ft.) as the highest elevation in the immediate area and the surface of the China Lake playa (2,145 ft.) as the lowest.

4.1 BASIN BOUNDARIES

The IWV is located east of the southern Sierra Nevada. Average annual precipitation in the valley is 2 to 5 inches, although some years there is virtually none. Surface elevation in central IWV ranges from 2,150 to 2,400 feet above sea level. The Sierra Nevada bounds the basin on the west, the Coso Range on the north, the Argus Range on the east, and the Rademacher and El Paso Mountains on the south. Three playa lakes including China Lake, Mirror Lake, and Satellite Lake are located in the east-central portion of the valley and are the primary surface water and groundwater discharge points.

4.2 GEOLOGY

The stratigraphy of the valley has been described in References 3 and 4. The stratigraphic units in the vicinity of the valley range in age from Paleozoic to Quaternary. A Mesozoic granitic basement complex (Sierra Nevada batholith) exists below 2,000 to as much as 6,000 feet of alluvial fill sediments. Tertiary continental sediments and volcanic deposits fill the valley to approximately 1,000 feet below ground surface. Miocene to Quaternary volcanics also crop out along the perimeter of the basin. The Quaternary deposits (post 2 million years ago) consist primarily of fan, alluvial, and lacustrine deposits. Holocene (post 10,000 years ago) sedimentation in most of the valley has been dominated by sand and gravel deposited in steep alluvial fans to gentle alluvial plain settings and by silt and clay deposited primarily in dry, ephemeral lakes.

Structurally, the valley is a north-south trending, normal fault-controlled valley representing the southwestern fringe of the Basin and Range Physiographic Province. Strike-slip faults present in the area are generally northwest-southeast trending, right-lateral (San Andreas trend) faults or east-west trending, left-lateral (Garlock trend) faults. The normal faults are generally north-trending block faults that form the range boundaries and are responsible for the vertical uplifts and high relief. These faults dominate the regional and local structural geology. The interplay of these two structural styles, strike-slip and extensional tectonics, creates complex patterns of faults (Reference 5), especially when superimposed on older pre-existing structural patterns. As a result, some of the faults in the IWV region have multiple periods of activity with different directions of motion.

4.3 HYDROGEOLOGY

For simplicity, previous investigators have divided the saturated unconsolidated Quaternary deposits in the valley into two main aquifers: shallow and deep (References 3, 6, and 7). The shallow aquifer occurs in the eastern portion of the valley and includes most of the young lacustrine deposits and shallow alluvium where underlain by lacustrine deposits. The shallow aquifer is generally characterized by high concentrations of total dissolved solids. The lacustrine deposits have been referred to as a confining clay (Reference 6) and extend across the eastern portion of the valley. The base of the shallow aquifer's confining clay is poorly defined because of stratigraphic inter-fingering of alluvium and lacustrine deposits (Reference 7). The underlying deep aquifer includes the total remaining thickness of saturated alluvium beneath the shallow aquifer with a range of grain sizes from clay to gravel. The thickness of the deep aquifer is uncertain due to a lack of data but is known to be at least 1,750 feet in the Intermediate Wellfield area (Reference 8) between Inyokern and Ridgecrest. In the deep aquifer, total dissolved solids concentrations are generally less than 1,000 parts per million (ppm), which is generally much lower than levels found in the shallow aquifer (References 9 and 10).

4.4 RESTRICTIVE STRUCTURES

Few restrictive features exist in portions of the deep, unconfined aquifer where water is produced for domestic, agricultural, and industrial purposes. There are two stratigraphic features that appear to influence groundwater flow in the China Lake area: a thick sequence of low permeability lacustrine beds (Reference 3) and a thick sequence present in the subsurface, east of the NAWS China Lake Main Gate (near the intersection of State Highway 178 and China Lake Boulevard) between approximately 65 and 530 feet below ground surface. As mentioned, these two features do not restrict groundwater flow utilized for domestic (potable) purposes.

4.5 GROUNDWATER TRENDS

The deep aquifer is the sole drinking water supply in the IWV and is used by NAWS China Lake, public water districts, private well owners, and industrial and agricultural users. Prior to 1944, groundwater from the deep aquifer was used mainly for irrigation. In 1912, only eight wells existed, pumping a total volume of 2,000 acre-feet per year. Since 1944, however, the groundwater has been used mainly by NAWS China Lake or for public supply (Reference 6). By 1979, the estimated volume of pumped water increased to about 26,500 acre-feet per year, and almost one-third of the total water production in the valley was pumped along the western boundary of NAWS China Lake (Reference 11). By 2001, the major water users (Indian Wells Valley Water District, NAWS China Lake, and IMC Chemical) had re-located many of their production wells in an effort to reduce localized pumping depressions and intercept water otherwise lost to natural discharge. The total groundwater production in the valley for 2001 was estimated at
27,100 acre-feet. In 2006, approximately 25,000 acre-feet of groundwater was produced throughout the IWV.

Water levels in the valley are decreasing by approximately 0.50 to 1.50 feet per year as an average over the whole of the basin. Areas where large production wells are located exhibit decreases of about 2.0 feet per year, while areas of no production show areas of slight (0.20 to 0.30 feet) water-level decline.

Water quality varies widely over the basin. Groundwater in the valley contains varying amounts of sodium and potassium. The anions are mainly chloride, sulfate, bicarbonate, and some carbonate. Some manganese and fluoride ions are found in the northern portions of the valley. Comprehensive water quality studies were conducted by Whelan and Baskin (Reference 12) and Houghton (Reference 10). In general, water quality data reflect good to excellent water throughout much of the extent of the deep aquifer. State Department of Health Services data shows much of the water in the valley to range from 200 to 600 ppm in total dissolved solids. The average drinking water delivered to the customer in the valley is about 400 ppm in total dissolved solids concentrations.

4.6 LITHOLOGIC SECTIONS

The well logs are not geophysical but are descriptions of drill cuttings written onsite during drilling. The characteristics of the observed soil and aquifer material were interpreted by drilling personnel. Terminology is used to describe material and dominant size fractions, but the terms are not uniform. Nevertheless, each identified lithologic change could be defined according to the Unified Soil Classification System and presented in figures that illustrate the lithology in a continuous display from land surface to total depth. Although the classification system assists in defining specific lithologic

zones of sand, gravel, and clay for use in extrapolating to other wells, the aquifer is predominantly loosely consolidated sand and gravel, so historically correlations were difficult and non-quantitative.

For this report, in order to create a quantitative correlation index, the major classifications of the Unified Soil Classification System were converted to numerical designators, and well files were created for each of the lithologic logs. The data were then entered into a geo-stratigraphic 3D geologic simulator to create cross sections that indicate continuity between wells based on the lithology, even though clear stratigraphic boundaries are not present. The numerical correlation is given below for the major lithologic types (Table 4.1). Using the numerical designators to quantify sediment type, the computer simulator examines the zones in one-foot intervals and correlates all wells using the data from each well with a bias that decreases with distance from each well. An example of the correlations is given in Figure 4.1. The numerical values of the lithologic intervals are converted to colors on a scale of 0 to 100 for the colors of blue to red. In the following figures, the shades of blue represent clay-rich to silty sands (0 to 40 scale). These are zones that would be expected to have relatively low permeability and could be considered aquitards. The zones with colors of yellow to red are dominated by gravel and sand with little clay (80 to 100 scale) and could be considered the most highly conductive (see Appendix D).

TABLE 4.1. Template for Converting Aquifer Lithology into a Numerical Attribute.

USCA Code[a]	Description	Numerical Value[b]
GW	Well graded gravels or gravel-sand mixtures, little or no fines	100
GP	Poorly graded gravels or gravel-sand mixture, little or no fines	90
GM	Silty gravels, gravel-sand-clay mixtures	80
GC	Clayey gravels, gravel-sand-clay mixtures	70
SW	Well graded sands or gravelly sands, little or no fines	60
SP	Poorly graded sands or gravelly sands, little or no fines	50
SM	Silty sands, poorly graded sand-silt mixtures	40
SC	Clayey sands, poorly graded sand-clay mixtures	30
ML, CL, OL	Silts and clays (LL <50)	20
MH, CH, OH	Silts and clays (LL >50)	10

[a]Unified Soil Classification System
[b]Unitless scale ranging from 1 to 100

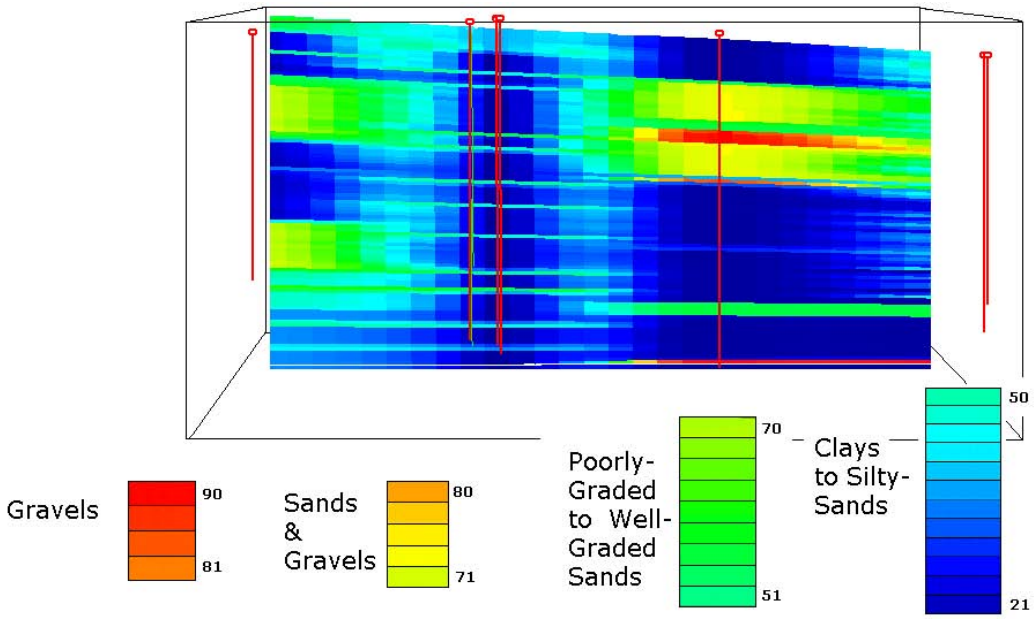

FIGURE 4.1. Key to Digital Characterization of Lithologic Data by Color Intervals.

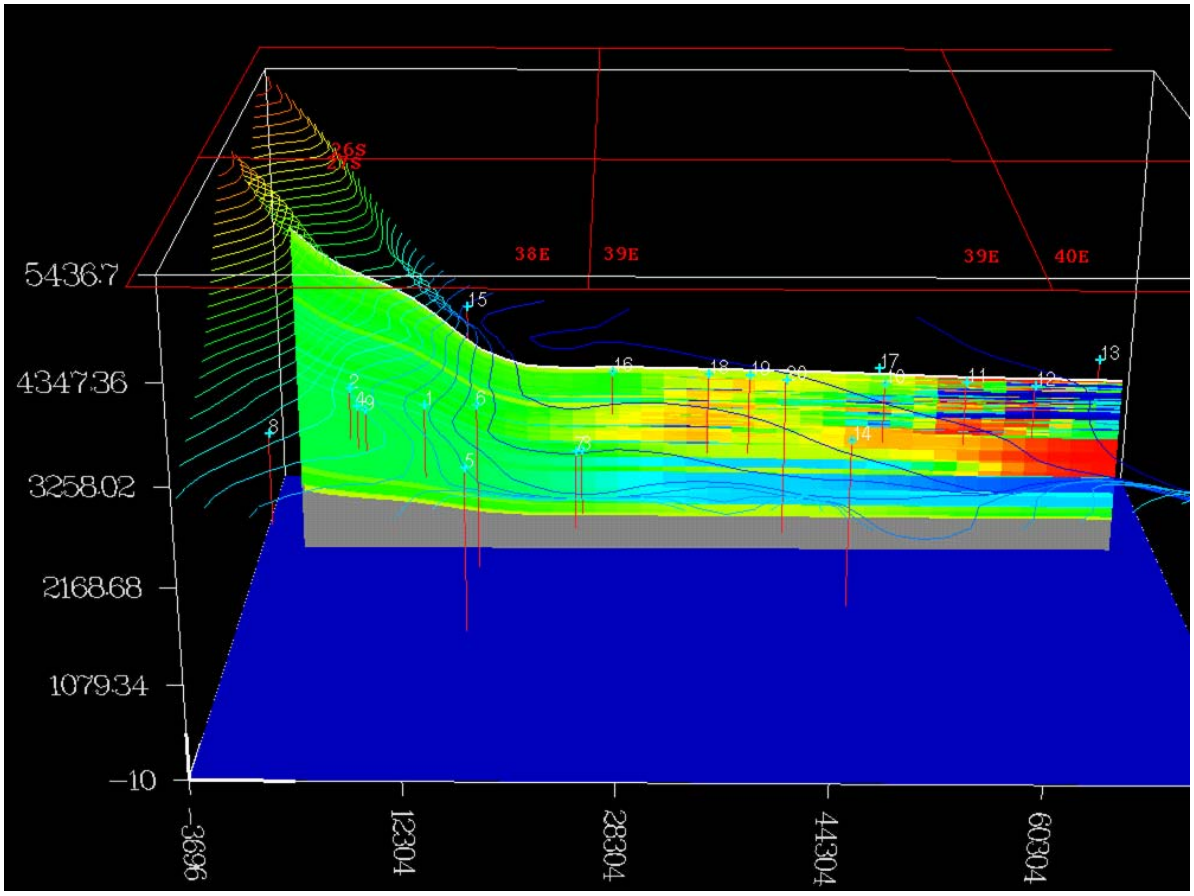

FIGURE 4.2. Lithologic Section Viewed Toward the North.

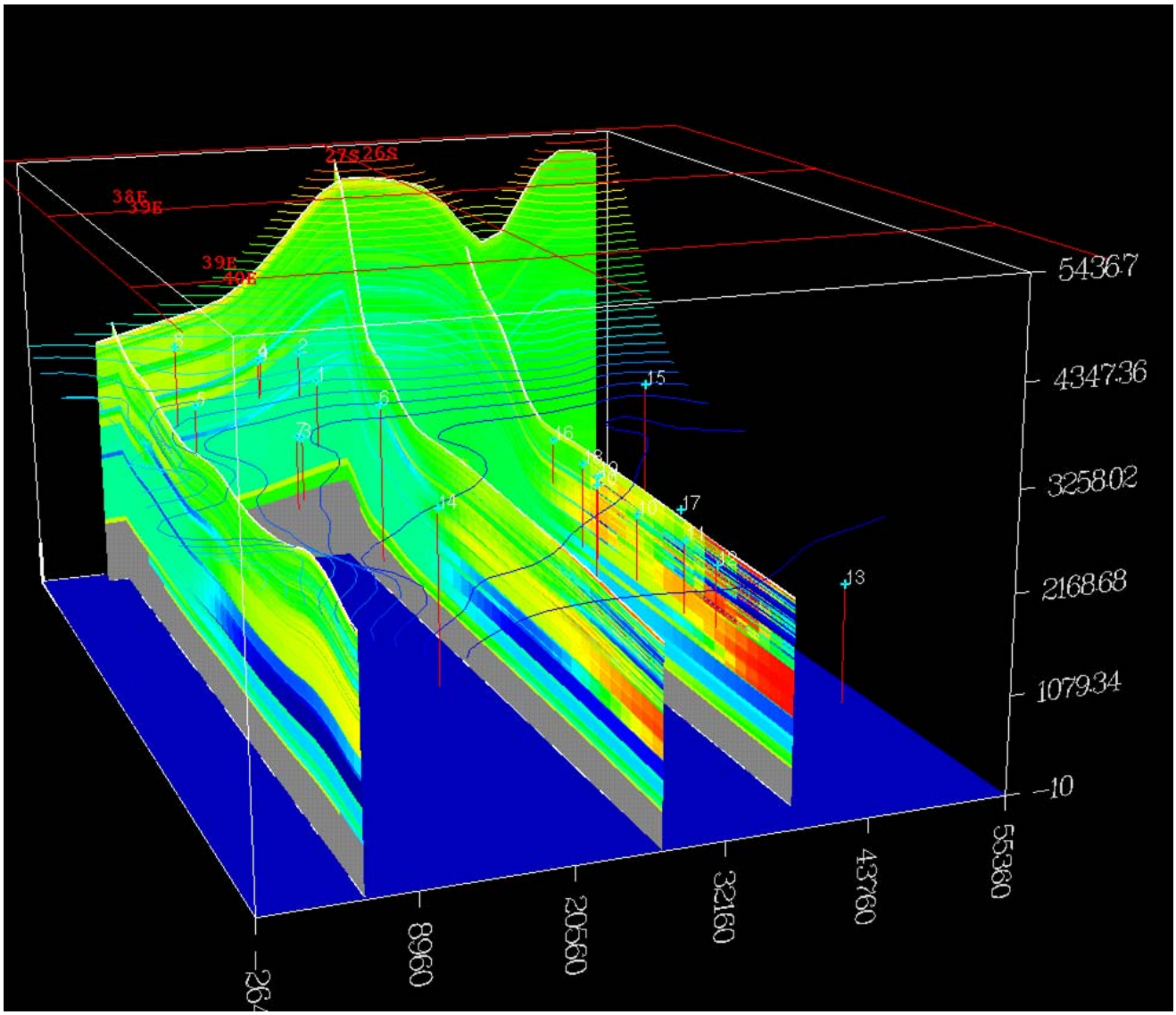

FIGURE 4.3. IWV Lithology Viewed Toward the Northwest.

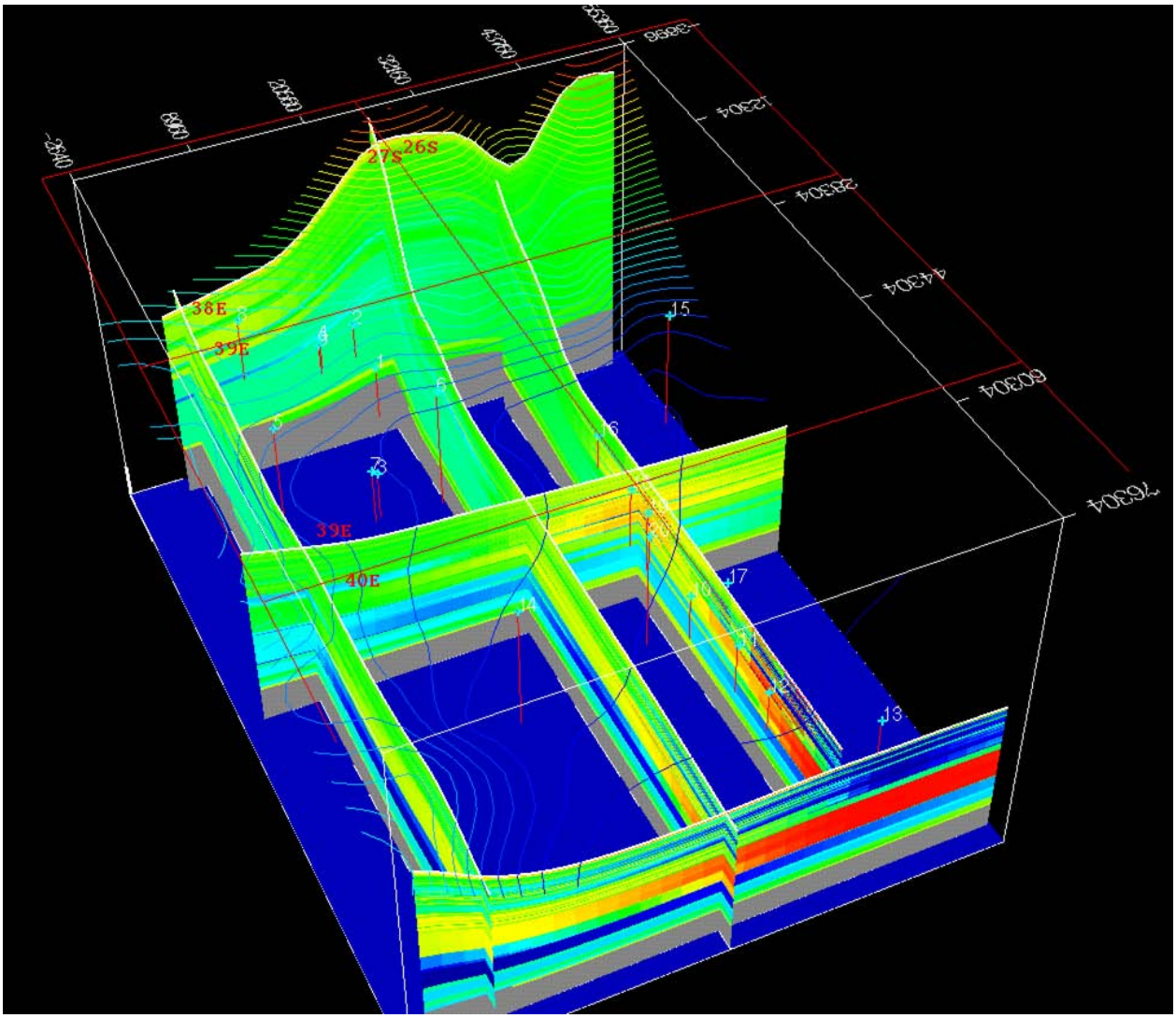

FIGURE 4.4. Lithology as a Fence Diagram.

5.0 DISCUSSION

The generally accepted conceptual model for the IWV aquifer is a closed basin receiving recharge predominantly along the eastern sierran mountain front with principal discharge as evapotranspiration from the China Lake playa to the east. Little contribution is expected from other bounding highlands. The greatest uncertainties for the valley are the quality of the existing reservoir, the quantity of potable water, and the confidence that can be placed in the conceptual model. Because of the overwhelming impact an alternative conceptual model would have on quantity and quality, this uncertainty must be addressed first.

In the recent past, an alternative to the closed basin conceptual model for recharge was presented by Ostdick (Reference 13) and Thyne et al. (Reference 14). These authors suggested that a significant quantity of water, perhaps even the majority of the recharge to the valley, is entering the basin through the Sierra Nevada batholith from an adjacent watershed, thus providing a new water source. If true, this would represent a quantity of water replenishing the aquifer at such a significant rate it would impact future resource planning.

The groundwater plan for the valley is a sequential effort to address uncertainties such as the conceptual model principally by acquiring the necessary data in regions of the valley with the greatest data gaps. This current AB 303 project was designed to supplement existing data by creating new wells for sampling, re-sampling existing wells, and evaluating existing chemical and isotopic data to reduce uncertainty. The data obtained for this project advance our understanding of the hydrologic system, thereby clarifying confusion and refining the conceptual models as discussed in the following two sections.

5.1 SUMMARY AND ADVANCEMENT OF THE CONCEPTUAL MODEL: INTERMOUNTAIN RECHARGE

The alternative conceptual model of recharge entering the basin from the Kern River Plateau suggested by Ostdick and Thyne et al. is a scenario to explain their estimates of unexpectedly large recharge volumes in the southwest portion of the valley. Their initial objective was to characterize the quantity and sources of recharge to the valley from the northwest, west, and southwest slopes of the eastern face of the Sierra Nevada. Their estimates of recharge quantities from the northwest and west canyons were consistent with the prevailing opinion of mountain-front recharge as the predominant source. Their estimates of recharge were based on precipitation, evapotranspiration (ET), and gauged streams matching the downgradient groundwater flux computed from the gradient and hydraulic conductivity. Their estimates for recharge from the northwest and west are 2.8×10^6 cubic meters per year (m^3/yr) and 3.6×10^6 m^3/yr, respectively (Figure 5.1).

In the southwest valley, however, the value for precipitation-based recharge of 5.1×10^6 m^3/yr is only about 10 percent of the gradient-based calculation of 4.2×10^7 m^3/yr. Thus, these authors asserted new water was required to explain this discrepancy. Rather than establish the uncertainty in these estimates, the authors pursued corroborative evidence from chemical and isotopic data. Their subsequent use of tritium and hydrogen-stable isotopic data was to identify the source of this new water and explain how this water could be derived from the adjacent Kern River Plateau watershed. This discrepancy of recharge water represents a large volume of water, and it places their estimate of total recharge to about three times or more the quantity estimated by others for the entire valley (Table 5.1).

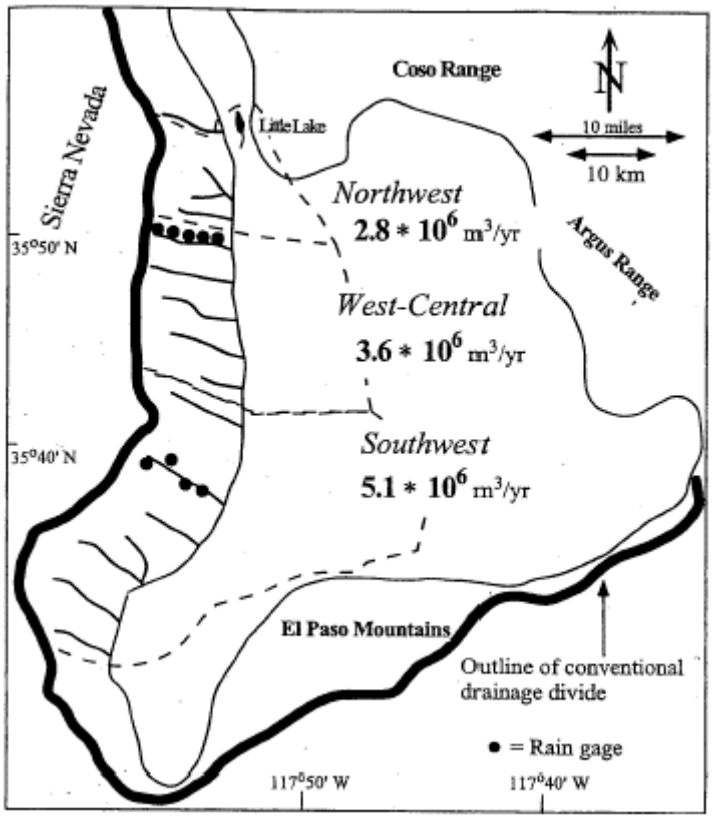

FIGURE 5.1. Precipitation-based Recharge From the Sierran Mountain Front into the IWV as Estimated in Reference 14 by Thyne et al. (After Their Figure 4).

There are principally three lines of evidence the authors employ to support this elevated recharge quantity, and each is discussed within the following three sections:

1. Groundwater Flux Argument: Groundwater flux in the southwest is 10 times greater than the amount of available recharge based on precipitation.
2. Age-dating Argument: Groundwater dating confirms that much of this water is of recent origin and thus cannot be Pleistocene water.
3. Stable Isotope Data Argument: The stable isotope and chemical data identify the adjacent Kern River watershed as a possible source, and fractures exist that could provide the pathway.

TABLE 5.1. Estimates of Total Basin Recharge.

Investigators	Total Basin Recharge
Boyd and Robson (Reference 15)	1.2×10^7 m^3/yr (9,840 acre-feet/yr)
St. Amand (Reference 16)	1.4×10^7 m^3/yr (11,000 acre-feet/yr)
Berenbrock and Martin (Reference 7)	1.2×10^7 m^3/yr (9,840 acre-feet/yr)
Clark (Reference 17)	0.6×10^7 m^3/yr (5,000 acre-feet/yr)
Thyne et al. (Reference 14)	3.7×10^7 m^3/yr (29,996 acre-feet/yr)

5.1.1 Groundwater Flux Argument

The alternative conceptual model for recharge entering the valley from the southwest is based on the computed flux using the gradient between well USBR1 and IWVWD Well 32 (Figure 5.1). This flux of 4.2×10^7 m^3/yr, of which only 5.1×10^6 m^3/yr is attributed to precipitation-based recharge, is an estimate based on Darcy's Law with its three components: the gradient, the hydraulic conductivity, and the cross-sectional area. The authors provide no discussion on the confidence that can be placed in their estimate of this large water volume, yet the value is exceedingly inconsistent with prevailing conceptual models and is based on very sparse data. How much confidence can be placed on this calculation of an additional 3.7×10^7 m^3/yr of water entering the basin that was previously undetected? How reliable is the calculation?

The gradient-based estimate depends on the following data used in the standard Darcy's Law equation (References 13 and 14):

$$Q = -KA\,(dh/dl)$$

Where:

Hydraulic conductivity (K): 0.009 ft/min
Cross section (A): 2.39×10^7 ft^2
Gradient: 0.01161 (between the selected two wells USBR1 and IWVWD MW 32)

Hydraulic conductivity. The hydraulic conductivity was computed by Ostdick from well data provided by the USBR1 (Reference 8), and in the absence of other well tests in the vicinity, it is assumed here that the value of 0.009 ft/min is acceptable until other data become available.

Cross-sectional area. The cross-sectional area is based on a constructed line of section northwest to southeast passing through the USBR1 well (Figure 5.2). The basement of the section was obtained through a gravity survey, and the contour lines shown represent the isopachous values of the alluvium from land surface to inferred basement (Figure 5.2). The cross-sectional area for the line across the southwest valley was intended to include flow from Indian Wells Canyon south to Bird Spring Canyon (Figure 5.1) and was estimated as 2.39×10^7 ft^2. This cross section is a maximum area for flow since it assumes uniform flow through all parts (Figure 5.3).

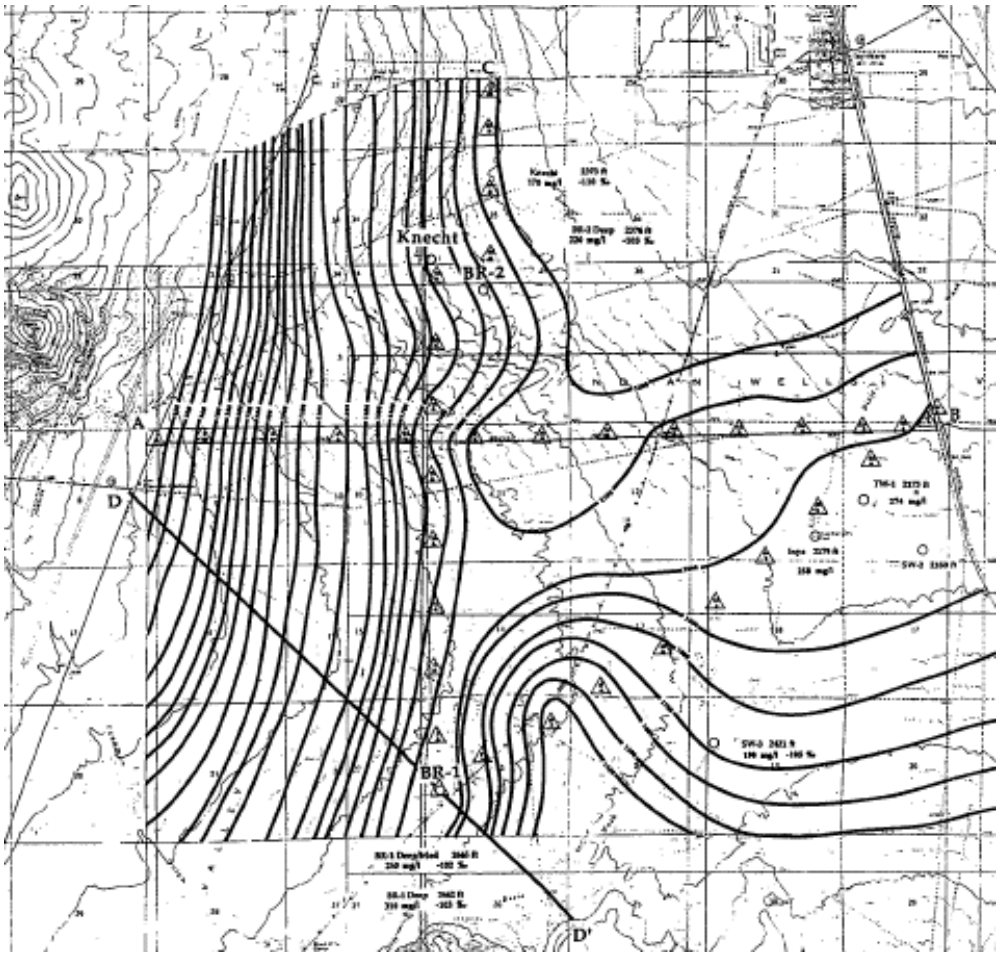

FIGURE 5.2. Isopachous Map of the Alluvium From Land Surface to Basement. Basement was inferred by modeling gravity data (Reference 13). The line of section is noted as D to D', and the section is shown in Figure 5.3 (after Figure 9 in Reference 13).

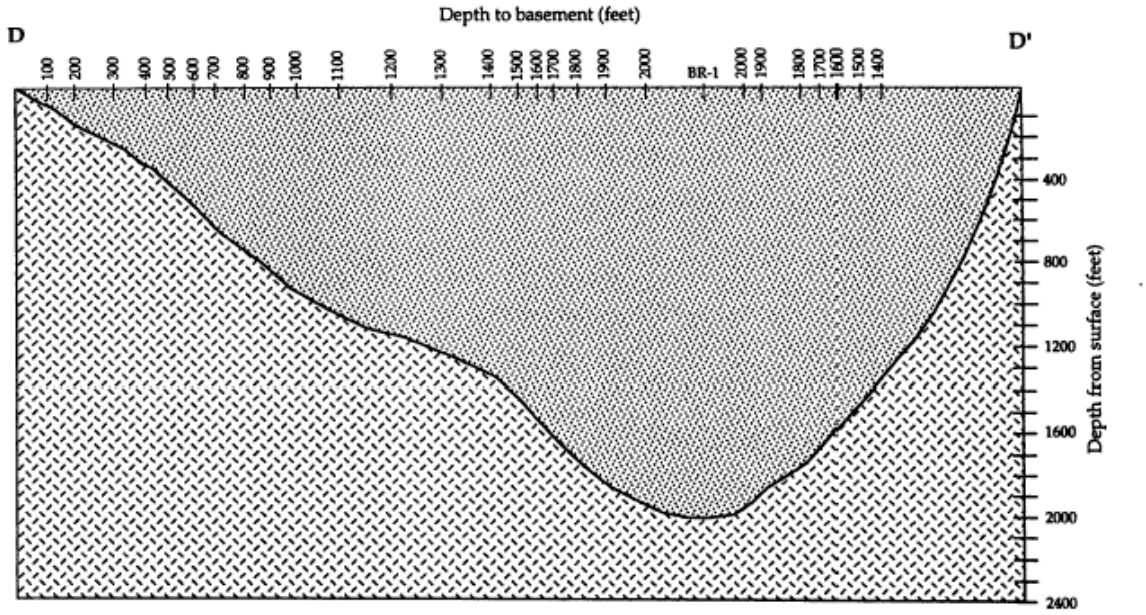

FIGURE 5.3. Cross Section from Reference 13 (After Figure 27).

As part of this AB 303 study, the lithology of the valley has been interpolated in 3-dimensions (as discussed in Section 4.6). The same line of section used by Ostdick was created for comparison using the geo-stratigraphic modeling capabilities of Stratamodel. In addition, a cross section is created that aligns perpendicularly to the first section and is oriented down the valley (Figures 5.4 and 5.5). The colors used in the section are keyed to numerically defined lithology: blue is defined as clay-rich sediments, while increasing sand to gravel content is shown by increasing yellow to red. Log data are available from the new wells drilled in this region, better defining the lithology for this area of the IWV. In Figure 5.5, the depicted lithology reveals the presence of the clay-rich middle hydrologic interval, which can be linked to the aquitard already generally recognized throughout the valley separating the upper and lower aquifer. The presence of this zone in the southwest area had not been recognized as this extensive prior to our modeling.

As can be seen in Figures 5.4 and 5.5, it would not be reasonable to assume uniform flux of depth across this section of the valley because of the laterally persistent lacustrine clays that increase with depth. Note that the extensive clay zone at about 800 feet bls divides the aquifer into upper and lower sections, even at this distal end of the valley, and is prominent especially in the cross section (Figure 5.5). The blue lower grid represents the computed level of basement rock obtained using gravity data presented by Ostdick. The lower aquifer has higher clay content and, as is discussed in the subsequent section, has different chemistry and isotopic composition from that of the upper zone. Furthermore, the upper zone has chemical composition and isotopic signatures that are correlative with mountain-front recharge, as discussed in the next section. This further supports the idea that the lower aquifer in this region may be separate, somewhat

isolated, and should not be considered when making a conservative estimate of flux related to mountain-front recharge.

Because of this obvious uncertainty, a bounding calculation of the cross-sectional area should be limited to the portion of the aquifer above the laterally extensive lacustrine clay. As a result, if the average depth to water is 200 feet bls and the top of the thick clay zone is approximately 800 feet bls, then the cross-sectional area is on the order of less than 50 percent of the cross-sectional area specified by Ostdick, which then would reduce the computed flux by an equivalent amount.

There are other uncertainties related to this selected cross section that should be addressed in future work. For example, Clark (1999) points out that in her simulation of discharge from Freeman Canyon, flow vectors indicate primary flow toward the El Paso Mountains that may not enter the IWV directly and may not cross the cross section as defined (Reference 17). Thus, clearly there are significant uncertainties in the estimates by Ostdick and Thyne et al. and, based on the effective and justifiable aquifer section alone, the flux may be reduced by at least 50 percent.

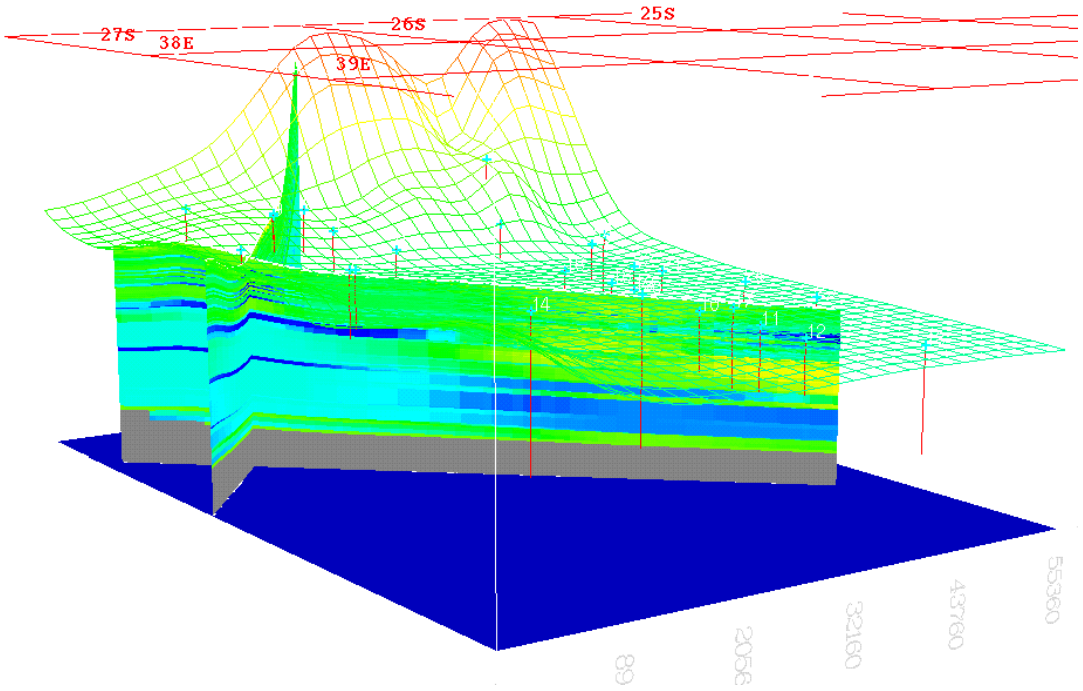

FIGURE 5.4. Three-dimensional Description of the Lithology in the Southwest Section of the IWV Viewed Toward the Northwest. The lines of section intersect at the USBR1 Well location. The blue base grid is Mean Sea Level and the wire mesh grid is the land surface.

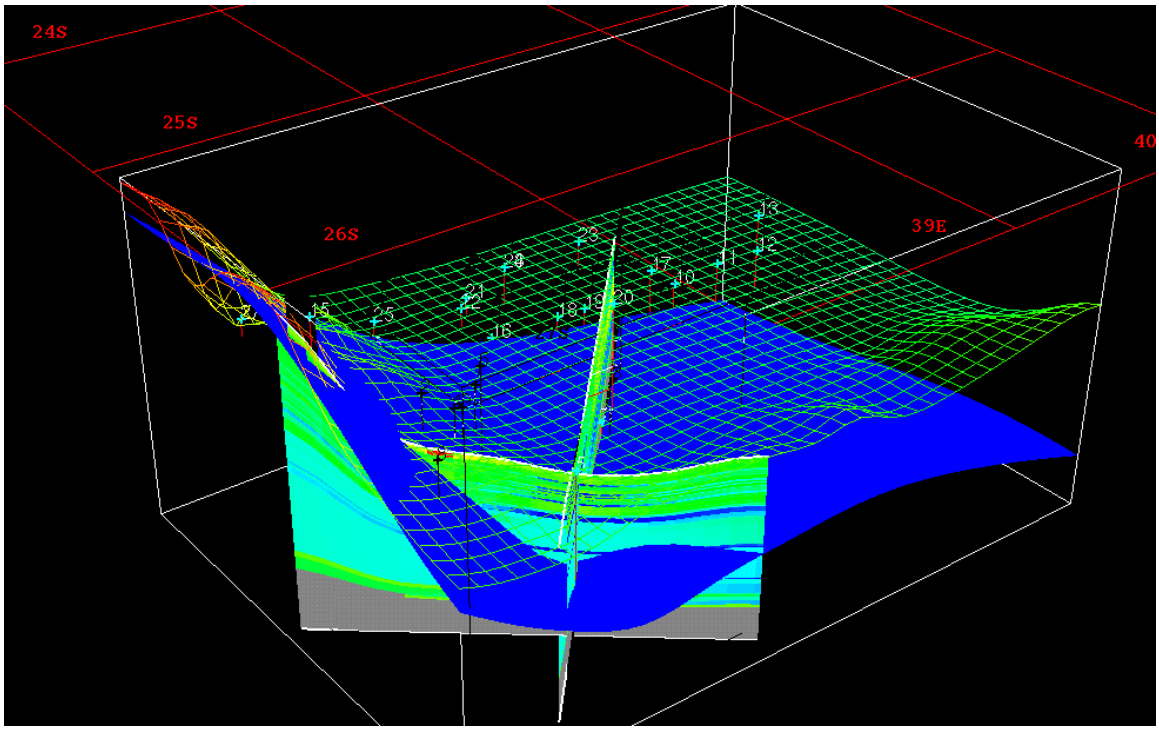

FIGURE 5.5. View Toward the Northeast Looking at the Same Line of Section Presented by Ostdick. The blue base surface is the basement as estimated by Ostdick from gravity data. Note the aquifer separation by the laterally persistent lacustrine clay zone.

Gradient. The gradient of 0.013 used in the alternative conceptual model is simply the change in head between the USBR1 well and IWVWD Well 32. Unfortunately, this selection of wells crosses the region often referred to as the horizontal flow barrier (HFB) because in this narrow region the head drops quickly. This head change has often been attributed to a fault or other geologic barrier (Figure 3.1). Clark simulated flow in the region and asserted that based on the numerical simulation, flow was crossing the barrier but also may be diverted. New wells in the area south of the USBR1 well allow for a determination of gradient more appropriate for computing flow into the selected cross section, and that gradient is an order of magnitude less steep at 0.0011 (Figure 5.6). This, of course, would lower the computed flux significantly. The gradient below the HFB is different from and greater than that above the suspected barrier on the order of 0.011. But at that point, the aquifer dynamics are quite different with potentially more recharge from other valleys further north, and the flow equipotential lines do not justify the assumption of a uniform gradient related to the location of the cross section. The gradient that captures the flow from the southern Sierra Nevada and incorporates the discharge of canyons from Indian Wells Canyon south is probably closer to the gradient above the location of the steep gradient. This being the case, this gradient is shallower by at least an order of magnitude; the selection of wells used by Ostdick yielded a computed gradient that was artificially high, since it incorporated two different hydrologic regimes.

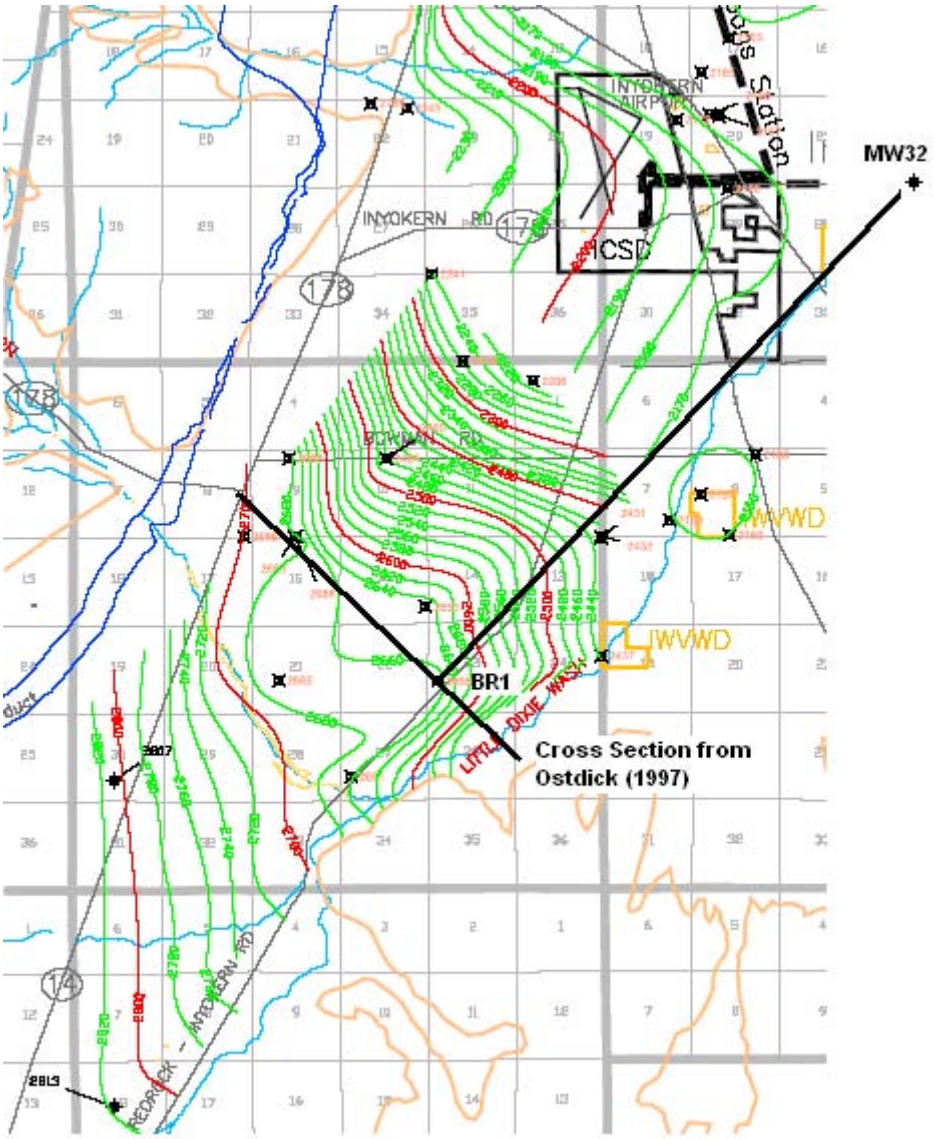

FIGURE 5.6. Region of the Southwest Valley Used For the Calculation of Flux.

Thus, based on a cross section reduced by 50 percent and a gradient lower by an order of magnitude, it is obvious that uncertainty of the original flux estimate is great. Using the reduced cross-sectional area and the gradient of 0.0011, the flux would be 2.6×10^6 m^3/yr, which is more than an order of magnitude lower than Ostdick's estimate and approximately half of the precipitation-based recharge. Thus, with this lower estimate as a bounding calculation, there is no deficit, and additional water from watersheds beyond the IWV is neither needed nor can it be justified.

5.1.2 Age-dating Argument

Portions of groundwater in the deep aquifer have lower dissolved solids content and more depleted (more negative) stable isotopic values for hydrogen (δD) and oxygen ($\delta^{18}O$) than would be expected for an aquifer with only mountain-front recharge as a source. This is because the springs and streams of the Sierras sampled to date have higher dissolved solids content and consistently more enriched δD and $\delta^{18}O$ than this deep groundwater. As early as the work by Berenbrock and Schroeder (Reference 9), it was suggested that these enigmatic portions of the deep aquifer indicate Pleistocene China Lake water (Figure 5.7), which would be remnants of the pluvial periods of cooler climate and higher rainfall (10,000 years before present [YBP] and earlier) and are not derived from the mountain-front recharge during the more recent past. This was further supported by Bassett and Einloth (Reference 18) with ^{14}C and ^{36}Cl data indicating old water, as did the additional ^{14}C data of TetraTech (Reference 2). The new ^{14}C data from this project also yielded corrected radiocarbon ages supporting the older age for this water (see Section 5.2).

Thyne et al., however, sampled IWVWD wells that produce from the deep aquifer and obtained elevated tritium content (21 to 98 TU) and depleted δD values; samples that would be characterized by others as Pleistocene in age (Table 5.2; Figure 5.8). Elevated tritium in Pleistocene-aged water is inconsistent. Thus, they argued that since the tritium content in other IWV wells was low, these elevated values in the southwest were anomalous and supported the assertion that there was an excess of recharge entering the valley from another source. By recent, they mean since nuclear weapons testing, which released excess tritium to the atmosphere (post-bomb tritium, i.e., more recent recharge than 1955).

Recharge along the sierran mountain front does, in fact, have higher dissolved content and more enriched δD and $\delta^{18}O$ values and does not appear capable of supplying recharge water with values as depleted as those observed for the deep aquifer. The Kern River Plateau, which is a watershed in the adjacent valley to the west, is at a higher elevation, and precipitation would be expected to yield different isotopic values. It was sampled by Ostdick and Thyne et al. and found to have appropriately depleted δD and $\delta^{18}O$ values. They did not, however, examine other scenarios that could cause this inconsistency in the tritium content, such as sampling or analytical error or other sources of depleted δD and $\delta^{18}O$.

For groundwater to travel into the IWV from the Kern River Plateau in the few decades since 1955, the only plausible mechanism would be rapid transport through large fractures driven by the higher head of the Kern Plateau. Surface water in the Kern Plateau was also assumed to be sufficiently exposed to atmospheric precipitation to have had the extremely elevated tritium content sufficient to yield the values now implied by their measurements.

TABLE 5.2. Results of Tritium Measurements for Wells Suspected of Being Post-bomb Because of the Reported Elevated Tritium Content (From Table 3 in Thyne et al.).

BR2 D	0.00	2.00
Knecht Well	0.11	0.09
Well SW-3*	73	37
Well 31*	98	25
Well 30*	35	24
Well 19 (Navy)*	79	25
Well 17 (CLA17)*	29	24
Well 16*	21	24
Well 13*	92	25
Well 12*	58	25
Well 11*	67	25
Well 10*	82	25
Well 9*	59	25
Well 8*	87	25
Well 7*	28	25

*Indian Wells Valley Water District samples courtesy of R. Tucker, analyzed by Davi Laboratory, Environmental Associates. Other samples analyzed by University of Miami. eTU to 1σ standard deviation

The argument by Thyne et al., unfortunately, depended on too few data points and on a misinterpretation of the isotopic data. The current AB 303 project had the objective of expanding the existing isotopic database by sampling new wells and re-sampling key wells for confirmation of the data used in the conceptual models. Some of the same wells sampled earlier by Thyne et al. were re-sampled for this project, and an additional 26 wells were also sampled for tritium, δD, and $\delta^{18}O$ content (Table 3.4). The results are displayed in Figure 5.8 for comparison. It should be noted that not only is tritium content in all wells sampled for the project at or below the detection limit, which is less than 1 tritium unit (TU), but the re-sampled wells with high reported tritium content by Thyne et al. also yielded tritium measurements below the tritium detection limit. Clearly, the Thyne et al. tritium analyses are suspect.

The ^{3}H analyses performed for this study were conducted at an accredited University of Arizona laboratory using an enrichment procedure that yields results with a detection limit of approximately 0.5 TU and a precision of less than 1 TU. Thyne et al. report that their tritium measurements were done at a laboratory (DAVI Lab., Hercules, California, Reference 19) that does not enrich the samples and has a count time of only 90 minutes, which is a procedure that cannot produce a low detection limit, and yields an estimated detection limit of approximately 40 TU (pers. comm. DAVI Labs, 2007). Thus, the results reported by Thyne at al. represent only the limit of detection, and the actual concentration of tritium is much lower, e.g., < 0.5 TU. Furthermore, the error that the DAVI Laboratory reports for their results is +/- 25 to 37 TU, indicating that the method is not sensitive enough to determine tritium content for these samples.

The differences between the earlier measurements and the results obtained from the current study are attributable to the measurement methods. The data for tritium presented by Thyne et al. have a detection limit and error that prevent determination of the actual tritium content; thus, the values assumed as elevated and post-bomb are simply high background values and not accurate measurements. The true values for tritium are less than 1 TU, which places them clearly pre-bomb, and are then consistent with radiocarbon measurements dating the water at several thousand years old and correlative with residual Pleistocene water. This, unfortunately, further negates the argument of a rapid flux of post-bomb water from outside the IWV.

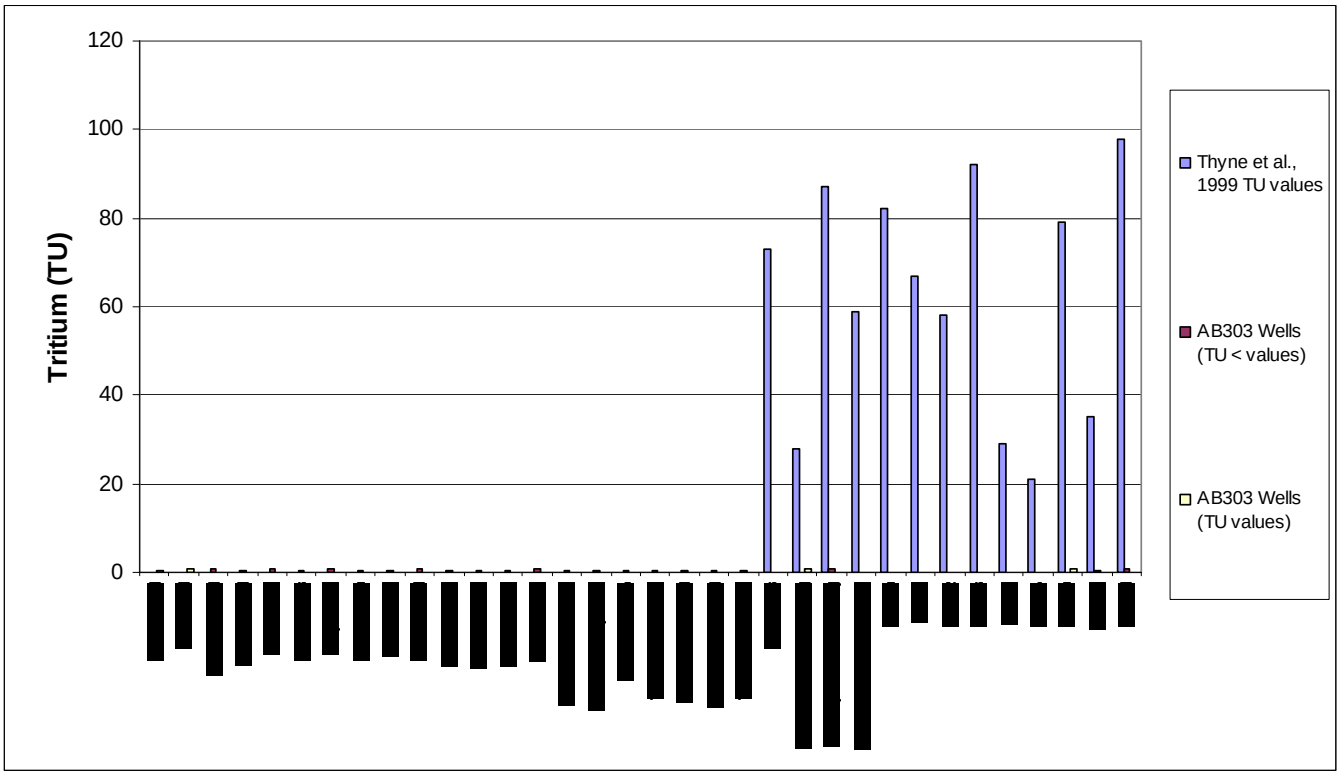

FIGURE 5.7. Comparison of Tritium Concentration For Samples Collected During the AB 303 Program and Tritium Measured by Prior Investigators (Thyne et al.).

One additional comparison is instructive; the data obtained in this study and the values from Thyne et al. are compared to the values monitored for precipitation in Ottawa, Canada, the only remaining monitoring station in North America that supplies data to the International Atomic Energy Agency (IAEA) international database (Figure 5.8). Clearly, the Thyne et al. data do not conform to known trends of declining tritium content in precipitation over the past few years, and the values obtained from this study are consistent with pre-1955 sources that would have decayed to below background levels by today.

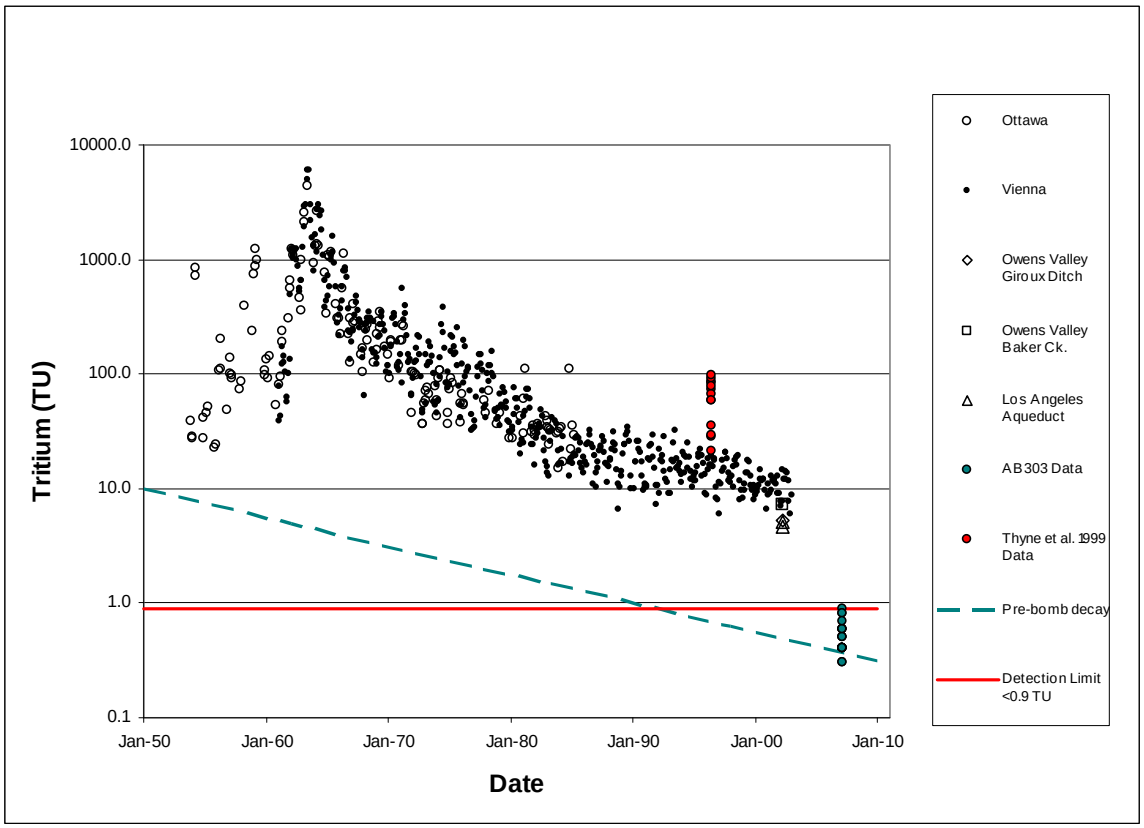

FIGURE 5.8. Historical ^{3}H Concentrations in Precipitation as Measured at the North American Station (Ottawa) Compared to AB 303 Data and the Projected Decay Curve.

5.1.3 Stable Isotope Data Argument

The δD and $\delta^{18}O$ samples for wells producing from the deep aquifer are generally recognized as being more depleted than the bulk of the valley and more depleted than the samples collected from springs and streams entering the valley (Figure 5.10). Because Thyne et al. limited their water source to mountain-front recharge, they could not explain these depleted values. It is true that precipitation at elevations in the Sierra Nevada that would supply water to the IWV is not at an elevation sufficient under the current climatic regime to provide the observed depleted values. Thyne et al. failed to recognize other explanations. For example, a pluvial Pleistocene lake in a post-glacial period would have had values in this range. This has already been demonstrated in European samples. Therefore, the observed absence of tritium, the old groundwater dates, and the depleted δD and $\delta^{18}O$, in fact, support the presence of very old Pleistocene water. Thus, there is no justification for using another watershed as the water source.

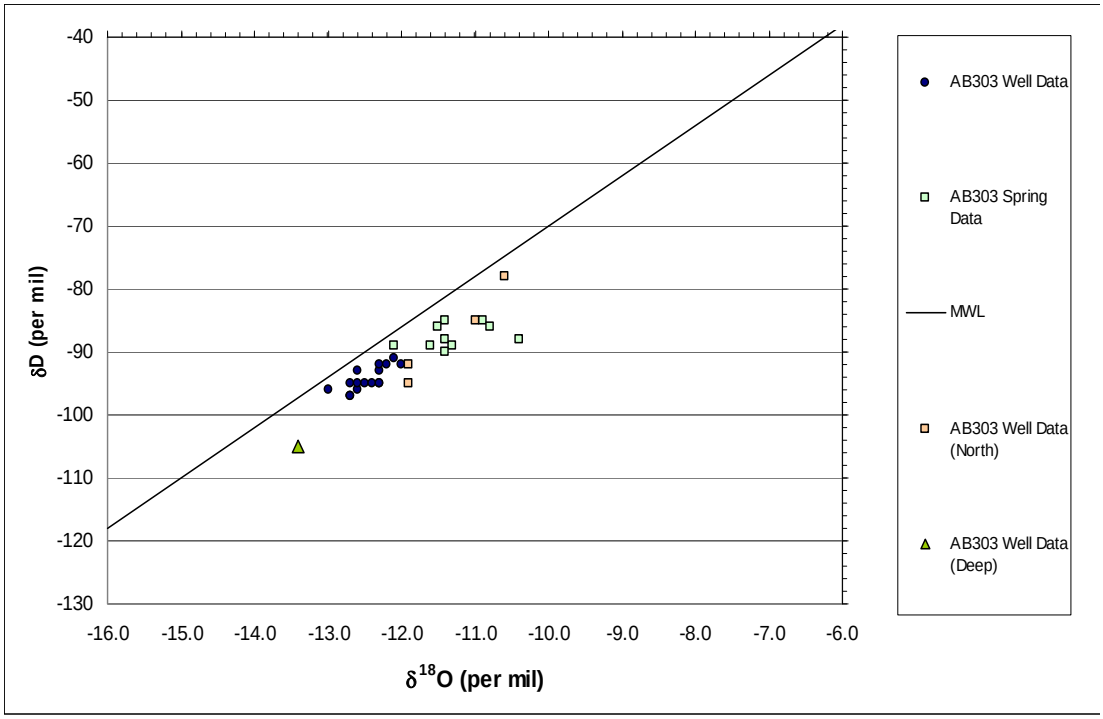

FIGURE 5.9. Comparison of Hydrogen and Oxygen Isotopes Among Aquifers and Recharge Sources.

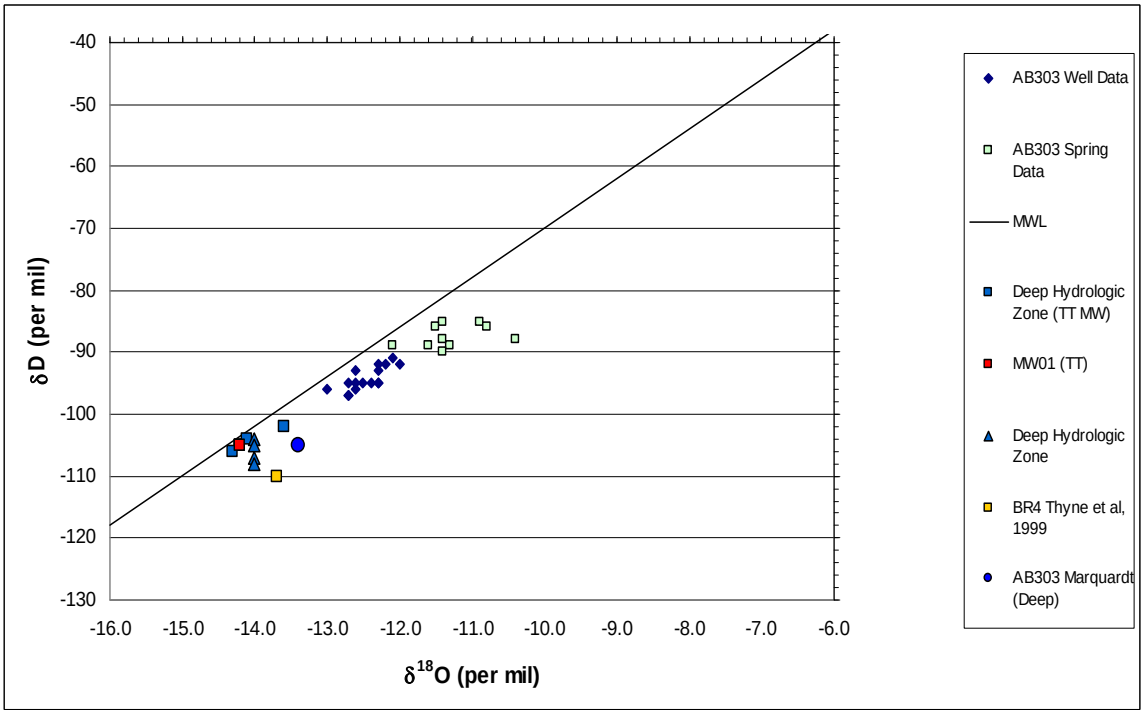

FIGURE 5.10. Comparison of Deep Pleistocene Values with Shallow Aquifer Samples.

5.1.4 Summary

The three arguments supporting the alternative conceptual model for the southwest valley, (1) groundwater flux, (2) age dating with tritium, and (3) stable isotope data, are all fundamentally dependent on the Darcy calculation of flux-based recharge, which is highly uncertain. The new data obtained in this study do not support the Darcy's Law calculation and demonstrate that the assertion of excess water entering the basin is not plausible. Even if it were plausible, the tritium and stable isotopic data do not support the need for the proposed excess water. Thus, using newer data, the southwestern valley groundwater flux will actually match the generally accepted precipitation-based recharge estimates for the region well enough to eliminate plausibility of the alternative conceptual model.

5.2 SUMMARY AND ADVANCEMENT OF THE CONCEPTUAL MODEL: MOUNTAIN FRONT

5.2.1 Recharge

The recommended conceptual model of this study is a closed basin with recharge derived predominantly from the Sierras. Losses to evapo-transpiration from the eastern playas has resulted in a saline-shallow aquifer in the eastern valley. The highest quality water has long been recognized as the deeper aquifer, and in general the production wells are completed in this lower aquifer. If the principal source of recharge is the sierran mountain front, then the quality of this water and the recharge flow paths need to be assessed since existing data indicate it is of lower quality and may be over-drafted with higher TDS recharge, resulting in progressive valley water degradation. The rate of change in quality will need to be a consideration as the groundwater plan is systematically accomplished, and monitoring well locations and sampling schemes need to be optimized to continually evaluate quality changes.

The current distribution of water quality can be approximated by mapping the values of total dissolved solids for the western region of the valley (Figures 5.11 and 5.12). The locations of springs and canyon samples are approximated by red markers, while the black markers are sampled wells. The TDS values are contoured in increments of 250 mg/L. The California secondary standard of TDS is 500 mg/L, and it is clear by simply contouring the data that the best quality is found in the southwestern valley, along with the western valley (along the recharge area). The point values for TDS are displayed to illustrate the ranges (Figure 5.11). The depth of screens through which the samples were collected is not honored by this method of contouring, and the implication of continuity in contoured values is misleading; however, it is still noteworthy that the regions of the western recharge area are progressively higher in TDS toward the north, and much of this region has TDS values above the 500 mg/L threshold. There is also a suggestion that some canyons are supplying better quality water than is currently present

in the shallow groundwater. More detailed assessments should be done to correlate this recharge with quality changes, and additional monitoring and data collection will occur in the future. There is the question of whether the recharge over time in the central and northern regions is actually improving the quality of the groundwater or whether this apparent freshening seen in Figures 5.11 and 5.12 is the result of sparse data.

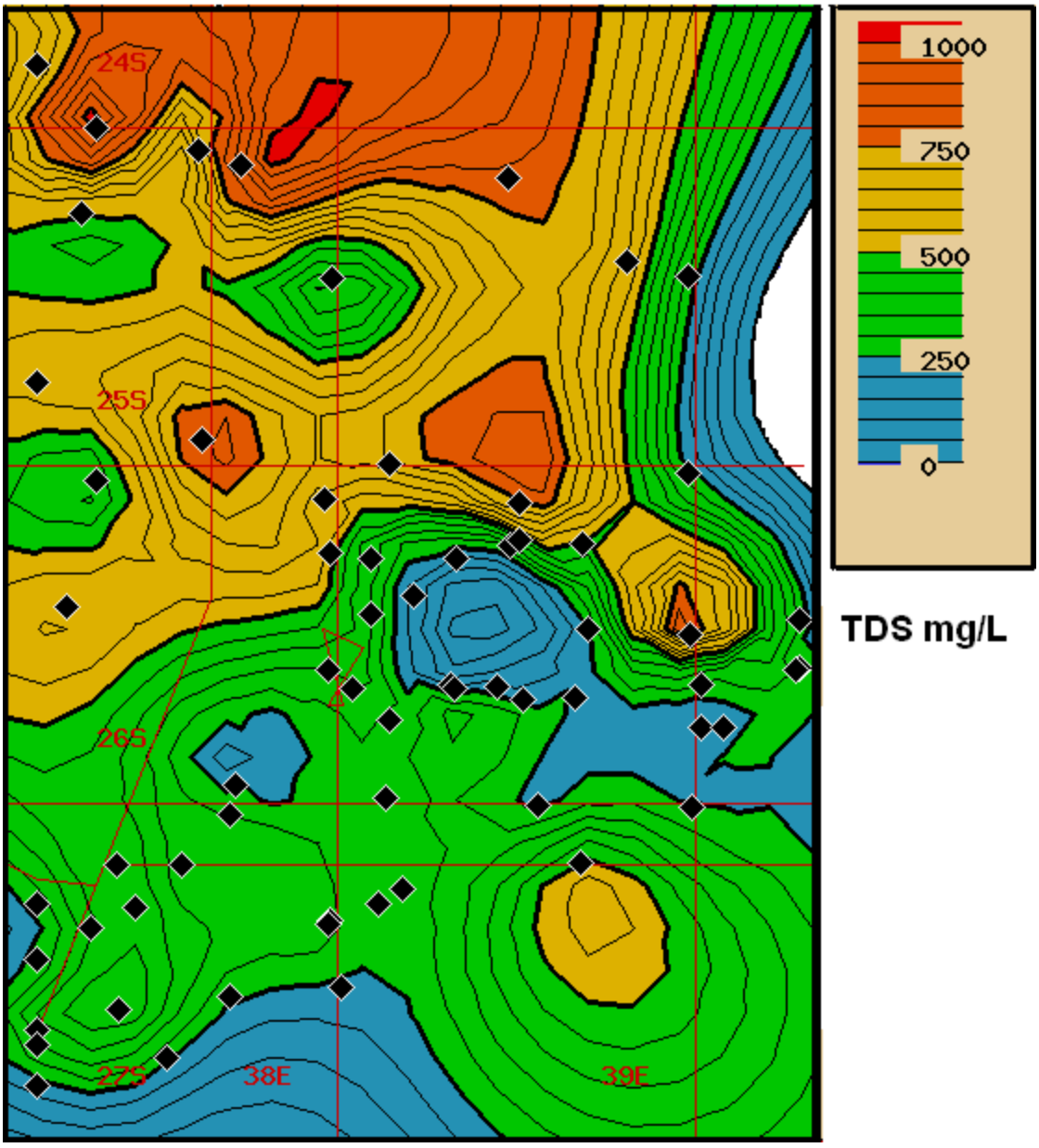

FIGURE 5.11. TDS Contours for the Western Region of the IWV
(Spring or Canyon Samples are Displayed as Red Markers, and Wells are Black).

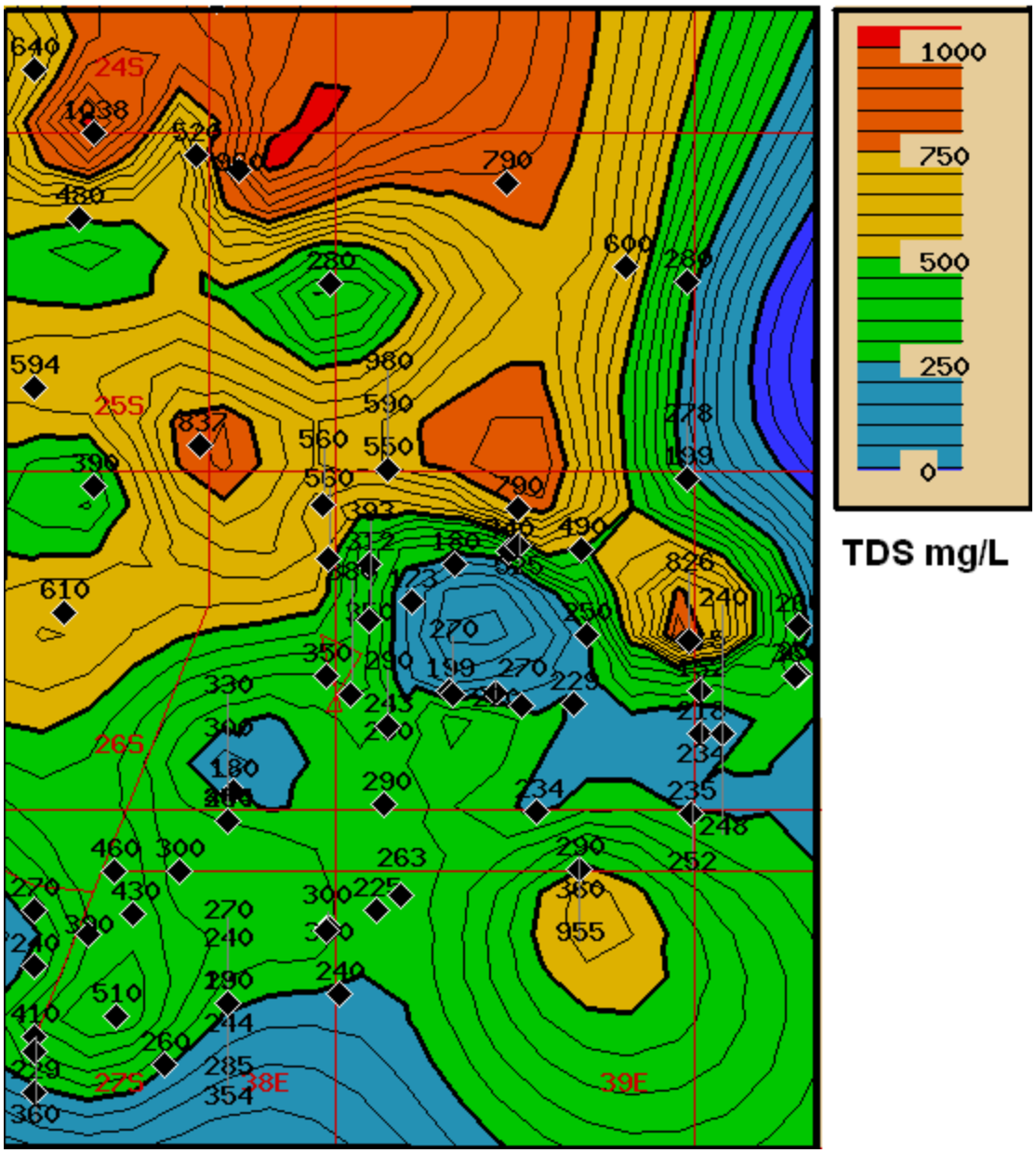

FIGURE 5.12. Posted Values for TDS for Reference.

The distribution of quality that has been recognized for many years is more qualitative than specifically identified. The complex nature of the lacustrine sediments that inter-finger with productive sands make it difficult to quantify the actual distribution of lower quality water. The cross section shown in Figure 5.13 includes the sections discussed in Section 5.1, and to that image, a cross section between USBR3 and USBR5 has been added. This section is extremely informative because it illustrates the locations of samples in the database which cannot be fully interpreted without the benefit of a detailed interpolated cross section to locate the values in the context of the lithology. Note the lower samples from BR3 are derived from isolated sand lenses and do not imply

degradation of either the upper or lower aquifer; similarly, the samples from BR5 are in a continuous sand zone with rather uniform lithology and dissolved solids content. Future work must incorporate the lithology into interpretation of aquifer composition.

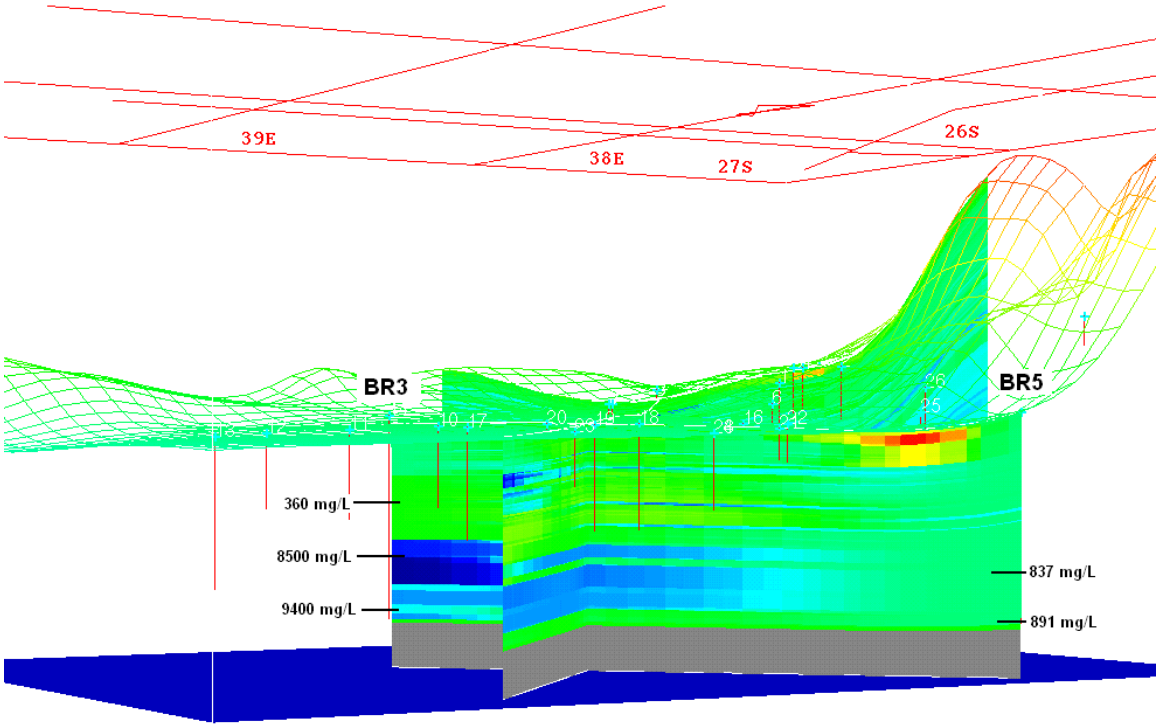

FIGURE 5.13. Lithologic Section Between the USBR3 and USBR5 Wells.

Springs and streams in canyons assumed to be providing recharge water to the valley have been sampled by a number of investigators over a period of years including this current AB 303 project (see data table in Appendix D). Using data obtained in this study, it was possible to combine the historical data (Table 3.2) to compare the source water composition to that of the aquifer. The five sampled springs in the northwest valley have an average TDS of 594 mg/L, based on 576 mg/L for the two western springs and 320 mg/L for the four southwestern springs.

5.2.2 Stable Isotope Information Content

The new paradigm of a closed basin for the IWV is defined as recharge principally derived from Sierra Nevada precipitation and supplemented by sources in surrounding mountains bounding the valley. Corroborative evidence is also obtained by examining the water source indicators provided by chemical and isotopic data. New stable isotopic data for hydrogen, oxygen, boron, sulfur, and carbon were obtained in this study.

The new measurements for tritium, δD, and $\delta^{18}O$ were discussed earlier in the assessment of the conceptual models in Section 5.1. These isotopes are components of the water molecule and assist in defining the circumstances related to water source and recharge conditions. Boron and sulfur are solute isotopes and provide a more direct indication of the source of the dissolved material transported in solution. When sources differ in rock type, the solute can provide an indicator of this source.

Boron. The boron isotopic signature is a useful intrinsic tracer because boron is present in virtually all waters. Boron is chemically conservative and does not react in redox or solubility reactions except in extreme circumstances, and the naturally large fractionation of the isotopic signature yields distinction among sources. Only a few water sources have a unique and representative $\delta^{11}B$ value, and in most instances, the usefulness of the tracer derives more from the ability to follow an identified isotopic signature along a flow path. For example, a particular locale may have solute signatures unique to the local rock type or anthropogenic sources, which can then be traced to other locations because of the chemically conservative behavior of the boron solute. This is especially true for the IWV.

The database for boron concentrations and $\delta^{11}B$ is expanding but at present is still relatively small (Appendix C). A most informative plot is generated by comparing the dissolved boron composition to the isotopic signature for springs and groundwater while separating the data into different symbols representing the valley's major townships (Figure 5.14).

The principal characteristic to note in this plot is the large separation in the $\delta^{11}B$ between the sierran springs from the western part of the valley (blue circle) and groundwater in the south valley influenced by the El Paso Mountains (red circle). Using data obtained from the AB 303 sampling, note that the sierran springs have the most enriched $\delta^{11}B$ values in the IWV and that the wells in the southwest valley adjacent to the mountain front also have similarly enriched values, indicating a clear connection between the spring sources and the groundwater composition in that area (Figure 5.15). This connection between the canyon recharge and nearby wells is best defined at present by the $\delta^{11}B$ signature. It is assumed here that a specific canyon has a rather narrowly defined $\delta^{11}B$ value and that this water can be traced from well to well. Furthermore, it is assumed that as the water mixes with other canyon sources, deeper groundwater, or water from the south valley, the mixing can be identified by isotopic and chemical changes.

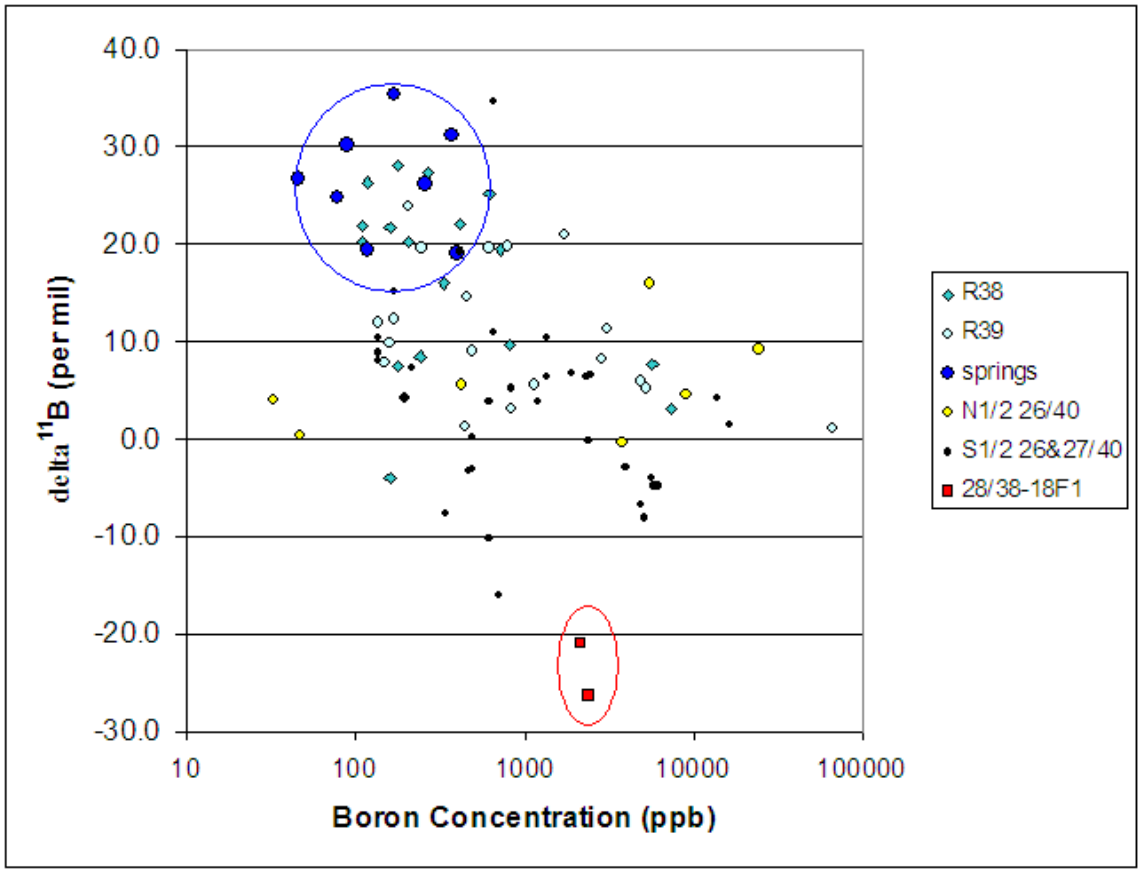

FIGURE 5.14. Distribution of $\delta^{11}B$ Values for the IWV.

A second observation to note regarding Figure 5.14 is the apparent mixing of water sources from the south and west to yield an intermediate composition in the downgradient wells and even in the China Lake area. Although it would be tempting to infer that the IWV derives its $\delta^{11}B$ signature from the mixing of these two principal sources, this does not account for potential contribution of new boron from dissolution of evaporites along the flow path. Other sources of boron are likely present, some perhaps related to older resident groundwater and some related to infiltration of surface water from the region around the playa. The detailed origin of all these boron sources, especially in the central valley, is beyond the scope of this project. The significant observation here is that the $\delta^{11}B$ varies widely across the IWV and is a useful tracer, perhaps specifically to differentiate water from the south mountains from sierran springs. It also corroborates the western recharge as source water and connects this water to western wells. This is consistent with the closed basin conceptual model and does not lend support to extra-basin sources of western valley water.

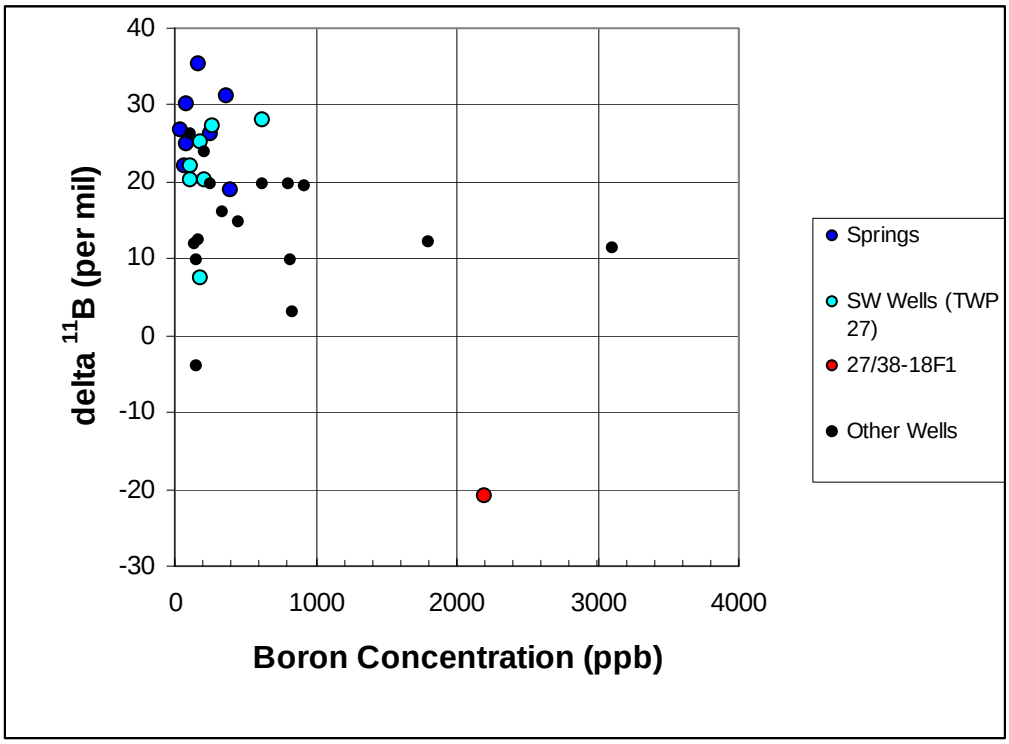

FIGURE 5.15. The $\delta^{11}B$ Values Obtained in the AB 303 Project.

Sulfur. The stable isotopic signature of sulfur is derived principally from three sources: airborne particulate material in the snowfall, seawater aerosol particles, and sulfate dissolution (probably gypsum) along surface and groundwater flow paths. Although there is a significant range in $\delta^{34}S$ values for the valley, there is no apparent consistency in the values among regions or water sources, at least not evident in this relatively small dataset. Because the spread in values is so great (Figure 5.16), it is expected that over time this signature will become useful as the sulfate geochemistry and cycling becomes better understood. Sulfur sources in this valley are likely mixed because windblown gypsum accumulates in soils and is incorporated into recharge water. Future work will benefit from determining sulfur isotopic composition of local gypsum, as well as sulfur in aerosols and particulates in snowmelt, which may have a marine signature.

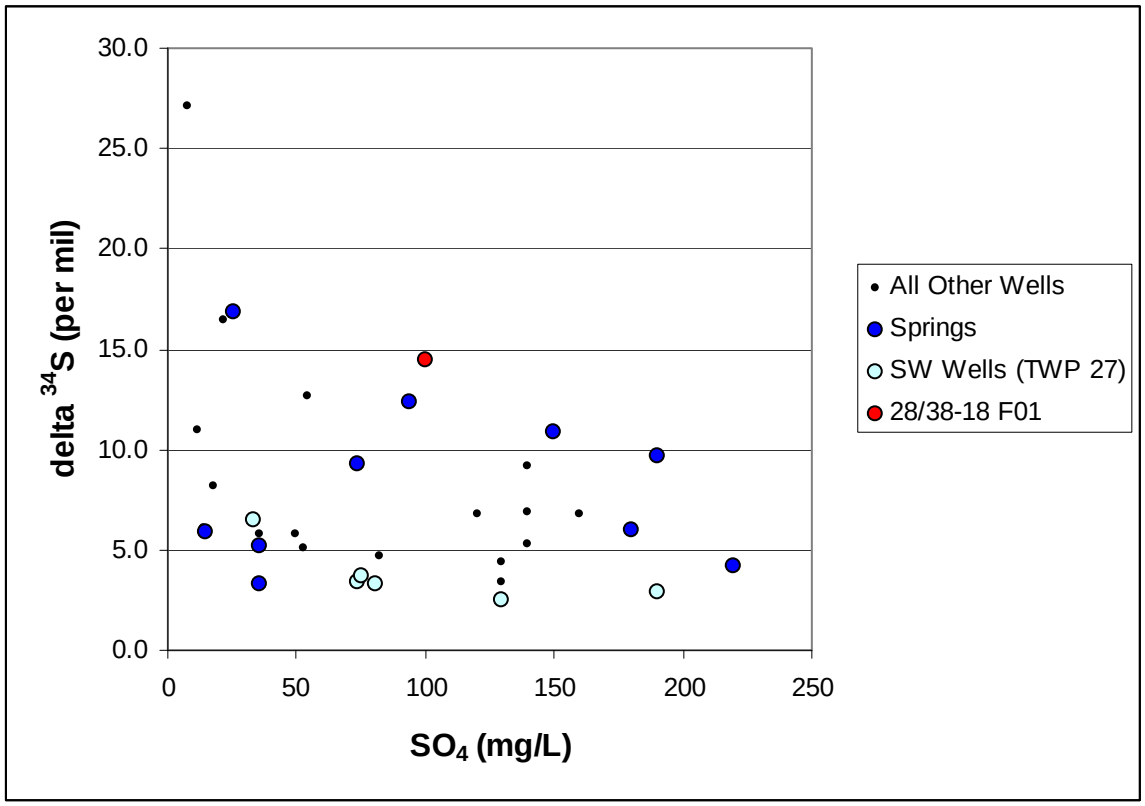

FIGURE 5.16. The $\delta^{34}S$ Values Obtained in the AB 303 Project.

Carbon. The stable isotopic analysis for carbon ($\delta^{13}C$) is measured from dissolved inorganic carbon (DIC) and is not impacted by dissolved organic material that may be present. Values for groundwater are generally within the range of approximately -26 to 0‰. The $\delta^{13}C$ in carbon dioxide of recharge area soil zones is derived from the decomposition of plant material and is the most negative or most depleted along the flow path. As groundwater migrates, it reacts with soluble carbonate rocks when present, and this reaction often results in an increase in alkalinity and an alteration of the isotopic value. For example, marine carbonate or limestone has a rather uniform value for $\delta^{13}C$, and since the standard of this isotopic ratio is a marine calcite, the computed $\delta^{13}C$ value for the carbonate is 0‰. The dissolution of marine carbonate causes the net value for the water to change toward that of the rock and, with sufficient reaction time, the water approaches the marine carbonate value. Although marine carbonates have a $\delta^{13}C$ of 0‰, non-marine calcite and secondary carbonates like caliche are generally slightly more depleted and would be expected to be near -3 to -2‰.

The range of values in the IWV is large, with the most depleted being a value of -28.1‰ obtained for the 26/38 M01 well in the AB 303 project (Appendix C). A plot of the $\delta^{13}C$ values for the IWV versus the total alkalinity for all available values illustrates generally how the $\delta^{13}C$ is altered as additional carbonate enters the groundwater (Figure 5.17).

Four classes of data are depicted in Figure 5.17: springs, wells in Township 27, remaining wells, and problematic analyses. Only four springs yielded reliable results: Indian Wells Canyon, Cow Haven Canyon, Sage Canyon, and Horse Canyon. Three other springs were analyzed, but the results are not reliable and are placed in the Unknown Error group: Nine Mile Canyon, No Name Canyon, and Sand Canyon. The four reliable springs are in the southwest valley and average -10.4‰. These are key springs for this work because the Township 27 wells are the ones most likely affected by recharge from these springs. Thus, the data provide a useful starting point for modeling the groundwater's subsequent evolution. In Figure 5.17, the springs and Township 27 wells plot in similar areas.

The $\delta^{13}C$ results that are more enriched (more positive) than a value -2‰ were re-tested, and some yielded significantly different values (e.g., Father Crowley East initially measured $\delta^{13}C$ of 1.5‰ and was re-measured at -13.5‰), whereas others tested the same. Discussions with the isotope lab supported our assertion that the results were not reliable, but no cause for the differences could be determined. These values for these wells are deemed unreliable, and the wells will be re-sampled in the future. Positive values for $\delta^{13}C$ are not reasonable except under extremely unusual conditions; therefore, because of the improbable results and inability to replicate the measurements, positive values are deemed unreliable.

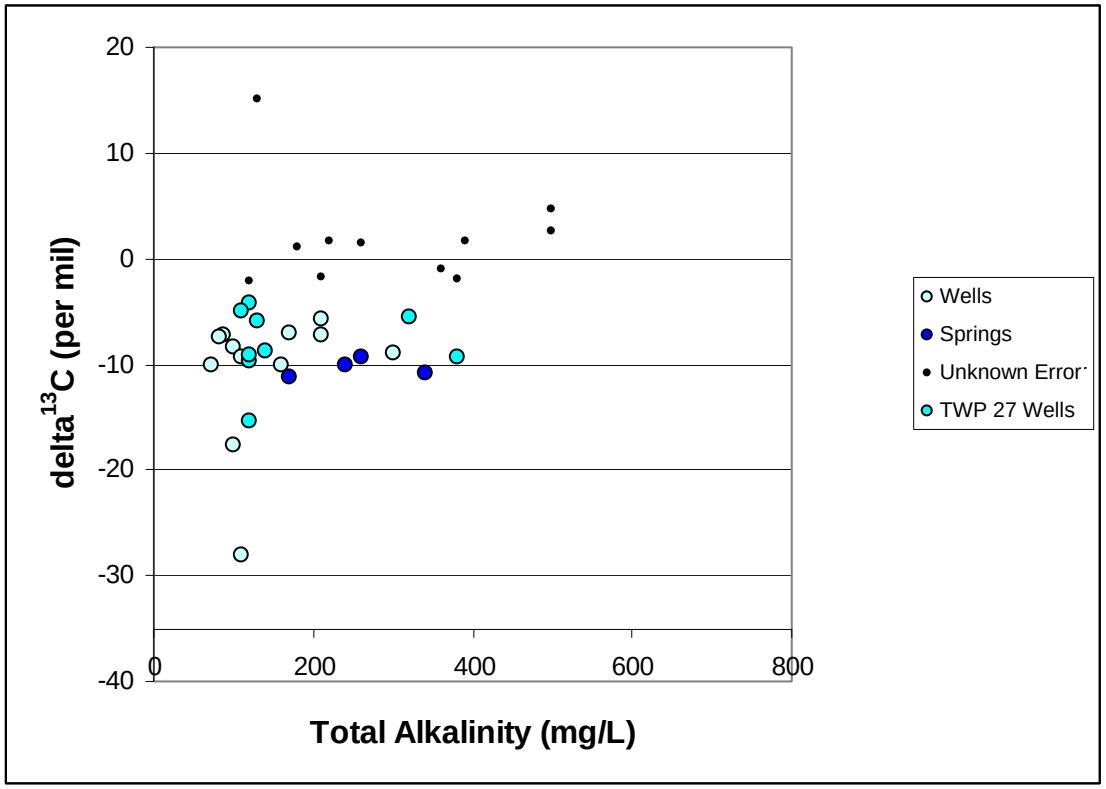

FIGURE 5.17. The $\delta^{13}C$ Values Obtained in the AB 303.

The most significant use for the $\delta^{13}C$ measurement in studies such as this is in its unique capability to determine whether additional carbon from other sources is entering or leaving the water. This is detectable because carbon exchange from different sources will not only change the dissolved carbon concentration but will also alter the $\delta^{13}C$ content; for example, as discussed earlier, additional carbonate from calcite shifts the $\delta^{13}C$ to more positive values.

This is used in age dating the groundwater with radiocarbon (^{14}C). For a detailed discussion of radiocarbon dating methods, other references should be consulted. See Reference 20 for an excellent summary of the methods. For this project, the following equation was assumed most useful because it allows for corrections to the standard isotope decay equation to compensate for age changes after input from recharge areas and changes due to dissolution of carbonates. In this approach, the starting point is not the carbon dioxide in a soil zone at the site of initial recharge but rather the composition of a water assumed to be an upgradient location with known DIC and modern or very young water. Data required are the $\delta^{13}C$ values for the DIC in recharge water, the $\delta^{13}C$ of DIC in the sampled water, and the $\delta^{13}C$ of carbonate minerals that may be dissolving. The computed value q is a correction factor used in the standard decay equation.

$$\mathbf{q} = \delta^{13}C\ (DIC) - \delta^{13}C\ (carbonate) / \delta^{13}C\ (recharge\ water) - \delta^{13}C\ (carbonate)$$

$$t\ (age\ in\ years) = (-8267)\ \ln\ [(a^{14}C\ in\ DIC)/(q * (a^{14}C\ DIC\ in\ recharge\ water)]$$

This correction-factor approach will be used in the subsequent modeling of flow.

5.2.3 Flow Path, Travel Time, and Age of the Groundwater

The conceptual model for the IWV hydrologic system relies principally on classical methods of groundwater hydrogeology and groundwater flow modeling. For example, the elevation, gradient, hydraulic conductivity, and boundary conditions interpreted in the valley's geologic framework have yielded the current understanding of the closed basin conceptual model. Independent corroboration for conceptual and numerical groundwater models is often gained using a variety of isotopic analyses and geochemical models not directly linked to the groundwater modeling effort.

There are three objectives for integrating the intrinsic stable isotopes (such as δD, $\delta^{18}O$, $\delta^{11}B$, and $\delta^{34}S$) and radioactive isotopes (such as ^{14}C and ^{3}H) into a geochemical travel path framework with respect to the IWV conceptual model:

1. To provide an independent check of the conceptualized flow regime by confirming the plausibility of the chemical changes along the path. As minerals dissolve and precipitate, they may impact isotopic composition.

2. To support the inferred flow path. The stable isotopic data label the water along the flow path and constrain connectivity between wells.

3. To estimate the groundwater age and travel time to improve the understanding of recharge processes, locate water sources, and define lateral and vertical distribution of quality.

Reaction Path Models. Three aquifer transects were selected for modeling. Each of these transects focuses on the southwest section of the valley and includes the steep gradient region (Figure 5.18). Transects are constrained by the location of sampled wells with available chemical and isotopic data and by the probable canyon-related recharge areas.

1. Pathway I: Freeman Canyon to Father Crowley Wells to 27/38-10 C2 to 26/38-35 L1
2. Pathway II: Indian Wells Valley Canyon to Navy 15 to 26/-12 R1
3. Pathway III: Cow Haven Canyon to 27/38-21 L1

The transect model means that the geochemical computer simulation is performed in the inverse mode, meaning that the initial water composition, such as that of an upgradient well, is compared to the composition of a downgradient well. The model computes whether the compositional changes between the wells can be obtained by reasonable chemical reactions along the flow path between the wells. The reactions are constrained by the following factors: dissolution or precipitation of minerals with defined compositions, gain or loss of gases such as CO_2, ion exchange on clays, saturation state with respect to phases, and isotopic continuity.

The simulator used in this project for the inverse modeling is PHREQEC (www.usgs.gov.), a code that is non-proprietary, available in the public domain, and professionally accepted. Several assumptions are generally employed here when performing inverse modeling. First, groundwater compositions as measured in an IWV sampled well are assumed to change slowly enough over time that samples collected from wells on different but similar dates can be assumed invariant over time for the purpose of this study. This is not true, however, for the composition of springs or surface water emerging from canyons, which can be highly variable in chemical composition over short timeframes. For example, data available for two canyons illustrate the large variability in TDS for samples collected over a relatively short interval of 4 years but in different seasons (Table 5.3).

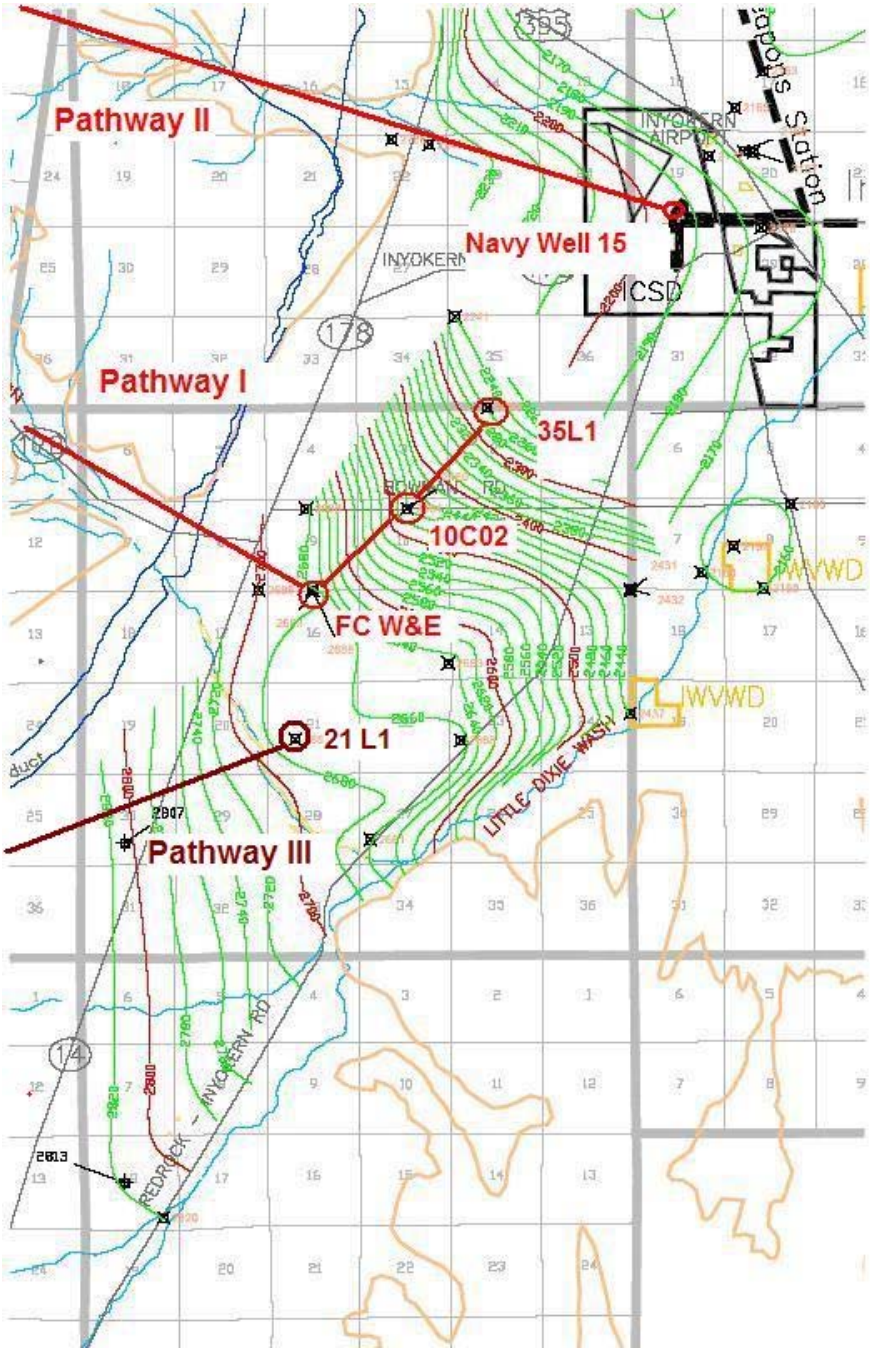

FIGURE 5.18. Three Reaction Pathways Simulated Using the Inverse Model.

TABLE 5.3. Examples of Spring Water Composition Variation from Two Sierran Canyons.

Location	Date Sampled	TDS, mg/L
Grapevine Canyon	1/20/1995	743
	4/8/1995	490
	5/13/1996	552
	3/10/1999	384
Sand Canyon	4/9/1995	375
	11/20/1995	782
	5/13/1996	360
	2/19/2007	480

A second assumption has to do with the fact that data are still limited. Canyon data are sparse, and the kind of range and frequency of variation in composition is not known for the canyons of importance to this study (Indian Wells Canyon, Freeman Canyon, and the upgradient canyons of Cow Haven, Sage, and Horse). Single samples were collected during the AB 303 project period; therefore, it can only be assumed that these analyses are part of a continuum of changing values and are representative enough to validate the mass transfer concept.

For the inverse models discussed in the following sections, the focus is on the southwest part of the valley, and the initial composition for each model is the recharge composition represented by the sample collected from either Indian Wells, Freeman, or the combination of the three upgradient canyons of Cow Haven, Horse, and Sage. The resultant inverse models are only approximate and serve as "proof of concept" for now because the canyon composition is still largely uncertain.

The stable isotopic data, however, are perhaps even more important than the chemical composition because they represent a label of the water source. Stable isotopic value is a ratio of isotope entities and is, therefore, much less affected by concentration due to evaporation. Of the group of isotopes selected for analysis, it does appear that the $\delta^{11}B$ is particularly useful in this part of the valley because the canyon sources are consistently enriched (more positive), ranging from 22.0 to 30.1‰, thereby providing a strong label of the source water and connecting canyon sources to nearby wells. This, of course, is essential in corroborating the current conceptual model.

Pathway 1: Freeman Canyon to Father Crowley Wells to 27/38-10 C2 to 26/38-35 L1

The data in Table 5.4 summarize the values used for Reaction Pathway 1. This path starts at Freeman Canyon and follows a curving flow vector on the north edge of the steep hydrologic gradient. Two constraints are honored in defining flow in Pathway 1: first, it is an approximate flow line based on the contoured gradient (Figure 5.18); and second, the $\delta^{11}B$ is almost invariant along this trajectory (Table 5.4).

TABLE 5.4. Chemical and Isotopic Composition Along Reaction Pathway 1.

	Freeman, Big/Soldier	27/38-9 Q2 Father Crowley West	27/38-9 Q1 Father Crowley East	27/38-10 C2	26/38-35 L1 Marquardt
Calcium	49	29	68	2.7	1.80
Magnesium	8.90	13	19	0.097	ND
Sodium	32	290	55	98	65
Potassium	0.29	12	3.2	1.10	0.64
Alkalinity	160	320	260	120	110
Chloride	13	140	17	18	5
Fluoride	0.42	1.90	0.11	0.42	0.22
Sulfate	36	190	81	67	14
pH	7.82	8.32	8.08	8.46	8.98
TDS	270	980	430	300	180
^{14}C	N/A	7,780	11,505	10,556	19,430
$\delta^{13}C$	NR	-6.50	1.5	-10	-9.40
Boron	46	630	180	270	120
$\delta^{11}B$	26.70	28	25.1	27.30	26.30
$\delta^{34}S$	3.30	4.30	3.3	-1.40	6.10
δD	-84	-92	-91	-97	-105
$\delta^{18}O$	-11.80	-12.20	-12.1	-12.70	-13.40
^{3}H	<0.40	<0.30	<0.5	<0.40	<0.9
SI (calcite)	0.34	0.73	0.88	-0.74	-0.44
SI (gypsum)	-2.02	-1.76	-1.74	-2.81	-3.14
SI (fluorite)	-1.94	-1	-3	-3.16	-3.86

N/A = not applicable
ND = no data
NR = no results

If it is assumed that the groundwater flow emerging from Freeman Canyon follows this route, then the evolution of water composition along the flow path should be explainable by accounting for changes resulting from either chemical reactions or mixing (including dispersion). For example, the composition of the Freeman Canyon sample is significantly more dilute than the Father Crowley West well, which is the next known composition along the flow pathway (Table 5.4). The inverse model compares these two known analyses, computes the differences for each element, and then determines whether or not this can be accounted for by an acceptable set of reactions involving specified phases. The result is shown in Table 5.5 for the two pathways between Freeman Canyon and either Father Crowley West or Father Crowley East. Although the wells are in close proximity and the screens are at similar depths, their compositions are significantly different. The reason for this is not known at present but could be related to flow pathway in different intervals or asymmetric flow to each well from different directions or horizons. Thus, it is possible that a separate flow path for each well from the canyon should be considered.

Note that the solution to the compositional change can be met by reaction with a small set of phases plus ion exchange of major cations on clay surfaces (Table 5.6). In addition to the constraint of mass balance, there is also a thermodynamic assessment. Each well composition is assessed for degree of saturation with respect to the phases of interest. This thermodynamic constraint of saturation is depicted by the saturation index (SI) and shown in Table 5.5. For example, note that the SI for calcium sulfate is a negative number. This indicates that the solution is undersaturated with that phase, meaning it could not precipitate but could dissolve if present. This is a useful constraint because if the inverse model required precipitation in order to explain the compositional change but the SI were negative, it would mean that particular inverse model was not valid. This was useful in eliminating several possible reactions with calcite. For example, the alkalinity between Freeman Canyon and the Father Crowley wells increases, but because calcite is already slightly supersaturated, it is not plausible that calcite could be the source. However, a small amount of a sodium carbonate phase (such as trona) could dissolve because trona is undersaturated, is a reasonable phase for this environment, and would provide needed increases in both sodium and alkalinity. The inverse accounts for both the sodium and carbonate in the stoichiometrically correct amount and determines if the mass can all be accounted for.

The boron isotopic values are almost identical along this flow path. This is consistent with a connection between the canyon and the wells since boron is chemically conservative and does not precipitate in this environment, making it an excellent label for the water source.

From the Father Crowley wells to the Marquardt well, the isotopic signature is constant, which implies a connection; the composition, however, becomes more dilute. This cannot be explained by precipitation of new minerals because the key elements involved in the dilution (e.g., Cl, SO_4, carbonate, etc.) are from minerals that are undersaturated, (e.g., calcium sulfate or sodium chloride) (Table 5.3). Thus, after using the model to examine all possibilities and combinations, it was determined no inverse modeling solutions are attainable.

There is an alternative view. Rather than precipitation of key phases from the Father Crowley well downgradient, the groundwater is progressively mixing with a more dilute water. Thus, the compositional change is driven by dilution from mixing. A mixing model confirms this as a plausible explanation. For example, if the Marquardt well is considered a dilute endmember well along this segment of the flow path, then a mixture of the Marquardt composition with the Father Crowley West well should yield the intermediate well compositions. The mixing calculations are summarized in Table 5.4 with the Father Crowley West well representing solution 1 and the upgradient water composition and the Marquardt well as solution 2 in the downgradient position. The mixing of these two wells with minimal mineral reaction will yield the intermediate well compositions of Father Crowley East and 27/38-10 C2 (Table 5.5).

The isotopic data for boron, deuterium, and oxygen support the mixing, while sulfur is inconclusive. The depleted sulfur data for the 27/38-10 C2 well are suspect because this value indicates a reduction process was active, perhaps sulfur reducing bacteria, which would indicate a local alteration in water composition that would render the $\delta^{34}S$ unrepresentative.

Nevertheless, the stable isotopic data and inverse modeling all corroborate the concept of initial dissolution of phases from Freeman Canyon to the Father Crowley wells, followed by progressive mixing of the groundwater with more dilute groundwater further along the flow pathway.

Finally, can an assessment be made regarding the radiocarbon data and travel time? The carbon isotopic data for samples collected during AB 303 are in general in the expected range. However, as discussed earlier, there were several measured values that are suspect and are outside the range of expected results. One of those measurements was for the Father Crowley East well. Consequently, a correction to the Father Crowley East well ^{14}C analysis cannot be made at present.

Using the previously discussed ^{14}C correction equation (a $\delta^{13}C$ value of -10.4‰) and the measured values of $\delta^{13}C$ for the Father Crowley well, the age at Father Crowley West of 7780 YBP corrects to a more recent age of 2846 YBP. This corrected age implies that groundwater travels from the sampled point to the well, a distance of about 4.5 miles in 2846 years, or 8.3 feet per year. Groundwater flow models are not yet available for this region, so no comparison can be made to estimates of flow rate based on numerical flow modeling at present.

TABLE 5.5. Mass Transfer for the Inverse Model for Pathway 1.

Phase Involved in Mass Transfer	Freeman Canyon to Father Crowley West, mmoles	Freeman Canyon to Father Crowley East, mmoles
NaCl	3.586	0.113
$CaSO_4$	2.004	0.398
$CaCO_3$	0.000	0.000
$CO_{2(g)}$	0.911	0.518
Ion Exchange:		
-Na	0.445	-0.906
-K	0.300	0.074
-Ca	-2.542	0.000
-Mg	0.169	0.416
Trona	1.068	0.598
CaF_2	0.004	-0.008

Pathway 2: Indian Wells Canyon to Navy Well 15

The second pathway considers the circumstance of recharge into the valley derived from Indian Wells Canyon with an assumed composition of the spring, as determined in the Tetratech (Reference 2) investigation (Table 5.6). The spring was sampled again as part of the AB 303, and a very different, more concentrated composition was obtained. This degree of variability is expected from canyon samples, as discussed earlier, and without seasonal sampling and a longer-term record of samples, it is not possible to conclude the most representative composition for canyon discharge.

TABLE 5.6. Composition of Sampled Locations for Pathway 2.

Analyte	IWV, AB 303	IWVBCS1, TTEMI	Navy 15 26/39-19 P2
Date	4/9/2007	~2001	12/27/2006
Calcium	100	89	44
Magnesium	26	22	6.40
Sodium	41	27	65
Potassium	3.20	4	2.60
Bicarbonate	240	100	110
Carbonate	25		
Alkalinity	240		88
Chloride	15	23.90	36
Fluoride	0.92		0.64
Nitrate	ND		5.40
Sulfate	190	72	130
pH	8.34	7.23	8.07
TDS	610	423	380
^{14}C (uncorrected YBP)	N/A	895	8485
^{13}C	-10.10	-7.90	-7.30
Boron	90	160	210
$\delta^{11}B$	30.10	21.80	23.90
$\delta^{34}S$	9.70		4.40
δD	-86	-94	-95
$\delta^{18}O$	-10.80	-12.30	-12.50
^{3}H	0.90	1.80	<0.60
SI (calcite)		-0.383	0.24
SI (gypsum)		-1.19	-1.65

N/A = not applicable
ND =no data

The AB 303 sample has a δD value indicating significant evaporation. The radiocarbon results are not available for this sample; therefore, as a proof of concept calculation, the earlier analysis is used instead. It may also be more representative as well, since the evaporative concentration is less and probably more similar to subsurface flow.

The pathway was selected because it follows, in general, a flow line defined by known gradient data and because the stable isotope values of boron, oxygen, and hydrogen are all similar, indicating a connection between the recharge area and the well.

Inverse model solutions are similar to Pathway 1 in that the composition of Indian Wells Canyon spring water can evolve to Navy Well 15 by dissolution of calcite and gypsum, with ion exchange modifying the cation changes. Note that the saturation index for calcite indicates calcite can dissolve, and the $\delta^{13}C$ values are modified from -7.9‰ at Indian Wells Canyon spring to -7.3‰ at Navy Well 15, indicating that the calcite dissolution has enriched the carbon isotope signature and contributed carbonate DIC that will require ^{14}C correction.

Using these $\delta^{13}C$ values, modern radiocarbon age for the spring, and an uncorrected age of 8485 YBP for Navy Well 15, a corrected ^{14}C age is computed to be 7845 YBP.

Using a distance of about 5 miles as the flow path, the groundwater travel time for this pathway is approximately 3.4 feet per year.

Pathway 3: Cow Haven Canyon to 27/38-21 L1

The third recharge pathway investigated using the inverse model is the pathway from the Cow Haven Canyon sampling point to the well at 27/38-21 L1 (Figure 5.18). The valley upgradient (toward the southwest) from Freeman Canyon is fed by recharge from several sierran canyons. The three closest to the area of interest are Sage, Horse, and Cow Haven. Water samples were collected from all three. No direct measurements of recharge or stream flow are available for these canyons, and it is reasonable to assume seasonal variation in water composition is highly variable here, as described earlier for other canyons with seasonal data.

The chemical analyses obtained in this study are complemented with two additional Sage Canyon analyses, obtained by Ostdick, to illustrate the variability in Sage Canyon samples (Table 5.7). The canyons yield a predominantly calcium bicarbonate water with lesser amounts of sodium, sulfate, and chloride. In contrast, the 27/38-21 L1 well is predominantly a sodium bicarbonate sulfate water type. The single upgradient well to the 21L1 well is 28/38-18 F1, located on the east side of Little Dixie Wash (Figure 5.18), which has a predominantly sodium bicarbonate composition that is in many respects quite similar to 21L1. The confusing aspect of this water type is the extremely depleted $\delta^{11}B$ value of -20.9‰, which is completely different from sierran springs and wells near these springs but consistent with depleted signatures seen in other wells adjacent and to the north of the Tertiary volcanic El Paso Mountains (Table 5.7). The El Paso Mountains are dominated by Tertiary volcanics, and the depleted signature is common for volcanic rocks (Reference 21).

TABLE 5.7. Composition of Locations Used in the Inverse Model for Pathway 3.

Analyte	Sage Canyon	Horse Canyon	Cow Haven Canyon	27/38-21 L1
Date	7/9/2007	7/9/2007	7/9/2007	8/27/2007
Calcium	96	57	43	14
Magnesium	18	17	8.9	11
Sodium	57	47	22	100
Potassium	1.7	2.5	2.4	2.7
Bicarbonate	410	320	190	160
Carbonate	ND	ND	10	6.3
Alkalinity	340	260	170	140
Chloride	21	17	6.3	35
Fluoride	2.2	1.5	0.27	0.81
Sulfate	26	36	15	69
pH	8.08	7.84	8.22	8.26
TDS	410	360	240	510
^{14}C	N/A	N/A	N/A	7821
$\delta^{13}C$	-10.9	-9.3	-11.3	-8.8
Boron	85	68	39	N/A
$\delta^{11}B$	N/A	22	N/A	20.7
$\delta^{34}S$	16.8	5.2	5.9	N/A
δD	-85	-86	-89	-96
$\delta^{18}O$	-11.4	-11.5	-12.1	-13
^{3}H	1.1	1.3	2.6	0.8
SI (calcite)	1.13	0.61	0.72	0.13
SI (gypsum)	-1.72	-2.18	-2.56	-2.33
SI (fluorite)	-0.26	-0.71	-2.31	-1.91

N/A = not applicable
ND = no data

The implication is that the 21L1 well composition is a mixture of the canyon sources and the 18F1 water type. Because of the highly variable canyon compositions and lack of available isotopic data for the canyons, 21L1 and 18F1, the computation of mixing proportions cannot yet be performed.

As an illustration of how the calcium-dominated canyon samples could evolve into the 21L1 composition, the following mass transfer model is presented. For this model, the composition from Cow Haven was used as the initial solution, and the composition of 21L1 was used as the final solution. Using the same simple set of phases as before, commonly found in this environment, the model yields a solution (Table 5.7). By dissolving gypsum and fluorite, precipitating a small amount of calcite, and allowing for ion exchange, the composition of the canyons as represented by the Cow Haven analysis could evolve into the composition observed at 21L1.

The isotope analyses for the entire set of locations are incomplete and thus not definitive at present. But the $\delta^{11}B$ for the adjacent Horse Canyon is similar to that of 21L1, and the average $\delta^{13}C$ of -10.4‰ for all three canyons is similar to the 21L1 value of -8.4 percent, considering the variability of canyon samples. It is noteworthy that the canyon samples have δD and $\delta^{18}O$ values that are more enriched than those of 21L1, and these values also infer evaporation when plotted against the meteoric water line (not shown). This further supports the notion that the canyon samples have experienced evaporation, and thus the elevated solute composition may not be representative of the actual bulk of canyon recharge water.

Finally, an example of a travel time calculation can be given with the following assumptions. First, the canyon samples were computed to be supersaturated with respect to calcite; however, if we assume that evaporation and perhaps some loss of carbon dioxide during emergence of the spring water at the surface has occurred, the water may in fact have been slightly undersaturated in the alluvium. This is an assumption that would allow for some additional dissolution of calcite along the flow path toward Well 21L1. Using the $\delta^{13}C$ average values of -10.4 and -8.8‰ for Cow Haven and 21L1 respectively, the uncorrected ^{14}C age of 7821 YBP would correct to 6301 YBP. This would mean that travel time from the Cow Haven Canyon sampling point to Well 21L1 was approximately 6,300 years or about 3.8 feet per year.

Table 5.8 is an example of the computation process for mass transfer and travel time in the upper canyon. To refine this work, better estimates of canyon composition are needed, along with additional data to complete a total isotopic data set for the key wells (i.e., Sections 18F01 and 21L1). These data will be pursued in subsequent field seasons. The most important conclusion is that the modeling confirmed the chemical compositional changes were plausible, the isotopic data were consistent, and the travel time example was reasonable. This kind of data analysis will be needed to corroborate the physical flow modeling of this region in the future.

TABLE 5.8. Equilibrium and Mass Transfer Modeling.

	Na	K	Ca	Mg	SO_4	Cl	F	Alk	δD	$\delta^{11}B$	^3H
Cow Haven	22	2.4	43	8.9	15	6.3	0.27	170	-89	~22	2.6
↓											
27/38-21 L1	100	2.7	14	11	69	35	0.81	140	96	20.7	0.8

Dissolve

0.944 mmole gypsum
0.810 mmole NaCl
0.014 mmole fluorite

Ion Exchange

CaX_2 NaX KX MgX_2

Precipitate

0.300 mmole calcite

Saturation Indices (SI)

Gypsum	-2.56
Fluorite	-2,31
NaCl	-8.42
Calcite	0.72

Additional Transects. The next phase in this project will involve extending the transects across the valley and adding transects from each canyon to follow groundwater movement chemically, isotopically, and in terms of flow lines. As one moves into the valley, the screened intervals are often deeper to produce from the deeper aquifer, but much of the flow from the canyons appears to be recharging the shallower aquifer. This prevents modeling along a flow line. To model the geochemical and isotopic changes more precisely, wells should be located and sampled that include the shallower section in the production well.

Radiocarbon Data. In addition to the ^{14}C age dates discussed in this report, there are an additional 21 values for wells further into the valley and 7 wells with untrustworthy $\delta^{13}C$ results. These data will be used in the future for creating cross sections through the valley but will require identification of plausible flow paths from well to well considering canyon locations and screen depths. Most project wells are not close enough to other wells that have ^{14}C results or to wells with confirmed flow paths based on either inverse modeling or stable isotope continuity, so travel time calculations with these data will require additional stable isotope analyses to create new travel time transects using all available data.

6.0 CONCLUSIONS

The two conceptual models generally considered for the IWV hydrologic system are basins that are either closed or open to recharge from outside the valley. Production and evaporation processes are not disputed.

The open basin model is an alternative to the conventional interpretation and was promulgated by investigators asserting substantial total recharge was entering the valley from the southwest in a volume much greater than what could be attributed to precipitation-based recharge. New data obtained in this study, combined with a review and qualification of existing data, allowed us to discount this concept. It can be shown that the open basin concept depended on a flux calculation with too much uncertainty, and the isotopic data were shown to be in error based on re-sampling and reinterpretation of the data. The open basin model increased the estimated recharge by 300 percent, which would greatly impact groundwater management planning. Based on the current study, however, the open basin conceptual model can be discounted, and the more conventional, lower estimates for recharge to a closed basin can be more realistically included in the management of this valuable resource.

Lithology in the IWV is defined by alluvium from the Sierra Nevada and thick accumulations of lacustrine clays and sands. The upper and lower aquifers are different in quality and aerial extent and are separated by the lacustrine aquitards over the eastern part of the valley. Interpretation of the distribution of water quality and flow path of recharged and pumped water requires a better definition of the lithology. Descriptive well logs from existing and newly drilled wells in this project were converted to numerical quantities. The distribution of lithologic properties could then be used to populate a database that could display cross sections as needed. The sections are interpolated in three dimensions and provide superior pictures of the basin lithology.

The connections between the recharging water sources and the flow paths between wells can be independently confirmed using stable isotopic analyses. The hydrogen and oxygen analyses allow for identification of older groundwater, remnant from the Pleistocene pluvial period (10,000 YBP and earlier). There is also a stable isotope distinction between mountain-front recharge and more depleted deeper and older groundwater in the western and central part of the valley. The boron and sulfur stable isotopic data provide a signature of water sources and allow for an interpretation of flow path and inter-well connection. Boron is a conservative intrinsic tracer that does not react with minerals in this system and is, therefore, useful for computing mixing between water sources. The $\delta^{11}B$ for recharged water is in general enriched to values in the upper 20 to low 30 per mil range. Deeper groundwater and water derived from the southern and northern volcanic terrains can have remarkably depleted values, as low as -30 per mil $\delta^{11}B$. This intrinsic signature will be a key method of identifying water sources in the future. Sulfur $\delta^{34}S$ is less conservative but changes along the flow path in an

interpretable manner. Additional sulfur enters the groundwater through dissolution of gypsum, which alters the $\delta^{34}S$ to more enriched values. Sulfur will identify the encroachment of more saline- and playa-related water sources.

The ^{14}C measurements are essential to identifying the travel time and age of the aquifer. The database is still sparse, and additional values in data-poor regions will be essential. The challenge with ^{14}C data in this basin is in correcting the measurements to accommodate the values in recharge water and for reaction with calcite. In general, the data can be used to infer the presence of Pleistocene water. Travel time along flow paths is still somewhat uncertain because of samples from variable depths and the absence of baseline data for the carbonate minerals in the aquifer. Future sampling should provide much of this needed data and reduce the uncertainty.

7.0 RECOMMENDATIONS

1. Drill monitoring wells in major canyons. Sample on a schedule for several years to establish a volume-corrected composition, usable as the recharge boundary conditions (Cow Haven, Freeman, Indian Wells, Grapevine, etc.).

2. Complete necessary environmental documentation for new drilling sites (in progress).

3. Determine representative $\delta^{13}C$ and ^{14}C activity in the canyon groundwater to better estimate travel time.

4. Determine key ion concentration ranges in canyon wells (necessary due to the large seasonal variation in composition) to perform mass balance models for better water age correction. Consider quarterly sampling.

5. Select key wells best representing locations of flow paths from canyons into the valley (based on location, screened intervals, and knowledge from prior compositional history) to create flow path reaction and travel time calculations for comparison with groundwater flow models.

6. Inventory valley wells and video log wells in use to locate screened intervals where unknown.

7. Resample all wells with spurious results ($\delta^{34}S$, $\delta^{13}C$).

8. Obtain shallow samples to confirm actual flow path of modern recharge. Flow path modeling indicates modern recharge is likely remaining primarily in the shallow aquifer and mixing vertically with deeper and older groundwater.

9. Locate a region of principal recharge from the El Paso Mountains for monitoring and sampling to determine flow path, confirm source, and compute travel time. (Water from the El Paso Mountains apparently has a distinct isotopic signature.) Additional wells may be necessary since there are very few groundwater sampling points at this time.

10. Create a lithologic model of the valley to define the interconnected zones and the zones specifically being pumped. In some cases, zones with degrading water composition are isolated from other higher quality zones. A geothermal database may be useful if available.

11. Undertake quarterly rather than semiannual monitoring of transducers.

12. Sample monitoring wells and surface water sites in the northwest area near Little Lake and southern Rose Valley to investigate possible recharge into the valley from that area.

13. Investigate potential recharge into the northeast area of the valley on the Navy Base. There are a few canyons in the northeast area where perennial surface water exists, with flows to the mouth of the canyons along the Argus Range.

14. Investigate costs of including existing and future data into the groundwater model. Research future solute-transport model as data becomes available.

15. Compile and submit another AB 303 grant proposal depending on State funding. Other funding sources should be investigated.

16. Expand continuous water-level and water quality monitoring to include additional monitoring wells near groundwater extraction areas. Data collection for this study was conducted on a daily basis. Future data could be collected less frequently. Based on the data collected for this study, weekly data collection would be sufficient to evaluate seasonal changes due to groundwater extraction. Daily collection of data may be recommended if well interference needs evaluation. Because it appears there may be some issues with transducer failure, data download should be performed at least quarterly. More frequent downloading of data would ensure minimal data loss should transducers fail.

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9.0 APPENDICES

A. Groundwater Management Plan
B. Electrical Logs
C. Water Quality/Isotope Results
D. Lithologic Data in Numerical Format Identified by Well

All appendices are located on a separate CD accompanying this report.

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Kern County

Agt. # 087-2006

Cooperative Groundwater Management Plan for the Indian Wells Valley

Preamble:

The groundwater aquifer system in the Indian Wells Valley (as shown in Figure #1) is complex and the supply is finite. Substantial data is available regarding groundwater production in the Valley but only limited data exist pertaining to the aquifer characteristics. While considerable data has been collected through individual and cooperative technical studies, there is still a need for additional information to further characterize the watershed and to support the management of the aquifer system in the Valley.

Large-scale cooperative groundwater technical studies have been completed and are continuing in the Indian Wells Valley. The results of this effort contributed valuable insights to the nature of the Valley's groundwater resources. Based on these studies, the major participants in the study (the Indian Wells Valley Water District, Naval Air Weapons Station/China Lake, Searles Valley Minerals) and other Parties have concluded that it is in their best interest to participate in the development of this Cooperative Groundwater Management Plan (the "Plan") to extend the useful life of the groundwater resources to meet current and foreseeable user needs in the Valley.

Purpose:

The purpose of this Plan is to:

1) set forth guidelines and management principles for the production, distribution, and use of groundwater within the purview of the participants;
2) further develop (cooperatively or individually) the technical data and analytical capabilities to better understand the nature and characteristics of the watershed and aquifer system;
3) apply these guidelines toward sound management practices to extend the useful life of the groundwater resource to meet current and foreseeable future demands;
4) coordinate interested local agencies and water producers into a cooperative planning effort to share information and management practices to maintain the life of the resource.

The Parties agree that, within the framework established by this Plan, the Parties themselves are best able to determine how to meet their respective future water supply needs and assure the availability of a long-term, high quality water supply.

The Parties recognize the varied beneficial uses within the Valley, including residential, agricultural, industrial, municipal, commercial, and public. In addition, Searles Valley Minerals currently exports water from the Valley. Groundwater planning for the Valley must take these existing uses into account.

This Plan is not intended to alter or affect any existing water rights, and no Party, by executing this Plan, waives any of its rights.

This Plan is intended to be a flexible document. As more groundwater information becomes available through technical studies, data collection and analysis, and experience in interpreting the effects of pumping pattern changes it is expected, and agreed, that this Plan will be modified accordingly.

Planning Concerns:

The following concerns have provided the incentive to the Parties for participating in a cooperative planning effort in the Indian Wells Valley.

1) Water levels have declined in areas within the Valley.
2) As depth to groundwater increases, production and distribution costs will increase.
3) As depth to groundwater increases, the potential exists for poorer quality water to mix with and degrade higher quality water.
4) Some portion of the recharge to the Valley from the Sierra Nevada may be lost to evaporation in the China Lake playa.
5) Our understanding of the geohydrology of the Valley is based on groundwater quantity and quality data collected from available production and monitoring wells located throughout much of the Valley. The recharge and discharge characteristics of the aquifer are not fully understood. Adequacy of the known groundwater reserves to meet future demands shall be determined.

Planning Objectives / Groundwater Management Guidelines:

In an effort to successfully address the aforementioned concerns, the Parties' actions will be directed toward the following groundwater management objectives:

Planning Objective #1: Limit additional large scale pumping in areas that appear to be adversely impacted.

No Signatory producing water will increase it's annual production of water from the groundwater depression identified in Figure #2 (applies to extractions greater than 5 AF/yr.). The water producing Signatories' long-term goal is to limit new and reduce existing production in this area to the fullest extent possible over an economically reasonable time frame.

Planning Objective #2: Distribute new groundwater extraction within the Valley in a manner that will minimize adverse effects to existing groundwater conditions (levels and quality), and maximize the long-term supply within the Valley.

Future groundwater development by the Parties will be distributed within the Valley in a manner that is designed in accordance with aquifer characteristics. The Parties will consider developing, to the fullest extent possible, individually or as a cooperating group, wells in the outlying areas of the Valley. Areas such as Indian Wells Valley Water District's southwest field should be considered as should wells designed to capture recharge from all areas of the watershed. As a general guideline, the location and capacity of new production wells (excluding domestic wells) should not unreasonably interfere with existing wells.

Planning Objective #3: Aggressively pursue the development and implementation of water conservation and education programs.

The Parties have collectively developed a written policy regarding water conservation (Water Conservation Public Advisory) and will continue to develop, to the extent possible, water conservation guidelines and education programs.

Planning Objective #4: Encourage the use of treated water, reclaimed water, recycled, gray and lower quality water where appropriate and economically feasible.

The Parties will consider, individually or collectively, use of non-potable water, such as treated sewage effluent or poorer quality sources, for appropriate re-use applications. The Parties will consider constructing, individually or collectively, recharge facilities including spreading basins and other types of facilities to capture and conserve storm water flows to augment efforts to replenish groundwater reserves. Water treatment and blending of different quality waters should be pursued to extend the life of the groundwater resource.

Planning Objective #5: Explore the potential for other types of water management programs that are beneficial to the Valley.

The Parties will consider, individually or collectively, projects such as water transfers, water banking, water importation, groundwater replenishment, and other programs that will enhance or prolong the groundwater reserves in the Valley. The Parties may consider joint acquisition, use, and operation of such projects and/or programs.

The Parties will coordinate with, and provide input to, land use planning authorities regarding water-intensive development activities within the Valley.

The Parties will review any new proposed export of water from the Valley with respect to its effect on groundwater resources, and make appropriate response, including but not limited to participation in the environmental review and planning process.

Planning Objective #6: Continue cooperative efforts to develop information and data which contributes to further defining and better understanding the groundwater resource in the Indian Wells Valley.

The Parties will continue to cooperate, to the fullest extent possible, in data gathering and analysis projects focusing on groundwater recharge, discharge, storage, quality, quantity, transmissivity and storativity as it pertains to the groundwater resources of the Indian Wells Valley. In conjunction with this objective, the Parties have collectively developed and will continue to develop a Water Sampling Plan, a Water Level Measurement Protocol, and a Monitor Well Selection Protocol.

Planning Objective #7: Develop an interagency management framework to implement objectives of this Plan.

The following entities are signatories on this Plan: Eastern Kern County, Resource Conservation District, Indian Wells Valley Airport District, Indian Wells Valley Water District, Inyokern Community Services District, Kern County Water Agency, Naval Air Weapons Station/China Lake, Searles Valley Minerals, the City of Ridgecrest, Quist Farms, the Bureau of Land Management, and **Kern County.**

The Parties may develop a cooperative agreement which defines the roles, responsibilities, rights, and obligations of all participants, affords opportunities to enlist new members and provides the administrative framework for implementing applicable elements of this Plan. A Steering Committee with representatives from each signing entity has been established to assist with coordinating each signing entity's groundwater management actions in conformity to the Plan.

Signing this Plan does not create any financial obligations. Future financial obligations will be determined in the agreement developed to implement this plan.

Severability:

If any part of this Plan is declared invalid by a court of law, the remaining provisions of the Plan shall continue in full force and effect.

Changes:

It is understood and agreed that this Plan contains all the provisions agreed upon by the Parties thereto. This Plan may be amended at any time by mutual written consent of the Parties. Notice of proposed changes must be submitted to the other Parties at least thirty (30) days in advance of the proposed change.

Effective Date, Termination, and Withdraw:

This Plan is effective when signed, and will remain in effect until amended or terminated by mutual written agreement. Any Party may withdraw from this Plan by giving the other Parties six months' written notice.

Revised and accepted this 16TH day of March, 2006 at Ridgecrest, California

NAVAL AIR WEAPONS STATION
CHINA LAKE

KERN COUNTY WATER AGENCY

CITY OF RIDGECREST

INYOKERN COMMUNITY SERVICES
DISTRICT

INDIAN WELLS VALLEY WATER
DISTRICT

SEARLES VALLEY MINERALS

EASTERN KERN COUNTY
RESOURCES CONSERVATION
DISTRICT

INDIAN WELLS VALLEY AIRPORT

BUREAU OF LAND MANAGEMENT

QUIST FARMS

KERN COUNTY

By: Barbara Patrick JAN 31 2006
Chairman, Board of Supervisors

APPROVED AS TO CONTENT:

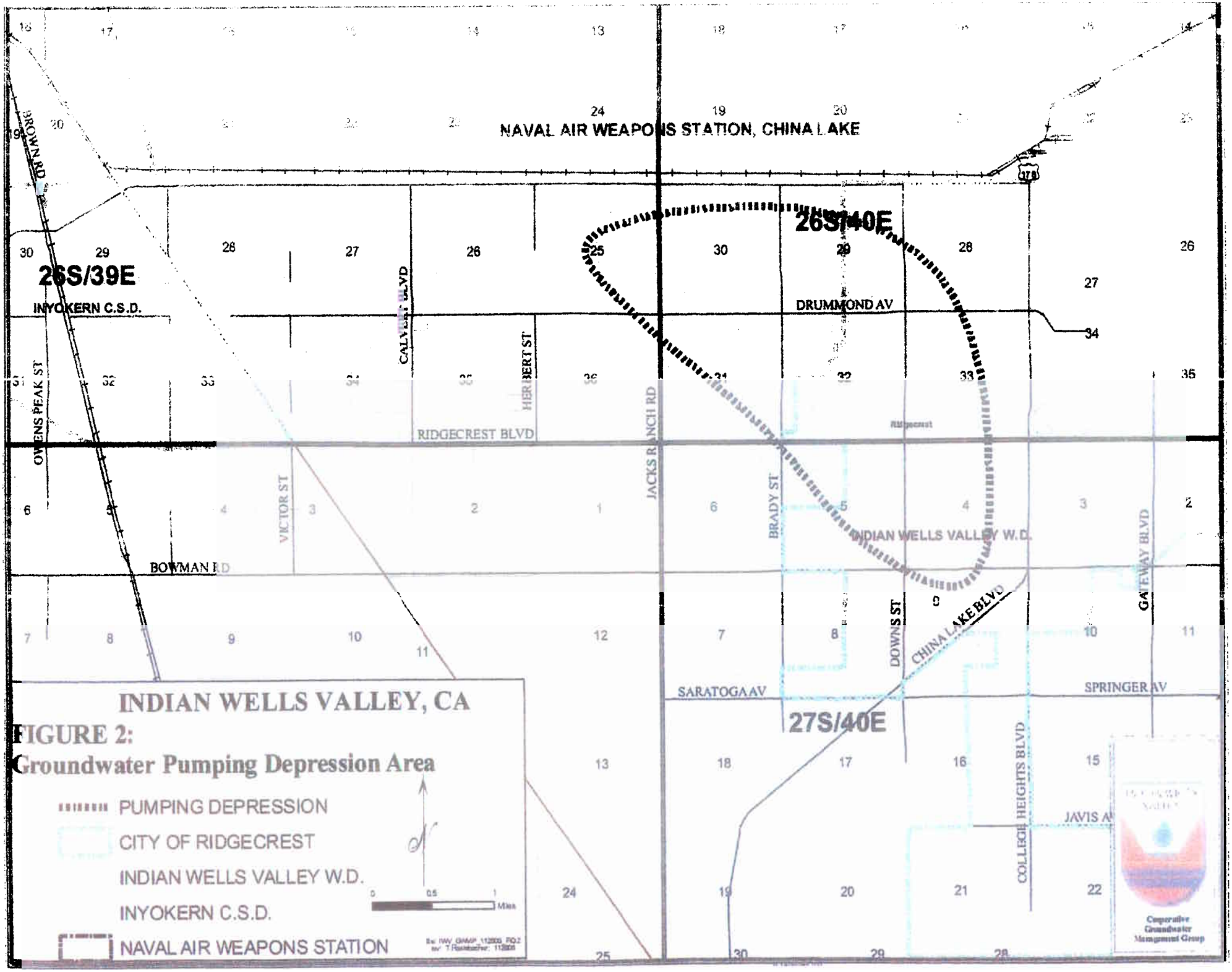
Planning Department

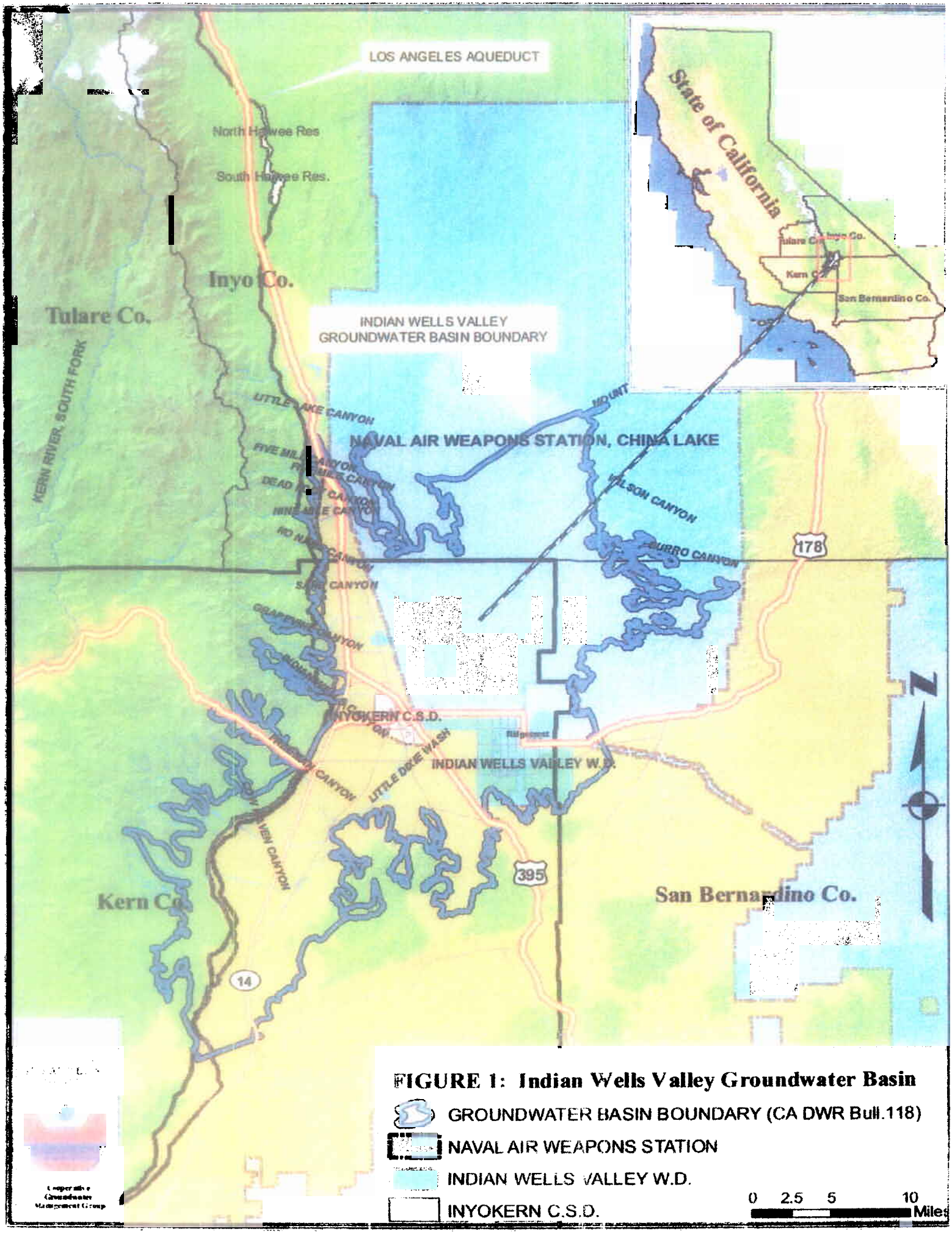
By: Ted Jan
Planning Director

APPROVED AS TO FORM:

Office of County Counsel

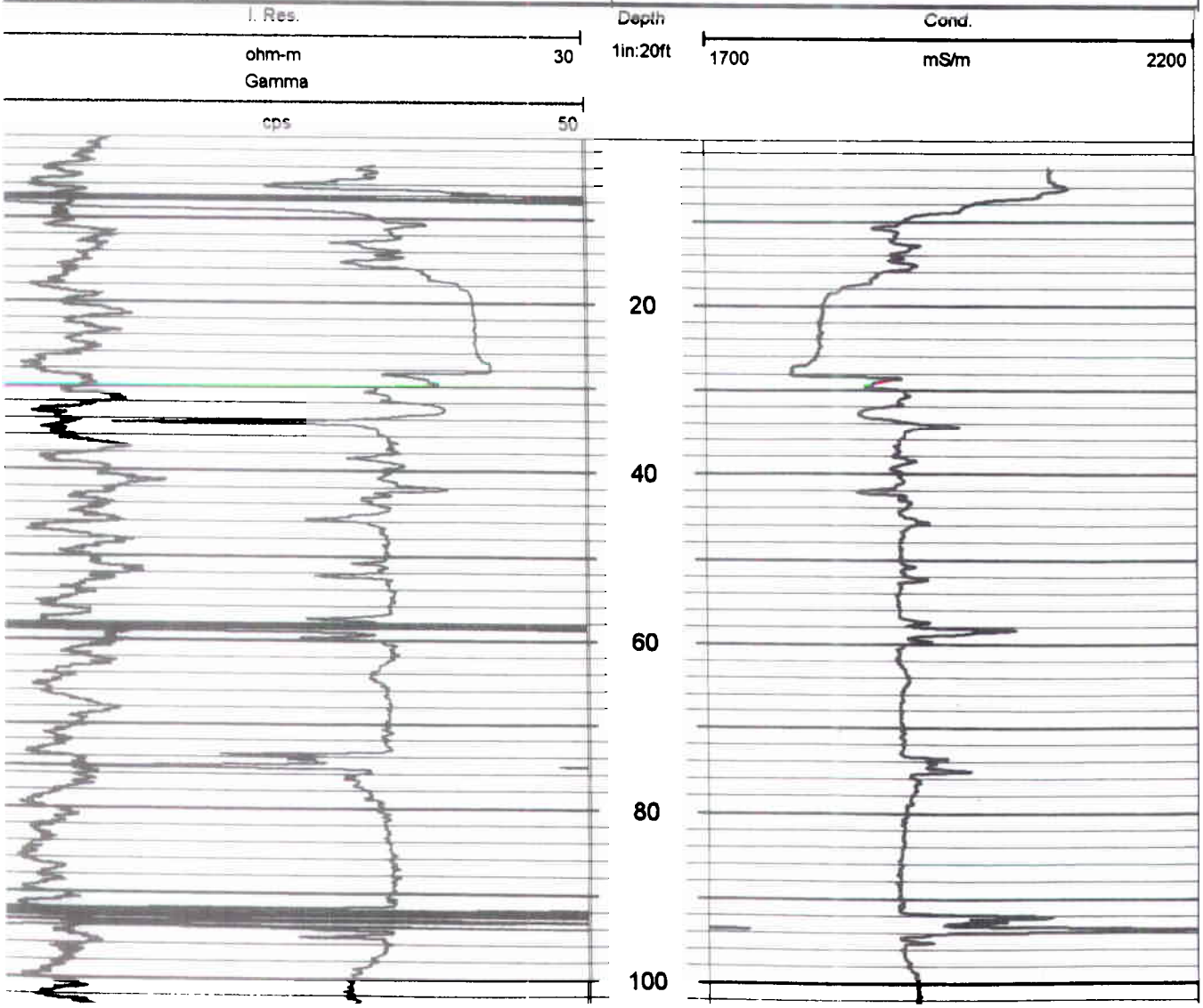
By: Bruce Wilson
Deputy

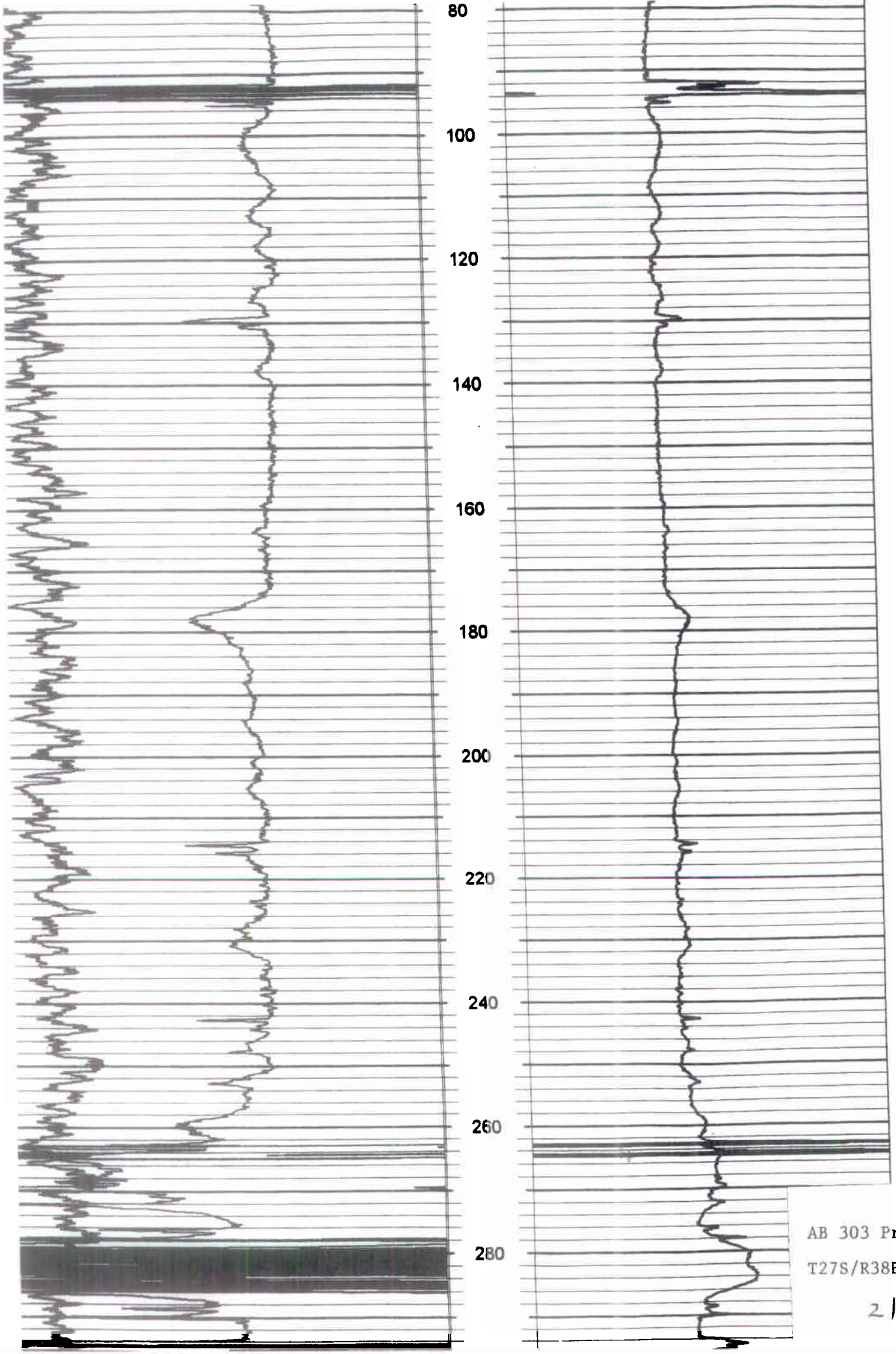

NAVAL AIR WEAPONS STATION, CHINA LAKE
26S/39E
INYOKERN C.S.D.
26S/40E
27S/40E
DRUMMOND AV
RIDGECREST BLVD
BOWMAN RD
SARATOGA AV
SPRINGER AV
CHINA LAKE BLVD
INDIAN WELLS VALLEY W.D.
BROWN RD
OWENS PEAK ST
CALVERT BLVD
HERBERT ST
JACKS RANCH RD
VICTOR ST
BRADY ST
DOWNS ST
GATEWAY BLVD
COLLEGE HEIGHTS BLVD
JAVIS AV
INDIAN WELLS VALLEY, CA
FIGURE 2:
Groundwater Pumping Depression Area
PUMPING DEPRESSION
CITY OF RIDGECREST
INDIAN WELLS VALLEY W.D.
INYOKERN C.S.D.
NAVAL AIR WEAPONS STATION
Miles
Cooperative Groundwater Management Group


LOS ANGELES AQUEDUCT
North Haiwee Res
South Haiwee Res.
Inyo Co.
Tulare Co.
KERN RIVER, SOUTH FORK
INDIAN WELLS VALLEY
GROUNDWATER BASIN BOUNDARY
State of California
Tulare Co.
Kern Co.
San Bernardino Co.
LITTLE LAKE CANYON
FIVE MILE CANYON
DEAD HORSE CANYON
NINE MILE CANYON
NAVAL AIR WEAPONS STATION, CHINA LAKE
MOUNT
WILSON CANYON
BURRO CANYON
178
SALT CANYON
GRAPEVINE CANYON
INYOKERN C.S.D.
INDIAN WELLS VALLEY W.D.
LITTLE DIXIE WASH
RANDSBURG CANYON
395
14
Kern Co.
San Bernardino Co.
N
FIGURE 1: Indian Wells Valley Groundwater Basin
GROUNDWATER BASIN BOUNDARY (CA DWR Bull.118)
NAVAL AIR WEAPONS STATION
INDIAN WELLS VALLEY W.D.
INYOKERN C.S.D.
0 2.5 5 10
Miles

	COMPANYSVM
	Location: Ridgecrest T27S/R38E - Section 09 C01
Well	bowman rd well
Date	11/17/06 BH Fluid
Casing	9
File Name	bowman rd well 5 111706
Depth Driller	
Depth Logger	
Logged by:	JT
Witness:	

OTHER SERVICES

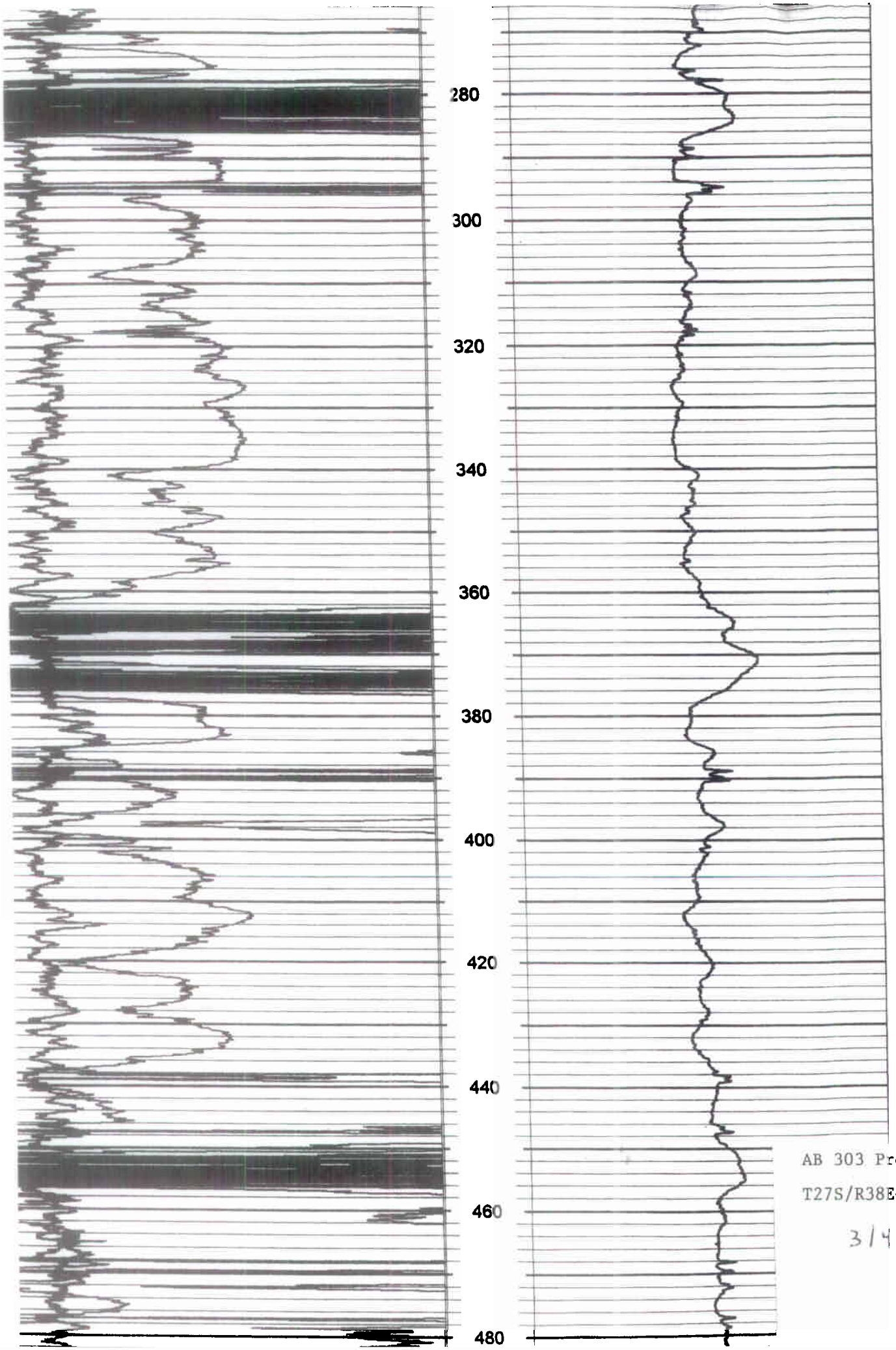




AB 303 Project

T27S/R38E-09 C01

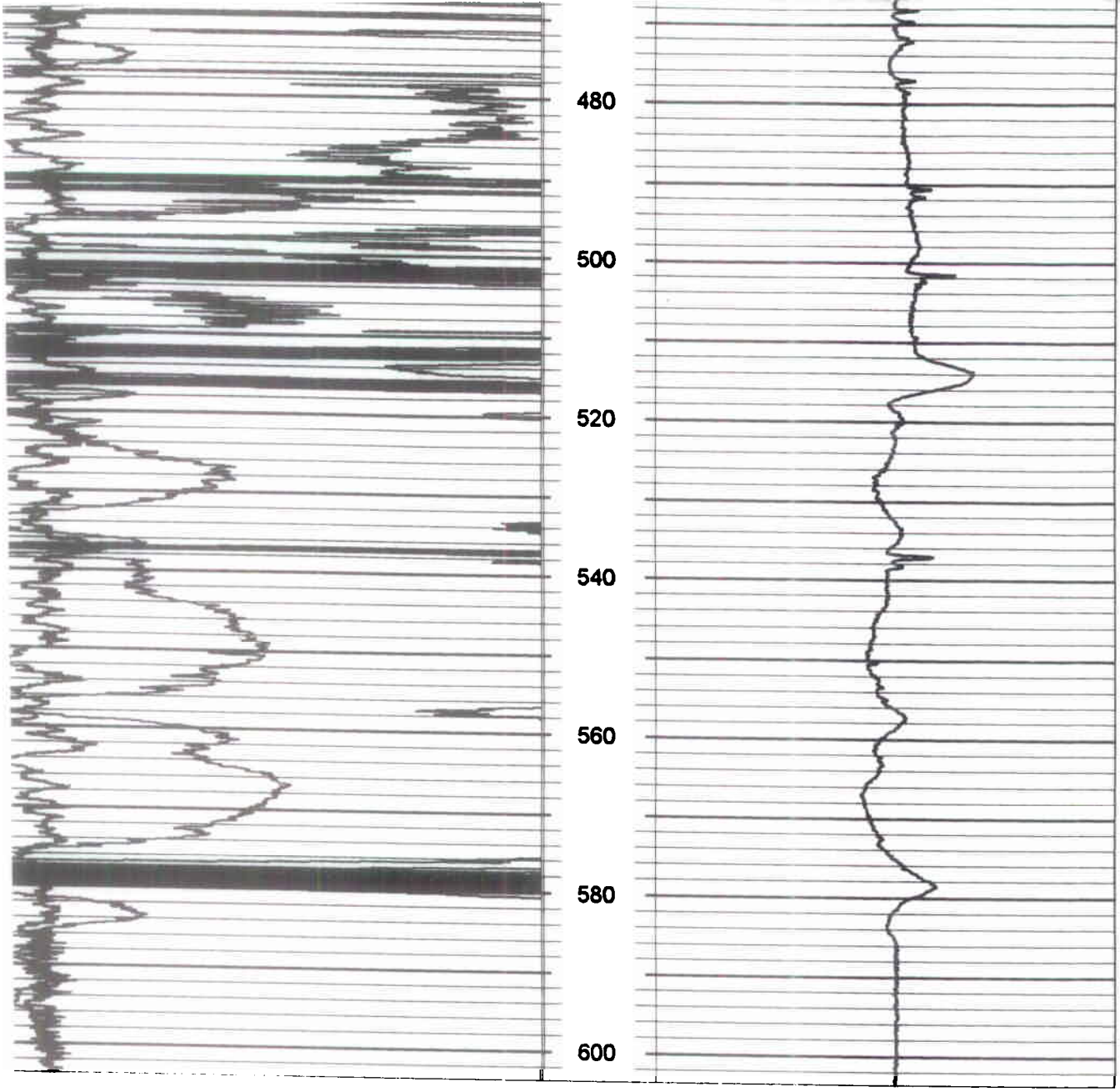
2 14



AB 303 Project

T27S/R38E-09 C01

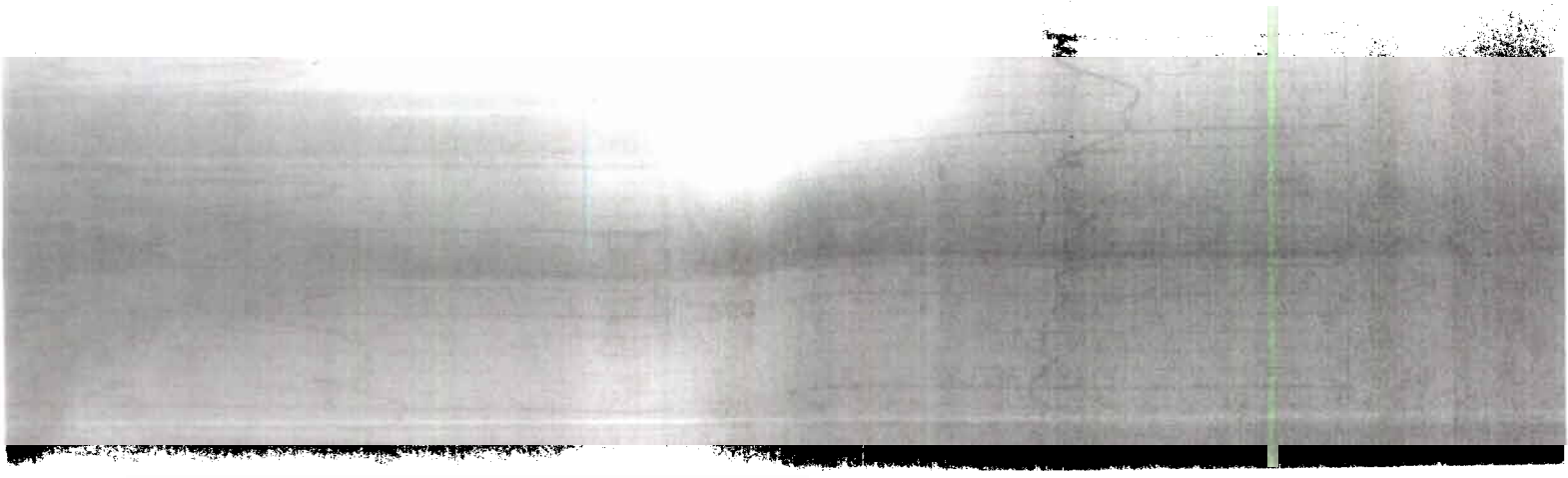
3/4



AB 303 Project

T27S/R38E-09 C01

4|4

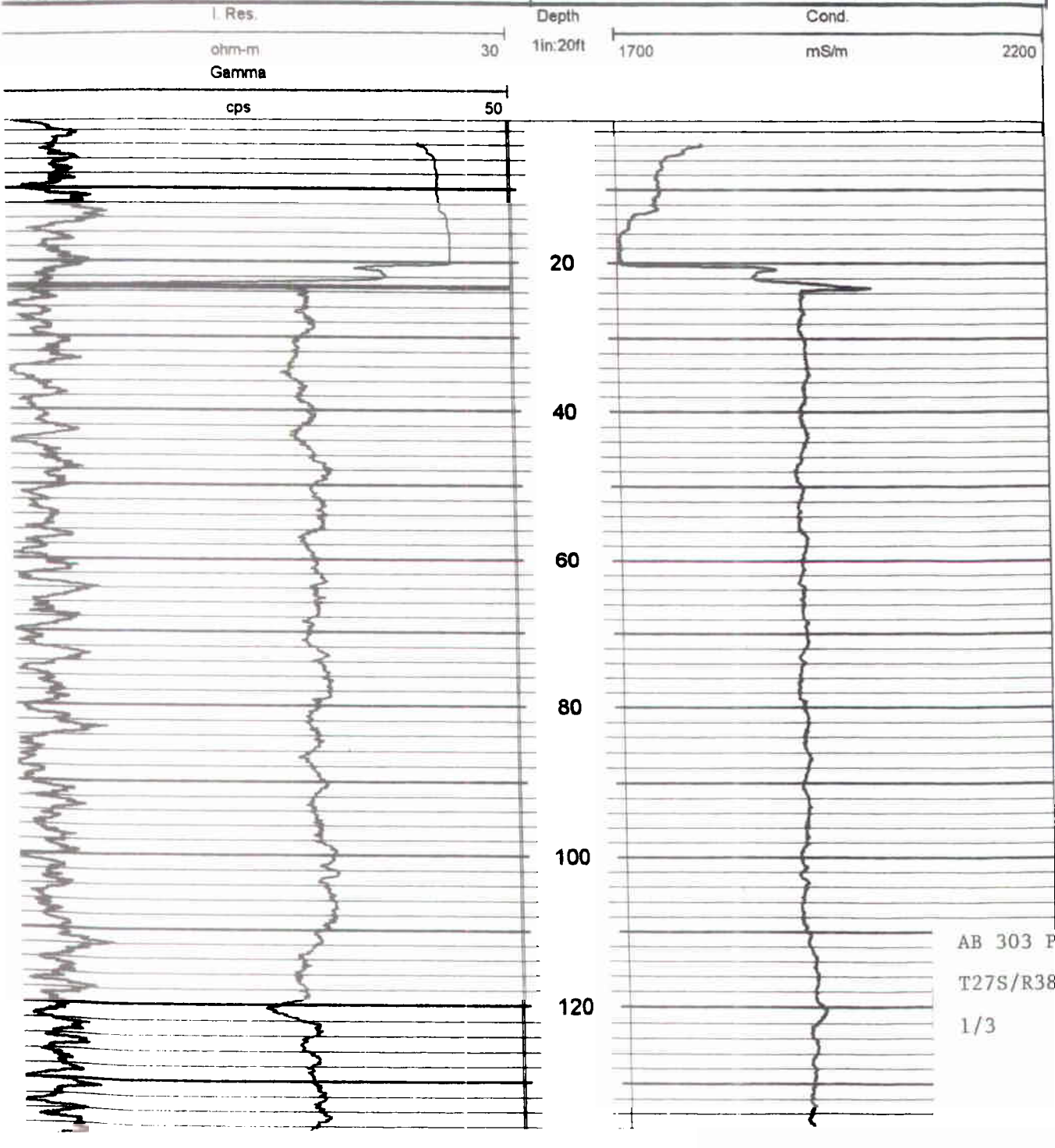


COMPANY SVM

Location: T27S / R38E - Section 10 C01

Well	Navy well 060400
Date	8-31-06
BH Fluid	
Casing	8.75
File Name	060400 083106
Depth Driller	
Depth Logger	
Logged by:	JT
Witness:	

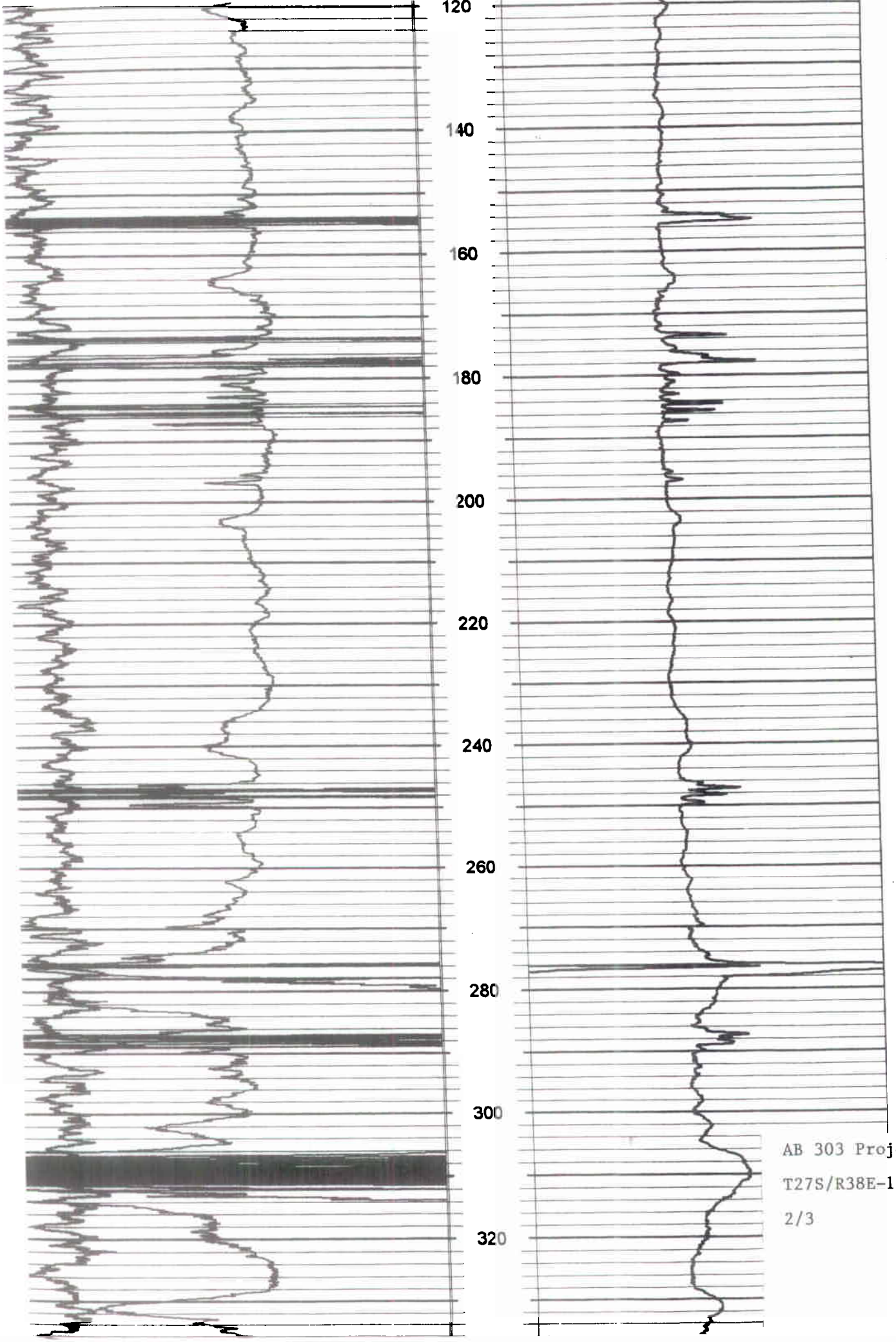
OTHER SERVICES



AB 303 Project

T27S/R38E-10 C01

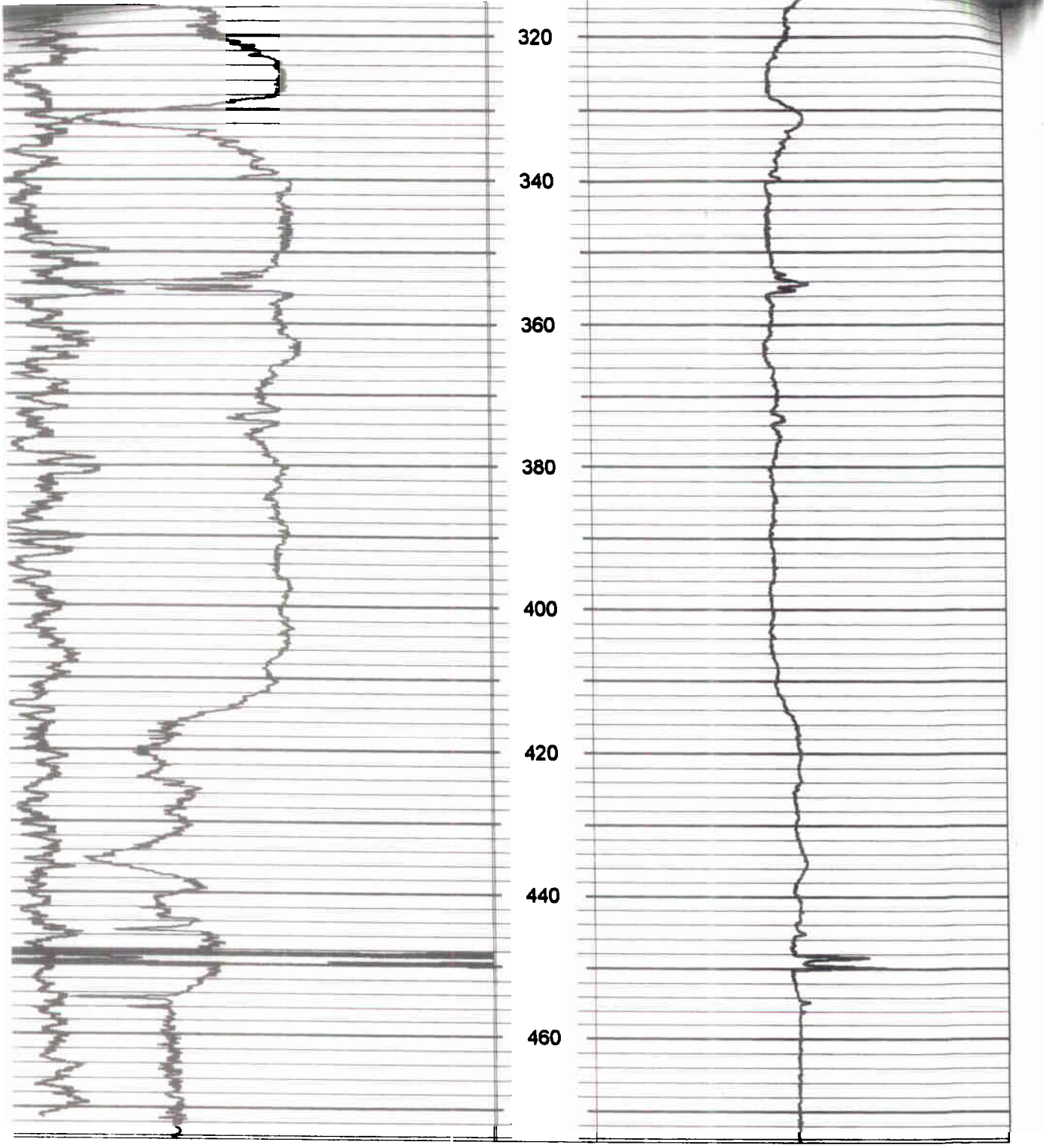
1/3



AB 303 Project

T27S/R38E-10 C01

2/3



424

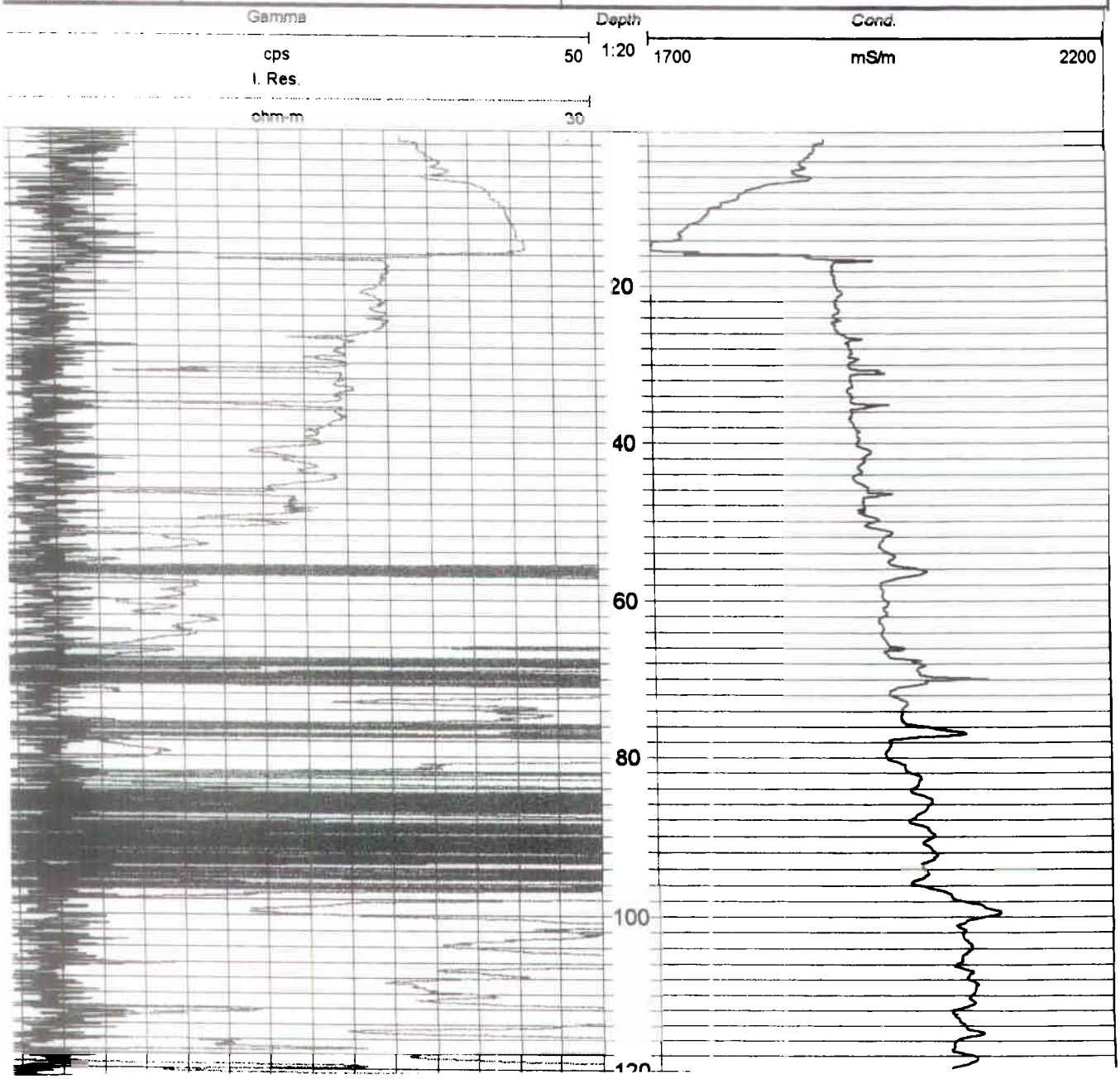
AB 303 Project

T27S/R38E-10 C01

3/3

COMPANY	SVM
Location:	RIDGECREST T27S / R38E - Section 10 C02
Well	SW seabee
Date	11/9/06
BH Fluid	
Casing	10
File Name	SW seabee 4 110906
Depth Driller	
Depth Logger	
Logged by:	JT
Witness:	

OTHER SERVICES



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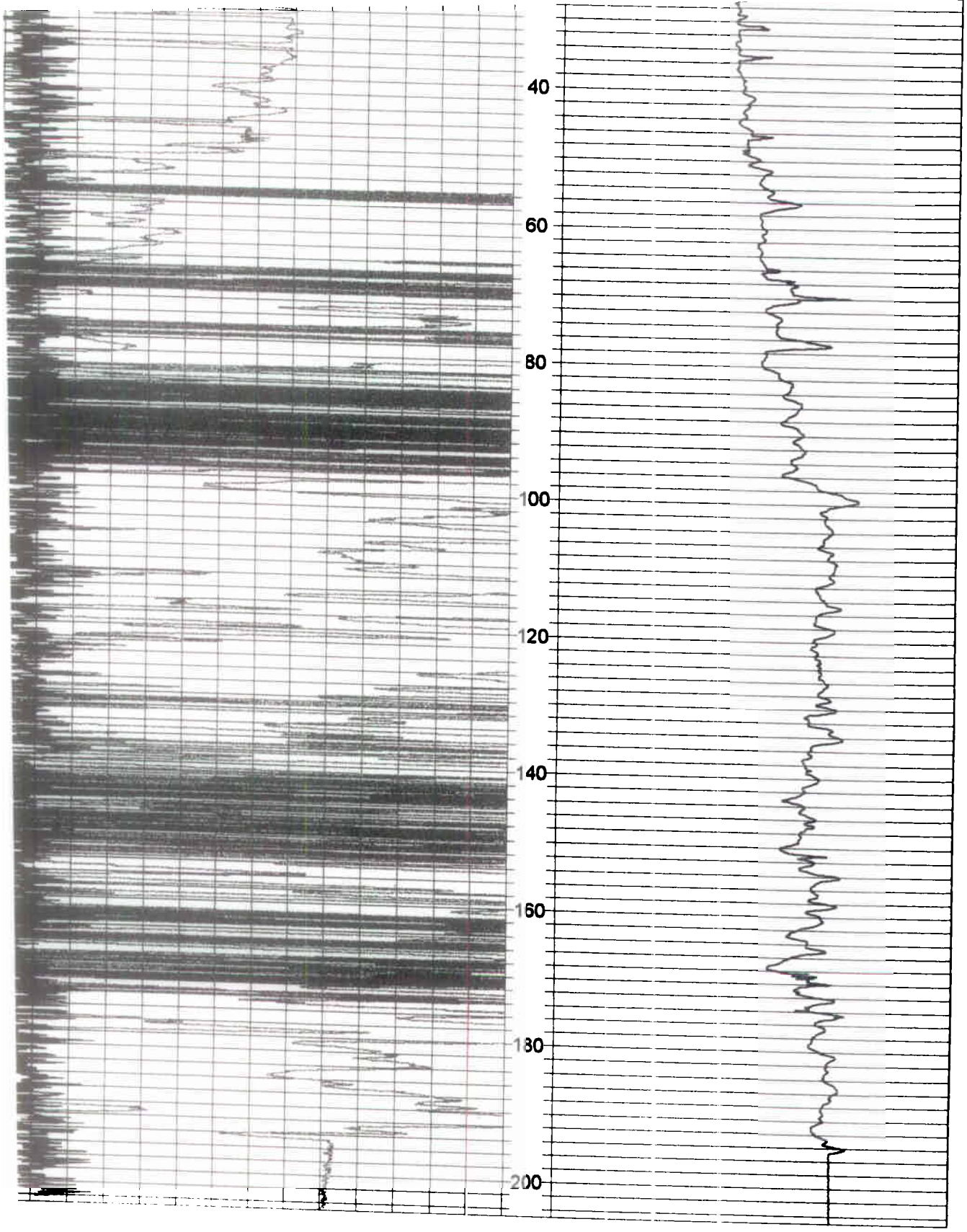
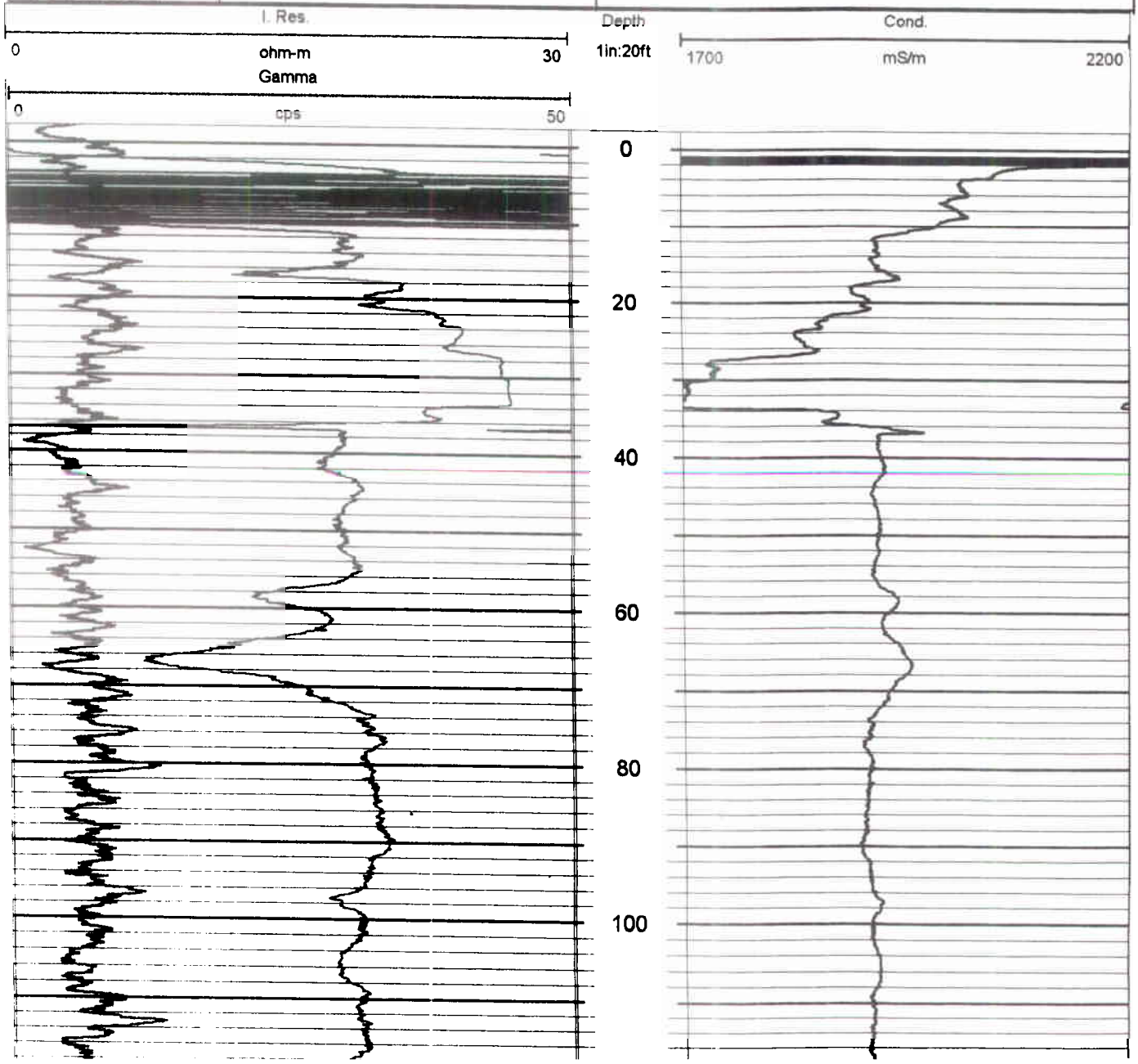
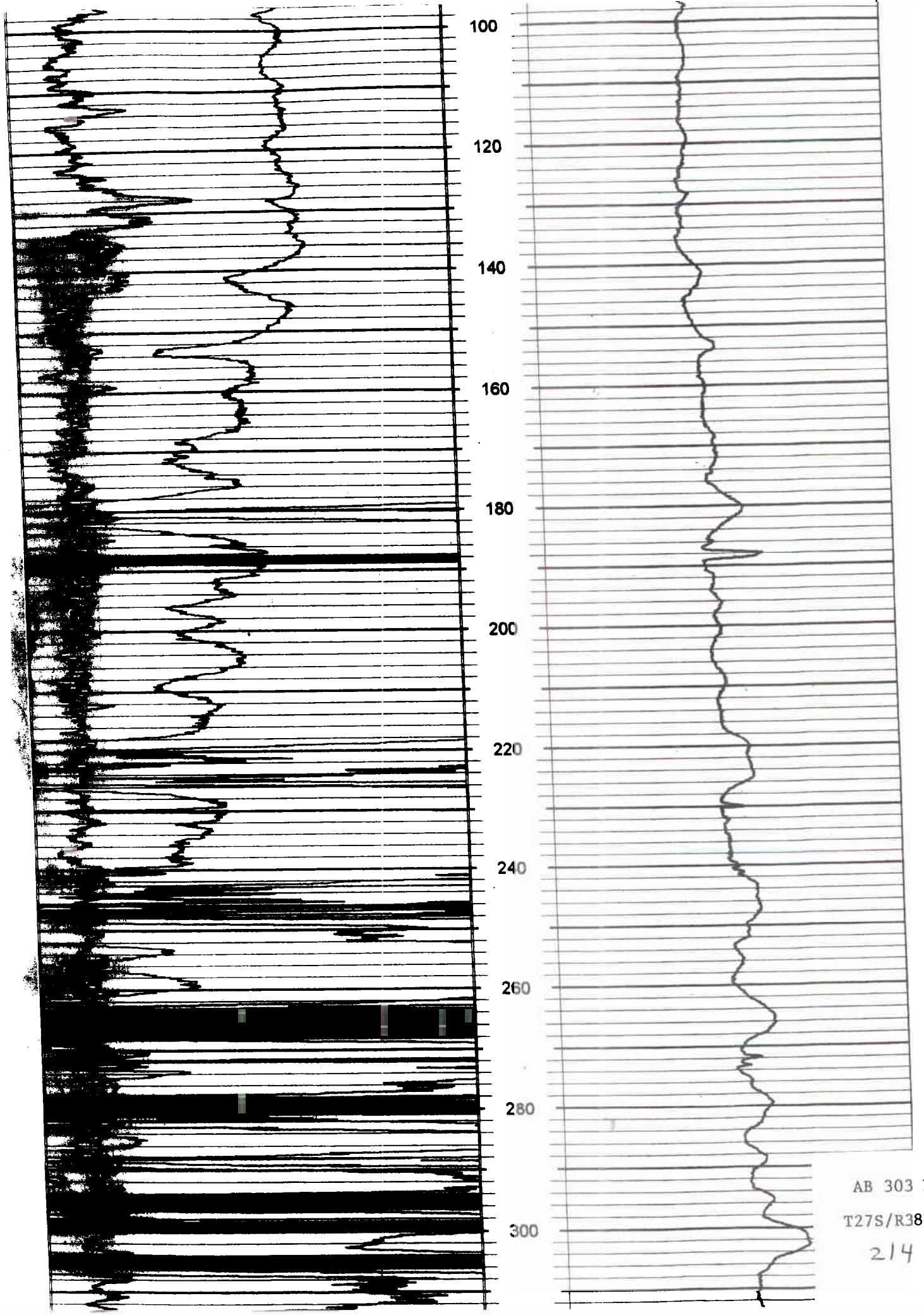


Well T27S / R38E - Section 10 CO2

2/2

	COMPANY:
	Location: BIKE FRAME RD T27S / R38E - Section 13 A02
Well AB303	OTHER SERVICES
Date 6-8-06 BH Fluid	
Casing	
File Name	AB303#16806
Depth Driller	962
Depth Logged	962
Logged by:	RODNEY
Witness:	

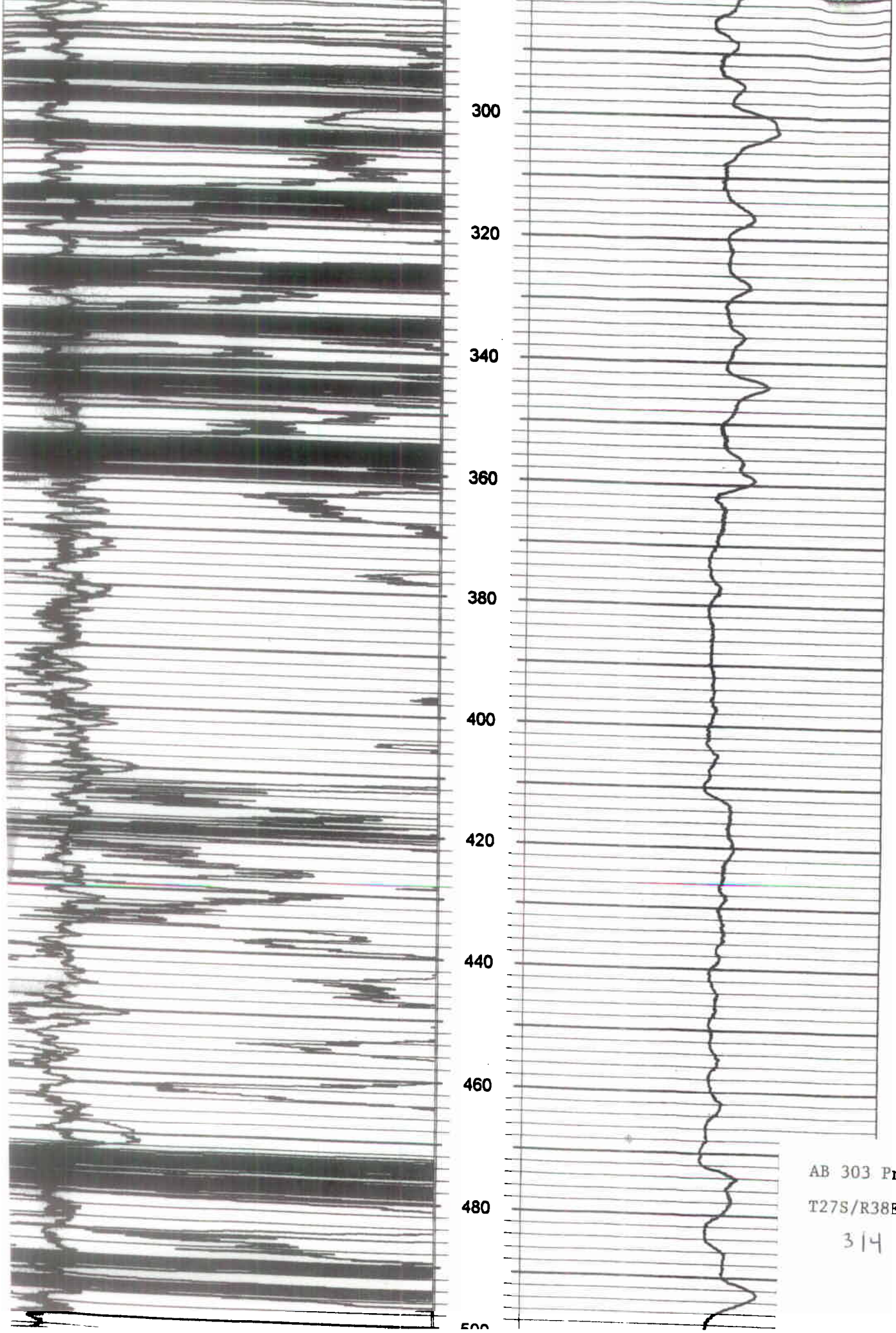




AB 303 Project

T27S/R38E-13 A02

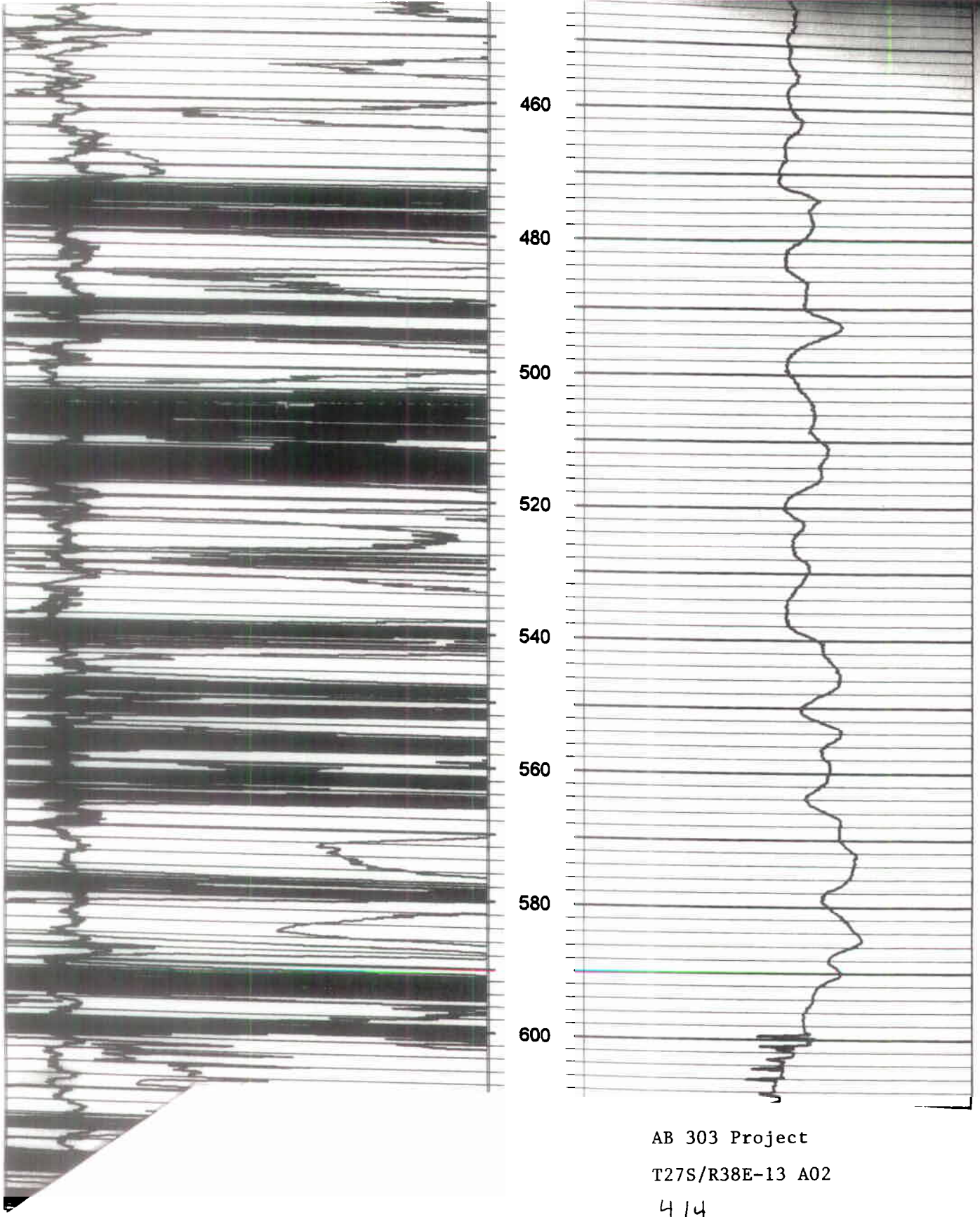
214



AB 303 Project

T27S/R38E-13 A02

3 | 4



AB 303 Project

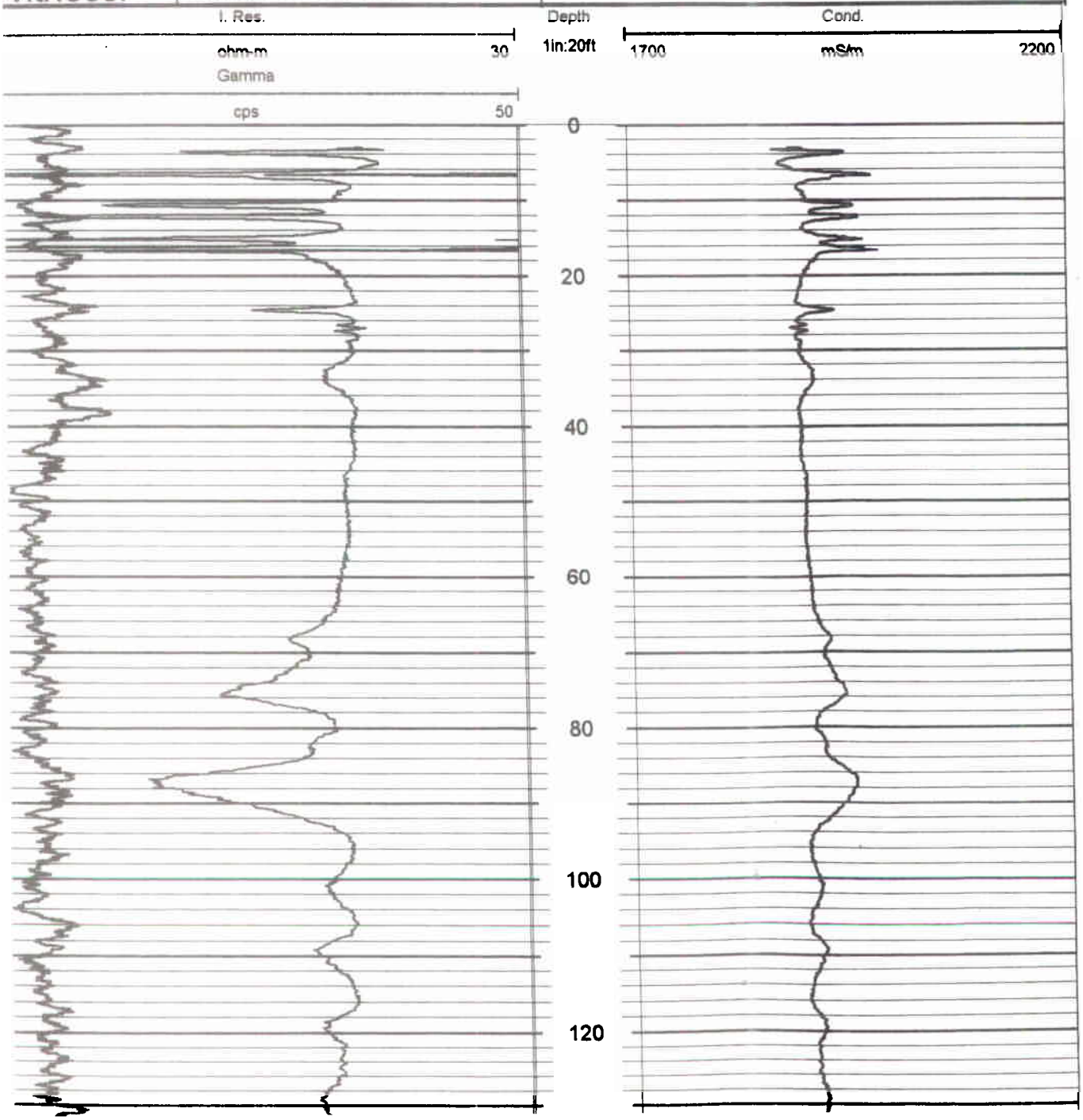
T27S/R38E-13 A02

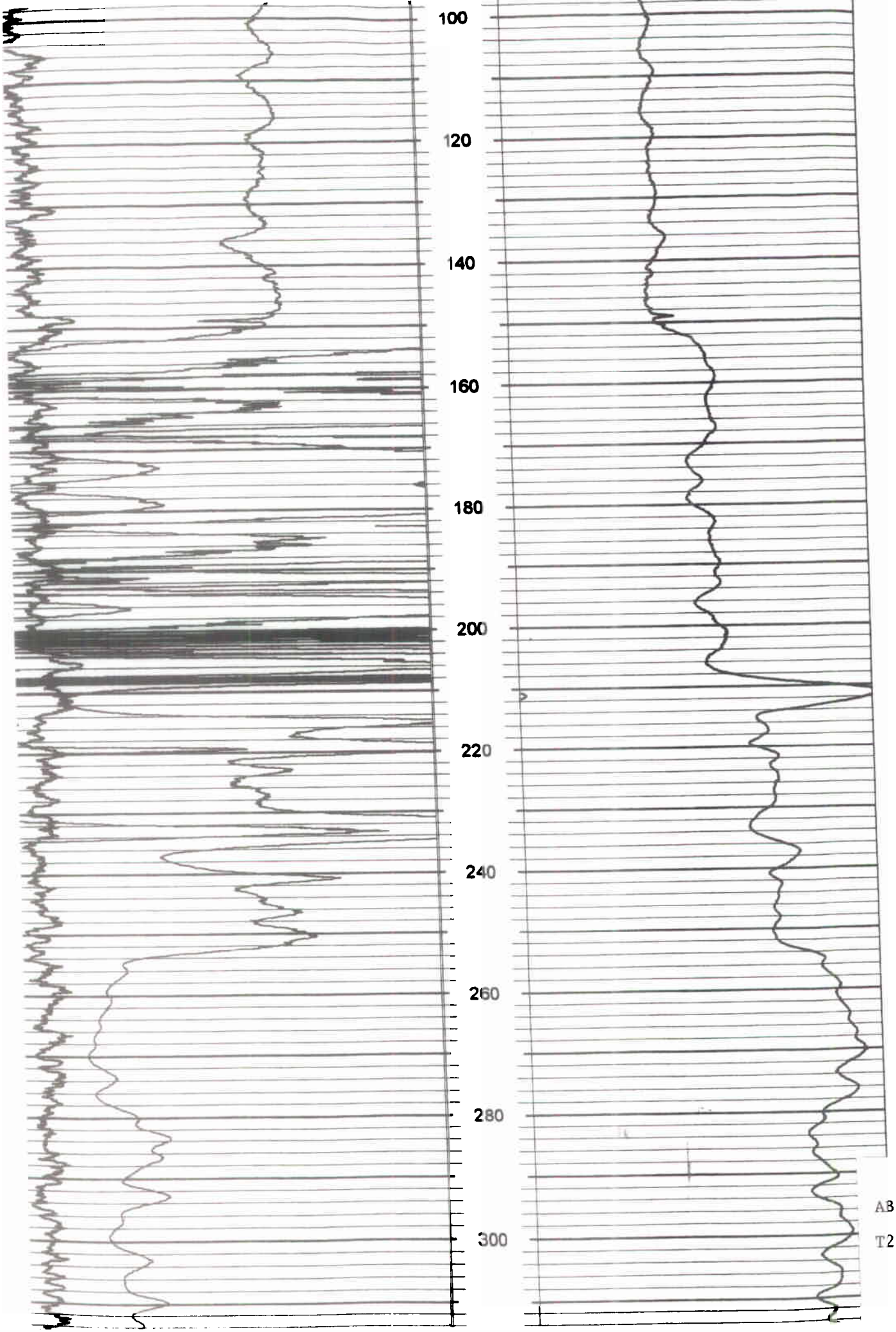
4/4

COMPANY	US NAVY
Location:	T27S / R38E - Section 14 M01
Well	AB303-0
Date	060107
BH Fluid	
Casing	4' of 18" steel
File Name	AB303
Depth Driller	400'
Depth Logger	
Logged by:	DAN FOREMAN
Witness:	MIKE STONER

OTHER SERVICES

WELL LOCATION: T27S / R38E-Section 14M01

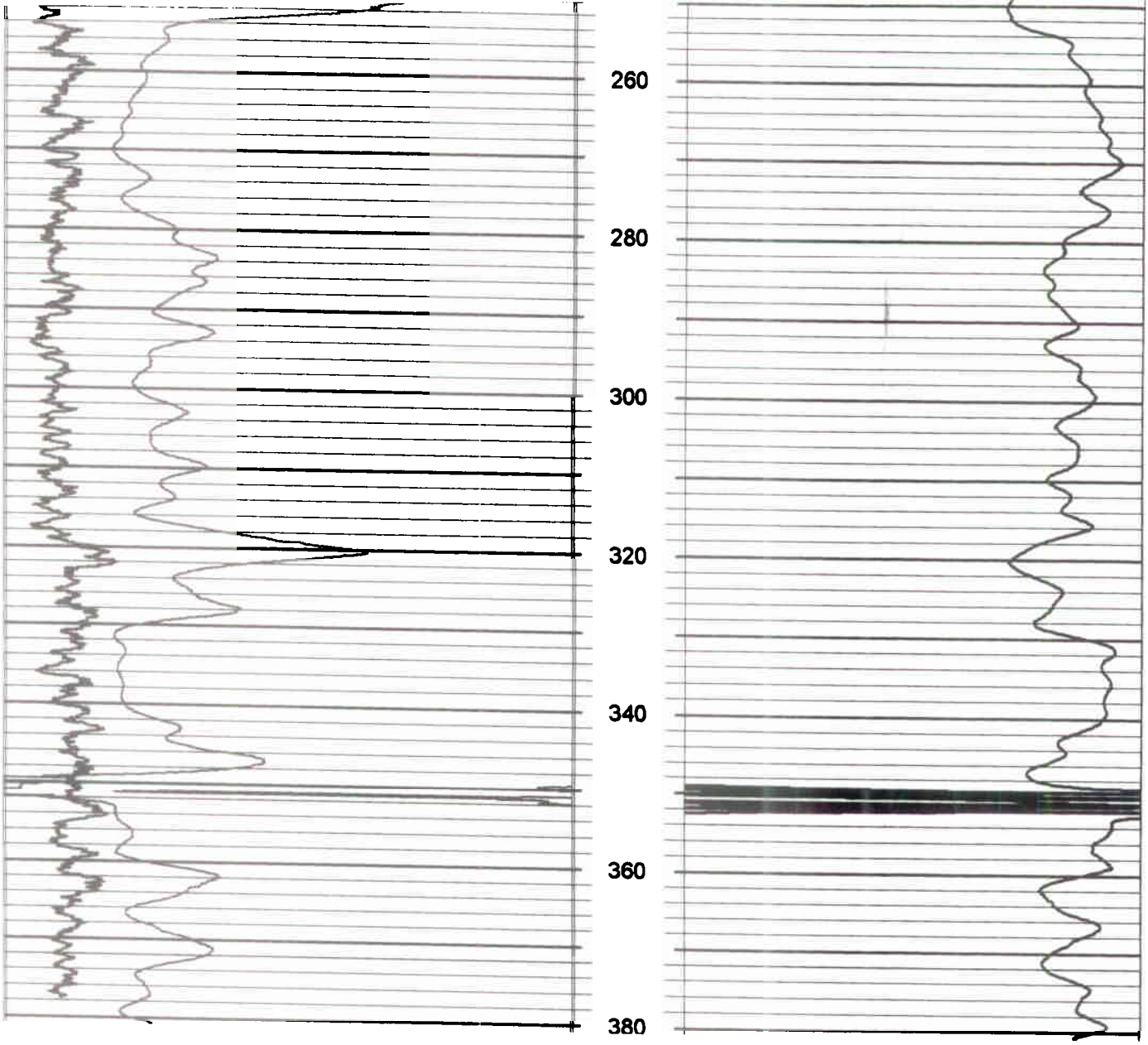




AB 303 Project

T27S/R38E-14M0

2/3



AB 303 Project

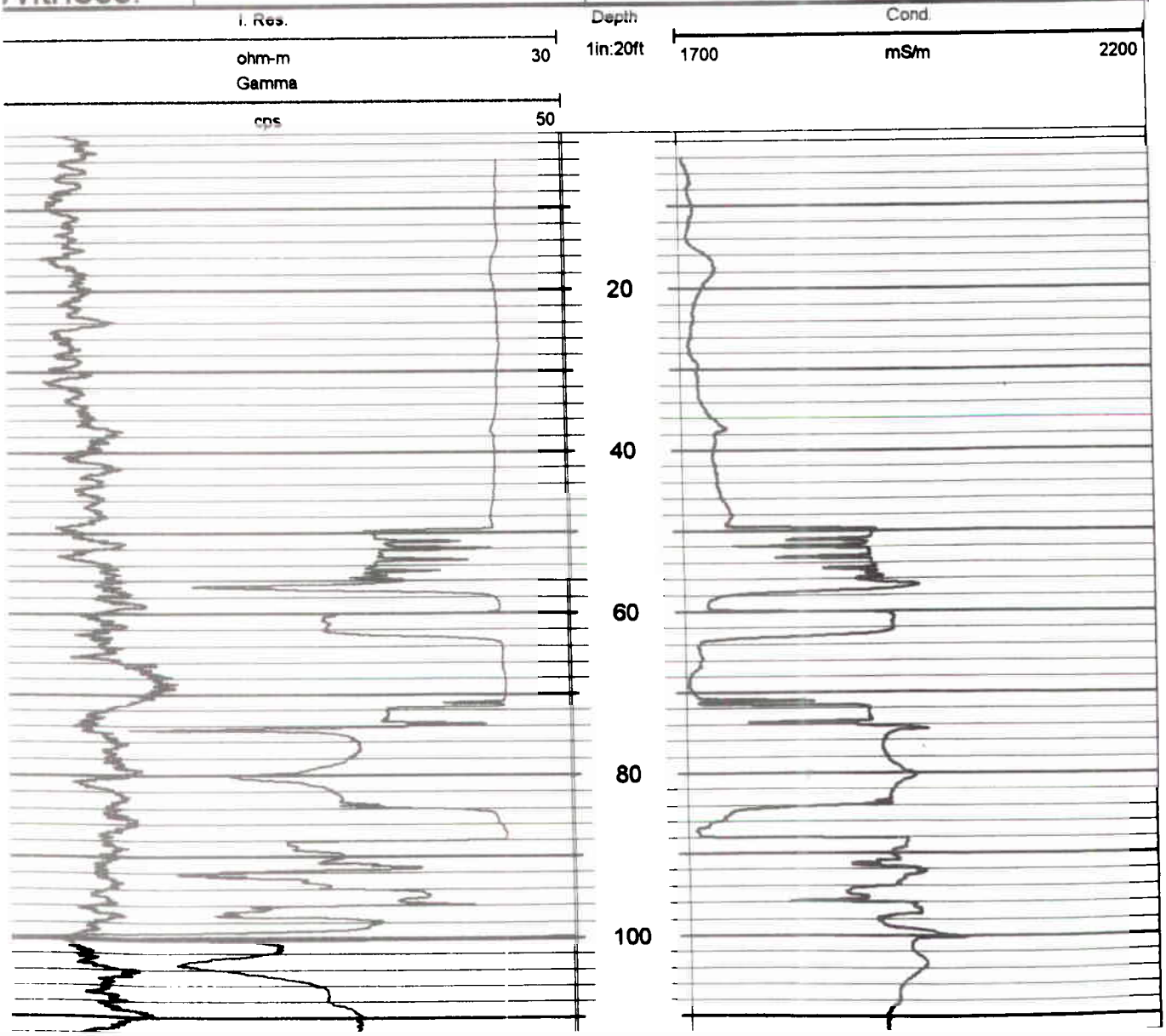
T27S/R38E-14 M01

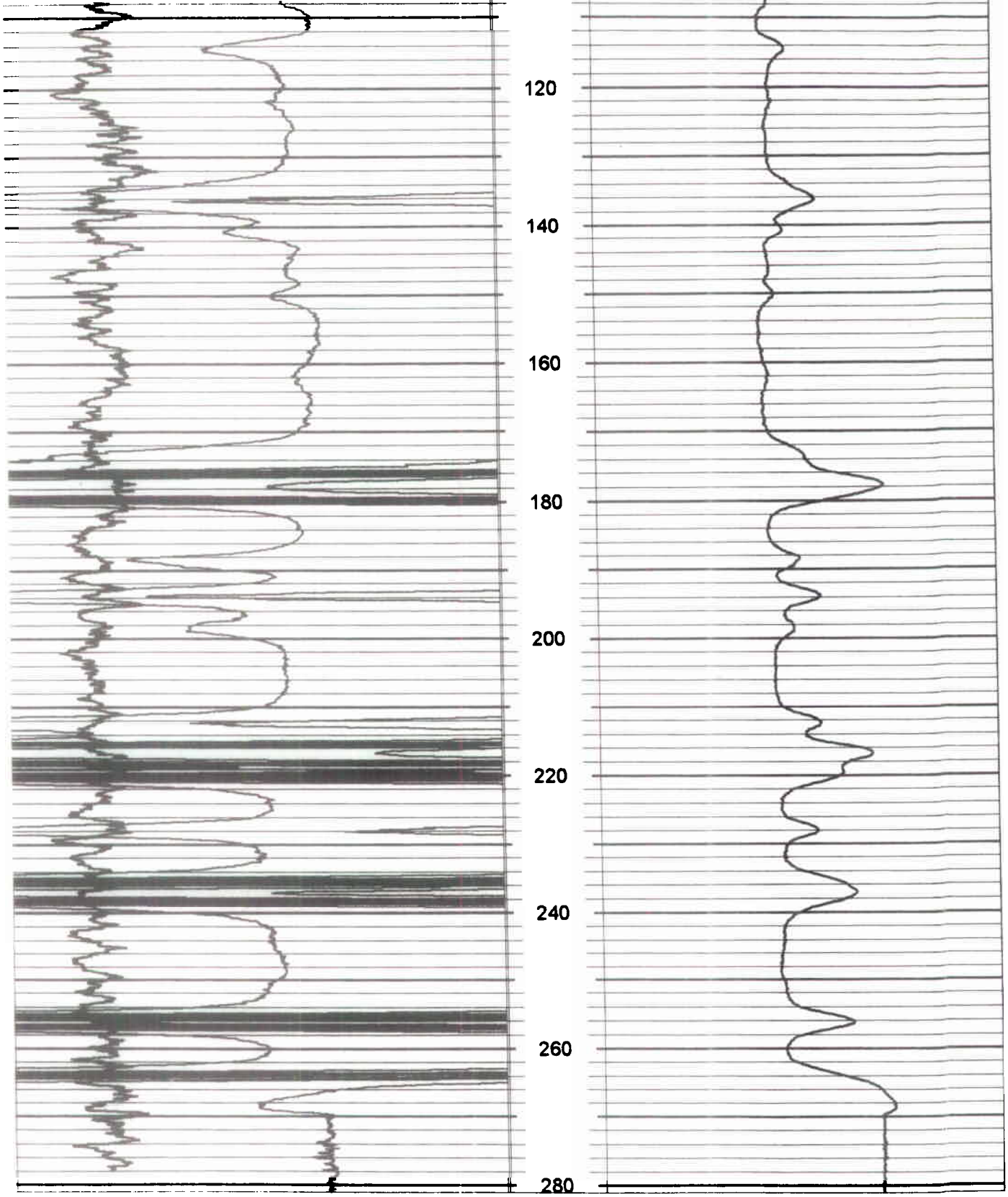
3/3

COMPANY	NAVY
Location:	RED ROCK RD 9MI SOUTH OF INYOKERN
Well	07020 WELL
Date	3-9-07
BH Fluid	
Casing	
File Name	07020 WELL
Depth Driller	605
Depth Logger	
Logged by:	RODNEY
Witness:	

Location: T27S/R38E - Section 27 M01

OTHER SERVICES





AB 303 Project

T27S/R38E-27M01

2/2

BC LABORATORIES, INC.

Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-01 | **Client Sample Name:** Marguard well, 2/7/2007 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	1.8	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	ND	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	65	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	0.64	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	J
Bicarbonate	88	mg/L	2.9	2.9	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Carbonate	25	mg/L	1.5	1.5	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Alkalinity as CaCO3	110	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Chloride	5.0	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	
Fluoride	0.22	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	
Nitrate as NO3	12	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	A26,S05
Sulfate	14	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	
Total Cations	2.9	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Total Anions	2.9	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	4.5	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
pH	8.98	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	280	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	180	mg/L	10	10	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	1	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1253	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation,, detachment or third party interpretation.

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-02 | **Client Sample Name:** Pennix Well, 2/7/2007 12:35:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	35	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	5.5	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	54	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	2.3	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	140	mg/L	2.9	2.9	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Carbonate	6.3	mg/L	1.5	1.5	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Chloride	25	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	
Fluoride	0.71	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	
Nitrate as NO3	7.7	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	A26,S05
Sulfate	53	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	
Total Cations	4.6	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Total Anions	4.5	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	110	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
pH	8.10	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	420	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	290	mg/L	20	20	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	2	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1253	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	A26,S05

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-02 | **Client Sample Name:** Pennix Well, 2/7/2007 12:35:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	2.2	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	49	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	250	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	3.3	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	5.4	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:28	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.3	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	43	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-03 | **Client Sample Name:** 25138-03 GO1, 2/7/2007 1:52:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	97	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	40	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	72	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	6.8	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	480	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1673	ND	A01,S05
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1673	ND	A01,S05
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1673	ND	A01,S05
Alkalinity as CaCO3	390	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Chloride	23	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	
Fluoride	0.75	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	
Nitrate as NO3	6.8	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	A26,S05
Sulfate	130	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	
Total Cations	11	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Total Anions	11	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	410	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
pH	7.69	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	910	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	520	mg/L	33	33	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	3.333	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1253	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	A26,S05

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-03 | **Client Sample Name:** 25138-03 GO1, 2/7/2007 1:52:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	4.4	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	60	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	160	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	12	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	0.76	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Manganese	3.6	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:26	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.9	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	8.8	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	J

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-04 | **Client Sample Name:** Five-mile Cyn, 2/19/2007 2:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	94	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	43	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	97	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	9.0	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	390	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	320	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	60	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	
Fluoride	1.4	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	0.10	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	J
Sulfate	220	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	
Total Cations	13	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	13	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	410	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.27	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	1000	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	740	mg/L	33	33	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	3.333	BQC0314	ND	
MBAS	0.039	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	J
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-04 | **Client Sample Name:** Five-mile Cyn, 2/19/2007 2:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	33	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Boron	370	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	0.17	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	0.17	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	2.4	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Iron	43	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Lead	0.40	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	0.16	J
Total Recoverable Manganese	23	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:19	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.2	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-05 | **Client Sample Name:** Nine-mile Cyn, 2/19/2007 2:40:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	93	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	73	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	90	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	7.5	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	490	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	57	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	500	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	35	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Fluoride	1.1	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Sulfate	150	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Total Cations	15	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	14	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	530	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.38	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	1100	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	640	mg/L	50	50	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	5	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-05 | **Client Sample Name:** Nine-mile Cyn, 2/19/2007 2:40:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	46	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	170	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	72	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	31	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:17	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	0.55	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-06 | **Client Sample Name:** No name Cyn, 2/19/2007 3:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	110	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	59	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	96	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	5.4	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	620	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	510	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	29	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Fluoride	2.3	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Sulfate	180	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Total Cations	15	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	15	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	520	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.08	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	1200	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	720	mg/L	50	50	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	5	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 13:02	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (Metals)

BCL Sample ID: 0702148-06 | **Client Sample Name:** No name Cyn, 2/19/2007 3:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	24	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	260	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	390	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:15	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	0.60	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-07 | **Client Sample Name:** Sand Cyn, 2/19/2007 3:26:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	79	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	25	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	90	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	6.3	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	370	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	35	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	360	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	23	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Fluoride	1.7	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Sulfate	94	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Total Cations	10	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	10	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	300	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.38	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	810	umhos/cm	1.0	1.0	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	480	mg/L	33	33	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	3.333	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 13:02	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (Metals)

BCL Sample ID: 0702148-07 | **Client Sample Name:** Sand Cyn, 2/19/2007 3:26:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	14	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	48	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	400	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:04	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/19/2007 11:51

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQB1112	Duplicate	0702131-01	126.54	126.62		mg/L	0.1		10		
		Matrix Spike	0702131-01	126.54	218.90	101.01	mg/L		91.4		80 - 120	
		Matrix Spike Duplicate	0702131-01	126.54	219.09	101.01	mg/L	0.2	91.6	10	80 - 120	
Fluoride	BQB1112	Duplicate	0702131-01	0.30900	0.31600		mg/L	2.2		10		
		Matrix Spike	0702131-01	0.30900	1.3848	1.0101	mg/L		107		80 - 120	
		Matrix Spike Duplicate	0702131-01	0.30900	1.3263	1.0101	mg/L	5.8	101	10	80 - 120	
Nitrate as NO3	BQB1112	Duplicate	0702131-01	37.902	37.947		mg/L	0.1		10		
		Matrix Spike	0702131-01	37.902	60.696	22.358	mg/L		102		80 - 120	
		Matrix Spike Duplicate	0702131-01	37.902	60.553	22.358	mg/L	1.0	101	10	80 - 120	
Sulfate	BQB1112	Duplicate	0702131-01	54.532	54.573		mg/L	0.1		10		
		Matrix Spike	0702131-01	54.532	163.56	101.01	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0702131-01	54.532	163.41	101.01	mg/L	0	108	10	80 - 120	
Chloride	BQB1174	Duplicate	0702148-07	22.669	22.643		mg/L	0.1		10		
		Matrix Spike	0702148-07	22.669	133.30	101.01	mg/L		110		80 - 120	
		Matrix Spike Duplicate	0702148-07	22.669	133.35	101.01	mg/L	0	110	10	80 - 120	
Fluoride	BQB1174	Duplicate	0702148-07	1.7250	1.6990		mg/L	1.5		10		
		Matrix Spike	0702148-07	1.7250	2.8192	1.0101	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0702148-07	1.7250	2.7293	1.0101	mg/L	8.3	99.4	10	80 - 120	
Nitrate as NO3	BQB1174	Duplicate	0702148-07	ND	ND		mg/L			10		
		Matrix Spike	0702148-07	ND	22.478	22.358	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0702148-07	ND	22.465	22.358	mg/L	1.0	100	10	80 - 120	
Sulfate	BQB1174	Duplicate	0702148-07	93.522	93.429		mg/L	0.1		10		
		Matrix Spike	0702148-07	93.522	200.75	101.01	mg/L		106		80 - 120	
		Matrix Spike Duplicate	0702148-07	93.522	201.00	101.01	mg/L	0	106	10	80 - 120	
MBAS	BQB1253	Duplicate	0702128-01	ND	0.078200		mg/L			20		J,A01
		Matrix Spike	0702128-01	ND	0.46540	0.40000	mg/L		116		80 - 120	J,A01
		Matrix Spike Duplicate	0702128-01	ND	0.46540	0.40000	mg/L	0	116	20	80 - 120	J,A01

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
MBAS	BQB1254	Duplicate	0702142-01	ND	ND		mg/L			20		A01
		Matrix Spike	0702142-01	ND	0.43820	0.40000	mg/L		110		80 - 120	J,A01
		Matrix Spike Duplicate	0702142-01	ND	0.43820	0.40000	mg/L	0	110	20	80 - 120	J,A01
Nitrite as N	BQB1455	Duplicate	0702148-01	ND	ND		ug/L			10		A26,S05
		Matrix Spike	0702148-01	ND	509.25	526.32	ug/L		96.8		90 - 110	A26,S05
		Matrix Spike Duplicate	0702148-01	ND	510.37	526.32	ug/L	0.2	97.0	10	90 - 110	A26,S05
pH	BQB1483	Duplicate	0702148-01	8.9810	8.9950		pH Units	0.2		20		
Electrical Conductivity @ 25 C	BQB1488	Duplicate	0702142-01	300.00	301.00		umhos/cm	0.3		10		
Total Recoverable Calcium	BQB1600	Duplicate	0702148-01	1.8027	1.7628		mg/L	2.2		20		
		Matrix Spike	0702148-01	1.8027	12.701	10.000	mg/L		109		75 - 125	
		Matrix Spike Duplicate	0702148-01	1.8027	12.573	10.000	mg/L	0.9	108	20	75 - 125	
Total Recoverable Magnesium	BQB1600	Duplicate	0702148-01	ND	ND		mg/L			20		
		Matrix Spike	0702148-01	ND	10.429	10.000	mg/L		104		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	10.463	10.000	mg/L	1.0	105	20	75 - 125	
Total Recoverable Sodium	BQB1600	Duplicate	0702148-01	65.129	65.208		mg/L	0.1		20		
		Matrix Spike	0702148-01	65.129	76.374	10.000	mg/L		112		75 - 125	
		Matrix Spike Duplicate	0702148-01	65.129	77.870	10.000	mg/L	12.6	127	20	75 - 125	A03
Total Recoverable Potassium	BQB1600	Duplicate	0702148-01	0.63810	0.62889		mg/L	1.5		20		J
		Matrix Spike	0702148-01	0.63810	10.369	10.000	mg/L		97.3		75 - 125	
		Matrix Spike Duplicate	0702148-01	0.63810	10.271	10.000	mg/L	1.0	96.3	20	75 - 125	
Bicarbonate	BQB1673	Duplicate	0702104-02	191.28	191.28		mg/L	0		10		A01
		Matrix Spike	0702104-02	191.28	344.32	152.38	mg/L		100		80 - 120	A01
		Matrix Spike Duplicate	0702104-02	191.28	345.48	152.38	mg/L	1.0	101	10	80 - 120	A01
Carbonate	BQB1673	Duplicate	0702104-02	ND	ND		mg/L			10		A01
Hydroxide	BQB1673	Duplicate	0702104-02	ND	ND		mg/L			10		A01

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	Control Limits RPD	Control Limits Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Bicarbonate	BQB1674	Duplicate	0702128-01	197.08	200.56		mg/L	1.8		10		A01
		Matrix Spike	0702128-01	197.08	348.96	152.38	mg/L		99.7		80 - 120	A01
		Matrix Spike Duplicate	0702128-01	197.08	350.12	152.38	mg/L	0.3	100	10	80 - 120	A01
Carbonate	BQB1674	Duplicate	0702128-01	ND	ND		mg/L			10		A01
Hydroxide	BQB1674	Duplicate	0702128-01	ND	ND		mg/L			10		A01
Total Dissolved Solids @ 180 C	BQC0314	Duplicate	0702142-01	220.00	210.00		mg/L	4.7		10		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Antimony	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.612	20.408	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	21.467	20.408	ug/L	3.9	105	20	70 - 130	
Total Recoverable Arsenic	BQB1596	Duplicate	0701983-01	1.1640	0.98200		ug/L	17.0		20		J
		Matrix Spike	0701983-01	1.1640	54.477	51.020	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0701983-01	1.1640	56.263	51.020	ug/L	3.8	108	20	70 - 130	
Total Recoverable Beryllium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.852	20.408	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	22.407	20.408	ug/L	7.5	110	20	70 - 130	
Total Recoverable Cadmium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.143	20.408	ug/L		98.7		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	21.162	20.408	ug/L	5.2	104	20	70 - 130	
Total Recoverable Lead	BQB1596	Duplicate	0701983-01	0.43200	0.40900		ug/L	5.5		20		J
		Matrix Spike	0701983-01	0.43200	51.840	51.020	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701983-01	0.43200	54.514	51.020	ug/L	4.8	106	20	70 - 130	
Total Recoverable Selenium	BQB1596	Duplicate	0701983-01	5.3400	5.3120		ug/L	0.5		20		
		Matrix Spike	0701983-01	5.3400	62.629	51.020	ug/L		112		70 - 130	
		Matrix Spike Duplicate	0701983-01	5.3400	64.250	51.020	ug/L	2.6	115	20	70 - 130	
Total Recoverable Thallium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	19.829	20.408	ug/L		97.2		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	20.857	20.408	ug/L	4.8	102	20	70 - 130	
Total Recoverable Aluminum	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	995.12	1000.0	ug/L		99.5		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	994.82	1000.0	ug/L	0	99.5	20	75 - 125	
Total Recoverable Barium	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	219.65	200.00	ug/L		110		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	220.18	200.00	ug/L	0	110	20	75 - 125	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Boron	BQB1600	Duplicate	0702148-01	117.12	114.15		ug/L	2.6		20		
		Matrix Spike	0702148-01	117.12	1138.2	1000.0	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702148-01	117.12	1155.1	1000.0	ug/L	1.9	104	20	75 - 125	
Total Recoverable Chromium	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	200.60	200.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	202.54	200.00	ug/L	1.0	101	20	75 - 125	
Total Recoverable Copper	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	216.87	200.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	219.10	200.00	ug/L	1.8	110	20	75 - 125	
Total Recoverable Iron	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	414.86	400.00	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	419.71	400.00	ug/L	1.0	105	20	75 - 125	
Total Recoverable Manganese	BQB1600	Duplicate	0702148-01	8.9510	8.7453		ug/L	2.3		20		J
		Matrix Spike	0702148-01	8.9510	191.45	200.00	ug/L		91.2		75 - 125	
		Matrix Spike Duplicate	0702148-01	8.9510	192.97	200.00	ug/L	0.9	92.0	20	75 - 125	
Total Recoverable Nickel	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	450.66	400.00	ug/L		113		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	444.02	400.00	ug/L	1.8	111	20	75 - 125	
Total Recoverable Silver	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	101.54	100.00	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	101.86	100.00	ug/L	0	102	20	75 - 125	
Total Recoverable Zinc	BQB1600	Duplicate	0702148-01	12.141	8.8994		ug/L	30.8		20		J,A02
		Matrix Spike	0702148-01	12.141	263.77	200.00	ug/L		126		75 - 125	Q03
		Matrix Spike Duplicate	0702148-01	12.141	242.11	200.00	ug/L	9.1	115	20	75 - 125	
Total Recoverable Antimony	BQB1603	Duplicate	0702010-01	1.2140	1.2670		ug/L	4.3		20		J
		Matrix Spike	0702010-01	1.2140	21.545	20.000	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.2140	22.537	20.000	ug/L	4.8	107	20	70 - 130	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Arsenic	BQB1603	Duplicate	0702010-01	8.9940	9.1820		ug/L	2.1		20		
		Matrix Spike	0702010-01	8.9940	58.594	50.000	ug/L		99.2		70 - 130	
		Matrix Spike Duplicate	0702010-01	8.9940	61.391	50.000	ug/L	5.7	105	20	70 - 130	
Total Recoverable Beryllium	BQB1603	Duplicate	0702010-01	ND	ND		ug/L			20		
		Matrix Spike	0702010-01	ND	22.258	20.000	ug/L		111		70 - 130	
		Matrix Spike Duplicate	0702010-01	ND	24.092	20.000	ug/L	7.8	120	20	70 - 130	
Total Recoverable Cadmium	BQB1603	Duplicate	0702010-01	0.21600	0.26600		ug/L	20.7		20		J,A02
		Matrix Spike	0702010-01	0.21600	22.176	20.000	ug/L		110		70 - 130	
		Matrix Spike Duplicate	0702010-01	0.21600	23.116	20.000	ug/L	3.6	114	20	70 - 130	
Total Recoverable Lead	BQB1603	Duplicate	0702010-01	1.4070	1.8140		ug/L	25.3		20		A02
		Matrix Spike	0702010-01	1.4070	54.693	50.000	ug/L		107		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.4070	57.345	50.000	ug/L	4.6	112	20	70 - 130	
Total Recoverable Selenium	BQB1603	Duplicate	0702010-01	1.6060	1.7130		ug/L	6.4		20		J
		Matrix Spike	0702010-01	1.6060	49.358	50.000	ug/L		95.5		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.6060	53.240	50.000	ug/L	7.6	103	20	70 - 130	
Total Recoverable Thallium	BQB1603	Duplicate	0702010-01	ND	ND		ug/L			20		
		Matrix Spike	0702010-01	ND	20.850	20.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0702010-01	ND	22.015	20.000	ug/L	5.6	110	20	70 - 130	
Total Recoverable Mercury	BQC0138	Duplicate	0702148-07	ND	ND		ug/L			20		
		Matrix Spike	0702148-07	ND	0.98750	1.0000	ug/L		98.8		70 - 130	
		Matrix Spike Duplicate	0702148-07	ND	0.98250	1.0000	ug/L	0.6	98.2	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/19/2007 11:51

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQB1112	BQB1112-BS1	LCS	106.11	100.00	0.50	mg/L	106		90 - 110		
Fluoride	BQB1112	BQB1112-BS1	LCS	1.0620	1.0000	0.050	mg/L	106		90 - 110		
Nitrate as NO3	BQB1112	BQB1112-BS1	LCS	22.506	22.134	0.44	mg/L	102		90 - 110		
Sulfate	BQB1112	BQB1112-BS1	LCS	103.90	100.00	1.0	mg/L	104		90 - 110		
Chloride	BQB1174	BQB1174-BS1	LCS	104.71	100.00	0.50	mg/L	105		90 - 110		
Fluoride	BQB1174	BQB1174-BS1	LCS	0.99900	1.0000	0.050	mg/L	99.9		90 - 110		
Nitrate as NO3	BQB1174	BQB1174-BS1	LCS	22.209	22.134	0.44	mg/L	100		90 - 110		
Sulfate	BQB1174	BQB1174-BS1	LCS	102.64	100.00	1.0	mg/L	103		90 - 110		
MBAS	BQB1253	BQB1253-BS1	LCS	0.19200	0.20000	0.50	mg/L	96.0		85 - 115		J
MBAS	BQB1254	BQB1254-BS1	LCS	0.19200	0.20000	0.50	mg/L	96.0		85 - 115		J
Nitrite as N	BQB1455	BQB1455-BS1	LCS	489.82	500.00	50	ug/L	98.0		90 - 110		
pH	BQB1483	BQB1483-BS1	LCS	7.0030	7.0000	0.05	pH Units	100		95 - 105		
Electrical Conductivity @ 25 C	BQB1488	BQB1488-BS1	LCS	318.00	303.00	1.0	umhos/cm	105		90 - 110		
Total Recoverable Calcium	BQB1600	BQB1600-BS1	LCS	10.730	10.000	0.10	mg/L	107		85 - 115		
Total Recoverable Magnesium	BQB1600	BQB1600-BS1	LCS	10.428	10.000	0.050	mg/L	104		85 - 115		
Total Recoverable Sodium	BQB1600	BQB1600-BS1	LCS	10.542	10.000	0.50	mg/L	105		85 - 115		
Total Recoverable Potassium	BQB1600	BQB1600-BS1	LCS	9.5942	10.000	1.0	mg/L	95.9		85 - 115		
Bicarbonate	BQB1673	BQB1673-BS1	LCS	126.95	121.90	2.9	mg/L	104		90 - 110		
Bicarbonate	BQB1674	BQB1674-BS1	LCS	126.95	121.90	2.9	mg/L	104		90 - 110		
Total Dissolved Solids @ 180 C	BQC0314	BQC0314-BS1	LCS	570.00	586.00	50	mg/L	97.3		90 - 110		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/19/2007 11:51

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Antimony	BQB1596	BQB1596-BS1	LCS	20.158	20.000	2.0	ug/L	101		85 - 115		
Total Recoverable Arsenic	BQB1596	BQB1596-BS1	LCS	50.429	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1596	BQB1596-BS1	LCS	21.723	20.000	1.0	ug/L	109		85 - 115		
Total Recoverable Cadmium	BQB1596	BQB1596-BS1	LCS	20.569	20.000	1.0	ug/L	103		85 - 115		
Total Recoverable Lead	BQB1596	BQB1596-BS1	LCS	54.392	50.000	1.0	ug/L	109		85 - 115		
Total Recoverable Selenium	BQB1596	BQB1596-BS1	LCS	51.683	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Thallium	BQB1596	BQB1596-BS1	LCS	20.838	20.000	1.0	ug/L	104		85 - 115		
Total Recoverable Aluminum	BQB1600	BQB1600-BS1	LCS	961.96	1000.0	50	ug/L	96.2		85 - 115		
Total Recoverable Barium	BQB1600	BQB1600-BS1	LCS	216.50	200.00	10	ug/L	108		85 - 115		
Total Recoverable Boron	BQB1600	BQB1600-BS1	LCS	1016.1	1000.0	100	ug/L	102		85 - 115		
Total Recoverable Chromium	BQB1600	BQB1600-BS1	LCS	202.67	200.00	10	ug/L	101		85 - 115		
Total Recoverable Copper	BQB1600	BQB1600-BS1	LCS	211.23	200.00	10	ug/L	106		85 - 115		
Total Recoverable Iron	BQB1600	BQB1600-BS1	LCS	373.46	400.00	50	ug/L	93.4		85 - 115		
Total Recoverable Manganese	BQB1600	BQB1600-BS1	LCS	180.13	200.00	10	ug/L	90.1		85 - 115		
Total Recoverable Nickel	BQB1600	BQB1600-BS1	LCS	447.06	400.00	10	ug/L	112		85 - 115		
Total Recoverable Silver	BQB1600	BQB1600-BS1	LCS	101.60	100.00	10	ug/L	102		85 - 115		
Total Recoverable Zinc	BQB1600	BQB1600-BS1	LCS	226.93	200.00	50	ug/L	113		85 - 115		
Total Recoverable Antimony	BQB1603	BQB1603-BS1	LCS	20.237	20.000	2.0	ug/L	101		85 - 115		
Total Recoverable Arsenic	BQB1603	BQB1603-BS1	LCS	50.616	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1603	BQB1603-BS1	LCS	22.452	20.000	1.0	ug/L	112		85 - 115		
Total Recoverable Cadmium	BQB1603	BQB1603-BS1	LCS	21.329	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Lead	BQB1603	BQB1603-BS1	LCS	55.471	50.000	1.0	ug/L	111		85 - 115		
Total Recoverable Selenium	BQB1603	BQB1603-BS1	LCS	51.316	50.000	2.0	ug/L	103		85 - 115		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Thallium	BQB1603	BQB1603-BS1	LCS	21.339	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Mercury	BQC0138	BQC0138-BS1	LCS	1.0025	1.0000	0.20	ug/L	100		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/19/2007 11:51

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQB1112	BQB1112-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQB1112	BQB1112-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQB1112	BQB1112-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQB1112	BQB1112-BLK1	ND	mg/L	1.0	0.11	
Chloride	BQB1174	BQB1174-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQB1174	BQB1174-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQB1174	BQB1174-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQB1174	BQB1174-BLK1	ND	mg/L	1.0	0.11	
MBAS	BQB1253	BQB1253-BLK1	ND	mg/L	0.50	0.039	
MBAS	BQB1254	BQB1254-BLK1	ND	mg/L	0.50	0.039	
Alkalinity as CaCO3	BQB1323	BQB1323-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQB1323	BQB1323-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQB1323	BQB1323-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQB1323	BQB1323-BLK1	ND	mg/L	0.50	0.10	
Nitrite as N	BQB1455	BQB1455-BLK1	ND	ug/L	50	12	
Total Recoverable Calcium	BQB1600	BQB1600-BLK1	0.025386	mg/L	0.10	0.018	J
Total Recoverable Magnesium	BQB1600	BQB1600-BLK1	ND	mg/L	0.050	0.017	
Total Recoverable Sodium	BQB1600	BQB1600-BLK1	ND	mg/L	0.50	0.047	
Total Recoverable Potassium	BQB1600	BQB1600-BLK1	ND	mg/L	1.0	0.13	
Bicarbonate	BQB1673	BQB1673-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQB1673	BQB1673-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQB1673	BQB1673-BLK1	ND	mg/L	0.81	0.81	
Bicarbonate	BQB1674	BQB1674-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQB1674	BQB1674-BLK1	ND	mg/L	1.5	1.5	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Hydroxide	BQB1674	BQB1674-BLK1	ND	mg/L	0.81	0.81	
Total Dissolved Solids @ 180 C	BQC0314	BQC0314-BLK1	ND	mg/L	6.7	6.7	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/19/2007 11:51

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Antimony	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Aluminum	BQB1600	BQB1600-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQB1600	BQB1600-BLK1	ND	ug/L	100	12	
Total Recoverable Chromium	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQB1600	BQB1600-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQB1600	BQB1600-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.9	
Total Recoverable Nickel	BQB1600	BQB1600-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQB1600	BQB1600-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQB1600	BQB1600-BLK1	ND	ug/L	50	5.2	
Total Recoverable Antimony	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1603	BQB1603-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1603	BQB1603-BLK1	0.17300	ug/L	1.0	0.088	J
Total Recoverable Lead	BQB1603	BQB1603-BLK1	0.15600	ug/L	1.0	0.12	J
Total Recoverable Selenium	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1603	BQB1603-BLK1	ND	ug/L	1.0	0.13	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 03/19/2007 11:51

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Mercury	BQC0138	BQC0138-BLK1	ND	ug/L	0.20	0.026	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/19/2007 11:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.

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GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar › Location: 27138-09C01
Da. f Report: 07/03/13 Sample ID No.0701401-11
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/03/0830 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|02|03|0830| YY MM DD TTTT Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	70	
	mg/L	Calcium (Ca) (mg/L)	00916	20	
	mg/L	Magnesium (Mg) (mg/L)	00927	5.3	
	mg/L	Sodium (NA) (mg/L)	00929	140	
	mg/L	Potassium (K) (mg/L)	00937	5.8	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	120	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	10	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	130	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	130	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	29	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	4.1	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.66	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.34	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	610	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	460	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	150	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	28000	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	590	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	130	50.0
		ADDITIONAL ANALYSES			
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	< 50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sa e Location: 27138-10C02
Da of Report: 07/03/13
Laboratory Name: BC LABORATORIES
Name of Sampler:Mike Stoner
Sample ID No.0701401-12
Signature Lab Director:
Employed By:
Date/Time Sample Collected:07/02/03/1035
Date/Time Sample Received @ Lab:07/02/06/1030
Date Analyses Completed:07/03/13

System Name:
System Number:
Name or Number of Sample Source:

* User ID: Station Number:
* Date/Time of Sample: |07|02|03|1035| YY MM DD TTTT
Laboratory Code: 5806 YY MM DD
Date Analysis completed: |07|03|13|
* Submitted by:_____ Phone #:_____

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	7.2	
	mg/L	Calcium (Ca) (mg/L)	00916	2.7	
	mg/L	Magnesium (Mg) (mg/L)	00927	0.097	
	mg/L	Sodium (NA) (mg/L)	00929	98	
	mg/L	Potassium (K) (mg/L)	00937	1.1	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	120	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 0.81	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 1.5	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	150	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	67	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	18	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	4.2	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.42	.1
Total Anions		Meq/L Value:			
Std.Units+		PH (Laboratory) (Std.Units)	00403	8.46	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	490	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	300	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	0.26	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-12

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045		98	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	<	10	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620		56	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sample Location: Childers Well
Date of Report: 07/03/13 Sample ID No.0701401-13
Laboratory Name: BC LABORATORIES Signature Lab Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/03/1106 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|02|03|1106| Laboratory Code: 5806 *
* YY MM DD TTTT YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	320	
	mg/L	Calcium (Ca) (mg/L)	00916	91	
	mg/L	Magnesium (Mg) (mg/L)	00927	21	
	mg/L	Sodium (NA) (mg/L)	00929	98	
	mg/L	Potassium (K) (mg/L)	00937	7.0	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	210	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 3.0	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	260	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	120	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	100	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	20	2.0
2 .	mg/L	Fluoride (F) (Natural-Source)	00951	0.74	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.18	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	990	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	600	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	<	10	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092		120	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar e Location: Standard Well
Da f Report: 07/03/13 Sample ID No.0701401-14
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/03/1125 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number:
* Date/Time of Sample: |07|02|03|1125| YY MM DD TTTT Laboratory Code: 5806
Date Analysis completed: |07|03|13| YY MM DD
* Submitted by:_____ Phone #:_____

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	200	
	mg/L	Calcium (Ca) (mg/L)	00916	57	
	mg/L	Magnesium (Mg) (mg/L)	00927	13	
	mg/L	Sodium (NA) (mg/L)	00929	110	
	mg/L	Potassium (K) (mg/L)	00937	3.9	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	170	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	3.4	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	200	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	140	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	85	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	0.60	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.54	.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.23	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	890	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	560	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-14

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	<	10	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092		59	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar ᵉ Location: Sawmill Well
Da f Report: 07/03/13 Sample ID No.0701401-15
Laboratory Signature Lab
Name: BC LABORATORIES Director: _____
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/04/1047 | Date/Time Sample Received @ Lab:07/02/06/1030 | Date Analyses Completed:07/03/13

System Name: | System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|02|04|1047| (YY MM DD TTTT) Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	330		
	mg/L	Calcium (Ca) (mg/L)	00916	68		
	mg/L	Magnesium (Mg) (mg/L)	00927	39		
	mg/L	Sodium (NA) (mg/L)	00929	350		
	mg/L	Potassium (K) (mg/L)	00937	18		
Total Cations		Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	640		
	mg/L	Hydroxide (OH) (mg/L)	71830		< 3.2	
	mg/L	Carbonate (CO3) (mg/L)	00445		< 6.0	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	770		
*	mg/L+	Sulfate (SO4) (mg/L)	00945	180		.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	180		
45	mg/L	Nitrate (as NO3) (mg/L)	71850	5.1		2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	1.0		.1
Total Anions		Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.13		
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	2000		
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	1100		
15	Units	Apparent Color (Unfiltered) (Units)	00081			
3	TON	Odor Threshold at 60 C (TON)	00086			1.
5	NTU	Lab Turbidity (NTU)	82079			
0.5	mg/L+	MBAS (mg/L)	38260		< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-15

N	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045		5800	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		150	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar ` Location: Little Lake Outlet
Da f Report: 07/03/13 Sample ID No.0701401-16
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/04/1115 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|02|04|1115| Laboratory Code: 5806 *
* YY MM DD TTTT YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	440	
	mg/L	Calcium (Ca) (mg/L)	00916	53	
	mg/L	Magnesium (Mg) (mg/L)	00927	75	
	mg/L	Sodium (NA) (mg/L)	00929	300	
	mg/L	Potassium (K) (mg/L)	00937	26	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	690	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 3.2	
	mg/L	Carbonate (CO3) (mg/L)	00445	110	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	610	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	190	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	210	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2 .	mg/L	Fluoride (F) (Natural-Source)	00951	1.1	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.60	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	2100	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	1300	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	0.13	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

M	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045		890	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		64	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar e Location: 26139-14P01
Da f Report: 07/03/13 Sample ID No.0701401-01
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/01/11/1335 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|01|11|1335| YY MM DD TTTT Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	120	
	mg/L	Calcium (Ca) (mg/L)	00916	30	
	mg/L	Magnesium (Mg) (mg/L)	00927	10	
	mg/L	Sodium (NA) (mg/L)	00929	25	
	mg/L	Potassium (K) (mg/L)	00937	2.7	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	100	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 0.81	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 1.5	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	120	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	22	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	33	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.62	.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	7.96	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	360	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	250	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

M	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		56	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sample Location: 26139-09H01
Date of Report: 07/03/13
Sample ID No.0701401-02
Laboratory Name: BC LABORATORIES
Signature Lab Director:
Name of Sampler:Mike Stoner
Employed By:
Date/Time Sample Collected:07/01/11/1501
Date/Time Sample Received @ Lab:07/02/06/1030
Date Analyses Completed:07/03/13

System Name:
System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|01|11|1501| Laboratory Code: 5806 *
* YY MM DD TTTT YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by: Phone #: *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	120	
	mg/L	Calcium (Ca) (mg/L)	00916	39	
	mg/L	Magnesium (Mg) (mg/L)	00927	6.1	
	mg/L	Sodium (NA) (mg/L)	00929	59	
	mg/L	Potassium (K) (mg/L)	00937	2.6	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	100	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 0.81	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 1.5	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	120	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	82	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	48	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	1.3	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.46	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.11	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	550	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	340	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

MC	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	<	10	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sam[illegible] Location: CAMPBELL RANCH
Da[illegible] f Report: 07/03/13
Laboratory Name: BC LABORATORIES
Name of Sampler:Mike Stoner
Date/Time Sample Collected:07/02/02/1251
Sample ID No.0701401-07
Signature Lab Director:
Employed By:
Date/Time Sample Received @ Lab:07/02/06/1030
Date Analyses Completed:07/03/13

System Name:
System Number:
Name or Number of Sample Source:

User ID:
Station Number:
Date/Time of Sample: |07|02|02|1251| YY MM DD TTTT
Laboratory Code: 5806 YY MM DD
Date Analysis completed: |07|03|13|
Submitted by:
Phone #:

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	220	
	mg/L	Calcium (Ca) (mg/L)	00916	69	
	mg/L	Magnesium (Mg) (mg/L)	00927	12	
	mg/L	Sodium (NA) (mg/L)	00929	100	
	mg/L	Potassium (K) (mg/L)	00937	3.5	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	120	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 3.0	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	150	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	140	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	130	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	3.2	2.0
2 .	mg/L	Fluoride (F) (Natural-Source)	00951	0.51	.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.16	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	930	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	560	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.20	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	<	10	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sample Location: 27138-09Q01
Date of Report: 07/03/13 Sample ID No.0701401-08
Laboratory Name: BC LABORATORIES Signature Lab Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/02/1415 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|02|02|1415| Laboratory Code: 5806 *
* YY MM DD TTTT YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	250	
	mg/L	Calcium (Ca) (mg/L)	00916	68	
	mg/L	Magnesium (Mg) (mg/L)	00927	19	
	mg/L	Sodium (NA) (mg/L)	00929	55	
	mg/L	Potassium (K) (mg/L)	00937	3.2	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	260	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 3.0	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	320	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	81	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	17	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.11	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.08	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	680	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	430	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-08

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045		820	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		430	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092		59	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sa[illegible]e Location: 27137-09C02
Da[illegible]of Report: 07/03/13 Sample ID No.0701401-09
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/02/1537 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

User ID: Station Number:
Date/Time of Sample: |07|02|02|1537| YY MM DD TTTT Laboratory Code: 5806
Date Analysis completed: YY MM DD |07|03|13|
Submitted by: Phone #:

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	130	
	mg/L	Calcium (Ca) (mg/L)	00916	29	
	mg/L	Magnesium (Mg) (mg/L)	00927	13	
	mg/L	Sodium (NA) (mg/L)	00929	290	
	mg/L	Potassium (K) (mg/L)	00937	12	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	320	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 3.2	
	mg/L	Carbonate (CO3) (mg/L)	00445	18	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	350	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	190	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	140	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	4.2	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	1.9	.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.32	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	1400	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	980	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-09

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	44	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	21000	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	720	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	92	50.0
		ADDITIONAL ANALYSES			
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	< 50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sam[illegible] Location: 28138-18F01
Da[illegible] f Report: 07/03/13 Sample ID No.0701401-10
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/02/02/1630 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|02|02|1630| YY MM DD TTTT Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	5.8	
	mg/L	Calcium (Ca) (mg/L)	00916	1.9	
	mg/L	Magnesium (Mg) (mg/L)	00927	0.25	
	mg/L	Sodium (NA) (mg/L)	00929	220	
	mg/L	Potassium (K) (mg/L)	00937	2.0	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	300	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	66	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	240	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	100	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	35	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	14	.1
Total Anions		Meq/L Value:			
Std.Units+		PH (Laboratory) (Std.Units)	00403	9.02	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	960	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	630	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

M	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045		850	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		19	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sa e Location: 26139-09M01
Da of Report: 07/03/13 Sample ID No. 0701401-03
Laboratory Signature Lab
Name: BC LABORATORIES Director: _____
Name of Sampler: Mike Stoner Employed By:
Date/Time Sample Collected: 07/01/11/1602 Date/Time Sample Received @ Lab: 07/02/06/1030 Date Analyses Completed: 07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|01|11|1602| (YY MM DD TTTT) Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by: _____ Phone #: _____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	6.1	
	mg/L	Calcium (Ca) (mg/L)	00916	2.2	
	mg/L	Magnesium (Mg) (mg/L)	00927	0.14	
	mg/L	Sodium (NA) (mg/L)	00929	63	
	mg/L	Potassium (K) (mg/L)	00937	1.8	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	110	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 0.81	
	mg/L	Carbonate (CO3) (mg/L)	00445	22	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	96	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	7.8	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	19	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.54	.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.86	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	300	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	180	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-03

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	<	10	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar e Location: 25139-31R01
Da of Report: 07/03/13 Sample ID No.0701401-04
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/01/11/1655 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|01|11|1655| YY MM DD TTTT Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	220	
	mg/L	Calcium (Ca) (mg/L)	00916	65	
	mg/L	Magnesium (Mg) (mg/L)	00927	15	
	mg/L	Sodium (NA) (mg/L)	00929	100	
	mg/L	Potassium (K) (mg/L)	00937	3.7	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	160	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.6	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 3.0	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	200	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	160	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	92	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2 .	mg/L	Fluoride (F) (Natural-Source)	00951	0.38	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.04	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	900	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	550	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-04

M	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		46	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	<	50	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sa[illegible]e Location: 25139-13J01
Da[illegible]of Report: 07/03/13 Sample ID No.0701401-05
Laboratory Signature Lab
Name: BC LABORATORIES Director: _____
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/01/12/1030 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|01|12|1030| YY MM DD TTTT Laboratory Code: 5806 *
* YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	53	
	mg/L	Calcium (Ca) (mg/L)	00916	12	
	mg/L	Magnesium (Mg) (mg/L)	00927	5.2	
	mg/L	Sodium (NA) (mg/L)	00929	92	
	mg/L	Potassium (K) (mg/L)	00937	8.2	
Total Cations	Meq/L Value:				
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	210	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 0.81	
	mg/L	Carbonate (CO3) (mg/L)	00445	2.8	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	240	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	12	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	28	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	1.0	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.20	.1
Total Anions	Meq/L Value:				
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.32	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	510	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	280	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

0701401-05

	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS		DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	<	10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	<	50	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055		31	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	<	50	50.0
		ADDITIONAL ANALYSES				
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620		670	400

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Client Name: NAWS - China Lake
Sar e Location: NAVY LB
Da f Report: 07/03/13 Sample ID No.0701401-06
Laboratory Signature Lab
Name: BC LABORATORIES Director:
Name of Sampler:Mike Stoner Employed By:
Date/Time Sample Collected:07/01/15/1140 Date/Time Sample Received @ Lab:07/02/06/1030 Date Analyses Completed:07/03/13

System Name: System Number:
Name or Number of Sample Source:

* User ID: Station Number: *
* Date/Time of Sample: |07|01|15|1140| Laboratory Code: 5806 *
* YY MM DD TTTT YY MM DD *
* Date Analysis completed: |07|03|13| *
* Submitted by:_____ Phone #:_____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	280	
	mg/L	Calcium (Ca) (mg/L)	00916	52	
	mg/L	Magnesium (Mg) (mg/L)	00927	37	
	mg/L	Sodium (NA) (mg/L)	00929	160	
	mg/L	Potassium (K) (mg/L)	00937	15	
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410	380	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 3.2	
	mg/L	Carbonate (CO3) (mg/L)	00445	< 6.0	
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	460	
*	mg/L+	Sulfate (SO4) (mg/L)	00945	140	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	110	
45	mg/L	Nitrate (as NO3) (mg/L)	71850	< 0.44	2.0
2 .	mg/L	Fluoride (F) (Natural-Source)	00951	0.73	.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.22	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	1200	
****	mg/L+	Total Filterable Residue@180C(TDS)(mg/L)	70300	790	
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260	< 0.10	

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

M	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
1000	ug/L+	Copper (Cu) (ug/L)	01042	< 10	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	260	100.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	92	20.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	230	50.0
		ADDITIONAL ANALYSES			
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	< 50	400

+ Indicates Secondary Drinking Water Standards

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Drinking Waters
Project Number: AB 303 Project
Project Manager: Mike Stoner

Reported: 09/21/2007 11:23

Water Analysis (General Chemistry)

BCL Sample ID: 0710074-01 | **Client Sample Name:** BR1 (DEEP), 8/27/2007 3:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	2.8	mg/L	0.10		EPA-200.7	08/27/07	09/19/07 13:43	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Magnesium	0.59	mg/L	0.050		EPA-200.7	08/27/07	09/19/07 13:43	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Sodium	68	mg/L	0.50		EPA-200.7	08/27/07	09/19/07 13:43	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Potassium	1.1	mg/L	1.0		EPA-200.7	08/27/07	09/19/07 13:43	ARD	PE-OP1	1	BQI0094	ND	
Bicarbonate	<2.9	mg/L	2.9		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Carbonate	75	mg/L	1.5		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Hydroxide	<0.81	mg/L	0.81		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Alkalinity as CaCO3	130	mg/L	2.5		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Chloride	9.1	mg/L	0.50		EPA-300.0	08/28/07	08/29/07 14:14	EDA	IC1	1	BQH1772	ND	
Fluoride	1.2	mg/L	0.050		EPA-300.0	08/28/07	08/29/07 14:14	EDA	IC1	1	BQH1772	ND	
Nitrate as NO3	<0.44	mg/L	0.44		EPA-300.0	08/28/07	08/29/07 14:14	EDA	IC1	1	BQH1772	ND	
Sulfate	2.1	mg/L	1.0		EPA-300.0	08/28/07	08/29/07 14:14	EDA	IC1	1	BQH1772	ND	
Total Cations	3.2	meq/L	0.10		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Total Anions	2.9	meq/L	0.10		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Hardness as CaCO3	9.3	mg/L	0.50		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
pH	10.24	pH Units	0.05		EPA-150.1	08/31/07	08/31/07 10:20	JSM	B360	1	BQH1986		
Electrical Conductivity @ 25 C	342	umhos/cm	1.00		SM-2510B	08/31/07	08/31/07 11:10	JSM	CND-3	1	BQH1983		
Total Dissolved Solids @ 180 C	190	mg/L	20		SM-2540C	08/30/07	08/31/07 15:00	VEL	MANUAL	2	BQI0150	ND	
Turbidity	38	NT Units	0.20		EPA-180.1	08/29/07	08/29/07 12:30	MAR	T2100	2	BQI0251		A10
MBAS	<0.10	mg/L	0.10		SM-5540C	08/29/07	08/29/07 14:00	CDR	SPEC05	1	BQI0694	ND	
Nitrite as N	<50	ug/L	50		EPA-353.2	08/29/07	08/29/07 14:20	TDC	KONE-1	1	BQH1886	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Drinking Waters
Project Number: AB 303 Project
Project Manager: Mike Stoner

Reported: 09/21/2007 11:23

Water Analysis (Metals)

BCL Sample ID: 0710074-01 | **Client Sample Name:** BR1 (DEEP), 8/27/2007 3:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	1700	ug/L	50		EPA-200.7	09/04/07	09/07/07 11:31	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Antimony	<2.0	ug/L	2.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Arsenic	110	ug/L	2.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Barium	20	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Beryllium	<1.0	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Boron	260	ug/L	100		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Cadmium	1.4	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Chromium	55	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Copper	47	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Iron	160000	ug/L	50		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Lead	17	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Manganese	2300	ug/L	10		EPA-200.7	09/04/07	09/07/07 11:31	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Mercury	<0.20	ug/L	0.20		EPA-245.1	09/07/07	09/07/07 16:13	MEV	CETAC1	1	BQI0323	ND	
Total Recoverable Nickel	13	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Selenium	<2.0	ug/L	2.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Silver	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Thallium	<1.0	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:45	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Zinc	240	ug/L	50		EPA-200.7	09/04/07	09/06/07 22:03	ARD	PE-OP1	1	BQI0094	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0710074-02 | **Client Sample Name:** 27138-13 A02, 8/27/2007 4:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	38	mg/L	0.10		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Magnesium	5.8	mg/L	0.050		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Sodium	58	mg/L	0.50		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Potassium	2.0	mg/L	1.0		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Bicarbonate	160	mg/L	2.9		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Carbonate	<1.5	mg/L	1.5		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Hydroxide	<0.81	mg/L	0.81		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Alkalinity as CaCO3	130	mg/L	2.5		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Chloride	24	mg/L	0.50		EPA-300.0	08/28/07	08/29/07 14:39	EDA	IC1	1	BQH1772	ND	
Fluoride	0.74	mg/L	0.050		EPA-300.0	08/28/07	08/29/07 14:39	EDA	IC1	1	BQH1772	ND	
Nitrate as NO3	8.8	mg/L	0.44		EPA-300.0	08/28/07	08/29/07 14:39	EDA	IC1	1	BQH1772	ND	
Sulfate	58	mg/L	1.0		EPA-300.0	08/28/07	08/29/07 14:39	EDA	IC1	1	BQH1772	ND	
Total Cations	5.0	meq/L	0.10		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Total Anions	4.7	meq/L	0.10		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Hardness as CaCO3	120	mg/L	0.50		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
pH	7.94	pH Units	0.05		EPA-150.1	08/31/07	08/31/07 10:20	JSM	B360	1	BQH1986		
Electrical Conductivity @ 25 C	461	umhos/cm	1.00		SM-2510B	08/31/07	08/31/07 11:10	JSM	CND-3	1	BQH1983		
Total Dissolved Solids @ 180 C	300	mg/L	20		SM-2540C	08/30/07	08/31/07 15:00	VEL	MANUAL	2	BQI0150	ND	
Turbidity	0.55	NT Units	0.10		EPA-180.1	08/29/07	08/29/07 12:30	MAR	T2100	1	BQI0251		
MBAS	<0.10	mg/L	0.10		SM-5540C	08/29/07	08/29/07 14:00	CDR	SPEC05	1	BQI0694	ND	
Nitrite as N	<50	ug/L	50		EPA-353.2	08/29/07	08/29/07 14:20	TDC	KONE-1	1	BQH1886	ND	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Drinking Waters
Project Number: AB 303 Project
Project Manager: Mike Stoner

Reported: 09/21/2007 11:23

Water Analysis (Metals)

BCL Sample ID: 0710074-02 | **Client Sample Name:** 27138-13 A02, 8/27/2007 4:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	110	ug/L	50		EPA-200.7	09/04/07	09/07/07 18:27	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Antimony	<2.0	ug/L	2.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Arsenic	<2.0	ug/L	2.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Barium	57	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Beryllium	<1.0	ug/L	1.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Boron	270	ug/L	100		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Cadmium	<1.0	ug/L	1.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Chromium	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Copper	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Iron	180	ug/L	50		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Lead	<1.0	ug/L	1.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Manganese	<10	ug/L	10		EPA-200.7	09/04/07	09/07/07 18:27	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Mercury	<0.20	ug/L	0.20		EPA-245.1	09/07/07	09/07/07 16:15	MEV	CETAC1	1	BQI0323	ND	
Total Recoverable Nickel	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Selenium	<2.0	ug/L	2.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Silver	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Thallium	<1.0	ug/L	1.0		EPA-200.8	09/14/07	09/14/07 12:47	PPS	PE-EL1	1	BQI0667	ND	
Total Recoverable Zinc	<50	ug/L	50		EPA-200.7	09/04/07	09/06/07 22:08	ARD	PE-OP1	1	BQI0094	ND	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Drinking Waters
Project Number: AB 303 Project
Project Manager: Mike Stoner

Reported: 09/21/2007 11:23

Water Analysis (General Chemistry)

BCL Sample ID: 0710074-03 | **Client Sample Name:** 27138 - 21 L01, 8/27/2007 3:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	14	mg/L	0.10		EPA-200.7	08/27/07	09/19/07 13:48	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Magnesium	1.1	mg/L	0.050		EPA-200.7	08/27/07	09/19/07 13:48	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Sodium	100	mg/L	0.50		EPA-200.7	08/27/07	09/19/07 13:48	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Potassium	2.7	mg/L	1.0		EPA-200.7	08/27/07	09/19/07 13:48	ARD	PE-OP1	1	BQI0094	ND	
Bicarbonate	160	mg/L	2.9		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Carbonate	6.3	mg/L	1.5		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Hydroxide	<0.81	mg/L	0.81		SM-2320B	09/07/07	09/07/07 11:00	MAR	BDB	1	BQI0473	ND	
Alkalinity as CaCO3	140	mg/L	2.5		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Chloride	35	mg/L	0.50		EPA-300.0	08/28/07	08/29/07 14:53	EDA	IC1	1	BQH1772	ND	
Fluoride	0.81	mg/L	0.050		EPA-300.0	08/28/07	08/29/07 14:53	EDA	IC1	1	BQH1772	ND	
Nitrate as NO3	0.57	mg/L	0.44		EPA-300.0	08/28/07	08/29/07 14:53	EDA	IC1	1	BQH1772	ND	
Sulfate	69	mg/L	1.0		EPA-300.0	08/28/07	08/29/07 14:53	EDA	IC1	1	BQH1772	ND	
Total Cations	5.4	meq/L	0.10		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Total Anions	5.2	meq/L	0.10		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
Hardness as CaCO3	39	mg/L	0.50		Calc	08/31/07	09/21/07 10:47	MSA	Calc	1	BQH2007	ND	
pH	8.26	pH Units	0.05		EPA-150.1	08/31/07	08/31/07 10:20	JSM	B360	1	BQH1986		
Electrical Conductivity @ 25 C	536	umhos/cm	1.00		SM-2510B	08/31/07	08/31/07 11:10	JSM	CND-3	1	BQH1983		
Total Dissolved Solids @ 180 C	510	mg/L	20		SM-2540C	08/30/07	08/31/07 15:00	VEL	MANUAL	2	BQI0150	ND	
Turbidity	30	NT Units	0.10		EPA-180.1	08/29/07	08/29/07 12:30	MAR	T2100	1	BQI0251		
MBAS	<0.10	mg/L	0.10		SM-5540C	08/29/07	08/29/07 14:00	CDR	SPEC05	1	BQI0694	ND	
Nitrite as N	230	ug/L	50		EPA-353.2	08/29/07	08/29/07 14:20	TDC	KONE-1	1	BQH1886	ND	

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0710074-03 | **Client Sample Name:** 27138 - 21 L01, 8/27/2007 3:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	11000	ug/L	50		EPA-200.7	09/04/07	09/07/07 11:41	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Antimony	<2.0	ug/L	2.0		EPA-200.8	09/07/07	09/11/07 16:48	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Arsenic	<4.0	ug/L	4.0		EPA-200.8	09/07/07	09/12/07 11:01	PPS	PE-EL1	2	BQI0329	ND	A01
Total Recoverable Barium	66	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Beryllium	<1.0	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:48	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Boron	210	ug/L	100		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Cadmium	<2.0	ug/L	2.0		EPA-200.8	09/07/07	09/12/07 11:01	PPS	PE-EL1	2	BQI0329	ND	A01
Total Recoverable Chromium	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Copper	17	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Iron	6100	ug/L	50		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Lead	2.9	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:48	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Manganese	240	ug/L	10		EPA-200.7	09/04/07	09/07/07 11:41	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Mercury	0.20	ug/L	0.20		EPA-245.1	09/07/07	09/07/07 16:17	MEV	CETAC1	1	BQI0323	ND	
Total Recoverable Nickel	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Selenium	<2.0	ug/L	2.0		EPA-200.8	09/07/07	09/11/07 16:48	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Silver	<10	ug/L	10		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	
Total Recoverable Thallium	<1.0	ug/L	1.0		EPA-200.8	09/07/07	09/11/07 16:48	PPS	PE-EL1	1	BQI0329	ND	
Total Recoverable Zinc	57	ug/L	50		EPA-200.7	09/04/07	09/06/07 22:14	ARD	PE-OP1	1	BQI0094	ND	

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported**: 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0710074-01	**COC Number:**	---	**Receive Date:**	08/29/2007 11:10
	Project Number:	---	**Sampling Date:**	08/27/2007 15:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	BR1 (DEEP)	**Sample Matrix:**	Water
	Sampled By:	---		
0710074-02	**COC Number:**	---	**Receive Date:**	08/29/2007 11:10
	Project Number:	---	**Sampling Date:**	08/27/2007 16:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138-13 A02	**Sample Matrix:**	Water
	Sampled By:	---		
0710074-03	**COC Number:**	---	**Receive Date:**	08/29/2007 11:10
	Project Number:	---	**Sampling Date:**	08/27/2007 15:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138 - 21 L01	**Sample Matrix:**	Water
	Sampled By:	---		

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQH1772	Duplicate	0710060-05	98.944	99.338		mg/L	0.4		10		
		Matrix Spike	0710060-05	98.944	205.68	101.01	mg/L		106		80 - 120	
		Matrix Spike Duplicate	0710060-05	98.944	206.15	101.01	mg/L	0	106	10	80 - 120	
Fluoride	BQH1772	Duplicate	0710060-05	3.5120	3.5190		mg/L	0.2		10		
		Matrix Spike	0710060-05	3.5120	4.6515	1.0101	mg/L		113		80 - 120	
		Matrix Spike Duplicate	0710060-05	3.5120	4.6697	1.0101	mg/L	1.8	115	10	80 - 120	
Nitrate as NO3	BQH1772	Duplicate	0710060-05	0	<0.44		mg/L			10		
		Matrix Spike	0710060-05	0	22.460	22.358	mg/L		100		80 - 120	
		Matrix Spike Duplicate	0710060-05	0	22.523	22.358	mg/L	1.0	101	10	80 - 120	
Sulfate	BQH1772	Duplicate	0710060-05	24.588	24.586		mg/L	0.0		10		
		Matrix Spike	0710060-05	24.588	128.13	101.01	mg/L		103		80 - 120	
		Matrix Spike Duplicate	0710060-05	24.588	129.03	101.01	mg/L	0	103	10	80 - 120	
Nitrite as N	BQH1886	Duplicate	0710067-11	-2.4540	<50		ug/L			10		
		Matrix Spike	0710067-11	-2.4540	500.97	526.32	ug/L		95.2		90 - 110	
		Matrix Spike Duplicate	0710067-11	-2.4540	506.75	526.32	ug/L	1.1	96.3	10	90 - 110	
Electrical Conductivity @ 25 C	BQH1983	Duplicate	0710067-08	711.00	709.00		umhos/cm	0.3		10		
pH	BQH1986	Duplicate	0710067-08	8.1050	8.1160		pH Units	0.1		20		
Total Recoverable Calcium	BQI0094	Duplicate	0709966-01	25.254	26.601		mg/L	5.2		20		
		Matrix Spike	0709966-01	25.254	34.985	10.000	mg/L		97.3		75 - 125	
		Matrix Spike Duplicate	0709966-01	25.254	35.083	10.000	mg/L	1.0	98.3	20	75 - 125	
Total Recoverable Magnesium	BQI0094	Duplicate	0709966-01	2.1945	2.2336		mg/L	1.8		20		
		Matrix Spike	0709966-01	2.1945	12.114	10.000	mg/L		99.2		75 - 125	
		Matrix Spike Duplicate	0709966-01	2.1945	12.214	10.000	mg/L	0.8	100	20	75 - 125	
Total Recoverable Sodium	BQI0094	Duplicate	0709966-01	9.3558	9.6169		mg/L	2.8		20		
		Matrix Spike	0709966-01	9.3558	19.259	10.000	mg/L		99.0		75 - 125	
		Matrix Spike Duplicate	0709966-01	9.3558	19.495	10.000	mg/L	2.0	101	20	75 - 125	

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Potassium	BQI0094	Duplicate	0709966-01	1.6481	1.7112		mg/L	3.8		20		
		Matrix Spike	0709966-01	1.6481	11.604	10.000	mg/L		99.6		75 - 125	
		Matrix Spike Duplicate	0709966-01	1.6481	11.776	10.000	mg/L	1.4	101	20	75 - 125	
Total Dissolved Solids @ 180 C	BQI0150	Duplicate	0710047-02	1185.0	1190.0		mg/L	0.4		10		
Turbidity	BQI0251	Duplicate	0710013-01	0.74000	0.74000		NT Units	0		10		
Bicarbonate	BQI0473	Duplicate	0710120-02	316.50	317.66		mg/L	0.4		10		A01
		Matrix Spike	0710120-02	316.50	475.32	152.38	mg/L		104		80 - 120	A01
		Matrix Spike Duplicate	0710120-02	316.50	476.48	152.38	mg/L	1.0	105	10	80 - 120	A01
Carbonate	BQI0473	Duplicate	0710120-02	0	<3.0		mg/L			10		A01
Hydroxide	BQI0473	Duplicate	0710120-02	0	<1.6		mg/L			10		A01
MBAS	BQI0694	Duplicate	0710025-01	0	<0.20		mg/L			20		A01
		Matrix Spike	0710025-01	0	0.39900	0.40000	mg/L		99.8		80 - 120	A01
		Matrix Spike Duplicate	0710025-01	0	0.39240	0.40000	mg/L	1.7	98.1	20	80 - 120	A01

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Aluminum	BQI0094	Duplicate	0709966-01	-10.628	<50		ug/L			20		
		Matrix Spike	0709966-01	-10.628	991.62	1000.0	ug/L		99.2		75 - 125	
		Matrix Spike Duplicate	0709966-01	-10.628	1004.2	1000.0	ug/L	0.8	100	20	75 - 125	
Total Recoverable Barium	BQI0094	Duplicate	0709966-01	84.445	85.772		ug/L	1.6		20		
		Matrix Spike	0709966-01	84.445	288.72	200.00	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0709966-01	84.445	294.20	200.00	ug/L	2.9	105	20	75 - 125	
Total Recoverable Boron	BQI0094	Duplicate	0709966-01	50.428	<100		ug/L			20		A02
		Matrix Spike	0709966-01	50.428	1123.1	1000.0	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0709966-01	50.428	1113.9	1000.0	ug/L	0.9	106	20	75 - 125	
Total Recoverable Chromium	BQI0094	Duplicate	0709966-01	-1.6657	<10		ug/L			20		
		Matrix Spike	0709966-01	-1.6657	203.39	200.00	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0709966-01	-1.6657	200.90	200.00	ug/L	2.0	100	20	75 - 125	
Total Recoverable Copper	BQI0094	Duplicate	0709966-01	80.890	91.491		ug/L	12.3		20		
		Matrix Spike	0709966-01	80.890	295.72	200.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0709966-01	80.890	292.74	200.00	ug/L	0.9	106	20	75 - 125	
Total Recoverable Iron	BQI0094	Duplicate	0709966-01	30.911	<50		ug/L			20		
		Matrix Spike	0709966-01	30.911	411.59	400.00	ug/L		95.2		75 - 125	
		Matrix Spike Duplicate	0709966-01	30.911	417.46	400.00	ug/L	1.5	96.6	20	75 - 125	
Total Recoverable Manganese	BQI0094	Duplicate	0709966-01	3.4610	<10		ug/L			20		
		Matrix Spike	0709966-01	3.4610	217.66	200.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0709966-01	3.4610	213.66	200.00	ug/L	1.9	105	20	75 - 125	
Total Recoverable Nickel	BQI0094	Duplicate	0709966-01	1.5402	<10		ug/L			20		
		Matrix Spike	0709966-01	1.5402	444.58	400.00	ug/L		111		75 - 125	
		Matrix Spike Duplicate	0709966-01	1.5402	440.65	400.00	ug/L	0.9	110	20	75 - 125	
Total Recoverable Silver	BQI0094	Duplicate	0709966-01	-0.70478	<10		ug/L			20		
		Matrix Spike	0709966-01	-0.70478	107.83	100.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0709966-01	-0.70478	106.74	100.00	ug/L	0.9	107	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Drinking Waters
Project Number: AB 303 Project
Project Manager: Mike Stoner

Reported: 09/21/2007 11:23

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Zinc	BQI0094	Duplicate	0709966-01	3613.1	3812.6		ug/L	5.4		20		
		Matrix Spike	0709966-01	3613.1	3682.3	200.00	ug/L		34.6		75 - 125	A03
		Matrix Spike Duplicate	0709966-01	3613.1	3744.7	200.00	ug/L	62.2	65.8	20	75 - 125	A03,Q02
Total Recoverable Mercury	BQI0323	Duplicate	0709947-01	-0.0025000	<0.20		ug/L			20		
		Matrix Spike	0709947-01	-0.0025000	1.0175	1.0000	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0709947-01	-0.0025000	1.0425	1.0000	ug/L	1.9	104	20	70 - 130	
Total Recoverable Antimony	BQI0329	Duplicate	0710169-01	0.96100	<2.0		ug/L			20		
		Matrix Spike	0710169-01	0.96100	20.965	20.000	ug/L		100		70 - 130	
		Matrix Spike Duplicate	0710169-01	0.96100	19.451	20.000	ug/L	7.9	92.4	20	70 - 130	
Total Recoverable Arsenic	BQI0329	Duplicate	0710169-01	3.4220	3.4700		ug/L	1.4		20		
		Matrix Spike	0710169-01	3.4220	53.418	50.000	ug/L		100		70 - 130	
		Matrix Spike Duplicate	0710169-01	3.4220	50.036	50.000	ug/L	7.0	93.2	20	70 - 130	
Total Recoverable Beryllium	BQI0329	Duplicate	0710169-01	0.010000	<1.0		ug/L			20		
		Matrix Spike	0710169-01	0.010000	22.669	20.000	ug/L		113		70 - 130	
		Matrix Spike Duplicate	0710169-01	0.010000	21.013	20.000	ug/L	7.3	105	20	70 - 130	
Total Recoverable Cadmium	BQI0329	Duplicate	0710169-01	0.21600	<1.0		ug/L			20		A02
		Matrix Spike	0710169-01	0.21600	20.750	20.000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0710169-01	0.21600	19.599	20.000	ug/L	6.1	96.9	20	70 - 130	
Total Recoverable Lead	BQI0329	Duplicate	0710169-01	3.2530	3.1250		ug/L	4.0		20		
		Matrix Spike	0710169-01	3.2530	56.428	50.000	ug/L		106		70 - 130	
		Matrix Spike Duplicate	0710169-01	3.2530	52.716	50.000	ug/L	6.9	98.9	20	70 - 130	
Total Recoverable Selenium	BQI0329	Duplicate	0710169-01	0.56400	<2.0		ug/L			20		
		Matrix Spike	0710169-01	0.56400	49.983	50.000	ug/L		98.8		70 - 130	
		Matrix Spike Duplicate	0710169-01	0.56400	46.648	50.000	ug/L	6.9	92.2	20	70 - 130	
Total Recoverable Thallium	BQI0329	Duplicate	0710169-01	0.73900	<1.0		ug/L			20		A02
		Matrix Spike	0710169-01	0.73900	21.501	20.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0710169-01	0.73900	20.312	20.000	ug/L	6.0	97.9	20	70 - 130	

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	Reported: 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Antimony	BQI0667	Duplicate	0710074-02	0.10500	<2.0		ug/L			20		
		Matrix Spike	0710074-02	0.10500	22.687	20.408	ug/L		111		70 - 130	
		Matrix Spike Duplicate	0710074-02	0.10500	22.709	20.408	ug/L	0	111	20	70 - 130	
Total Recoverable Arsenic	BQI0667	Duplicate	0710074-02	1.8290	2.0190		ug/L	9.9		20		
		Matrix Spike	0710074-02	1.8290	59.527	51.020	ug/L		113		70 - 130	
		Matrix Spike Duplicate	0710074-02	1.8290	59.964	51.020	ug/L	0.9	114	20	70 - 130	
Total Recoverable Beryllium	BQI0667	Duplicate	0710074-02	0.012000	<1.0		ug/L			20		
		Matrix Spike	0710074-02	0.012000	25.246	20.408	ug/L		124		70 - 130	
		Matrix Spike Duplicate	0710074-02	0.012000	25.253	20.408	ug/L	0	124	20	70 - 130	
Total Recoverable Cadmium	BQI0667	Duplicate	0710074-02	0.037000	<1.0		ug/L			20		
		Matrix Spike	0710074-02	0.037000	21.957	20.408	ug/L		107		70 - 130	
		Matrix Spike Duplicate	0710074-02	0.037000	21.997	20.408	ug/L	0.9	108	20	70 - 130	
Total Recoverable Lead	BQI0667	Duplicate	0710074-02	0.20300	<1.0		ug/L			20		
		Matrix Spike	0710074-02	0.20300	52.155	51.020	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0710074-02	0.20300	49.623	51.020	ug/L	5.1	96.9	20	70 - 130	
Total Recoverable Selenium	BQI0667	Duplicate	0710074-02	0.084000	<2.0		ug/L			20		
		Matrix Spike	0710074-02	0.084000	62.845	51.020	ug/L		123		70 - 130	
		Matrix Spike Duplicate	0710074-02	0.084000	62.960	51.020	ug/L	0	123	20	70 - 130	
Total Recoverable Thallium	BQI0667	Duplicate	0710074-02	0.64000	<1.0		ug/L			20		A02
		Matrix Spike	0710074-02	0.64000	19.764	20.408	ug/L		93.7		70 - 130	
		Matrix Spike Duplicate	0710074-02	0.64000	20.103	20.408	ug/L	1.8	95.4	20	70 - 130	

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQH1772	BQH1772-BS1	LCS	104.64	100.00	0.50	mg/L	105		90 - 110		
Fluoride	BQH1772	BQH1772-BS1	LCS	1.0640	1.0000	0.050	mg/L	106		90 - 110		
Nitrate as NO3	BQH1772	BQH1772-BS1	LCS	22.338	22.134	0.44	mg/L	101		90 - 110		
Sulfate	BQH1772	BQH1772-BS1	LCS	101.79	100.00	1.0	mg/L	102		90 - 110		
Nitrite as N	BQH1886	BQH1886-BS1	LCS	481.46	500.00	50	ug/L	96.3		90 - 110		
Electrical Conductivity @ 25 C	BQH1983	BQH1983-BS1	LCS	306.00	303.00	1.00	umhos/cm	101		90 - 110		
pH	BQH1986	BQH1986-BS1	LCS	7.0610	7.0000	0.05	pH Units	101		95 - 105		
Total Recoverable Calcium	BQI0094	BQI0094-BS1	LCS	10.156	10.000	0.10	mg/L	102		85 - 115		
Total Recoverable Magnesium	BQI0094	BQI0094-BS1	LCS	10.263	10.000	0.050	mg/L	103		85 - 115		
Total Recoverable Sodium	BQI0094	BQI0094-BS1	LCS	10.374	10.000	0.50	mg/L	104		85 - 115		
Total Recoverable Potassium	BQI0094	BQI0094-BS1	LCS	10.175	10.000	1.0	mg/L	102		85 - 115		
Total Dissolved Solids @ 180 C	BQI0150	BQI0150-BS1	LCS	555.00	586.00	50	mg/L	94.7		90 - 110		
Bicarbonate	BQI0473	BQI0473-BS1	LCS	126.95	121.90	2.9	mg/L	104		90 - 110		
MBAS	BQI0694	BQI0694-BS1	LCS	0.19280	0.20000	0.10	mg/L	96.4		85 - 115		

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	Reported: 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Control Limits Percent Recovery	RPD	Control Limits Percent Recovery	RPD	Lab Quals
Total Recoverable Aluminum	BQI0094	BQI0094-BS2	LCS	952.27	1000.0	50	ug/L	95.2		85 - 115		
Total Recoverable Barium	BQI0094	BQI0094-BS1	LCS	209.67	200.00	10	ug/L	105		85 - 115		
Total Recoverable Boron	BQI0094	BQI0094-BS1	LCS	1085.4	1000.0	100	ug/L	109		85 - 115		
Total Recoverable Chromium	BQI0094	BQI0094-BS1	LCS	197.69	200.00	10	ug/L	98.8		85 - 115		
Total Recoverable Copper	BQI0094	BQI0094-BS1	LCS	206.45	200.00	10	ug/L	103		85 - 115		
Total Recoverable Iron	BQI0094	BQI0094-BS1	LCS	380.34	400.00	50	ug/L	95.1		85 - 115		
Total Recoverable Manganese	BQI0094	BQI0094-BS2	LCS	210.83	200.00	10	ug/L	105		85 - 115		
Total Recoverable Nickel	BQI0094	BQI0094-BS1	LCS	438.17	400.00	10	ug/L	110		85 - 115		
Total Recoverable Silver	BQI0094	BQI0094-BS1	LCS	102.76	100.00	10	ug/L	103		85 - 115		
Total Recoverable Zinc	BQI0094	BQI0094-BS1	LCS	212.33	200.00	50	ug/L	106		85 - 115		
Total Recoverable Mercury	BQI0323	BQI0323-BS1	LCS	1.0650	1.0000	0.20	ug/L	106		85 - 115		
Total Recoverable Antimony	BQI0329	BQI0329-BS1	LCS	19.898	20.000	2.0	ug/L	99.5		85 - 115		
Total Recoverable Arsenic	BQI0329	BQI0329-BS1	LCS	50.508	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQI0329	BQI0329-BS1	LCS	21.745	20.000	1.0	ug/L	109		85 - 115		
Total Recoverable Cadmium	BQI0329	BQI0329-BS1	LCS	20.457	20.000	1.0	ug/L	102		85 - 115		
Total Recoverable Lead	BQI0329	BQI0329-BS1	LCS	54.924	50.000	1.0	ug/L	110		85 - 115		
Total Recoverable Selenium	BQI0329	BQI0329-BS1	LCS	50.053	50.000	2.0	ug/L	100		85 - 115		
Total Recoverable Thallium	BQI0329	BQI0329-BS1	LCS	21.661	20.000	1.0	ug/L	108		85 - 115		
Total Recoverable Antimony	BQI0667	BQI0667-BS1	LCS	20.739	20.000	2.0	ug/L	104		85 - 115		
Total Recoverable Arsenic	BQI0667	BQI0667-BS1	LCS	51.458	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Beryllium	BQI0667	BQI0667-BS1	LCS	21.582	20.000	1.0	ug/L	108		85 - 115		
Total Recoverable Cadmium	BQI0667	BQI0667-BS1	LCS	20.305	20.000	1.0	ug/L	102		85 - 115		
Total Recoverable Lead	BQI0667	BQI0667-BS1	LCS	54.144	50.000	1.0	ug/L	108		85 - 115		

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Selenium	BQI0667	BQI0667-BS1	LCS	51.396	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Thallium	BQI0667	BQI0667-BS1	LCS	21.099	20.000	1.0	ug/L	105		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Drinking Waters
Project Number: AB 303 Project
Project Manager: Mike Stoner

Reported: 09/21/2007 11:23

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQH1772	BQH1772-BLK1	<0.50	mg/L	0.50		
Fluoride	BQH1772	BQH1772-BLK1	<0.050	mg/L	0.050		
Nitrate as NO3	BQH1772	BQH1772-BLK1	<0.44	mg/L	0.44		
Sulfate	BQH1772	BQH1772-BLK1	<1.0	mg/L	1.0		
Nitrite as N	BQH1886	BQH1886-BLK1	<50	ug/L	50		
Alkalinity as CaCO3	BQH2007	BQH2007-BLK1	<2.5	mg/L	2.5		
Total Cations	BQH2007	BQH2007-BLK1	<0.10	meq/L	0.10		
Total Anions	BQH2007	BQH2007-BLK1	<0.10	meq/L	0.10		
Hardness as CaCO3	BQH2007	BQH2007-BLK1	<0.50	mg/L	0.50		
Total Recoverable Calcium	BQI0094	BQI0094-BLK1	<0.10	mg/L	0.10		
Total Recoverable Magnesium	BQI0094	BQI0094-BLK1	<0.050	mg/L	0.050		
Total Recoverable Sodium	BQI0094	BQI0094-BLK1	<0.50	mg/L	0.50		
Total Recoverable Potassium	BQI0094	BQI0094-BLK1	<1.0	mg/L	1.0		
Total Dissolved Solids @ 180 C	BQI0150	BQI0150-BLK1	<6.7	mg/L	6.7		
Bicarbonate	BQI0473	BQI0473-BLK1	<2.9	mg/L	2.9		
Carbonate	BQI0473	BQI0473-BLK1	<1.5	mg/L	1.5		
Hydroxide	BQI0473	BQI0473-BLK1	<0.81	mg/L	0.81		
MBAS	BQI0694	BQI0694-BLK1	<0.10	mg/L	0.10		

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Aluminum	BQI0094	BQI0094-BLK2	<50	ug/L	50		
Total Recoverable Barium	BQI0094	BQI0094-BLK1	<10	ug/L	10		
Total Recoverable Boron	BQI0094	BQI0094-BLK1	<100	ug/L	100		
Total Recoverable Chromium	BQI0094	BQI0094-BLK1	<10	ug/L	10		
Total Recoverable Copper	BQI0094	BQI0094-BLK1	<10	ug/L	10		
Total Recoverable Iron	BQI0094	BQI0094-BLK1	<50	ug/L	50		
Total Recoverable Manganese	BQI0094	BQI0094-BLK2	<10	ug/L	10		
Total Recoverable Nickel	BQI0094	BQI0094-BLK1	<10	ug/L	10		
Total Recoverable Silver	BQI0094	BQI0094-BLK1	<10	ug/L	10		
Total Recoverable Zinc	BQI0094	BQI0094-BLK1	<50	ug/L	50		
Total Recoverable Mercury	BQI0323	BQI0323-BLK1	<0.20	ug/L	0.20		
Total Recoverable Antimony	BQI0329	BQI0329-BLK1	<2.0	ug/L	2.0		
Total Recoverable Arsenic	BQI0329	BQI0329-BLK1	<2.0	ug/L	2.0		
Total Recoverable Beryllium	BQI0329	BQI0329-BLK1	<1.0	ug/L	1.0		
Total Recoverable Cadmium	BQI0329	BQI0329-BLK1	<1.0	ug/L	1.0		
Total Recoverable Lead	BQI0329	BQI0329-BLK1	<1.0	ug/L	1.0		
Total Recoverable Selenium	BQI0329	BQI0329-BLK1	<2.0	ug/L	2.0		
Total Recoverable Thallium	BQI0329	BQI0329-BLK1	<1.0	ug/L	1.0		
Total Recoverable Antimony	BQI0667	BQI0667-BLK1	<2.0	ug/L	2.0		
Total Recoverable Arsenic	BQI0667	BQI0667-BLK1	<2.0	ug/L	2.0		
Total Recoverable Beryllium	BQI0667	BQI0667-BLK1	<1.0	ug/L	1.0		
Total Recoverable Cadmium	BQI0667	BQI0667-BLK1	<1.0	ug/L	1.0		
Total Recoverable Lead	BQI0667	BQI0667-BLK1	<1.0	ug/L	1.0		
Total Recoverable Selenium	BQI0667	BQI0667-BLK1	<2.0	ug/L	2.0		

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Thallium	BQI0667	BQI0667-BLK1	<1.0	ug/L	1.0		

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Naval Air Weapons Station - China Lake	Project: Drinking Waters	**Reported:** 09/21/2007 11:23
429 E. Bowan	Project Number: AB 303 Project	
China Lake, CA 93555	Project Manager: Mike Stoner	

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A10	PQL's and MDL's were raised due to matrix interference.
Q02	Matrix spike precision is not within the control limits.

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-01 | **Client Sample Name:** Weiler Well, 7/9/2007 5:50:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	140	mg/L	0.10	0.018	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Magnesium	18	mg/L	0.050	0.019	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Sodium	290	mg/L	0.50	0.12	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Potassium	6.8	mg/L	1.0	0.13	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Bicarbonate	250	mg/L	12	12	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	4	BQG0736	ND	A01
Carbonate	ND	mg/L	6.0	6.0	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	4	BQG0736	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	4	BQG0736	ND	A01
Alkalinity as CaCO3	210	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Chloride	570	mg/L	1.0	0.074	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01
Fluoride	1.3	mg/L	0.10	0.022	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01
Nitrate as NO3	24	mg/L	0.88	0.15	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01,A26,S05
Sulfate	54	mg/L	2.0	0.22	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01
Total Cations	21	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Total Anions	22	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	410	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
pH	7.41	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	2200	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	1500	mg/L	100	100	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	10	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:53	TDC	KONE-1	1	BQG0537	ND	

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-01 | **Client Sample Name:** Weiler Well, 7/9/2007 5:50:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	1.8	mg/L	0.10	0.016	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Copper	13	ug/L	10	2.0	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Manganese	ND	ug/L	10	3.7	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Zinc	23	ug/L	50	6.1	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	J

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-02 | **Client Sample Name:** Cow Haven Cyn., 7/9/2007 10:38:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	43	mg/L	0.10	0.018	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Magnesium	8.9	mg/L	0.050	0.019	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Sodium	22	mg/L	0.50	0.12	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Potassium	2.4	mg/L	1.0	0.13	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Bicarbonate	190	mg/L	2.9	2.9	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Carbonate	10	mg/L	1.5	1.5	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Alkalinity as CaCO3	170	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Chloride	6.3	mg/L	0.50	0.037	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	
Fluoride	0.27	mg/L	0.050	0.011	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	
Nitrate as NO3	5.6	mg/L	0.44	0.077	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	A26
Sulfate	15	mg/L	1.0	0.11	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	
Total Cations	3.9	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Total Anions	4.0	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	140	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
pH	8.22	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	363	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	240	mg/L	20	20	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	2	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	37	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:53	TDC	KONE-1	1	BQG0537	ND	J,A26,S05

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-02 | **Client Sample Name:** Cow Haven Cyn., 7/9/2007 10:38:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	39	ug/L	100	16	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	J
Total Recoverable Copper	5.2	ug/L	10	2.0	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	J
Total Recoverable Iron	80	ug/L	50	41	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Manganese	81	ug/L	10	3.7	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Zinc	13	ug/L	50	6.1	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	J

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-03 | **Client Sample Name:** Sage Cyn., 7/9/2007 11:21:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	96	mg/L	0.10	0.018	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Magnesium	18	mg/L	0.050	0.019	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Sodium	57	mg/L	0.50	0.12	EPA-200.7	07/16/07	07/17/07 14:56	ARD	PE-OP1	1	BQG0700	ND	
Total Recoverable Potassium	1.7	mg/L	1.0	0.13	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Bicarbonate	410	mg/L	5.8	5.8	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	2	BQG0736	ND	A01
Carbonate	ND	mg/L	3.0	3.0	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	2	BQG0736	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	2	BQG0736	ND	A01
Alkalinity as CaCO3	340	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Chloride	21	mg/L	0.50	0.037	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	
Fluoride	2.2	mg/L	0.050	0.011	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	A26
Sulfate	26	mg/L	1.0	0.11	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	
Total Cations	8.8	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Total Anions	8.0	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	310	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
pH	8.08	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	696	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	410	mg/L	20	20	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	2	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:56	TDC	KONE-1	1	BQG0537	ND	A26,S05

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-03 | **Client Sample Name:** Sage Cyn., 7/9/2007 11:21:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	85	ug/L	100	16	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	J
Total Recoverable Copper	2.3	ug/L	10	2.0	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	J
Total Recoverable Iron	4600	ug/L	50	41	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Manganese	140	ug/L	10	3.7	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Zinc	14	ug/L	50	6.1	EPA-200.7	07/16/07	07/17/07 14:56	ARD	PE-OP1	1	BQG0700	ND	J

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-04 | **Client Sample Name:** Horse Cyn., 7/9/2007 12:00:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	57	mg/L	0.10	0.018	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Magnesium	17	mg/L	0.050	0.019	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Sodium	47	mg/L	0.50	0.12	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Potassium	2.5	mg/L	1.0	0.13	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Bicarbonate	320	mg/L	2.9	2.9	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Carbonate	ND	mg/L	1.5	1.5	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Alkalinity as CaCO3	260	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Chloride	17	mg/L	0.50	0.037	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	
Fluoride	1.5	mg/L	0.050	0.011	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	
Nitrate as NO3	2.1	mg/L	0.44	0.077	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	A26
Sulfate	36	mg/L	1.0	0.11	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	
Total Cations	6.3	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Total Anions	6.6	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	210	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
pH	7.84	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	593	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	360	mg/L	20	20	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	2	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:56	TDC	KONE-1	1	BQG0537	ND	A26,S05

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-04 | **Client Sample Name:** Horse Cyn., 7/9/2007 12:00:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	68	ug/L	100	16	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	J
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Manganese	ND	ug/L	10	3.7	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Zinc	8.7	ug/L	50	6.1	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	J

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
MBAS	BQG0469	Duplicate	0707751-01	ND	ND		mg/L			20		A01
		Matrix Spike	0707751-01	ND	0.33880	0.40000	mg/L		84.7		80 - 120	A01
		Matrix Spike Duplicate	0707751-01	ND	0.34520	0.40000	mg/L	1.9	86.3	20	80 - 120	A01
Chloride	BQG0470	Duplicate	0707856-01	26.176	26.221		mg/L	0.2		10		
		Matrix Spike	0707856-01	26.176	137.18	101.01	mg/L		110		80 - 120	
		Matrix Spike Duplicate	0707856-01	26.176	137.43	101.01	mg/L	0	110	10	80 - 120	
Fluoride	BQG0470	Duplicate	0707856-01	0.36400	0.36800		mg/L	1.1		10		
		Matrix Spike	0707856-01	0.36400	1.3222	1.0101	mg/L		94.9		80 - 120	
		Matrix Spike Duplicate	0707856-01	0.36400	1.3242	1.0101	mg/L	0.2	95.1	10	80 - 120	
Nitrate as NO3	BQG0470	Duplicate	0707856-01	40.279	40.434		mg/L	0.4		10		
		Matrix Spike	0707856-01	40.279	62.941	22.358	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0707856-01	40.279	63.035	22.358	mg/L	1.0	102	10	80 - 120	
Sulfate	BQG0470	Duplicate	0707856-01	42.391	42.536		mg/L	0.3		10		
		Matrix Spike	0707856-01	42.391	149.14	101.01	mg/L		106		80 - 120	
		Matrix Spike Duplicate	0707856-01	42.391	149.24	101.01	mg/L	0	106	10	80 - 120	
Nitrite as N	BQG0537	Duplicate	0707854-01	ND	ND		ug/L			10		
		Matrix Spike	0707854-01	ND	517.65	526.32	ug/L		98.4		90 - 110	
		Matrix Spike Duplicate	0707854-01	ND	520.09	526.32	ug/L	0.4	98.8	10	90 - 110	
pH	BQG0561	Duplicate	0707846-02	8.2230	8.2340		pH Units	0.1		20		
Electrical Conductivity @ 25 C	BQG0562	Duplicate	0707846-02	363.00	364.00		umhos/cm	0.3		10		
Total Recoverable Calcium	BQG0700	Duplicate	0707914-01	107.48	103.82		mg/L	3.5		20		
		Matrix Spike	0707914-01	107.48	109.78	10.000	mg/L		23.0		75 - 125	A03
		Matrix Spike Duplicate	0707914-01	107.48	109.24	10.000	mg/L	26.6	17.6	20	75 - 125	A03,Q02
Total Recoverable Magnesium	BQG0700	Duplicate	0707914-01	37.279	36.813		mg/L	1.3		20		
		Matrix Spike	0707914-01	37.279	45.691	10.000	mg/L		84.1		75 - 125	
		Matrix Spike Duplicate	0707914-01	37.279	44.805	10.000	mg/L	11.0	75.3	20	75 - 125	

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:3

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Sodium	BQG0700	Duplicate	0707914-01	51.013	52.215		mg/L	2.3		20		
		Matrix Spike	0707914-01	51.013	58.694	10.000	mg/L		76.8		75 - 125	
		Matrix Spike Duplicate	0707914-01	51.013	58.779	10.000	mg/L	1.2	77.7	20	75 - 125	
Total Recoverable Potassium	BQG0700	Duplicate	0707914-01	4.8152	4.7217		mg/L	2.0		20		
		Matrix Spike	0707914-01	4.8152	14.975	10.000	mg/L		102		75 - 125	
		Matrix Spike Duplicate	0707914-01	4.8152	14.773	10.000	mg/L	2.4	99.6	20	75 - 125	
Bicarbonate	BQG0736	Duplicate	0707870-01	182.02	179.70		mg/L	1.3		10		A01
		Matrix Spike	0707870-01	182.02	335.04	152.38	mg/L		100		80 - 120	A01
		Matrix Spike Duplicate	0707870-01	182.02	335.04	152.38	mg/L	0	100	10	80 - 120	A01
Carbonate	BQG0736	Duplicate	0707870-01	ND	ND		mg/L			10		A01
Hydroxide	BQG0736	Duplicate	0707870-01	ND	ND		mg/L			10		A01
Total Recoverable Calcium	BQG0776	Duplicate	0707846-01	135.65	132.52		mg/L	2.3		20		
		Matrix Spike	0707846-01	135.65	143.18	10.204	mg/L		73.8		75 - 125	A03
		Matrix Spike Duplicate	0707846-01	135.65	143.69	10.204	mg/L	6.6	78.8	20	75 - 125	
Total Recoverable Magnesium	BQG0776	Duplicate	0707846-01	17.693	17.901		mg/L	1.2		20		
		Matrix Spike	0707846-01	17.693	27.546	10.204	mg/L		96.6		75 - 125	
		Matrix Spike Duplicate	0707846-01	17.693	27.787	10.204	mg/L	2.4	98.9	20	75 - 125	
Total Recoverable Sodium	BQG0776	Duplicate	0707846-01	285.12	277.43		mg/L	2.7		20		
		Matrix Spike	0707846-01	285.12	288.72	10.204	mg/L		35.3		75 - 125	A03
		Matrix Spike Duplicate	0707846-01	285.12	288.97	10.204	mg/L	6.6	37.7	20	75 - 125	A03
Total Recoverable Potassium	BQG0776	Duplicate	0707846-01	6.7747	6.7911		mg/L	0.2		20		
		Matrix Spike	0707846-01	6.7747	16.417	10.204	mg/L		94.5		75 - 125	
		Matrix Spike Duplicate	0707846-01	6.7747	16.415	10.204	mg/L	0	94.5	20	75 - 125	
Total Dissolved Solids @ 180 C	BQG1003	Duplicate	0707846-01	1470.0	1490.0		mg/L	1.4		10		

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Boron	BQG0700	Duplicate	0707914-01	43.438	41.425		ug/L	4.7		20		J
		Matrix Spike	0707914-01	43.438	1075.9	1000.0	ug/L		103		75 - 125	
		Matrix Spike Duplicate	0707914-01	43.438	1087.6	1000.0	ug/L	1.0	104	20	75 - 125	
Total Recoverable Copper	BQG0700	Duplicate	0707914-01	2.9846	3.0509		ug/L	2.2		20		J
		Matrix Spike	0707914-01	2.9846	200.59	200.00	ug/L		98.8		75 - 125	
		Matrix Spike Duplicate	0707914-01	2.9846	203.52	200.00	ug/L	1.2	100	20	75 - 125	
Total Recoverable Iron	BQG0700	Duplicate	0707914-01	43.148	42.431		ug/L	1.7		20		J
		Matrix Spike	0707914-01	43.148	471.56	400.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0707914-01	43.148	470.55	400.00	ug/L	0	107	20	75 - 125	
Total Recoverable Manganese	BQG0700	Duplicate	0707914-01	12.513	12.150		ug/L	2.9		20		
		Matrix Spike	0707914-01	12.513	226.87	200.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0707914-01	12.513	224.89	200.00	ug/L	0.9	106	20	75 - 125	
Total Recoverable Zinc	BQG0700	Duplicate	0707914-01	63.992	64.224		ug/L	0.4		20		
		Matrix Spike	0707914-01	63.992	215.38	200.00	ug/L		75.7		75 - 125	
		Matrix Spike Duplicate	0707914-01	63.992	217.55	200.00	ug/L	1.4	76.8	20	75 - 125	
Total Recoverable Boron	BQG0776	Duplicate	0707846-01	1.7950	1.7736		mg/L	1.2		20		
		Matrix Spike	0707846-01	1.7950	2.8234	1.0204	mg/L		101		75 - 125	
		Matrix Spike Duplicate	0707846-01	1.7950	2.8468	1.0204	mg/L	2.0	103	20	75 - 125	
Total Recoverable Boron	BQG0776	Duplicate	0707846-01	1795.0	1773.6		ug/L	1.2		20		
		Matrix Spike	0707846-01	1795.0	2823.4	1020.4	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0707846-01	1795.0	2846.8	1020.4	ug/L	2.0	103	20	75 - 125	
Total Recoverable Copper	BQG0776	Duplicate	0707846-01	12.924	12.351		ug/L	4.5		20		
		Matrix Spike	0707846-01	12.924	210.45	204.08	ug/L		96.8		75 - 125	
		Matrix Spike Duplicate	0707846-01	12.924	212.52	204.08	ug/L	1.0	97.8	20	75 - 125	
Total Recoverable Iron	BQG0776	Duplicate	0707846-01	ND	ND		ug/L			20		
		Matrix Spike	0707846-01	ND	432.96	408.16	ug/L		106		75 - 125	
		Matrix Spike Duplicate	0707846-01	ND	440.68	408.16	ug/L	1.9	108	20	75 - 125	

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Manganese	BQG0776	Duplicate	0707846-01	ND	ND		ug/L			20		
		Matrix Spike	0707846-01	ND	189.50	204.08	ug/L		92.9		75 - 125	
		Matrix Spike Duplicate	0707846-01	ND	190.31	204.08	ug/L	0.4	93.3	20	75 - 125	
Total Recoverable Zinc	BQG0776	Duplicate	0707846-01	22.947	21.324		ug/L	7.3		20		J
		Matrix Spike	0707846-01	22.947	250.40	204.08	ug/L		111		75 - 125	
		Matrix Spike Duplicate	0707846-01	22.947	252.25	204.08	ug/L	0.9	112	20	75 - 125	

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16.3

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
MBAS	BQG0469	BQG0469-BS1	LCS	0.19210	0.20000	0.10	mg/L	96.0		85 - 115		
Chloride	BQG0470	BQG0470-BS1	LCS	105.80	100.00	0.50	mg/L	106		90 - 110		
Fluoride	BQG0470	BQG0470-BS1	LCS	0.99300	1.0000	0.050	mg/L	99.3		90 - 110		
Nitrate as NO3	BQG0470	BQG0470-BS1	LCS	22.377	22.134	0.50	mg/L	101		90 - 110		
Sulfate	BQG0470	BQG0470-BS1	LCS	103.18	100.00	1.0	mg/L	103		90 - 110		
Nitrite as N	BQG0537	BQG0537-BS1	LCS	497.84	500.00	50	ug/L	99.6		90 - 110		
pH	BQG0561	BQG0561-BS1	LCS	7.0110	7.0000	0.05	pH Units	100		95 - 105		
Electrical Conductivity @ 25 C	BQG0562	BQG0562-BS1	LCS	299.00	303.00	1.00	umhos/cm	98.7		90 - 110		
Total Recoverable Calcium	BQG0700	BQG0700-BS1	LCS	10.649	10.000	0.10	mg/L	106		85 - 115		
Total Recoverable Magnesium	BQG0700	BQG0700-BS1	LCS	10.741	10.000	0.050	mg/L	107		85 - 115		
Total Recoverable Sodium	BQG0700	BQG0700-BS2	LCS	9.9580	10.000	0.50	mg/L	99.6		85 - 115		
Total Recoverable Potassium	BQG0700	BQG0700-BS1	LCS	10.388	10.000	1.0	mg/L	104		85 - 115		
Bicarbonate	BQG0736	BQG0736-BS1	LCS	126.95	121.90	2.9	mg/L	104		90 - 110		
Total Recoverable Calcium	BQG0776	BQG0776-BS1	LCS	10.049	10.000	0.10	mg/L	100		85 - 115		
Total Recoverable Magnesium	BQG0776	BQG0776-BS1	LCS	10.406	10.000	0.050	mg/L	104		85 - 115		
Total Recoverable Sodium	BQG0776	BQG0776-BS1	LCS	10.069	10.000	0.50	mg/L	101		85 - 115		
Total Recoverable Potassium	BQG0776	BQG0776-BS1	LCS	9.5721	10.000	1.0	mg/L	95.7		85 - 115		
Total Dissolved Solids @ 180 C	BQG1003	BQG1003-BS1	LCS	540.00	586.00	50	mg/L	92.2		90 - 110		

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:3

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Boron	BQG0700	BQG0700-BS1	LCS	1076.0	1000.0	100	ug/L	108		85 - 115		
Total Recoverable Copper	BQG0700	BQG0700-BS1	LCS	194.75	200.00	10	ug/L	97.4		85 - 115		
Total Recoverable Iron	BQG0700	BQG0700-BS1	LCS	434.72	400.00	50	ug/L	109		85 - 115		
Total Recoverable Manganese	BQG0700	BQG0700-BS1	LCS	226.63	200.00	10	ug/L	113		85 - 115		
Total Recoverable Zinc	BQG0700	BQG0700-BS2	LCS	207.02	200.00	50	ug/L	104		85 - 115		
Total Recoverable Boron	BQG0776	BQG0776-BS1	LCS	0.99282	1.0000	0.10	mg/L	99.3		85 - 115		
Total Recoverable Boron	BQG0776	BQG0776-BS1	LCS	992.82	1000.0	100	ug/L	99.3		85 - 115		
Total Recoverable Copper	BQG0776	BQG0776-BS1	LCS	191.97	200.00	10	ug/L	96.0		85 - 115		
Total Recoverable Iron	BQG0776	BQG0776-BS1	LCS	395.58	400.00	50	ug/L	98.9		85 - 115		
Total Recoverable Manganese	BQG0776	BQG0776-BS1	LCS	204.48	200.00	10	ug/L	102		85 - 115		
Total Recoverable Zinc	BQG0776	BQG0776-BS1	LCS	225.84	200.00	50	ug/L	113		85 - 115		

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
MBAS	BQG0469	BQG0469-BLK1	ND	mg/L	0.10	0.039	
Chloride	BQG0470	BQG0470-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQG0470	BQG0470-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQG0470	BQG0470-BLK1	ND	mg/L	0.50	0.077	
Sulfate	BQG0470	BQG0470-BLK1	ND	mg/L	1.0	0.11	
Nitrite as N	BQG0537	BQG0537-BLK1	ND	ug/L	50	10	
Alkalinity as CaCO3	BQG0590	BQG0590-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQG0590	BQG0590-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQG0590	BQG0590-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQG0590	BQG0590-BLK1	ND	mg/L	0.50	0.10	
Total Recoverable Calcium	BQG0700	BQG0700-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQG0700	BQG0700-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQG0700	BQG0700-BLK2	ND	mg/L	0.50	0.12	
Total Recoverable Potassium	BQG0700	BQG0700-BLK1	ND	mg/L	1.0	0.13	
Bicarbonate	BQG0736	BQG0736-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQG0736	BQG0736-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQG0736	BQG0736-BLK1	ND	mg/L	0.81	0.81	
Total Recoverable Calcium	BQG0776	BQG0776-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQG0776	BQG0776-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQG0776	BQG0776-BLK1	ND	mg/L	0.50	0.12	
Total Recoverable Potassium	BQG0776	BQG0776-BLK1	ND	mg/L	1.0	0.13	
Total Dissolved Solids @ 180 C	BQG1003	BQG1003-BLK1	ND	mg/L	6.7	6.7	

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NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Boron	BQG0700	BQG0700-BLK1	ND	ug/L	100	16	
Total Recoverable Copper	BQG0700	BQG0700-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQG0700	BQG0700-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQG0700	BQG0700-BLK1	ND	ug/L	10	3.7	
Total Recoverable Zinc	BQG0700	BQG0700-BLK2	ND	ug/L	50	6.1	
Total Recoverable Boron	BQG0776	BQG0776-BLK1	ND	mg/L	0.10	0.016	
Total Recoverable Boron	BQG0776	BQG0776-BLK1	ND	ug/L	100	16	
Total Recoverable Copper	BQG0776	BQG0776-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQG0776	BQG0776-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQG0776	BQG0776-BLK1	ND	ug/L	10	3.7	
Total Recoverable Zinc	BQG0776	BQG0776-BLK1	ND	ug/L	50	6.1	

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NAWS-China Lake	Project: Water Samples	**Reported:** 07/27/2007 16:38
429 E. Bowen	Project Number: [none]	
Building 982	Project Manager: Mike Stoner	
China Lake, CA 93555		

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q02	Matrix spike precision is not within the control limits.
S05	The sample holding time was exceeded.

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LABORATORIES, INC.

Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/13/2007 15:20
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712427-01 | **Client Sample Name:** 27138, 10/20/2007 11:30:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	43	mg/L	0.10	0.018	EPA-200.7	11/05/07	11/09/07 11:47	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Magnesium	8.3	mg/L	0.050	0.019	EPA-200.7	11/05/07	11/09/07 11:47	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Sodium	220	mg/L	0.50	0.12	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Potassium	8.2	mg/L	1.0	0.13	EPA-200.7	11/05/07	11/09/07 11:47	LDG	PE-OP2	1	BQK0185	ND	
Bicarbonate	380	mg/L	12	12	SM-2320B	10/25/07	10/25/07 09:40	JSM	BDB	4	BQJ1602	ND	A01
Carbonate	ND	mg/L	6.0	6.0	SM-2320B	10/25/07	10/25/07 09:40	JSM	BDB	4	BQJ1602	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	SM-2320B	10/25/07	10/25/07 09:40	JSM	BDB	4	BQJ1602	ND	A01
Alkalinity as CaCO3	310	mg/L	2.5	2.5	Calc	10/25/07	11/13/07 15:19	MSA	Calc	1	BQJ1556	ND	
Chloride	82	mg/L	0.50	0.037	EPA-300.0	11/08/07	11/08/07 21:09	FAD	IC2	1	BQK0474	ND	
Fluoride	0.81	mg/L	0.050	0.011	EPA-300.0	10/24/07	10/24/07 03:32	LMB	IC1	1	BQJ1399	ND	
Nitrate as NO3	0.85	mg/L	0.44	0.077	EPA-300.0	10/24/07	10/24/07 03:32	LMB	IC1	1	BQJ1399	ND	A26,S05
Sulfate	180	mg/L	1.0	0.11	EPA-300.0	11/08/07	11/08/07 21:09	FAD	IC2	1	BQK0474	ND	
Total Cations	13	meq/L	0.10	0.10	Calc	10/25/07	11/13/07 15:19	MSA	Calc	1	BQJ1556	ND	
Total Anions	12	meq/L	0.10	0.10	Calc	10/25/07	11/13/07 15:19	MSA	Calc	1	BQJ1556	ND	
Hardness as CaCO3	140	mg/L	0.50	0.10	Calc	10/25/07	11/13/07 15:19	MSA	Calc	1	BQJ1556	ND	
pH	8.05	pH Units	0.05	0.05	EPA-150.1	10/24/07	10/24/07 13:45	JSM	B360	1	BQJ1504		
Electrical Conductivity @ 25 C	1060	umhos/cm	1.00	1.00	SM-2510B	10/24/07	10/24/07 11:35	JSM	CND-3	1	BQJ1503		
Total Dissolved Solids @ 180 C	780	mg/L	33	33	SM-2540C	10/26/07	10/26/07 14:00	JLR	MANUAL	3.333	BQJ1792	ND	
Color	20	Color Units	1.0	1.0	SM-2120B	10/23/07	10/23/07 10:00	MAR	MANUAL	1	BQJ1516		A26,S05
Turbidity	68	NT Units	0.20	0.20	EPA-180.1	10/23/07	10/23/07 10:00	MAR	T2100	2	BQJ1512		A01,A26,S05
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/24/07	10/24/07 09:00	CDR	SPEC05	1	BQK0140	ND	A26,S05
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/23/07	10/23/07 17:29	TDC	KONE-1	1	BQJ1468	ND	A26,S05

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Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/13/2007 15:20
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0712427-01 | **Client Sample Name:** 27138, 10/20/2007 11:30:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	24000	ug/L	50	36	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Antimony	3.6	ug/L	2.0	0.097	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	0.097	
Total Recoverable Arsenic	54	ug/L	2.0	0.37	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	
Total Recoverable Barium	160	ug/L	10	1.7	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Beryllium	0.89	ug/L	1.0	0.043	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	J
Total Recoverable Boron	500	ug/L	100	16	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Cadmium	0.69	ug/L	1.0	0.025	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	J
Total Recoverable Chromium	11	ug/L	10	1.6	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Copper	160	ug/L	10	2.0	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Iron	20000	ug/L	50	41	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Lead	18	ug/L	1.0	0.057	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	0.10	
Total Recoverable Manganese	1100	ug/L	10	3.7	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	11/05/07	11/06/07 11:06	MEV	CETAC1	1	BQK0224	ND	
Total Recoverable Nickel	20	ug/L	10	3.4	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Selenium	1.9	ug/L	2.0	0.47	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.016	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	
Total Recoverable Zinc	180	ug/L	50	6.1	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/13/2007 15:20

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Fluoride	BQJ1399	Duplicate	0712442-02	0.13900	0.14500		mg/L	4.2		10		
		Matrix Spike	0712442-02	0.13900	1.2394	1.0101	mg/L		109		80 - 120	
		Matrix Spike Duplicate	0712442-02	0.13900	1.2303	1.0101	mg/L	0.9	108	10	80 - 120	
Nitrate as NO3	BQJ1399	Duplicate	0712442-02	47.092	47.150		mg/L	0.1		10		
		Matrix Spike	0712442-02	47.092	69.774	22.358	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0712442-02	47.092	69.823	22.358	mg/L	1.0	102	10	80 - 120	
Nitrite as N	BQJ1468	Duplicate	0712410-11	ND	ND		ug/L			10		
		Matrix Spike	0712410-11	ND	510.09	526.32	ug/L		96.9		90 - 110	
		Matrix Spike Duplicate	0712410-11	ND	512.56	526.32	ug/L	0.5	97.4	10	90 - 110	
Electrical Conductivity @ 25°C	BQJ1503	Duplicate	0712388-05	216.00	215.00		umhos/cm	0.5		10		
pH	BQJ1504	Duplicate	0712365-01	7.9100	7.9210		pH Units	0.1		20		
Turbidity	BQJ1512	Duplicate	0712377-01	135.00	135.00		NT Units	0		10		A01
Color	BQJ1516	Duplicate	0712377-01	4.0000	4.0000		Color Units	0		20		
Bicarbonate	BQJ1602	Duplicate	0712378-01	127.52	126.36		mg/L	0.9		10		A01
		Matrix Spike	0712378-01	127.52	282.88	152.38	mg/L		102		80 - 120	A01
		Matrix Spike Duplicate	0712378-01	127.52	285.20	152.38	mg/L	1.0	103	10	80 - 120	A01
Carbonate	BQJ1602	Duplicate	0712378-01	ND	ND		mg/L			10		A01
Hydroxide	BQJ1602	Duplicate	0712378-01	ND	ND		mg/L			10		A01
Total Dissolved Solids @ 180 C	BQJ1792	Duplicate	0712417-01	9720.0	9660.0		mg/L	0.6		10		
MBAS	BQK0140	Duplicate	0712454-03	ND	ND		mg/L			20		A01
		Matrix Spike	0712454-03	ND	0.39700	0.40000	mg/L		99.2		80 - 120	A01
		Matrix Spike Duplicate	0712454-03	ND	0.40420	0.40000	mg/L	1.8	101	20	80 - 120	A01
Total Recoverable Calcium	BQK0185	Duplicate	0712390-01	35.076	34.070		mg/L	2.9		20		
		Matrix Spike	0712390-01	35.076	44.488	10.000	mg/L		94.1		75 - 125	
		Matrix Spike Duplicate	0712390-01	35.076	44.448	10.000	mg/L	0.4	93.7	20	75 - 125	

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Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/13/2007 15:20
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Magnesium	BQK0185	Duplicate	0712390-01	8.7847	8.5461		mg/L	2.8		20		
		Matrix Spike	0712390-01	8.7847	18.169	10.000	mg/L		93.8		75 - 125	
		Matrix Spike Duplicate	0712390-01	8.7847	18.447	10.000	mg/L	2.9	96.6	20	75 - 125	
Total Recoverable Sodium	BQK0185	Duplicate	0712390-01	27.727	27.219		mg/L	1.8		20		
		Matrix Spike	0712390-01	27.727	37.131	10.000	mg/L		94.0		75 - 125	
		Matrix Spike Duplicate	0712390-01	27.727	37.313	10.000	mg/L	2.0	95.9	20	75 - 125	
Total Recoverable Potassium	BQK0185	Duplicate	0712390-01	1.8405	1.7929		mg/L	2.6		20		
		Matrix Spike	0712390-01	1.8405	11.517	10.000	mg/L		96.8		75 - 125	
		Matrix Spike Duplicate	0712390-01	1.8405	11.546	10.000	mg/L	0.3	97.1	20	75 - 125	
Chloride	BQK0474	Duplicate	0713205-01	5.7650	5.7940		mg/L	0.5		10		
		Matrix Spike	0713205-01	5.7650	119.92	101.01	mg/L		113		80 - 120	
		Matrix Spike Duplicate	0713205-01	5.7650	119.92	101.01	mg/L	0	113	10	80 - 120	
Sulfate	BQK0474	Duplicate	0713205-01	16.238	16.123		mg/L	0.7		10		
		Matrix Spike	0713205-01	16.238	126.33	101.01	mg/L		109		80 - 120	
		Matrix Spike Duplicate	0713205-01	16.238	126.24	101.01	mg/L	0	109	10	80 - 120	

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Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/13/2007 15:20
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Aluminum	BQK0185	Duplicate	0712390-01	1541.0	1505.0		ug/L	2.4		20		
		Matrix Spike	0712390-01	1541.0	3202.1	1000.0	ug/L		166		75 - 125	Q03
		Matrix Spike Duplicate	0712390-01	1541.0	3219.9	1000.0	ug/L	1.2	168	20	75 - 125	Q03
Total Recoverable Barium	BQK0185	Duplicate	0712390-01	27.473	27.223		ug/L	0.9		20		
		Matrix Spike	0712390-01	27.473	223.03	200.00	ug/L		97.8		75 - 125	
		Matrix Spike Duplicate	0712390-01	27.473	223.39	200.00	ug/L	0.2	98.0	20	75 - 125	
Total Recoverable Boron	BQK0185	Duplicate	0712390-01	319.94	318.88		ug/L	0.3		20		
		Matrix Spike	0712390-01	319.94	1303.5	1000.0	ug/L		98.4		75 - 125	
		Matrix Spike Duplicate	0712390-01	319.94	1343.9	1000.0	ug/L	3.6	102	20	75 - 125	
Total Recoverable Chromium	BQK0185	Duplicate	0712390-01	6.5220	6.5738		ug/L	0.8		20		J
		Matrix Spike	0712390-01	6.5220	197.96	200.00	ug/L		95.7		75 - 125	
		Matrix Spike Duplicate	0712390-01	6.5220	201.83	200.00	ug/L	2.1	97.7	20	75 - 125	
Total Recoverable Copper	BQK0185	Duplicate	0712390-01	4.0380	3.9950		ug/L	1.1		20		J
		Matrix Spike	0712390-01	4.0380	194.86	200.00	ug/L		95.4		75 - 125	
		Matrix Spike Duplicate	0712390-01	4.0380	195.64	200.00	ug/L	0.4	95.8	20	75 - 125	
Total Recoverable Iron	BQK0185	Duplicate	0712390-01	5685.1	5355.6		ug/L	6.0		20		
		Matrix Spike	0712390-01	5685.1	5952.7	400.00	ug/L		66.9		75 - 125	A03
		Matrix Spike Duplicate	0712390-01	5685.1	6040.6	400.00	ug/L	28.2	88.9	20	75 - 125	A03,Q02
Total Recoverable Manganese	BQK0185	Duplicate	0712390-01	383.14	394.56		ug/L	2.9		20		
		Matrix Spike	0712390-01	383.14	583.83	200.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0712390-01	383.14	584.97	200.00	ug/L	1.0	101	20	75 - 125	
Total Recoverable Nickel	BQK0185	Duplicate	0712390-01	9.2300	8.8212		ug/L	4.5		20		J
		Matrix Spike	0712390-01	9.2300	427.81	400.00	ug/L		105		75 - 125	
		Matrix Spike Duplicate	0712390-01	9.2300	426.38	400.00	ug/L	1.0	104	20	75 - 125	
Total Recoverable Silver	BQK0185	Duplicate	0712390-01	ND	ND		ug/L			20		
		Matrix Spike	0712390-01	ND	105.19	100.00	ug/L		105		75 - 125	
		Matrix Spike Duplicate	0712390-01	ND	105.41	100.00	ug/L	0	105	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/13/2007 15:20

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Zinc	BQK0185	Duplicate	0712390-01	214.48	206.87		ug/L	3.6		20		
		Matrix Spike	0712390-01	214.48	416.78	200.00	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0712390-01	214.48	412.79	200.00	ug/L	1.8	99.2	20	75 - 125	
Total Recoverable Antimony	BQK0186	Duplicate	0712404-01	0.14100	0.10200		ug/L	32.1		20		J,A02
		Matrix Spike	0712404-01	0.14100	20.751	20.000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0712404-01	0.14100	20.719	20.000	ug/L	0	103	20	70 - 130	
Total Recoverable Arsenic	BQK0186	Duplicate	0712404-01	12.252	12.441		ug/L	1.5		20		
		Matrix Spike	0712404-01	12.252	59.777	50.000	ug/L		95.0		70 - 130	
		Matrix Spike Duplicate	0712404-01	12.252	59.996	50.000	ug/L	0.5	95.5	20	70 - 130	
Total Recoverable Beryllium	BQK0186	Duplicate	0712404-01	ND	ND		ug/L			20		
		Matrix Spike	0712404-01	ND	17.551	20.000	ug/L		87.8		70 - 130	
		Matrix Spike Duplicate	0712404-01	ND	17.481	20.000	ug/L	0.5	87.4	20	70 - 130	
Total Recoverable Cadmium	BQK0186	Duplicate	0712404-01	ND	ND		ug/L			20		
		Matrix Spike	0712404-01	ND	18.845	20.000	ug/L		94.2		70 - 130	
		Matrix Spike Duplicate	0712404-01	ND	18.906	20.000	ug/L	0.3	94.5	20	70 - 130	
Total Recoverable Lead	BQK0186	Duplicate	0712404-01	0.63700	0.62300		ug/L	2.2		20		J
		Matrix Spike	0712404-01	0.63700	45.105	50.000	ug/L		88.9		70 - 130	
		Matrix Spike Duplicate	0712404-01	0.63700	45.690	50.000	ug/L	1.3	90.1	20	70 - 130	
Total Recoverable Selenium	BQK0186	Duplicate	0712404-01	ND	ND		ug/L			20		
		Matrix Spike	0712404-01	ND	45.975	50.000	ug/L		92.0		70 - 130	
		Matrix Spike Duplicate	0712404-01	ND	46.216	50.000	ug/L	0.4	92.4	20	70 - 130	
Total Recoverable Thallium	BQK0186	Duplicate	0712404-01	0.048000	ND		ug/L			20		
		Matrix Spike	0712404-01	0.048000	17.775	20.000	ug/L		88.6		70 - 130	
		Matrix Spike Duplicate	0712404-01	0.048000	18.105	20.000	ug/L	1.9	90.3	20	70 - 130	
Total Recoverable Mercury	BQK0224	Duplicate	0712407-12	ND	ND		ug/L			20		
		Matrix Spike	0712407-12	ND	0.96500	1.0000	ug/L		96.5		70 - 130	
		Matrix Spike Duplicate	0712407-12	ND	0.96000	1.0000	ug/L	0.5	96.0	20	70 - 130	

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Arsenic Pilot Study Project Number: [none] Project Manager: Mike Stoner	**Reported:** 11/13/2007 15:20

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Fluoride	BQJ1399	BQJ1399-BS1	LCS	1.0400	1.0000	0.050	mg/L	104		90 - 110		
Nitrate as NO3	BQJ1399	BQJ1399-BS1	LCS	23.050	22.134	0.44	mg/L	104		90 - 110		
Nitrite as N	BQJ1468	BQJ1468-BS1	LCS	482.13	500.00	50	ug/L	96.4		90 - 110		
Electrical Conductivity @ 25 C	BQJ1503	BQJ1503-BS1	LCS	301.00	303.00	1.00	umhos/cm	99.3		90 - 110		
pH	BQJ1504	BQJ1504-BS1	LCS	7.0280	7.0000	0.05	pH Units	100		95 - 105		
Bicarbonate	BQJ1602	BQJ1602-BS1	LCS	127.53	121.90	2.9	mg/L	105		90 - 110		
Total Dissolved Solids @ 180 C	BQJ1792	BQJ1792-BS1	LCS	595.00	586.00	50	mg/L	102		90 - 110		
MBAS	BQK0140	BQK0140-BS1	LCS	0.20030	0.20000	0.10	mg/L	100		85 - 115		
Total Recoverable Calcium	BQK0185	BQK0185-BS1	LCS	9.5915	10.000	0.10	mg/L	95.9		85 - 115		
Total Recoverable Magnesium	BQK0185	BQK0185-BS1	LCS	9.8642	10.000	0.050	mg/L	98.6		85 - 115		
Total Recoverable Sodium	BQK0185	BQK0185-BS1	LCS	10.070	10.000	0.50	mg/L	101		85 - 115		
Total Recoverable Potassium	BQK0185	BQK0185-BS1	LCS	9.6974	10.000	1.0	mg/L	97.0		85 - 115		
Chloride	BQK0474	BQK0474-BS1	LCS	109.28	100.00	0.50	mg/L	109		90 - 110		
Sulfate	BQK0474	BQK0474-BS1	LCS	105.60	100.00	1.0	mg/L	106		90 - 110		

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Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/13/2007 15:20
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Aluminum	BQK0185	BQK0185-BS1	LCS	966.46	1000.0	50	ug/L	96.6		85 - 115		
Total Recoverable Barium	BQK0185	BQK0185-BS1	LCS	193.48	200.00	10	ug/L	96.7		85 - 115		
Total Recoverable Boron	BQK0185	BQK0185-BS1	LCS	958.10	1000.0	100	ug/L	95.8		85 - 115		
Total Recoverable Chromium	BQK0185	BQK0185-BS1	LCS	186.44	200.00	10	ug/L	93.2		85 - 115		
Total Recoverable Copper	BQK0185	BQK0185-BS1	LCS	177.60	200.00	10	ug/L	88.8		85 - 115		
Total Recoverable Iron	BQK0185	BQK0185-BS1	LCS	408.87	400.00	50	ug/L	102		85 - 115		
Total Recoverable Manganese	BQK0185	BQK0185-BS1	LCS	212.01	200.00	10	ug/L	106		85 - 115		
Total Recoverable Nickel	BQK0185	BQK0185-BS1	LCS	407.07	400.00	10	ug/L	102		85 - 115		
Total Recoverable Silver	BQK0185	BQK0185-BS1	LCS	101.41	100.00	10	ug/L	101		85 - 115		
Total Recoverable Zinc	BQK0185	BQK0185-BS1	LCS	206.34	200.00	50	ug/L	103		85 - 115		
Total Recoverable Antimony	BQK0186	BQK0186-BS1	LCS	21.960	20.000	2.0	ug/L	110		85 - 115		
Total Recoverable Arsenic	BQK0186	BQK0186-BS1	LCS	51.357	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Beryllium	BQK0186	BQK0186-BS1	LCS	18.418	20.000	1.0	ug/L	92.1		85 - 115		
Total Recoverable Cadmium	BQK0186	BQK0186-BS1	LCS	20.108	20.000	1.0	ug/L	101		85 - 115		
Total Recoverable Lead	BQK0186	BQK0186-BS1	LCS	48.715	50.000	1.0	ug/L	97.4		85 - 115		
Total Recoverable Selenium	BQK0186	BQK0186-BS1	LCS	49.972	50.000	2.0	ug/L	99.9		85 - 115		
Total Recoverable Thallium	BQK0186	BQK0186-BS1	LCS	19.452	20.000	1.0	ug/L	97.3		85 - 115		
Total Recoverable Mercury	BQK0224	BQK0224-BS1	LCS	0.97000	1.0000	0.20	ug/L	97.0		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/13/2007 15:20

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Fluoride	BQJ1399	BQJ1399-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQJ1399	BQJ1399-BLK1	ND	mg/L	0.44	0.077	
Nitrite as N	BQJ1468	BQJ1468-BLK1	ND	ug/L	50	10	
Alkalinity as CaCO3	BQJ1556	BQJ1556-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQJ1556	BQJ1556-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQJ1556	BQJ1556-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQJ1556	BQJ1556-BLK1	ND	mg/L	0.50	0.10	
Bicarbonate	BQJ1602	BQJ1602-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQJ1602	BQJ1602-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQJ1602	BQJ1602-BLK1	ND	mg/L	0.81	0.81	
Total Dissolved Solids @ 180 C	BQJ1792	BQJ1792-BLK1	ND	mg/L	6.7	6.7	
MBAS	BQK0140	BQK0140-BLK1	ND	mg/L	0.10	0.039	
Total Recoverable Calcium	BQK0185	BQK0185-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQK0185	BQK0185-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQK0185	BQK0185-BLK1	ND	mg/L	0.50	0.12	
Total Recoverable Potassium	BQK0185	BQK0185-BLK1	ND	mg/L	1.0	0.13	
Chloride	BQK0474	BQK0474-BLK1	ND	mg/L	0.50	0.037	
Sulfate	BQK0474	BQK0474-BLK1	ND	mg/L	1.0	0.11	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/13/2007 15:20

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Aluminum	BQK0185	BQK0185-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQK0185	BQK0185-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQK0185	BQK0185-BLK1	ND	ug/L	100	16	
Total Recoverable Chromium	BQK0185	BQK0185-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQK0185	BQK0185-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQK0185	BQK0185-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQK0185	BQK0185-BLK1	ND	ug/L	10	3.7	
Total Recoverable Nickel	BQK0185	BQK0185-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQK0185	BQK0185-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQK0185	BQK0185-BLK1	ND	ug/L	50	6.1	
Total Recoverable Antimony	BQK0186	BQK0186-BLK1	0.097000	ug/L	2.0	0.097	J
Total Recoverable Arsenic	BQK0186	BQK0186-BLK1	ND	ug/L	2.0	0.37	
Total Recoverable Beryllium	BQK0186	BQK0186-BLK1	ND	ug/L	1.0	0.043	
Total Recoverable Cadmium	BQK0186	BQK0186-BLK1	ND	ug/L	1.0	0.025	
Total Recoverable Lead	BQK0186	BQK0186-BLK1	0.10100	ug/L	1.0	0.057	J
Total Recoverable Selenium	BQK0186	BQK0186-BLK1	ND	ug/L	2.0	0.47	
Total Recoverable Thallium	BQK0186	BQK0186-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Mercury	BQK0224	BQK0224-BLK1	ND	ug/L	0.20	0.022	

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Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/13/2007 15:20
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712043-01 | **Client Sample Name:** 27138-14 MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	23	mg/L	0.10	0.018	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Magnesium	3.8	mg/L	0.050	0.019	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Sodium	77	mg/L	0.50	0.12	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Potassium	3.1	mg/L	1.0	0.13	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Bicarbonate	140	mg/L	2.9	2.9	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Carbonate	ND	mg/L	1.5	1.5	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Alkalinity as CaCO3	110	mg/L	2.5	2.5	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
Chloride	14	mg/L	0.50	0.037	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Fluoride	0.22	mg/L	0.050	0.011	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Nitrate as NO3	12	mg/L	0.44	0.077	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Sulfate	74	mg/L	1.0	0.11	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Total Cations	4.9	meq/L	0.10	0.10	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
Total Anions	4.4	meq/L	0.10	0.10	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
Hardness as CaCO3	74	mg/L	0.50	0.10	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
pH	8.20	pH Units	0.05	0.05	EPA-150.1	10/16/07	10/16/07 11:45	JSM	B360	1	BQJ1016		
Electrical Conductivity @ 25 C	425	umhos/cm	1.00	1.00	SM-2510B	10/16/07	10/16/07 13:00	JSM	CND-3	1	BQJ1021		
Total Dissolved Solids @ 180 C	290	mg/L	20	20	SM-2540C	10/18/07	10/18/07 10:00	JLR	MANUAL	2	BQJ1506	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/12/07	10/12/07 14:00	CDR	SPEC05	1	BQJ0922	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/12/07	10/12/07 15:13	TDC	KONE-1	1	BQJ0940	ND	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/06/2007 13:21

Water Analysis (Metals)

BCL Sample ID: 0712043-01 | **Client Sample Name:** 27138-14 MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	1100	ug/L	50	36	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Antimony	0.56	ug/L	2.0	0.097	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Arsenic	4.2	ug/L	2.0	0.37	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Barium	7.0	ug/L	10	1.7	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Beryllium	0.076	ug/L	1.0	0.043	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Boron	110	ug/L	100	16	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Cadmium	0.048	ug/L	1.0	0.025	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Copper	2.3	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Iron	910	ug/L	50	41	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Lead	0.87	ug/L	1.0	0.057	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Manganese	71	ug/L	10	3.7	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	10/18/07	10/19/07 14:43	MEV	CETAC1	1	BQJ1161	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Selenium	1.2	ug/L	2.0	0.47	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.016	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Zinc	7.7	ug/L	50	6.1	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712043-02 | **Client Sample Name:** 27138-27MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	40	mg/L	0.10	0.018	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Magnesium	9.5	mg/L	0.050	0.019	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Sodium	46	mg/L	0.50	0.12	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Potassium	3.3	mg/L	1.0	0.13	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Bicarbonate	150	mg/L	2.9	2.9	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Carbonate	ND	mg/L	1.5	1.5	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
Chloride	16	mg/L	0.50	0.037	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Fluoride	0.96	mg/L	0.050	0.011	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Nitrate as NO3	9.7	mg/L	0.44	0.077	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Sulfate	33	mg/L	1.0	0.11	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Total Cations	4.9	meq/L	0.10	0.10	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
Total Anions	3.8	meq/L	0.10	0.10	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
Hardness as CaCO3	140	mg/L	0.50	0.10	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
pH	8.02	pH Units	0.05	0.05	EPA-150.1	10/16/07	10/16/07 11:45	JSM	B360	1	BQJ1016		
Electrical Conductivity @ 25 C	367	umhos/cm	1.00	1.00	SM-2510B	10/16/07	10/16/07 13:00	JSM	CND-3	1	BQJ1021		
Total Dissolved Solids @ 180 C	260	mg/L	20	20	SM-2540C	10/18/07	10/18/07 10:00	JLR	MANUAL	2	BQJ1506	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/12/07	10/12/07 14:00	CDR	SPEC05	1	BQJ0922	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/12/07	10/12/07 15:13	TDC	KONE-1	1	BQJ0940	ND	

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LABORATORIES, INC.

Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: AB303 Project Manager: Mike Stoner	**Reported:** 11/06/2007 13:21

Water Analysis (Metals)

BCL Sample ID: 0712043-02 | **Client Sample Name:** 27138-27MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	8900	ug/L	50	36	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Antimony	0.13	ug/L	2.0	0.097	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Arsenic	1.0	ug/L	2.0	0.37	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Barium	120	ug/L	10	1.7	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Beryllium	0.38	ug/L	1.0	0.043	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Boron	180	ug/L	100	16	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Cadmium	0.099	ug/L	1.0	0.025	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Chromium	6.0	ug/L	10	1.6	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Copper	20	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Iron	9200	ug/L	50	41	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Lead	4.7	ug/L	1.0	0.057	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Manganese	280	ug/L	10	3.7	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	10/18/07	10/19/07 14:46	MEV	CETAC1	1	BQJ1161	ND	
Total Recoverable Nickel	4.7	ug/L	10	3.4	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Selenium	0.81	ug/L	2.0	0.47	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Thallium	0.071	ug/L	1.0	0.016	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Zinc	46	ug/L	50	6.1	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712043-03 | **Client Sample Name:** 27138-17 AO1, 10/11/2007 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	120	mg/L	0.10	0.018	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Magnesium	19	mg/L	0.050	0.019	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Sodium	54	mg/L	0.50	0.12	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Potassium	2.8	mg/L	1.0	0.13	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Bicarbonate	260	mg/L	5.8	5.8	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	2	BQJ1056	ND	A01
Carbonate	ND	mg/L	3.0	3.0	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	2	BQJ1056	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	2	BQJ1056	ND	A01
Alkalinity as CaCO3	210	mg/L	2.5	2.5	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
Chloride	19	mg/L	0.50	0.037	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Fluoride	0.22	mg/L	0.050	0.011	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Nitrate as NO3	2.5	mg/L	0.44	0.077	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Sulfate	75	mg/L	1.0	0.11	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Total Cations	9.8	meq/L	0.10	0.10	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
Total Anions	6.4	meq/L	0.10	0.10	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
Hardness as CaCO3	370	mg/L	0.50	0.10	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
pH	7.90	pH Units	0.05	0.05	EPA-150.1	10/16/07	10/16/07 11:45	JSM	B360	1	BQJ1016		
Electrical Conductivity @ 25 C	574	umhos/cm	1.00	1.00	SM-2510B	10/16/07	10/16/07 13:00	JSM	CND-3	1	BQJ1021		
Total Dissolved Solids @ 180 C	390	mg/L	20	20	SM-2540C	10/18/07	10/18/07 10:00	JLR	MANUAL	2	BQJ1506	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/12/07	10/12/07 14:00	CDR	SPEC05	1	BQJ0922	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/12/07	10/12/07 15:13	TDC	KONE-1	1	BQJ0940	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0712043-03 | **Client Sample Name:** 27138-17 AO1, 10/11/2007 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	750	ug/L	50	36	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.097	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.37	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Barium	41	ug/L	10	1.7	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.043	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Boron	110	ug/L	100	16	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.025	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Copper	3.4	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Iron	890	ug/L	50	41	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Lead	0.33	ug/L	1.0	0.057	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Manganese	36	ug/L	10	3.7	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	10/25/07	10/26/07 08:51	MEV	CETAC1	1	BQJ1566	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Selenium	1.3	ug/L	2.0	0.47	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.016	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Zinc	6.7	ug/L	50	6.1	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	J

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/06/2007 13:21

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQJ0842	Duplicate	0712031-01	71.571	71.488		mg/L	0.1		10		
		Matrix Spike	0712031-01	71.571	184.84	101.01	mg/L		112		80 - 120	
		Matrix Spike Duplicate	0712031-01	71.571	184.36	101.01	mg/L	0	112	10	80 - 120	
Fluoride	BQJ0842	Duplicate	0712031-01	1.6000	1.4750		mg/L	8.1		10		
		Matrix Spike	0712031-01	1.6000	2.6374	1.0101	mg/L		103		80 - 120	
		Matrix Spike Duplicate	0712031-01	1.6000	2.6313	1.0101	mg/L	1.0	102	10	80 - 120	
Nitrate as NO3	BQJ0842	Duplicate	0712031-01	1.8327	1.8150		mg/L	1.0		10		
		Matrix Spike	0712031-01	1.8327	25.036	22.358	mg/L		104		80 - 120	
		Matrix Spike Duplicate	0712031-01	1.8327	24.875	22.358	mg/L	1.0	103	10	80 - 120	
Sulfate	BQJ0842	Duplicate	0712031-01	89.141	89.269		mg/L	0.1		10		
		Matrix Spike	0712031-01	89.141	198.48	101.01	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0712031-01	89.141	198.40	101.01	mg/L	0	108	10	80 - 120	
MBAS	BQJ0922	Duplicate	0711982-01	ND	ND		mg/L			20		A01
		Matrix Spike	0711982-01	ND	0.40560	0.40000	mg/L		101		80 - 120	A01
		Matrix Spike Duplicate	0711982-01	ND	0.41240	0.40000	mg/L	2.0	103	20	80 - 120	A01
Nitrite as N	BQJ0940	Duplicate	0712042-01	ND	ND		ug/L			10		A26,S05
		Matrix Spike	0712042-01	ND	509.82	526.32	ug/L		96.9		90 - 110	A26,S05
		Matrix Spike Duplicate	0712042-01	ND	508.55	526.32	ug/L	0.3	96.6	10	90 - 110	A26,S05
pH	BQJ1016	Duplicate	0712036-01	7.9220	7.9330		pH Units	0.1		20		
Electrical Conductivity @ 25 C	BQJ1021	Duplicate	0712043-01	425.00	422.00		umhos/cm	0.7		10		
Bicarbonate	BQJ1056	Duplicate	0712043-03	262.00	260.84		mg/L	0.4		10		A01
		Matrix Spike	0712043-03	262.00	417.36	152.38	mg/L		102		80 - 120	A01
		Matrix Spike Duplicate	0712043-03	262.00	417.36	152.38	mg/L	0	102	10	80 - 120	A01
Carbonate	BQJ1056	Duplicate	0712043-03	ND	ND		mg/L			10		A01
Hydroxide	BQJ1056	Duplicate	0712043-03	ND	ND		mg/L			10		A01

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/06/2007 13:21

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Calcium	BQJ1186	Duplicate	0712043-01	23.259	24.679		mg/L	5.9		20		
		Matrix Spike	0712043-01	23.259	31.491	10.000	mg/L		82.3		75 - 125	
		Matrix Spike Duplicate	0712043-01	23.259	32.257	10.000	mg/L	8.9	90.0	20	75 - 125	
Total Recoverable Magnesium	BQJ1186	Duplicate	0712043-01	3.7514	4.1079		mg/L	9.1		20		
		Matrix Spike	0712043-01	3.7514	14.125	10.000	mg/L		104		75 - 125	
		Matrix Spike Duplicate	0712043-01	3.7514	14.561	10.000	mg/L	3.8	108	20	75 - 125	
Total Recoverable Sodium	BQJ1186	Duplicate	0712043-01	76.726	82.397		mg/L	7.1		20		
		Matrix Spike	0712043-01	76.726	80.925	10.000	mg/L		42.0		75 - 125	A03
		Matrix Spike Duplicate	0712043-01	76.726	82.913	10.000	mg/L	38.3	61.9	20	75 - 125	A03,Q02
Total Recoverable Potassium	BQJ1186	Duplicate	0712043-01	3.1412	3.4136		mg/L	8.3		20		
		Matrix Spike	0712043-01	3.1412	12.764	10.000	mg/L		96.2		75 - 125	
		Matrix Spike Duplicate	0712043-01	3.1412	13.045	10.000	mg/L	2.9	99.0	20	75 - 125	
Total Dissolved Solids @ 180 C	BQJ1506	Duplicate	0712036-01	456.66	433.33		mg/L	5.2		10		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Mercury	BQJ1161	Duplicate	0712011-02	ND	ND		ug/L			20		
		Matrix Spike	0712011-02	ND	1.0850	1.0000	ug/L		108		70 - 130	
		Matrix Spike Duplicate	0712011-02	ND	1.0700	1.0000	ug/L	0.9	107	20	70 - 130	
Total Recoverable Aluminum	BQJ1186	Duplicate	0712043-01	1130.4	1377.6		ug/L	19.7		20		
		Matrix Spike	0712043-01	1130.4	4061.5	1000.0	ug/L		293		75 - 125	Q03
		Matrix Spike Duplicate	0712043-01	1130.4	4421.8	1000.0	ug/L	11.6	329	20	75 - 125	Q03
Total Recoverable Barium	BQJ1186	Duplicate	0712043-01	6.9792	7.5878		ug/L	8.4		20		J
		Matrix Spike	0712043-01	6.9792	209.23	200.00	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0712043-01	6.9792	215.48	200.00	ug/L	2.9	104	20	75 - 125	
Total Recoverable Boron	BQJ1186	Duplicate	0712043-01	114.66	119.60		ug/L	4.2		20		
		Matrix Spike	0712043-01	114.66	1114.3	1000.0	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0712043-01	114.66	1139.9	1000.0	ug/L	3.0	103	20	75 - 125	
Total Recoverable Chromium	BQJ1186	Duplicate	0712043-01	ND	ND		ug/L			20		
		Matrix Spike	0712043-01	ND	187.62	200.00	ug/L		93.8		75 - 125	
		Matrix Spike Duplicate	0712043-01	ND	194.47	200.00	ug/L	3.6	97.2	20	75 - 125	
Total Recoverable Copper	BQJ1186	Duplicate	0712043-01	2.2975	3.3424		ug/L	37.1		20		J,A02
		Matrix Spike	0712043-01	2.2975	199.06	200.00	ug/L		98.4		75 - 125	
		Matrix Spike Duplicate	0712043-01	2.2975	203.26	200.00	ug/L	1.6	100	20	75 - 125	
Total Recoverable Iron	BQJ1186	Duplicate	0712043-01	910.53	1077.4		ug/L	16.8		20		
		Matrix Spike	0712043-01	910.53	1870.0	400.00	ug/L		240		75 - 125	Q03
		Matrix Spike Duplicate	0712043-01	910.53	2029.4	400.00	ug/L	15.4	280	20	75 - 125	Q03
Total Recoverable Manganese	BQJ1186	Duplicate	0712043-01	71.324	82.877		ug/L	15.0		20		
		Matrix Spike	0712043-01	71.324	288.07	200.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0712043-01	71.324	300.33	200.00	ug/L	6.3	115	20	75 - 125	
Total Recoverable Nickel	BQJ1186	Duplicate	0712043-01	ND	ND		ug/L			20		
		Matrix Spike	0712043-01	ND	398.76	400.00	ug/L		99.7		75 - 125	
		Matrix Spike Duplicate	0712043-01	ND	413.80	400.00	ug/L	3.3	103	20	75 - 125	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Silver	BQJ1186	Duplicate	0712043-01	ND	ND		ug/L			20		
		Matrix Spike	0712043-01	ND	107.15	100.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0712043-01	ND	109.68	100.00	ug/L	2.8	110	20	75 - 125	
Total Recoverable Zinc	BQJ1186	Duplicate	0712043-01	7.6711	8.9211		ug/L	15.1		20		J
		Matrix Spike	0712043-01	7.6711	214.84	200.00	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0712043-01	7.6711	221.24	200.00	ug/L	2.8	107	20	75 - 125	
Total Recoverable Antimony	BQJ1188	Duplicate	0711990-01	0.17000	0.11600		ug/L	37.8		20		J,A02
		Matrix Spike	0711990-01	0.17000	19.616	20.000	ug/L		97.2		70 - 130	
		Matrix Spike Duplicate	0711990-01	0.17000	19.833	20.000	ug/L	1.1	98.3	20	70 - 130	
Total Recoverable Arsenic	BQJ1188	Duplicate	0711990-01	19.818	20.489		ug/L	3.3		20		
		Matrix Spike	0711990-01	19.818	67.714	50.000	ug/L		95.8		70 - 130	
		Matrix Spike Duplicate	0711990-01	19.818	67.265	50.000	ug/L	0.9	94.9	20	70 - 130	
Total Recoverable Beryllium	BQJ1188	Duplicate	0711990-01	ND	ND		ug/L			20		
		Matrix Spike	0711990-01	ND	19.318	20.000	ug/L		96.6		70 - 130	
		Matrix Spike Duplicate	0711990-01	ND	18.816	20.000	ug/L	2.6	94.1	20	70 - 130	
Total Recoverable Cadmium	BQJ1188	Duplicate	0711990-01	0.070000	0.070000		ug/L	0		20		J
		Matrix Spike	0711990-01	0.070000	18.988	20.000	ug/L		94.6		70 - 130	
		Matrix Spike Duplicate	0711990-01	0.070000	19.640	20.000	ug/L	3.3	97.8	20	70 - 130	
Total Recoverable Lead	BQJ1188	Duplicate	0711990-01	4.1850	4.2170		ug/L	0.8		20		
		Matrix Spike	0711990-01	4.1850	51.875	50.000	ug/L		95.4		70 - 130	
		Matrix Spike Duplicate	0711990-01	4.1850	52.928	50.000	ug/L	2.2	97.5	20	70 - 130	
Total Recoverable Selenium	BQJ1188	Duplicate	0711990-01	ND	ND		ug/L			20		
		Matrix Spike	0711990-01	ND	47.391	50.000	ug/L		94.8		70 - 130	
		Matrix Spike Duplicate	0711990-01	ND	46.865	50.000	ug/L	1.2	93.7	20	70 - 130	
Total Recoverable Thallium	BQJ1188	Duplicate	0711990-01	0.11700	ND		ug/L			20		
		Matrix Spike	0711990-01	0.11700	19.012	20.000	ug/L		94.5		70 - 130	
		Matrix Spike Duplicate	0711990-01	0.11700	19.547	20.000	ug/L	2.8	97.2	20	70 - 130	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13 21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Mercury	BQJ1566	Duplicate	0712043-03	ND	ND		ug/L			20		
		Matrix Spike	0712043-03	ND	1.0650	1.0000	ug/L		106		70 - 130	
		Matrix Spike Duplicate	0712043-03	ND	1.0300	1.0000	ug/L	2.9	103	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/06/2007 13:21

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQJ0842	BQJ0842-BS1	LCS	109.53	100.00	0.50	mg/L	110		90 - 110		
Fluoride	BQJ0842	BQJ0842-BS1	LCS	1.0390	1.0000	0.050	mg/L	104		90 - 110		
Nitrate as NO3	BQJ0842	BQJ0842-BS1	LCS	23.081	22.134	0.44	mg/L	104		90 - 110		
Sulfate	BQJ0842	BQJ0842-BS1	LCS	105.95	100.00	1.0	mg/L	106		90 - 110		
MBAS	BQJ0922	BQJ0922-BS1	LCS	0.19080	0.20000	0.10	mg/L	95.4		85 - 115		
Nitrite as N	BQJ0940	BQJ0940-BS1	LCS	481.77	500.00	50	ug/L	96.4		90 - 110		
pH	BQJ1016	BQJ1016-BS1	LCS	7.0290	7.0000	0.05	pH Units	100		95 - 105		
Electrical Conductivity @ 25 C	BQJ1021	BQJ1021-BS1	LCS	302.00	303.00	1.00	umhos/cm	99.7		90 - 110		
Bicarbonate	BQJ1056	BQJ1056-BS1	LCS	127.53	121.90	2.9	mg/L	105		90 - 110		
Total Recoverable Calcium	BQJ1186	BQJ1186-BS1	LCS	10.309	10.000	0.10	mg/L	103		85 - 115		
Total Recoverable Magnesium	BQJ1186	BQJ1186-BS1	LCS	10.648	10.000	0.050	mg/L	106		85 - 115		
Total Recoverable Sodium	BQJ1186	BQJ1186-BS1	LCS	10.245	10.000	0.50	mg/L	102		85 - 115		
Total Recoverable Potassium	BQJ1186	BQJ1186-BS1	LCS	10.129	10.000	1.0	mg/L	101		85 - 115		
Total Dissolved Solids @ 180 C	BQJ1506	BQJ1506-BS1	LCS	585.00	586.00	50	mg/L	99.8		90 - 110		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Mercury	BQJ1161	BQJ1161-BS1	LCS	1.0075	1.0000	0.20	ug/L	101		85 - 115		
Total Recoverable Aluminum	BQJ1186	BQJ1186-BS1	LCS	985.62	1000.0	50	ug/L	98.6		85 - 115		
Total Recoverable Barium	BQJ1186	BQJ1186-BS1	LCS	206.83	200.00	10	ug/L	103		85 - 115		
Total Recoverable Boron	BQJ1186	BQJ1186-BS1	LCS	1010.0	1000.0	100	ug/L	101		85 - 115		
Total Recoverable Chromium	BQJ1186	BQJ1186-BS1	LCS	192.24	200.00	10	ug/L	96.1		85 - 115		
Total Recoverable Copper	BQJ1186	BQJ1186-BS1	LCS	191.86	200.00	10	ug/L	95.9		85 - 115		
Total Recoverable Iron	BQJ1186	BQJ1186-BS1	LCS	423.30	400.00	50	ug/L	106		85 - 115		
Total Recoverable Manganese	BQJ1186	BQJ1186-BS1	LCS	217.09	200.00	10	ug/L	109		85 - 115		
Total Recoverable Nickel	BQJ1186	BQJ1186-BS1	LCS	408.08	400.00	10	ug/L	102		85 - 115		
Total Recoverable Silver	BQJ1186	BQJ1186-BS1	LCS	108.87	100.00	10	ug/L	109		85 - 115		
Total Recoverable Zinc	BQJ1186	BQJ1186-BS1	LCS	218.79	200.00	50	ug/L	109		85 - 115		
Total Recoverable Antimony	BQJ1188	BQJ1188-BS1	LCS	19.387	20.000	2.0	ug/L	96.9		85 - 115		
Total Recoverable Arsenic	BQJ1188	BQJ1188-BS1	LCS	48.526	50.000	2.0	ug/L	97.1		85 - 115		
Total Recoverable Beryllium	BQJ1188	BQJ1188-BS1	LCS	19.008	20.000	1.0	ug/L	95.0		85 - 115		
Total Recoverable Cadmium	BQJ1188	BQJ1188-BS1	LCS	19.334	20.000	1.0	ug/L	96.7		85 - 115		
Total Recoverable Lead	BQJ1188	BQJ1188-BS1	LCS	48.843	50.000	1.0	ug/L	97.7		85 - 115		
Total Recoverable Selenium	BQJ1188	BQJ1188-BS1	LCS	49.538	50.000	2.0	ug/L	99.1		85 - 115		
Total Recoverable Thallium	BQJ1188	BQJ1188-BS1	LCS	19.416	20.000	1.0	ug/L	97.1		85 - 115		
Total Recoverable Mercury	BQJ1566	BQJ1566-BS1	LCS	0.97750	1.0000	0.20	ug/L	97.8		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/06/2007 13:21

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQJ0842	BQJ0842-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQJ0842	BQJ0842-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQJ0842	BQJ0842-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQJ0842	BQJ0842-BLK1	ND	mg/L	1.0	0.11	
MBAS	BQJ0922	BQJ0922-BLK1	ND	mg/L	0.10	0.039	
Nitrite as N	BQJ0940	BQJ0940-BLK1	ND	ug/L	50	10	
Bicarbonate	BQJ1056	BQJ1056-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQJ1056	BQJ1056-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQJ1056	BQJ1056-BLK1	ND	mg/L	0.81	0.81	
Alkalinity as CaCO3	BQJ1105	BQJ1105-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQJ1105	BQJ1105-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQJ1105	BQJ1105-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQJ1105	BQJ1105-BLK1	ND	mg/L	0.50	0.10	
Total Recoverable Calcium	BQJ1186	BQJ1186-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQJ1186	BQJ1186-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQJ1186	BQJ1186-BLK1	ND	mg/L	0.50	0.12	
Total Recoverable Potassium	BQJ1186	BQJ1186-BLK1	ND	mg/L	1.0	0.13	
Total Dissolved Solids @ 180 C	BQJ1506	BQJ1506-BLK1	ND	mg/L	6.7	6.7	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/06/2007 13:21

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Mercury	BQJ1161	BQJ1161-BLK1	ND	ug/L	0.20	0.022	
Total Recoverable Aluminum	BQJ1186	BQJ1186-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQJ1186	BQJ1186-BLK1	ND	ug/L	100	16	
Total Recoverable Chromium	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQJ1186	BQJ1186-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	3.7	
Total Recoverable Nickel	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQJ1186	BQJ1186-BLK1	ND	ug/L	50	6.1	
Total Recoverable Antimony	BQJ1188	BQJ1188-BLK1	ND	ug/L	2.0	0.097	
Total Recoverable Arsenic	BQJ1188	BQJ1188-BLK1	ND	ug/L	2.0	0.37	
Total Recoverable Beryllium	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.043	
Total Recoverable Cadmium	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.025	
Total Recoverable Lead	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.057	
Total Recoverable Selenium	BQJ1188	BQJ1188-BLK1	ND	ug/L	2.0	0.47	
Total Recoverable Thallium	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Mercury	BQJ1566	BQJ1566-BLK1	ND	ug/L	0.20	0.022	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/06/2007 13:21
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 04/25/2007 11:19

Water Analysis (General Chemistry)

BCL Sample ID: 0704149-03 | **Client Sample Name:** ~~Soldier~~ Spring, 4/9/2007 10:36:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	49	mg/L	0.10	0.018	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Magnesium	8.9	mg/L	0.050	0.017	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Sodium	32	mg/L	0.50	0.047	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Potassium	0.29	mg/L	1.0	0.13	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		J
Bicarbonate	200	mg/L	2.9	2.9	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824		
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824		
Alkalinity as CaCO3	160	mg/L	2.5	2.5	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Chloride	13	mg/L	0.50	0.037	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487		
Fluoride	0.42	mg/L	0.050	0.011	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487		
Nitrate as NO3	2.4	mg/L	0.44	0.077	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487		
Sulfate	36	mg/L	1.0	0.11	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487		
Total Cations	4.6	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Total Anions	4.4	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Hardness as CaCO3	160	mg/L	0.50	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
pH	7.82	pH Units	0.05	0.05	EPA-150.1	04/11/07	04/11/07 14:05	JSM	BDB	1	BQD0573		
Electrical Conductivity @ 25 C	419	umhos/cm	1.00	1.00	EPA-120.1	04/11/07	04/11/07 14:25	JSM	CND-3	1	BQD0571		
Total Dissolved Solids @ 180 C	270	mg/L	20	20	EPA-160.1	04/11/07	04/11/07 16:00	VEL	MANUAL	2	BQD1160		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/11/07	04/11/07 08:15	CDR	SPEC05	1	BQD0684		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/10/07	04/10/07 13:02	TDC	KONE-1	1	BQD0629		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11 19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704149-03 | **Client Sample Name:** Soldier Spring, 4/9/2007 10:36:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		
Total Recoverable Arsenic	1.1	ug/L	2.0	0.89	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		J
Total Recoverable Barium	20	ug/L	10	1.7	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		
Total Recoverable Boron	46	ug/L	100	12	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		J
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Mercury	0.030	ug/L	0.20	0.026	EPA-245.1	04/18/07	04/20/07 13:43	PRA	CETAC1	1	BQD0909		J
Total Recoverable Nickel	3.4	ug/L	10	3.4	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		J
Total Recoverable Selenium	0.87	ug/L	2.0	0.54	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637		
Total Recoverable Zinc	20	ug/L	50	5.2	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618		J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
A01	PQL's and MDL's are raised due to sample dilution.

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LABORATORIES, INC.

Date of Report: 04/25/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0704004

Enclosed are the results of analyses for samples received by the laboratory on 04/05/2007 10:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

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LABORATORIES, INC.

Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 04/25/2007 11:19

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-01 | **Client Sample Name:** IWVWD WELL 8, 4/4/2007 9:07:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	6.2	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Magnesium	1.7	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Sodium	79	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Potassium	1.2	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Bicarbonate	100	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Carbonate	25	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Alkalinity as CaCO3	130	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
Chloride	30	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295		
Fluoride	1.0	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295		
Nitrate as NO3	2.9	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295		
Sulfate	17	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295		
Total Cations	3.9	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
Total Anions	3.8	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
Hardness as CaCO3	22	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
pH	8.94	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	401	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	280	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765		
MBAS	ND	mg/L	0.20	0.078	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	2	BQD0465		A01
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-01 | **Client Sample Name:** IWVWD WELL 8, 4/4/2007 9:07:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Arsenic	16	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Barium	8.6	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Boron	600	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Mercury	0.15	ug/L	0.20	0.026	EPA-245.1	04/12/07	04/18/07 10:41	PRA	CETAC1	1	BQD0589		J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428		
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-02 | **Client Sample Name:** IWVWD WELL 10, 4/4/2007 8:46:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	8.2	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Magnesium	1.9	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Sodium	79	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Potassium	1.5	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Bicarbonate	97	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Carbonate	23	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
Chloride	41	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295		
Fluoride	1.2	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295		
Nitrate as NO3	3.8	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295		
Sulfate	26	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295		
Total Cations	4.1	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
Total Anions	4.2	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
Hardness as CaCO3	28	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692		
pH	8.82	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	417	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	280	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-02 | **Client Sample Name:** IWVWD WELL 10, 4/4/2007 8:46:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Arsenic	16	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Barium	9.4	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Boron	780	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Mercury	0.17	ug/L	0.20	0.026	EPA-245.1	04/12/07	04/18/07 10:43	PRA	CETAC1	1	BQD0589		J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428		
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-03 | **Client Sample Name:** IWVWD WELL 11, 4/4/2007 8:25:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	13	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Magnesium	1.7	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Sodium	140	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Potassium	1.9	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Bicarbonate	89	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Carbonate	15	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660		
Alkalinity as CaCO3	98	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692		
Chloride	150	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295		
Fluoride	0.66	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295		
Nitrate as NO3	3.3	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295		
Sulfate	47	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295		
Total Cations	6.9	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692		
Total Anions	7.4	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692		
Hardness as CaCO3	40	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692		
pH	8.52	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	769	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	470	mg/L	33	33	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	3.333	BQD0765		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 04/25/2007 11:19

Water Analysis (Metals)

BCL Sample ID: 0704004-03 | **Client Sample Name:** IWVWD WELL 11, 4/4/2007 8:25:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Arsenic	11	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Barium	10	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Boron	1100	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Mercury	0.050	ug/L	0.20	0.026	EPA-245.1	04/13/07	04/16/07 09:34	PRA	CETAC1	1	BQD0657		J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428		
Total Recoverable Zinc	5.2	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472		J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-04 | **Client Sample Name:** IWVWD WELL 30, 4/4/2007 8:35:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	23	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Magnesium	0.47	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Sodium	46	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Potassium	2.2	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Bicarbonate	100	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661		
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661		
Alkalinity as CaCO3	84	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
Chloride	22	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295		
Fluoride	0.32	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295		
Nitrate as NO3	12	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295		
Sulfate	33	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295		
Total Cations	3.2	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
Total Anions	3.2	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
Hardness as CaCO3	59	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
pH	8.11	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	328	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	220	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 04/25/2007 11:19

Water Analysis (Metals)

BCL Sample ID: 0704004-04 | **Client Sample Name:** IWVWD WELL 30, 4/4/2007 8:35:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		
Total Recoverable Arsenic	1.7	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		J
Total Recoverable Barium	23	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		
Total Recoverable Boron	210	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		
Total Recoverable Chromium	4.8	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Copper	5.3	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Lead	0.72	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		J
Total Recoverable Manganese	2.9	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Mercury	0.058	ug/L	0.20	0.026	EPA-245.1	04/13/07	04/16/07 09:36	PRA	CETAC1	1	BQD0657		J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Selenium	0.64	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428		
Total Recoverable Zinc	7.9	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472		J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11.19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-05 | **Client Sample Name:** IWVWD WELL 31, 4/4/2007 8:22:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	33	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Magnesium	0.63	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Sodium	41	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Potassium	2.6	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Bicarbonate	110	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661		
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661		
Alkalinity as CaCO3	90	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
Chloride	26	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295		
Fluoride	0.61	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295		
Nitrate as NO3	9.4	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295		
Sulfate	40	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295		
Total Cations	3.6	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
Total Anions	3.5	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
Hardness as CaCO3	85	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692		
pH	7.96	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	369	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	260	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 04/25/2007 11 19

Water Analysis (Metals)

BCL Sample ID: 0704004-05 | **Client Sample Name:** IWVWD WELL 31, 4/4/2007 8:22:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		
Total Recoverable Arsenic	3.1	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		
Total Recoverable Barium	25	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		
Total Recoverable Boron	190	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		
Total Recoverable Chromium	1.8	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Copper	10	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Lead	0.68	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		J
Total Recoverable Manganese	3.4	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Mercury	0.042	ug/L	0.20	0.026	EPA-245.1	04/13/07	04/16/07 09:39	PRA	CETAC1	1	BQD0657		J
Total Recoverable Nickel	5.6	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		J
Total Recoverable Selenium	0.66	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428		
Total Recoverable Zinc	6.3	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472		J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:1
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
A01	PQL's and MDL's are raised due to sample dilution.

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BC LABORATORIES, INC.

Date of Report: 04/25/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0704149

Enclosed are the results of analyses for samples received by the laboratory on 04/10/2007 10:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

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BC Laboratories, Inc. — Chain of Custody Form

45275

Page ___ of ___

Report To	
Client: NAWS China Lake	Project #: AB303
Attn: Mike Stone	Project Name: AB303
Street Address: 429 E. Bowen Rd	Project Code: —
City, State, Zip: China Lake CA	Sampler(s): M. Stone
Phone: 7609373243 Fax: 939-2980	
Email Address: michael.stone@navy.mil	
Submittal #: 07-04149	

Analysis Requested: General Minerals; Inorganic Chemicals; Boron

Sample #	Description	Date Sampled	Time Sampled	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*
-1	Short Cyn	4/9/07	1140			X				
-2	Indian Wells Cyn	4/9/07	1106			X				
-3	Soldier Spring	4/9/07	1036			X				

Comments: ASAP

Are there any tests with holding times less than or equal to 48 hours? [X] Yes [ ] No

* Standard Turnaround = 15 work days

Notes

Return Cooler to Mike Stone @ 429 E. Bowen China Lake, CA 93555

MS: 4014

SHORT HOLDING TIME

Cr^{+6} NO_2 ~~NO~~ DO BOD ~~MBAS~~

CHK BY DISTRIBUTION

MAILED [ ]

SUB-OUT [ ]

Billing

[ ] Same as above

Client: IWV Water District

Address: 500 W. Ridgecrest Blvd

City: Ridgecrest State CA Zip 93555

Attn: Tom Mulvihill

PO#:

Report Drinking Waters on State Form? [ ] Yes [X] No

Send Copy to State of CA? [ ] Yes [X] No

Sample Disposal: [ ] Return to Client [ ] Disposal by lab [ ] Archive: Months ____

Special Reporting: [ ] QC [ ] WIP [ ] Raw Data

	Relinquished By	Date	Time	Received By	Date	Time
1.	Michael Stone	4/9/07	1510	Kristy Lawrence	4/10/07	10
2.						
3.						

BC LABORATORIES INC. **SAMPLE RECEIPT FORM** Rev. No. 10 01/21/04 Page 1 Of 1

Submission #: 07-04149 | Project Code: | TB Batch #

SHIPPING INFORMATION

Federal Express ☒ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER

Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Ice Chest ID
Temperature: 5.8 °C
Thermometer ID: #18
Emissivity 95
Container OTHER

Date/Time 4/10/04
Analyst Init KW 10:5

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	A	A	A							
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	B	B	B							
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
100ml TOTAL ORGANIC CARBON										
QT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT OA/OC										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:_____ Date/Time: 4/10/04 11:50

LABORATORIES, INC.

Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 04/25/2007 11:19

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0704149-01	**COC Number:**	---	**Receive Date:**	04/10/2007 10:50
	Project Number:	---	**Sampling Date:**	04/09/2007 11:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Short Cyn	**Sample Matrix:**	Water
	Sampled By:	---		
0704149-02	**COC Number:**	---	**Receive Date:**	04/10/2007 10:50
	Project Number:	---	**Sampling Date:**	04/09/2007 11:06
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Indian Wells Cyn	**Sample Matrix:**	Water
	Sampled By:	---		
0704149-03	**COC Number:**	---	**Receive Date:**	04/10/2007 10:50
	Project Number:	---	**Sampling Date:**	04/09/2007 10:36
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Soldier Spring	**Sample Matrix:**	Water
	Sampled By:	---		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704149-01 | **Client Sample Name:** Short Cyn, 4/9/2007 11:40:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	66	mg/L	0.10	0.018	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Magnesium	9.3	mg/L	0.050	0.017	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Sodium	41	mg/L	0.50	0.047	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Potassium	0.97	mg/L	1.0	0.13	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		J
Bicarbonate	240	mg/L	2.9	2.9	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824		
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824		
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824		
Alkalinity as CaCO3	200	mg/L	2.5	2.5	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Chloride	8.0	mg/L	0.50	0.037	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487		
Fluoride	0.87	mg/L	0.050	0.011	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487		
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487		
Sulfate	74	mg/L	1.0	0.11	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487		
Total Cations	5.9	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Total Anions	5.8	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Hardness as CaCO3	200	mg/L	0.50	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
pH	8.16	pH Units	0.05	0.05	EPA-150.1	04/11/07	04/11/07 14:05	JSM	BDB	1	BQD0573		
Electrical Conductivity @ 25 C	524	umhos/cm	1.00	1.00	EPA-120.1	04/11/07	04/11/07 14:25	JSM	CND-3	1	BQD0571		
Total Dissolved Solids @ 180 C	390	mg/L	20	20	EPA-160.1	04/11/07	04/11/07 16:00	VEL	MANUAL	2	BQD1160		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/11/07	04/11/07 08:15	CDR	SPEC05	1	BQD0684		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/10/07	04/10/07 13:02	TDC	KONE-1	1	BQD0629		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 04/25/2007 11:19
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704149-01 | **Client Sample Name:** Short Cyn, 4/9/2007 11:40:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		
Total Recoverable Arsenic	1.4	ug/L	2.0	0.89	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		J
Total Recoverable Barium	18	ug/L	10	1.7	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		
Total Recoverable Boron	79	ug/L	100	12	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		J
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Lead	0.47	ug/L	1.0	0.12	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		J
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Mercury	0.032	ug/L	0.20	0.026	EPA-245.1	04/18/07	04/20/07 13:30	PRA	CETAC1	1	BQD0909		J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637		
Total Recoverable Zinc	7.9	ug/L	50	5.2	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618		J

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 04/25/2007 11:19

Water Analysis (General Chemistry)

BCL Sample ID: 0704149-02 | **Client Sample Name:** Indian Wells Cyn, 4/9/2007 11:06:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	100	mg/L	0.10	0.018	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Magnesium	26	mg/L	0.050	0.017	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Sodium	41	mg/L	0.50	0.047	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Potassium	3.2	mg/L	1.0	0.13	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Bicarbonate	240	mg/L	5.8	5.8	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	2	BQD0824		A01
Carbonate	25	mg/L	3.0	3.0	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	2	BQD0824		A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	2	BQD0824		A01
Alkalinity as CaCO3	240	mg/L	5.0	5.0	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Chloride	15	mg/L	0.50	0.037	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487		
Fluoride	0.92	mg/L	0.050	0.011	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487		
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487		
Sulfate	190	mg/L	1.0	0.11	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487		
Total Cations	9.0	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Total Anions	9.2	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
Hardness as CaCO3	360	mg/L	0.50	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705		
pH	8.34	pH Units	0.05	0.05	EPA-150.1	04/11/07	04/11/07 14:05	JSM	BDB	1	BQD0573		
Electrical Conductivity @ 25 C	779	umhos/cm	1.00	1.00	EPA-120.1	04/11/07	04/11/07 14:25	JSM	CND-3	1	BQD0571		
Total Dissolved Solids @ 180 C	610	mg/L	33	33	EPA-160.1	04/11/07	04/11/07 16:00	VEL	MANUAL	3.333	BQD1160		
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/11/07	04/11/07 08:15	CDR	SPEC05	1	BQD0684		
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/10/07	04/10/07 13:02	TDC	KONE-1	1	BQD0629		

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Naval Air Weapons Station - China Lake 429 E. Bowan China Lake, CA 93555	Project: Indian Wells Valley Water Project Number: [none] Project Manager: Mike Stoner	**Reported:** 04/25/2007 11:19

Water Analysis (Metals)

BCL Sample ID: 0704149-02 | **Client Sample Name:** Indian Wells Cyn, 4/9/2007 11:06:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	180	ug/L	50	36	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		
Total Recoverable Arsenic	2.2	ug/L	2.0	0.89	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		
Total Recoverable Barium	38	ug/L	10	1.7	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		
Total Recoverable Boron	90	ug/L	100	12	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		J
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Iron	200	ug/L	50	41	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Lead	0.94	ug/L	1.0	0.12	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		J
Total Recoverable Manganese	12	ug/L	10	1.9	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Mercury	0.040	ug/L	0.20	0.026	EPA-245.1	04/18/07	04/20/07 13:41	PRA	CETAC1	1	BQD0909		J
Total Recoverable Nickel	4.6	ug/L	10	3.4	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		J
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610		
Total Recoverable Zinc	9.3	ug/L	50	5.2	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618		J

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BC Laboratories, Inc.

Chain of Custody Form

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Page ___ of ___

Report To:
Client: NAWS - China Lake
Attn: Mike Stoner
Street Address: 429 E. Bowen
City, State, Zip: China Lake 93555
Phone: 7609393243 Fax: 7609352980
Email Address: michael.stoner@navy.mil
Submittal #: 07-04004

Project #: AB 303
Project Name: AB 303
Project Code:
Sampler(s): Thatcher Siliman

Analysis Requested

Comments: ASAP

Sample #	Description	Date Sampled	Time Sampled	General Minerals	Inorganic Chemicals	Boron	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*
-1	IWVWD Well 8	4/4/07	0907	X	X	X			X				
-2	IWVWD Well 10	4/4/07	0846	X	X	X			X				
-3	IWVWD Well 11	4/4/07	0825	X	X	X			X				
-4	IWVWD Well 30	4/4/07	0835	X	X	X			X				
-5	IWVWD Well 31	4/4/07	0822	X	X	X			X				

CHK BY DISTRIBUTION
MISC3
SUB-OUT

SHORT HOLDING TIME
Cr^{+6} NO NO DP SS
DO BOD MBAS

Are there any tests with holding times less than or equal to 48 hours?
☐ Yes ☐ No

* Standard Turnaround = 15 work days

Notes

Billing
☐ Same as above
Client: IWV WATER District
Address: 500 W. Ridgecrest Blvd
City: Ridgecrest State CA Zip 93555
Attn: Tom Mulvihill
PO#:

Report Drinking Waters on State Form? ☐ Yes ☒ No
Send Copy to State of CA? ☐ Yes ☒ No

Sample Disposal
☐ Return to Client ☐ Disposal by lab ☐ Archive: Months ___

Special Reporting
☐ QC ☐ WIP ☐ Raw Data

	Date	Time		Date	Time
1. Relinquished By: Michael Stoner	4/4/07	1345	1. Received By: [illegible] Rawlings	4/5/07	10:
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

BC LABORATORIES INC. **SAMPLE RECEIPT FORM** Rev. No. 10 01/21/04 Page __ Of __

Submission #: 07-04004 | **Project Code:** | **TB Batch #**

SHIPPING INFORMATION
Federal Express ☒ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ **Comments:**

Custody Seals [redacted] [redacted] None ☒ **Comments:**

All samples received? Yes ☒ No ☐ **All samples containers intact?** Yes ☒ No ☐ **Description(s) match COC?** Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Ice Chest ID _____ Emissivity .95
Temperature: 17.9 °a/s Container Q7152
Thermometer ID: #45

Date/Time 4/5/07
Analyst Init KW 10:45

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	A	A	A	A	A					
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	B	B	B	B	B					
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
100ml TOTAL ORGANIC CARBON										
QT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
0 ml VOA VIAL- 504										
)T EPA 508/608/8080										
)T EPA 515.1/8150										
)T EPA 525										
)T EPA 525 TRAVEL BLANK										
00ml EPA 547										
00ml EPA 531.1										
T EPA 548										
T EPA 549										
T EPA 632										
T EPA 8015M										
T QA/QC										
T AMBER										
OZ. JAR										
OZ. JAR										
IL SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										

ments: _____

ple Numbering Completed By: SLC3 Date/Time: 4/5/07 1045

APPENDIX B. Dabase of Chemical and Isotopic Analyses for Indian We;ls Valley

Name	Ref	x	y	T_R_S	Date	Zone	T_C	TD	Elev	TOC	Screen top (depth)	Screen bottom (depth)	Screen top (El)
23/38-17-E01 (L.Lake Outlet)	AB303			23S38E17E1									
23S38E32 about center of S1/2				23S38E32		UNK							
Sawmill Well	AB303			24S38E15M1	2/4/2007								
BR10-MD	T	16136	102197	24S38E21J	10/30/1995		25.4		1001				
BR10-S	T	16136	102197	24S38E21J	4/14/1995		23.1		1919				
BR10-MD	T	16136	102197	24S38E21J	4/14/1995		23.4		1001				
BR10-S	T	16136	102197	24S38E21J	11/30/1995		23		1919				
BR10-D	T	16136	102197	24S38E21J	4/14/1995		23.4		630				
BR10-D	T	16136	102197	24S38E21J	12/1/1995		24		630				
BR10-MS	T	16136	102197	24S38E21J	11/30/1995		26.1		1381				
BR10-MS	T	16136	102197	24S38E21J	4/14/1995		23		1381				
25/38-02L01	H	17952	86240	25S38E02L01			23						
25/38-03G01	AB303	14197	87765	25S38E03G1	2/21/2007								
25/38-13J01	AB303	26048	75680	25S38E13J1	1/12/2007								
BR-5 P3		14667	60661	25S38E34J1	1/6/1992						1970	1990	-1970
BR-5 P2		14667	60661	25S38E34J1	1/6/1992						1580	1600	-1580
		57493	75915	25S39E13J1									
Childers Well	AB303	52213	77205	25S39E14H1	2/3/2007								
25/39-31R1	UA	31093	58315	25S39E31R1	11/17/1998		21.8	300	2267		120	180.0	
25/39-31R01	H	31093	58315	25S39E31R1			22						
25S/39E31R01	AB303	31093	58315	25S39E31R1	1/11/2007								
		41580	85140	25S39E4R1									
25/41-18Q01	H			25S41E18Q1									
Standard Well	AB303	25461	55029	26S38E01J1	2/3/2007								
Campbell Ranch	AB303	25931	49989	26S38E12R1	2/2/2007								
Marquardt Well	AB303	17483	28160	26S38E35L1	2/7/2007								
TTIWV-MW01(I)	TT03	57493	57493	26S39E01A	2/17/2002	IHZ	20.31	372	2379	2379	350	370	2029
TTIWV-MW01(D)	TT03	57493	57493	26S39E01A	2/17/2002	DHZ	23.23	752	2379	2379	730	750	1649
Navy Well LB	AB303	42555	54677	26S39E03M1	1/15/2007								
26S/39E09H01	AB303	41771	50688	26S39E09H1	1/11/2007				2300				2300
26/39-09M01	AB303	37048	49426	26S39E09M1	1/11/2007				2311				2311
26/39-10E1	UA	42680	51260	26S39E10E1	3/9/1999		20.4	480	2305				
26/39-11E1	UA	48180	50820	26S39E11E1	11/17/1998		21.5	250	2305				
26/39-13R4	B_S	57649	42241	26S39E13R4	1/18/1989		33	800	2318		640	800	1678
26S/39E14P01	AB303	48647	42847	26S39E14P1	1/11/2007				2338				2338
26/39-17F2	B_S	33326	45963	26S39E17F2	5/31/1987		22	881	2340		681	881	1659
26/39-18K2	B_S	29568	49515	26S39E18K2	7/1/1988		28.5	310	2388		290	310	2098
26/39-19K1	B_S	29568	44235	26S39E19K1	4/1/1987			803	2406		270	540	2136
Navy Well 27	AB303	29568	44235	26S39E19K1	12/27/2006 1/14/2007								
Navy Well 27		25700	38940	26S39E19K1									
Navy Well 15	AB303	27925	37312	26S39E19P2	12/27/2006 1/14/2007								
Navy Well 30	AB303	36843	37312	26S39E20R1	12/27/2006 1/14/2007								
26/39-20R2	B_S	36615	37654	26S39E20R2	5/29/1987		28.5	920	2421		600	900	1821
Navy Well 31	AB303	40597	37429	26S39E21Q1	12/27/2006 1/14/2007								
26/39-24P1	B_S	49632	38837	26S39E24P1	5/29/1987		30.5	800	2345		250	350	2095
Navy Well 18		54780	37620	26S39E24P3									
26/39-26B3	B_S	47520	36373	26S39E26B3	1/7/1988			-99	2384				
26/39-27C1	B_S	44352	26256	26S39E27C1	1/7/1988			500	2415				2415
26/39-27D1 (IWVWD#30)	H	42900	36300	26S39E27D1	4/28/1993		29	380	2418		360	380	2058
IWVWD#30	AB303	42900	36300	26S39E27D1									
26/39-30J1	H	31075	34321	26S39E30J1	3/11/1993		27	413	2441		294	413	2147
26/39-30J01	H	31075	34321	26S39E30J1			27	290	2441				2441
26/39-30J1	B_S	31075	34321	26S39E30J1	5/14/1987			413	2441		294	413	2147
Pennix Well	AB303	30902	27007	26S39E31R1	2/7/2007				2505				2505
26/41-7D1	H	58740	48180	26S40E07D1	3/19/1993		21	21	2160				2160
26/40-14A1	H			26S40E14A1	8/21/1996			-99	2159				2159
26/40-17J1	B_S	67344	43713	26S40E17J1	7/2/1988		25	97	2262		95	97	2167
26/40-17Q1	H	23804	42155	26S40E17Q1	8/6/1996			440	2277		360	420	1917
TTIWV-MW02(S)	TT03	58740	37620	26S40E19N01	2/18/2002	SHZ	21.91	257	2339		235	255	2104
TTIWV-MW02(D)	TT03	58740	37620	26S40E19N01	2/18/2002	DHZ	24.9	802	2339		780	800	1559

TTIWV-MW02(I)	TT03	58740	37620	26S40E19N01	2/18/2002	IHZ	24.21	422	2339		400	420	1939
26/40-20J01	H	67084	38952	26S40E20J1			24		2271				2271
26/40-20L1	UA			26S40E20L1	3/9/1999		24.1	400	2295		280	380.0	
26/40-20L1	UA	67467	39189	26S40E20L1	3/9/1999		24.1	400	2295		280	380	2015
26/40-22P1	UA			26S40E22P1	11/17/1998		27.3	1358	2260		530	830.0	
26/40-22P1	UA			26S40E22P1	11/17/1998		27.3	1358	2260		530	830	1730
26/40-22P1	B_S			26S40E22P1	8/9/1988		32	1358	2259		530	830	1729
26/40-22P2	B_S			26S40E22P2	7/1/1988		28.5	75	2263		73	75	2190
26/40-22P4	B_S			26S40E22P4	8/9/1988		25.5	215	2260		200	215	2060
26/40-23B2	H			26S40E23B2	8/23/1996			360	2210		300	340	1910
26/40-23D1	H			26S40E23D1	8/26/1996			400	2223		340	480	1883
26/40-30E2	B_S	58740	33660	26S40E30E2	5/29/1987		27	378	2345		205	378	2140
IWVWD#8	AB303			26S40E30K1									
26/40-30K1	UA			26S40E30K1	3/10/1999		30.8	800	2340		250	800.0	
26/40-30K1	UA	60592	33585	26S40E30K1	3/10/1999		30.8	800	2340		250	800	2090
26/40-30K1	B_S	60592	33585	26S40E30K1	1/22/1986			800	2340		250	800	2090
26/40-30K2	B_S	60592	33585	26S40E30K2	5/14/1987			802	2340		220	760	2120
IWVWD#11	AB303			26S40E32K1									
26/40-35H2	H			26S40E35H2	8/6/1996			500	2243		340	480	1903
BR-1 P4	H96	16966	8353	27S38E02C01	6/4/1996		27		2848		1750	1770	1098
27/38-10C02	AB303	12811	20774	27S38E10C2				872	2900		452	852	2448
27/38-13A1	UA	25881	15581	27S38E13A1	3/8/1999		23.9	510	2649		250	290.0	
27/38-13A1	UA	25881	15581	27S38E13A1	3/8/1999		23.9	630	2660		460	610	2200
27/38-13A2	AB303	25696	15103	27S38E13A2									
		16661	12789	27S38E14M1									
		4673	14901	27S38E17A1									
27/38-21L1	AB303	7157	7157	27S38E21L1									
BR-1 P1		16966	8353	27S38E23F1	3/2/1991						615	635	-615
BR-1 P1	H96	16966	8353	27S38E23F2	6/4/1996		29		2848		615	635	2233
BR-1 P2		16966	8353	27S38E23F2	3/2/1991				2848		1040	1060	1808
BR-1 P3		16966	8353	27S38E23F3	3/2/1991				2848		1500	1520	1348
BR-1 P2	H96	16966	8353	27S38E23F3	6/4/1996		29		2848		1040	1060	1808
BR-1 P4		16966	8353	27S38E23F4	3/2/1991				2848		1750	1770	1098
BR-1 P3	H96	16966	8353	27S38E23F4	6/4/1996		27		2848		1500	1520	1348
27/38-27M1		11440	2640	27S38E27M1									
BR-1 P4	AB303	16966	8353	27S38E2C01									
BR-2 P1	H96	17009	25449	27S38E2C02	6/4/1996		26		2656		620	640	2036
BR-2 P2		17009	25449	27S38E2C02	10/30/1990				2656		1480	1500	1176
BR-2 P3		17009	25449	27S38E2C03	10/30/1990				2656		1960	1980	696
BR-2 P2	H96	17009	25449	27S38E2C03	6/4/1996		25.5		2656		1480	1500	1176
27/38/-09C01	AB303	7098	20688	27S38E9C1				601	3090		501	581	2589
27/38-9 Q1(F.Crowley E.)	AB303	8743	16793	27S38E9Q1	2/2/2007				3075				3075
27/38-9Q2 (F.Crowley W)	AB303	7877	16620	27S38E9Q2				490	3090		380	480	2710
BR-3 P1		48041	20904	27S39E11D1	3/18/1991				2490		650	670	1840
BR-2 P3	H96	17009	25449	27S39E11D1	6/4/1996		27.5		2656		1960	1980	696
BR-3 P2		48041	20904	27S39E11D2	3/18/1991				2490		1320	1340	1170
BR-3 P1	H96	48041	20904	27S39E11D2	6/25/1996				2490		650	670	1840
BR-3 P3	H96	48041	20904	27S39E11D3	6/25/1996				2490		1850	1870	640
BR-3 P2	H96	48041	20904	27S39E11D3	6/25/1996				2490		1320	1340	1170
27/39-19E1	H	26834	9348	27S39E19E1	3/17/1993		22		2643				2643
27/39-7R1	B_S	30123	17052	27S39E7R1	8/31/1988			515	2563		434	514	2129
27/39-8M1	B_S	32287	18524	27S39E8M1	7/2/1987		32	1020	2558		560	1000	1998
27/40-6D1	UA			27S40E06D1	3/10/1999		31.3	720	2400		580	700.0	
27/40-6D1	UA	57909	26141	27S40E6D1	3/10/1999		31.3	720	2400		580	700	1820
27/40-6D1	B_S	57909	26141	27S40E6D1	5/28/1987		33	720	2400		580	700	1820
28/38-18F1	UA			28/38-18F1	11/18/1998		21.7	255	3025				
28/38-18F1	UA			28S38E18F1	11/18/1998		21.7	247	3025		0	247	3025
28/38-18F1	AB303			28S38E18F1									
68-6 (Brine)	TTI			22S39E20Q1		COSO							
24S/38E16J2	B_S			24S38E16J2	1/22/1986			611	2585		251	611	2334
24S/38E33J2	B_S			24S38E33J2	1/23/1986			675	2480		240	375	2240
24S/39E33N1	B_S			24S39E33N1	1/10/1986			161	2355				
25S/38E11L1	B_S			25S38E11L1	7/23/1987		20.5	400	2445				
25S/38E11L1	B_S			25S38E11L1	9/20/1987			400	2445				
25S/38E23J1	B_S			25S38E23J1	4/16/1986			630	2376		240	630	2136

25S/38E25J1	B_S			25S38E25J1	4/16/1986			330	2275		120	330	2155
25S/38E25J2	B_S			25S38E25J2	8/25/1988			330	2275		120	331	2155
25S/38E36A1	B_S			25S38E36A1	4/16/1986			285	2291		139	285	2152
25S/38E36A1	B_S			25S38E36A1	8/25/1988								
25S/38E36B1	B_S			25S38E36B1	4/17/1986			400	2293		200	400	2093
25S/38E36B1	B_S			25S38E36B1	7/29/1988			400	2293		200	400	2093
25S39E12R02	TTI	57611	79669	25S39E12R2		SHZ							
25S39E29M01	TTI	32325	65237	25S39E29M1		SHZ							
25S39E30L01	TTI	28160	65120	25S39E30L01		IHZ							
25S/39E31D1	B_S			25S39E31D1	4/16/1986			300	2267		140	300	2127
25S/39E31D1	B_S			25S39E31D1	7/29/1988			300	2267		140	300	2127
25S/40E20F1	B_S			25S40E20F1	1/9/1986			183	2180				
26S/37E26L1	B_S			26S37E26L1	7/23/1987			50	4320				
26S38E22 NW1/4 of NW1/4				26S38E22		spring							
26S/38E27G1	B_S			26S38E27G1	9/17/1985			723	2901		663	723	2238
26S/38E35B1	B_S			26S38E35B1	1/23/1986			400	2575		340	400	2235
26S/39E7N2	B_S			26S39E07N2	4/15/1986			368	2395				2395
26/39-15J01	H			26S39E15J01	8/7/1996			885	2355		600	700	1755
26S/39E19P1	B_S			26S39E19P1	9/18/1985			421	2416				
26S39E21Q01		40597	37429	26S39E21Q1		UNK							
26S39E23G-SEA05	TTI	51260	40700	26S39E23G		DHZ							
Navy Well 28				26S39E23H1									
26S/39E24M1	B_S			26S39E24M1	9/18/1985			800	2366		220	405	2146
26S/39E25E1	B_S			26S39E25E1	2/27/1986			387	2345		179	260	2166
26S/39E25E1	B_S			26S39E25E1	5/29/1987		26	387	2345		179	260	2166
26/39-26E1	B_S			26S39E26E1	5/29/1987		26	387	2345		179	260	2166
26/39-28A01	H			26S39E28A1			29	270	2410				2410
IWVWD#31	AB303			26S39E28R1									
26S/40E1A2	B_S			26S40E01A2	6/17/1985			198	2158		80	100	2078
26S/40E1A2	B_S			26S40E01A2	6/1/1987		24	198	2158		80	100	2078
26/40-01Q2	S			26S40E01Q2	11/10/1998		23	22	2160				2160
26/40-01R	S			26S40E01R	11/6/1998		24	17	2162				
26S/40E4Q1	B_S			26S40E04Q1	7/22/1987			290	2185		30	50	2155
26S/40E4Q1	B_S			26S40E04Q1	5/30/1987		21	290	2185		30	51	2155
26S40E06C01	TTI			26S40E06C01		IHZ							
26S/40E6C1	B_S			26S40E06C1	7/24/1987			620	2195		500	600	1695
26S/40E6C1	B_S			26S40E06C1	5/30/1987		20.5	620	2195		500	601	1695
26S/40E6D1	B_S			26S40E06D1	7/24/198			320	2216		276	300	1940
26S/40E6D1	B_S			26S40E06D1	5/30/1987		23.5	320	2216		276	301	1940
MW02-03	TTI			26S40E09		IHZ							
ITC02-MW21	TTI			26S40E09		SHZ							
RLS15-MW01	TTI			26S40E11		SHZ							
26/40-11J2	S			26S40E11J2									
26/40-11J3	B_S			26S40E11J3	6/11/1985		27.5	8	2174				2174
Seep 1				26S40E12		SW							
26/40-14B1	B_S			26S40E14B1	6/11/1985			22	2187		20	22	2167
26/40-14L1	B_S			26S40E14L1	6/11/1985		23.5	57	2201		55	57	2146
26S/40E15N2	B_S			26S40E15N2	6/11/1985			101	2235		99	101	2136
26S/40E15N2	B_S			26S40E15N2	7/9/1988		26	101	2235		99	101	2136
26/40-17J1	B_S	67344	43713	26S40E17J1	6/10/1985			97	2262		95	97	2167
26/40-17R1	B_S			26S40E17R1	6/10/1985			101	2267		99	101	2168
26/40-17R1	B_S			26S40E17R1	7/2/1988		24.5	101	2267		99	101	2168
26/40-17R1	B_S			26S40E17R1	6/10/1985			101	2267		99	101	2168
26S40E19P01				26S40E19P01		SHZ_IHZ							
JMM12-MW06	TTI			26S40E20		IHZ							
JMM12-MW09	TTI			26S40E20		SHZ							
JMM12-MW09-DUP	TTI			26S40E20		SHZ							
26S40E06D01				26S40E206D1		IHZ							
26S40E20L01	TTI	67467	39189	26S40E20L1		IHZ_DHZ							
26S40E20Q1	TTI			26S40E20Q1									
	TTI			26S40E21		DHZ							
MKFL-MW04	TTI			26S40E21		IHZ							
MKFL-MW03	TTI			26S40E21		SHZ							
26S/40E21A1	B_S			26S40E21A1	6/10/1985			104	2251		102	104	2149
26S/40E21E1	B_S			26S40E21E1	6/10/1985			114	2273		112	114	2161

MW07-15	TTI			26S40E22		IHZ							
RLS07-MW02	TTI			26S40E22		SHZ							
26S/40E22B1	B_S			26S40E22B1	6/12/1985			63	2232		61	63	2171
26S/40E22B1	B_S			26S40E22B1	6/2/1987		25	63	2232		61	63	2171
26S/40E22H1	B_S			26S40E22H1	6/12/1985			49	2227		47	49	2180
26S/40E22H1	B_S			26S40E22H1	6/29/1988		27	49	2227		47	49	2180
26S/40E22H2	B_S			26S40E22H2	6/12/1985			77	2227		75	77	2152
26S/40E22H2	B_S			26S40E22H2	6/29/1988		26	77	2227		75	77	2152
26/40-22H2	S			26S40E22H2	11/6/1998		21.1	49	2226		75	77	2151
26S/40E22H3	B_S			26S40E22H3	6/12/1985			97	2226		95	97	2131
26S/40E22H3	B_S			26S40E22H3	6/2/1987		26	97	2226		95	97	2131
26S40E22P01 (MW07-14)	TTI			26S40E22P1		DHZ							
26S40E22P02				26S40E22P2		SHZ							
26S/40E22P2	B_S			26S40E22P2	6/10/1985			75	2263		73	75	2190
26S/40E22P2	B_S			26S40E22P2	5/27/1987		31	75	2263		73	75	2190
26/40-22P2	B_S			26S40E22P2	6/10/1985			75	2263		73	75	2190
26S40E22P03	TTI			26S40E22P3		IHZ							
26S/40E22P3	B_S			26S40E22P3	1/9/1986			75	2263		73	75	2190
26S/40E22P3	B_S			26S40E22P3	5/26/1987		27	75	2263		73	75	2190
26/40-22P3	B_S			26S40E22P3	1/9/1986			415	2260		400	415	1860
26/40-22P3	B_S			26S40E22P3	8/8/1988		27.5	415	2260		400	415	1860
26S40E22P04	TTI			26S40E22P4		IHZ							
26S/40E22P4	B_S			26S40E22P4	1/9/1986			215	2260		200	215	2060
26S/40E22P4	B_S			26S40E22P4	5/26/1987		25	215	2260		200	215	2060
26/40-22P4	B_S			26S40E22P4	1/9/1986			215	2260		200	215	2060
26S40E23B02	TTI			26S40E23B2		DHZ							
26/40-23B2	S			26S40E23B2	11/5/1998		21.5	360	2210		300	340	1910
26/40-23B2				26S40E23B2				360	2210		300	340	1910
26S40E23D01-DUP	TTI			26S40E23D1		DHZ							
26S40E23D01	TTI			26S40E23D1		DHZ							
26S/40E23D1	B_S			26S40E23D1	1/9/1986			400	2223		385	400	1838
26S/40E23D1	B_S			26S40E23D1	5/26/1987		24.5	400	2223		385	400	1838
26/40-23D1	B_S			26S40E23D1	1/9/1986			400	2223		385	400	1838
26S40E23D02	TTI			26S40E23D2		IHZ							
26S/40E23D2	B_S			26S40E23D2	1/9/1986			185	2223		170	185	2053
26S/40E23D2	B_S			26S40E23D2	5/26/1987		23	185	2223		170	185	2053
26/40-23D2	B_S			26S40E23D2	1/9/1986			185	2223		170	185	2053
26/40-23G1	B_S			26S40E23G1	6/11/1985			57	2215		55	57	2160
TTBK-MW10	TTI			26S40E26		SHZ							
MKFL-MW02-DUP				26S40E27		IHZ							
MKFL-MW02				26S40E27		IHZ							
MKFL-MW01				26S40E27		SHZ							
MKFL-MW02 Dup	TTI			26S40E27D1									
MKFL-MW02	TTI			26S40E27D1									
MKFL-MW01	TTI			26S40E27D1									
26S/40E28J1	B_S			26S40E28J1	1/23/1986				2289				2289
26S/40E28J1	B_S			26S40E28J1	9/00/1997				2289				2289
26S40E29M06	TTI			26S40E29M6		IHZ							
26S40E29M06-DUP	TTI			26S40E29M6		IHZ							
IWVWD#9	AB303			26S40E30K2									
26/40-30K2	B_S	60592	33585	26S40E30K2	5/14/1987		32	802	2340		220	760	2120
IWVWD#10	AB303			26S40E30K3									
IWVWD#9A	AB303			26S40E30K4									
26S40E31A01	TTI			26S40E31A1		DHZ							
IVVWD#13	AB303			26S40E32F1									
26S/40E32F3	B_S			26S40E32F3	1/22/1986			720	2320		520	700	1800
26S/40E32F3	B_S			26S40E32F3	5/28/1987		33.5	720	2320		520	700	1800
IWVWD#17	AB303			26S40E32K1									
26S/40E32K1	B_S			26S40E32K1	1/22/1986			620	2330		230	310	2100
26S/40E32K1	B_S			26S40E32K1	1/7/1988			620	2330		230	310	2100
IWVWD#7	AB303			26S40E33P4									
IWVWD#19-DUP	TTI			26S40E34		SHZ_IHZ							
IWVWD#19	TTI			26S40E34		SHZ_IHZ							
IWVWD#19	AB303			26S40E34N1									
MK22-MW12	TTI			26S40E35		IHZ							

RLS22-MW06	TTI			26S40E35		SHZ							
26/40-35H1(?)	S			26S40E35H1									
26S40E35H02				26S40E35H2		DHZ							
26S/40E36A1	B_S			26S40E36A1	6/17/1985			260	2247		80	90	2167
26S41E11P01	TTI			26S41E11P1		SWV							
USN08-MW04 or01	TTI			26S41E22		SWV							
USN08-MW01	TTI			26S41E27		SWV							
ALB08-MW06-DUP				26S41E27		SWV							
ALB08-MW06				26S41E27		SWV							
27/38-1G1	B_S			27S38E1G1	9/26/1985			399	2555		344	399	2211
27/38-20C1		1760	9460	27S38E20C1									
27/38-31D1				27S38E31D1					3075				3075
27/39-16C1	B_S			27S39E16C1	1/18/1986			502	2582		370	502	2212
IWVWD#33				27S39E8L1									
27/39-8M1	H	32287	18524	27S39E8M1	6/6/1989		27.5	1020	2558		560	1000	1998
27/39-8M2	B_S	32287	18524	27S39E8M2	6/6/1989			1000	2558		400	1000	2158
27S40E01K01	TTI			27S40E01K1		DHZ							
27S40E02J01-DUP				27S40E02J1		DHZ							
27S40E02J01	TTI			27S40E02J1		DHZ							
27/40-07G	S			27S40E07G									
27S/40E2J1	B_S			27S40E2J1	1/24/1986			200	2300				2300
27S/40E2J1	B_S			27S40E2J1	6/1/1987		25	200	2300				2300
27S/40E4B2	B_S			27S40E4B2	2/27/1987			288	2998		128	278	2870
27S/40E4B2	B_S			27S40E4B2	5/29/1987		26	288	2998		128	278	2870
27S/40E5D1	B_S			27S40E5D1	2/27/1986			555	2375		251	556	2124
27S/40E5D1	B_S			27S40E5D1	5/29/1987		25	555	2375		251	556	2124
27/40-6D1	B_S			27S40E6D1	1/22/1986		33	720	2400		580	700	1820
Well 25	TTI			28S44E8		RWA							
Seasite 1	TTI					RWA							
Weiler Well	AB303												
IWVWD#16													
IWVWD#12													
Springs													
Amity	SB&M												
Bigfoot Sprg	T				8/24/2009		24.1		5243				
Bircham	SB&M												
Bird Sprg	T				4/23/1995		19		4003				
Bird Sprg	T				1/15/1996		17.1		4003				
Bird Sprg	T				5/5/1996		21.1		4003				
Boulder Canyon	T				4/22/1995		19		3803				
Boulder Canyon Sprg	T				11/26/1995		17.3		3803				
Canebrake Creek	H						16						
Chimney Creek	H						16						
China Garden	SB&M												
Cole	SB&M												
Cow Haven Cyn	AB303	0	11880										
Cow Hvn Canyon Sprg	T				4/8/1995		16.9		4502				
Cow Hvn Canyon Sprg	T				1/13/1996		16.3		4502				
Crystall	SB&M												
Darwin	SB&M												
Dead End	SB&M												
Deadfoot Canyon	T				4/2/1995				4003				
Deadfoot Canyon	T				11/21/1995		10.2		3803				
Deadfoot Cnyn	AB303	0	105000	24S38E7F1									
Edgar's Sprg	T				8/24/1996		21		7002				
Fivemile Canyon	T				11/21/1995		12.5		4003				
Fivemile Canyon					2/19/2007								
Fivemile Canyon 2	T				5/4/1996		19.3		3721				
Fivemile Canyon side	T				5/4/1996		17.6		4301				
Fivemile Canyon-L	T				11/26/1995		9		3803				
Granite	SB&M												
Grapevine C	UA			Grapevine C	3/10/1999		11.9	0	surf				
Grapevine Canyon	H						17						
Grapevine Canyon	T				4/8/1995		13.2		3002				

Grapevine Canyon	T				1/20/1995		17.6		3202				
Grapevine Canyon	T				5/13/1996		17.5		3202				
Haiwee Spring	H						12						
Haiwee Spring	SB&M												
Hidden	SB&M												
Horse Canyon	AB303	0	3960										
Horse Canyon Sprg	T				1/15/1996		10.4		4502				
Horse Canyon well	T				4/23/1996		15.5		4600				
Indian	SB&M												
Indian Garden	SB&M												
Indian Wells Canyon	H						17						
Indian Wells Cnyn	AB303	2640	44880										
IWVBCSI	TTI												
JB Well	T				5/21/1996				2339				2339
JB Well	T				11/25/1995		0		2339				2339
John's Well	T				4/21/1996		22		2402				2402
Kennedy Meadows-Kern River	H						8						
KR at K Meadows	T				6/1/1994				6040				
KR at K Meadows	T				4/2/1995				6040				
KR South Fork	T				6/1/1994				2612				
KR South Fork	T				3/31/1996		7.8		5942				
La Motte	SB&M												
Layton	SB&M												
Lead Pipe	SB&M												
Little Lake	H						17						
Little Lake Outlet					2/4/2007								
Mammoth Mine	SB&M												
Margaret Ann E	SB&M												
Mariposa	SB&M												
McIvers Sprg	T				5/1/1995		16		6601				
Mesquite	SB&M												
Myrick	SB&M												
New House	SB&M												
Ninemile Canyon	H						18						
Ninemile Canyon	T				4/2/1995		14.2		3501				
Ninemile Canyon	T				12/2/1995		12		3202				
Ninemile Canyon	T				5/13/1996		28		3202				
Ninemile Canyon					2/19/2007								
Ninemile Cnyn	AB303	0	95700	24S38E									
Noname	T				4/21/1996		0		3501				
Noname Canyon	H						16						
Noname Canyon	H				2/19/2007								
Noname Canyon	T				4/2/1995		15.2		3402				
Noname Canyon	T				1/6/1996		15.6		3501				
Noname Canyon	T				5/13/1996		28		3402				
NoName Cnyn	AB303	0	89730	24S38E30P1									
Noname Grotto	T				4/21/1996		18.6		3481				
Noname High	T				4/21/1996		0		4301				
North Mountain	SB&M												
NR2-s	T			27/38-23F01	12/15/1995		23.9		1985				1985
Old House	SB&M												
Pierce Well	T				11/24/1995		26		2339				2339
Pierce Well	T				5/21/1996				2339				2339
Pink Hill	SB&M												
Rock House Sprg	T				8/25/1996		25.3		5000				
Ruby-West	SB&M												
Sacatar Cyn Sprg	T				8/24/1996		22		5801				
Sage Canyon	AB303	0	5280										
Sage Canyon	T				4/22/1995		14.8		3301				
Sage Canyon Sprg	T				11/26/1995		17.2		3301				
Sage Sprg A	T				5/4/1996		23.5		4600				
Sage Sprg D	T				5/4/1996		22.6		4600				
Sand Canyon	H						17						
Sand Canyon	T				4/9/1995		13		3002				
Sand Canyon	T				11/20/1995		17		3202				

Sand Canyon	T				5/13/1996		20.5		3002				
Sand Canyon					2/19/2007								
Sand Cnyn	AB303	3960	81840	25S38E8K1									
Seep	SB&M												
Short	AB303	5280	56760										
Short Canyon	H						15						
Short Canyon	T				5/13/1996		16.8		3402				
Short Canyon C	T				4/21/1996		21.5		3402				
Short Canyon D	T				4/21/1996		21.4		3402				
Short Canyon I					4/21/1996				3402				
Short Canyon Sprg	T				1/12/1996		9		3402				
Short Canyon Sprg					4/8/1995		13.3		3402				
Soldier	AB303	0	17160										
Stone Corral	SB&M												
Tennessee	SB&M												
Upper Tunnel	SB&M												
Wild Rose Spring	H						-18						

Screen bottom (El)	WL	Head	E_C	pH_F	pH_L	TDS	Ca	Mg	Na	K	Cl	Sr	SO4	T_ALK	HCO3	CO3	NO2_NO3	SiO2	F
			2080		8.6	1300	53	75	300.00	26.00	210.00		190	690	610	110			1.10
						1100					83.60	0.814	54.6						
			1960		8.13	1100	68	39	350.00	18.00	180.00		180	640	770		5.1		1.00
				7.7		1480	154	117	222.00	24.80	109.00	2.6	141		1170			15	0.80
				8.1		1140	57	56	283.00	17.90	208.00	1	211		618			27	0.50
				8.4		1140	44	55	281.00	18.20	207.00	1	211		527			28	0.50
				8		1120	40	50	248.00	18.30	205.00	1.1	194		485			10	0.40
				8.5		1120	49	56	282.00	17.80	209.00	0.8	211		485			25	0.50
				8		1120	47	51	258.00	18.10	206.00	1	208		468			0	0.40
				8		994	40	42	215.00	16.30	194.00	0.9	199		358			3	0.50
				8.5		745	32	28	193.00	8.60	170.00	0.9	185		190			14	0.80
				7.15	7.7	960	108	47	163.00	17.00	119.00		241		597			27	0.70
			909		7.69	520	97	40	72.00	6.80	23.00		130	390	480		6.8		0.75
			512		8.32	280	12	5.2	92.00	8.20	28.00		12	210	240	2.8	1		0.20
-1990			1870		8.7	891	14.4	17.5	335.00	8.70	68.60		90	708			<1.0		1.50
-1600			1880		8.7	837	20.8	6.8	346.00	9.00	72.70		65.5	626			<1.0		2.10
						280													
			993		8.18	600	91	0.097	98.00	7.00	100.00		120	210	260		20		0.74
			1600	9.2		980	31	14	314	4.9	232		163	288			0.6		1.0
				6.96	7.8	590	68	17	96.00	4.00	89.00		181		184			34	0.40
			898		8.04	550	65	15	100.00	3.70	92.00		160	160	200		0.35		0.38
						790													
					9	7870	11	6	2500.00	63.00	4530.00		23		212			3	2.00
			886		8.23	560	57	13	110.00	3.90	85.00		140	170	200	3.4	0.6		0.54
			932		8.16	560	69	12	100.00	3.50	130.00		140	120	150		3.2		0.51
			281		8.98	180	1.8		65.00	0.64	5.00		14	110	88	25	12		0.22
2009	246.47	2131.65	307	7.99		278	32.6	9.84	33.90	2.76	29.60		52.70	100			1.7	94.3	0.60
1629	259.31	2105.11	395	9.57		199	1.79	0.155	62.90	0.90	10.90		21.80	102			1.8	42.6	0.60
			1240		8.22	790	52	37	160.00	15.00	110.00		140	380	460				0.73
2300			551		8.11	340	39	6.1	59.00	2.60	48.00		82	100	120		1.3		0.46
2311			303		8.86	180	2.2	0.14	63.00	1.80	19.00		7.8	110	96	22			0.54
			695	8.5		525	27	6	116	4.2	60		75		191				0.8
			813	7.5		490	70	12	87	3.6	96		52	257	257		2.1		0.3
1518			1,300	9.0		826	3.7	0.56	320.00	3.40	160.00		13			<.10	3.7	29.0	3.50
2338			360		7.96	250	30	10	25.00	2.70	33.00		22	100	120				0.62
1459			360	8.8		173	4.9	0.64	52.00	3.70	7.20		6.7			<.10	3.2		3.20
2078			530	7.3		312	38	6	51.00	2.30	55.00		63			1.5	0.6	35.0	0.60
1866			780	8.1		393	60	9	64.00	4.00	136.00		80				0.7		0.70
			490		8.11	350	40	5.9	57.00	2.40	44.00		91	92	110		6.6		0.59
						350													
			540		8.07	380	44	604	65.00	2.60	36.00		130	88	110		5.4		0.64
			340		8.14	270	31	3.5	37.00	2.10	24.00		50	84	100		7.6		0.66
1521			365	8.2		199	10.0	2.3	62.00	1.90	27.00		40				1.5	27.0	0.80
			310		8.14	220	22	0.32	38.00	1.70	22.00		36	73	89		9.9		0.41
1995			360	9.0		215	21	1.7	40.00	1.40	21.00		21			1.2	0.8		
						230													
			400	8.1		229	37.8	4.2	38.00	2.30	30.60		51.9				0.7		
2415			440	8.0		234	40.0	4.2	32.00	4.00	30.20		51						0.80
2038			336	7.9	8.2	270	20.0		52.00	2.00	27.00		31				10.8		0.40
						220													
2028			439	7.5	7.9	290	31.0			2.00	29.00		63						0.70
2441				7.5	7.9	290	31.0	5.0	54.00	2.00	29.00		63		132			33.0	0.70
2028			430	8.3		243	29.4	3.4	54.30	3.40	24.00		58						0.90
2505			423		8.1	290	35	5.5	54.00	2.30	25.00		53	120	140	6.3	7.7		0.71
2160			9410	8.97	8.8	5650	10.0	3	2240.00	15.00	2320.00		620					23	6.90
2159			2900		7.8	1900	35.0	7.2	650.00	10.00	450.00		240		570		2.2		5.10
2165			415	7.5		266	30.0	6.0	43.00	4.20	24.00		40				<0.1		0.80
1857			3700		9.4	2400	0.8	0.8	960.00	7.60	280.00		1		1000	700	0.0		14.00
2084		2132.31	342	8.8		218	12.4	3.73	55.80	4.55	17.80		19.90	122			0.7	94.1	0.80
1539		2113.28	311	9.66		208	1.37	0.132	65.10	0.42	19.10		12.10	106			0.08	86.6	1.00

1919		2116.34	256	9.13		152	1.69	0.0991	55.90	1.79	7.40		1.70	118			0.7	53.9	1.00
2271				8.2	8.1	360	17	3	77.00	7.00	30.00		60		145			55	0.90
			351	8.2	10.0	250	16.0	5.1	39	8.4	19	0.3531	33	131	160		nd		0.7
1915			351	8.2	10.0	250	16.0	5.1	39.00	8.40	19.00	0.3531	33						0.70
			1850	8.5	8.6	1150	1.9	0.9	458	5.0	147	0.1829	8	879	1072		nd		3.4
1430			1850	8.5	8.6	1150	1.9	0.9	458.00	5.00	147.00	0.1829	8						3.40
1429			1880	8.6		1090	1.7	0.5	440.00	4.10	140.00		13				<0.1		2.90
2188			2180	7.2		1660	150.0	76.0	210.00	20.00	96.00		960				<0.1		1.80
2045			1670	7.4		1260	170.0	41.0	130.00	11.00	110.00		670				0.9		0.50
1870			2100		8.6	1300	5.5	2.9	490.00	13.00	360.00		88		440	10	0.0		2.20
1743					9.0	2000	4.3	6.1	750.00	15.00	380.00		260		580	150			5.90
1967			420	8.1		234	40	4.2	41.80	2.50	27.00		39			2.4	0.6	38.0	0.20
						280													
			362	9.0	9.2	248	4.5	1.1	75	1.1	26	0.1519	19	84	102		3.2		1.2
1540			362	9.0	9.2	248	4.5	1.1	75.00	1.10	26.00	0.1519	19				3.2		1.20
1540			364	8.3		10.3	2.2	68.7	1.70	1.70	28.70		22						1.10
1580			375	8.9		240	13.0	3.5	60.00	1.90	36.00		27				2.5		0.90
						470													
1763			3700		7.8	2200	150.0	15.0	580.00	20.00	1100.00		79		70				
1078			430		10	240	1	0.21	110.00	0.40	12.00		11		82	97			1.20
2048	439	2461	487		8.46	300	2.7	0.097	98.00	1.10	18.00		67	120	150		4.2		0.42
			531	7.6	7.7	360	34.0	5.5	58	2.3	27	0.4173	61	194	237		8.6		1.0
2050			531	7.6	7.7	360	34.0	5.5	58.00	2.30	27.00	0.4173	61				8.6		0.99
						300													
						290													
						390													
						510													
-635			380		8.7	212.8	6.4	1.6	79.20	3.50	17.10		27.9	124.8					1.40
2213			420		10	270	1.5	1	110.00	0.80	9.60		12		80	100			0.77
1788			420		9.1	243.6	3.2	1.2	95.00	1.50	9.40		16	183.2					0.70
1328			610		8.8	353.8	20	5.3	110.20	7.90	14.30		25.3	248.8					2.30
1788			410		9.8	230	0.85	0.02	110.00	0.00	7.40		11		110	76			0.63
1078			500		8.7	285	9.6	1.9	107.90	4.80	10.20		16.6	218					3.30
1328			420		9.9	230	1	0.16	110.00	0.40	12.00		11		92	88			1.40
						260													
						190													
2016			1100		11.7	450	3.8	0.1	180.00	6.20	23.00		56			278			5.90
1156			400		9.9	240	4	2.9	75.10	3.20	20.80		27.6	118			1.6		1.40
676			580		8.6	353.8	13.1	2.2	105.40	4.50	52.00		81.3	86			4.8		8.40
1156			600		9.4	330	12	0.43	130.00	1.20	62.00		110		8	26			13.00
2509	386	2704	614		8.34	460	20	5.3	140.00	5.80	29.00		130	120	130	10	4.1		0.66
3075			682		8.08	430	68	19	55.00	3.20	17.00		81	260	320				0.11
2610	419	2671	1440		8.32	980	29	13	290.00	12.00	140.00		190	320	350	18	4.2		1.90
1820			660		8.4	360	17.6	12.6	91.40	5.90	47.30		78.5	132.8			11.1		0.50
676			500		9.9	300	7.8	8.7	69.00	2.10	11.00		22		47	57			0.77
1150			1540		7.4	955	38.4	7.8	255.90	7.90	372.00		65.6	113.2			1		1.10
1820			500		8.6	290	12	2.7	93.00	15.00	36.00		72		95	6.4			1.50
620			14000		6.6	9400	680	75	2100.00	38.00	4900.00		110		5.4	0			1.30
1150			9100		6.1	8500	390	9.6	1400.00	25.00	2800.00		280		5.3	0			0.73
2643				8.96	8.8	240	4.0	0.0	72.00		20.00		35		51			2.0	4.00
2049			440	7.8		225	32.2	6.8	50.70	2.70	25.40		58						0.70
1558			420	8.1		263	30.0	5.3	49.00	3.40	32.00		56				1.8	10.0	1.20
			369	8.8	9.0	252	3.1	0.1	77	nd	29	0.0186	20	93	113		nd		1.0
1700			369	8.8	9.0	252	3.1	0.1	77.00	nd	29.00	0.0186	20						0.96
1700			380	9.0		235	2.0	0.0	76.00	0.60	31.00		21				<.10		0.90
			970	9.2	9.1	657	2.2	0.4	220	2.1	34	0.0434	101	249	304		ND		13.0
2778			970	9.2	9.1	657	2.2	0.4	220.00	2.10	34.00	0.0434	101						13.00
			965		9.02	630	1.9	0.25	220.00	2.00	35.00		100	300	240	66			14.00
											2600.00	9.3	16						
1974																			
2105																			
				8			24	8.3	61.00	4.80	12.00		41.00					24	1.40
1746																			

1945																			
1944				7.7			40	15	253.00	5.40	163.00		114.00						1.40
2006																			
				7.5			309	121	486.00	7.70	310.00		1220.00						0.63
1893																			
1893							61	15	183.00	4.90	95.90		141.00						0.73
											118.00		38						
											43.70		16						
											12500.00		577						
1967																			
1967				7.5			72	19	185.00	4.40	106.00		185.00						
					7.2														
											23.90	0.838	72						
2178																			
2175																			
2395																			
1655			350	7.7			31	8.7	32.00	4.50	25.00		47			2.5	0.7		0.24
											25.00	0.421	11						
											82.00	0.307	28						
1961																			
2085																			
2085				7.9			21	1.7	50.00	1.40	32.00		47.00					36	0.70
2085			450	7.9			34	7	35.00	2.10	32.00		47			2.9	0.7		
2410				7.85	8.2		20.0	0.0	52.00	2.00	27.00		31		99			53.0	0.40
2058																			
2058							1.7	0.3	4300.00	42.00	3700.00		950.00					69	3.70
2160				6.05			82	11	3800.00	110.00	5730.00								6.60
				8.02			73.0	39	14000.00	500.00	23200.00	49.6496							1.50
2135																			
2134				9			20	4.3	110.00	4.70	120.00		52.00					49	0.70
											30200.00	0.147	3911						
1595																			
1594				10.1			3.1	0.75	24000.00	74.00	14000.00		5200.00					48	
1916																			
1915				10.1			2.9	1.2	4000.00	10.00	2700.00		120.00					34	11.00
											263.00	0.097	1						
											431.00	0.994	34						
											818.00	0.431	10						
2174			15000				87.0	44	2800.00	32.00	3800.00		1000					16	2.70
											341.00		133						
2165			4200																
2144			2600	7.3			250.0	57	890.00	19.00	1300.00		710					69.0	1.20
2134																			
2134				8.6			5.3	4.6	1200.00	15.00	160.00		1100.00					1.5	1.50
2165			410																0.70
2166			440																
2166			450	7.8			32.0	6.3	42.00	4.80	28.00		41					52.0	0.70
2166			440																
											15.00	0.097	4						
											31.10	0.706	16						
											217.00	3.29	84						
											224.00	3.44	86						
											13900.00	0.109	18						
											22.50	0.323	9						
											235.00	0.209	1						
											21.90	0.258	1						
											20.40	5.91	465						
2147																			
2159																			

											30.30	0.06	1						
											358.00	9.11	927						
2169																			
2169				7.7			120	150	13000.00	41.00	210.00		3200.00					68	1.20
2178																			
2178				7.2			500	290	540.00	53.00	210.00		3100.00					83	2.00
2150																			
2150				7.2			440	670	2400.00	49.00	430.00		8100.00					46	2.70
2149				7.9			430.0	480.0	1900.00	93.00	490.00	13.2132	6290						2.40
2129																			
2129				7.4			450	450	1400.00	45.00	260.00		5500.00					69	2.10
											147.00		13						
											102.00		173						
2188																			
2188				8.6			1.7	0.53	410.00	4.40	96.00		960.00					77	1.80
2188			1800																
											232.00		1						
2188																			
2188				8.8			2.1	0.7	520.00	7.10	230.00		11.00					1340	5.10
1845			1940																
1845			2220	8.8			1.2	0.6	650.00	7.10	220.00		9				<0.1		4.60
											175.00		151						
2045																			
2045				7.3			270	65	170.00	20.00	140.00		1100.00					63	0.50
2045			2210																
											292.00	0.172	4						
1870							5.8	3.3	460.00	18.00	350.00	0.7062	109						2.40
1870																			
											455.00	0.598	157						
											479.00	0.615	151						
1823																			
1823				9			3.2	1.8	720.00	11.00	370.00		330.00					14	6.00
1823			2780																
											978.00	6.19	752						
2038																			
2038				8.3			56	86	16000.00	38.00	1100.00		2300.00					46	1.70
2038			6800																
2158			9750																
											78.00		34						
											15.50	0.046	1						
											15.30	0.046	1						
											31.90	6.13	698						
2289																			
2289				8.4			60	15	83.00	26.00	55.60		270.00						0.38
											30.50	0.57	7						
											29.90	0.587	7						
1580			375	8.9			13.0	3.5	60.00	1.90	36.00		27					33.0	0.90
											35.80	0.649	11						
1620																			
1620				9.1			3.5	0.06	150.00	0.80	110.00		28.00					53	0.80
2020																			
2020				8.27			7.3	2.2	82.70	1.40	37.30		24.30						1.30
											206.00	1.79	34						
											178.00	1.84	1						
											12.10	0.97	1						

											177.00	1.73	100						
											327.00	3.94	10						
2157																			
											573.00	0.691	101						
											385.00	0.499	146						
											2990.00	8.48	248						
											639.00	0.756	111						
											644.00	0.779	113						
2156			635																
3075																			
2080			427																
1558			435	7.8															
1558			435																
											506.00	1.15	16						
											525.00	1.63	15						
											388.00	1.49	15						
2300																			
2300				7.7			75	11	320.00	6.10	480.00		54.00					69	2.90
2720																			
2720				8			57	18	160.00	5.30	320.00		47.00					44	0.70
1819																			
1819				8.8			2.9	0.42	120.00	0.70	67.00		20.00					36	1.40
1700			367	9.0			2.0	0.03	76.00	0.60	31.00		21					45.0	0.90
											37.60		12.6						
											137.00		34						
				7.3		301	41	12	32.00	1.20	7.00	0.3	67		190			43	0.60
				8		245	36	3	43.00	1.30	21.00	0.4	56		118			20	3.50
				7.6		199	36	3	37.00	1.10	23.00	0.3	49		91			0	3.10
				7.6		244	37	3	36.00	1.40	23.00	0.4	50		117			20	3.20
				7.5		305	53	15	40.00	3.40	14.00	0.6	26		291			29	1.60
				7.4		353	55	15	44.00	5.00	20.00	0.8	23		276			2	1.20
				8.04	8.1	210	35	9	21.00	1.00	7.00		16		179			61	0.60
				8.11	8.2	400	64	20	31.00	3.00	14.00		72		254			30	0.60
						240													
				7.5		250	43	8	24.00	1.60	8.00	0.4	18		204			31	0.40
				7.1		252	49	9	26.00	1.00	10.00	0.4	14		189			29	0.10
				8.1		675	75	37	84.00	8.60	45.00	0.5	180		310			12	2.40
				8		668	76	37	83.00	8.30	57.00	0.5	176		287			26	1.50
					8.27	740	94	43	97.00	9.00	60.00		220	320	390		0.1		1.40
				7.7		417	81	20	32.00	3.70	26.00	0.3	37		373			31	0.30
				7.9		658	68	31	90.00	8.80	43.00	0.6	172		284			24	3.00
			1030		8.27	740	94	43	97.00	9.00	60.00		220	320	390		0.1		1.40
				8		633	89	37	93.00	6.00	44.00	0.6	175		325			31	2.60
				8.1		482	67	29	51.00	8.40	27.00	0.3	91		322			34	0.90
				8.2		731	68	39	111.00	10.30	48.00	0.7	190		298			27	2.70
			590	7.4		384	66	17	31	3.8	5.3		52		328		nd		0.6
				8.06	8	590	97	28	61.00	7.00	14.00		137		392			49	0.80
				7.9		490	78	21	49.00	5.40	10.00	0.5	106		336			49	0.80

				7.5		743	100	32	86.00	7.90	19.00	0.9	118		451			55	0.80
				7.8		552	101	20	52.00	4.80	10.00	0.6	83		421			63	0.50
				7.6	7.6	400	64	18	47.00	6.00	40.00		63		269			41	0.20
							44	4	17.00	2.00	14.00				137				
							113	30	83.00	8.00	93.00				439				0.40
						360													
				7.9		348	55	8	39.00	1.20	12.00	0.4	20		245			0	1.50
				7.8		355	57	17	48.00	3.20	20.00	0.6	40		304			29	1.70
				8.05	8.3	460	89	23	27.00	4.00	14.00		133		228			32	0.80
					8.34	610	100	26	41.00	3.20	15.00		190	240	240	25			0.92
2339				7.2		774	105	35	136.00	12.80	76.00	0.9	167		497			35	0.40
2339				6.9		921	92	42	147.00	17.00	92.00	1.2	185		583			35	0.60
2402				7.1		640	53	19	165.00	5.30	47.00	0.8	74		487			39	0.00
				6.98	7.4	110	8	2	12.00	2.00	9.00		4		51			22	0.10
				8		240	35	9	41.00	5.00	40.00	0	16		180			15	0.10
				8		110	11	3	17.00	4.00	13.00	0.1	4		64			9	0.20
				8.1		300	42	13	46.00	5.00	39.00	0	25		240			20	0.10
				7.7		84	11	3	11.00	1.80	8.00	0.1	3		54			20	0.10
				8.3	8.3	1240	59	65	282.00	26.00	193.00		163		750			29	1.00
			2080		8.6	1300	53	75	300.00	26.00	210.00		190	690	610	110			1.10
				8.1		285	70	10	10.00	1.10	4.00	0.2	11		266			38	0.30
				8.55	8.4	570	76	44	54.00	6.00	22.00		98		322			35	1.00
				8		560	68	44	57.00	6.30	22.00	0.5	105		385			15	0.90
				8.1		842	78	88	98.00	8.90	45.00	0.7	155		553			33	0.50
				8.2		703	69	68	75.00	8.80	31.00	0.7	108		560			38	0.90
			1080		8.38	640	93	73	90.00	7.50	35.00		150	500	490	57			1.10
					8.38	640	93	73	90.00	7.50	35.00		150	500	490	57			1.10
				7.5		1230	161	33	62.00	5.90	53.00	1.4	340		672			59	3.00
				7.98	8	1060	131	86	115.00	8.00	42.00		279		682			54	2.40
			1150		8.08	720	110	59	96.00	5.40	29.00		180	510	620				2.30
				7.9		950	115	72	104.00	6.40	37.00	1.3	246		637			26	2.60
				7.8		1190	156	102	125.00	7.00	52.00	1.5	315		655			16	1.80
				7.7		1080	119	94	113.00	10.40	48.00	1.6	377		634			0	1.90
					8.08	1038	110	59	96.00	5.40	29.00		180	510	620				2.30
				7.8		1150	163	84	137.00	6.20	57.00	1.3	365		656			62	2.40
				7.8		634	188	65	147.00	8.20	21.00	1.2	135		463			46	1.90
1985				7.9		617	36	21	129.00	3.80	61.00	0.7	11		394			41	0.20
							59	9	19.00	1.00	16.00				183				0.10
2339				7.4		656	63	16	107.00	6.80	89.00	0.8	421		149			34	1.10
2339				7.4		590	69	14	113.00	5.70	72.00	0.7	204		186			44	0.50
							3		112.00	4.00	37.00				174				0.40
				7.1		240	21	1	50.00	0.80	3.00	0.1	8		186			54	2.60
							86	17	47.00	2.00	36.00				357				0.20
				7.4		293	49	14	22.00	3.90	12.00	0.1	30		252			26	0.40
						410													
				7.6		335	58	11	42.00	1.80	15.00	0.4	34		275			33	2.10
				7.6		242	36	5	30.00	1.30	12.00	0.5	14		165			30	2.00
				8		192	47	5	17.00	1.10	9.00	0.4	12		174			26	1.70
				7.3		161	34	4	12.00	1.40	6.00	0.2	9		124			28	0.50
				8.43	8.2	420	62	17	43.00	4.00	113.00		78		264			35	1.00
				8.1		375	59	16	46.00	4.10	11.00	0.5	74		280			36	1.30
				7.4		782	90	28	113.00	6.90	30.00	1.1	105		472			47	1.70

				8.24	8.2	360	73	21	75.00	4.70	21.00	0.7	75		369			48	1.30
			807		8.38	480	79	25	90.00	6.30	23.00		94	360	370	35			1.70
					8.38	480	79	25	90.00	6.30	23.00		94	360	370	35			1.70
							21	4	37.00	6.00	24.00				76				0.5
					8.16	390	66	9.3	41.00	0.97	8.00		74	200	260				0.87
				8.29	802	360	57	8	41.00	2.00	12.00		74		190			36	0.80
				7.9		435	74	8	49.00	0.70	11.00	0.6	65		282			53	0.80
				7.3		492	69	8	61.00	5.90	10.00	0.6	164		196			45	0.20
				7.6		180	33	4	18.00	2.10	6.00	0.2	38		92			30	0.20
				7.9		206	30	3	27.00	0.60	13.00	0.2	9		141			55	0.30
				8		322	60	8	40.00	1.20	10.00	0.4	71		173			33	0.30
				8.1		350	55	8	42.00	1.60	10.00	0.5	79		209			44	0.80
					7.82	270	49	8.9	32.00	0.29	13.00		36	160	200		2.4		0.42
							69	8	40.00		33.00				195				0.60
							51	5	24.00	3.00	26.00				153				0.20
							72	11	43.00	2.00	41.00				183				
					7.4	440	86	21	37.00	2.00	41.00		54		307			26	0.20

As	Ba	B	del ^{11}B	del_D_date	del_D	del_18O	^{3}H (TU)	δ^{13}C (‰)	PMC	^{14}C (uncorr)	^{14}C (corr) GTC	^{14}C (corr) TTI	I_36Cl	Sr_87_86	del_37CL	δ^{34}S (‰)	I_222Rn
		5700	7.6		-74	-7.40	<0.8									7.7	
		410	22.2		-94	-12.00	2	0.1				6108		0.708996		4.1	
6.7	38	7400	3.1		-95	-11.90	<0.6	1.1	31.42	9299	#NUM!					8.2	
		3			-103	-13.10											
		7			-93	-11.90											
		6			-96	-11.70											
		7			-95	-11.60											
		6			-92	-11.70											
		7			-93	-10.80											
		5			-95	-11.40											
		1			-96	-11.90											
		3		3/18/1993	-90	-11.70											
4.4	60	160	-4.1		-92	-11.90	<0.5	2.1	29.49	9809	#NUM!					3.4	
	81	340	16.0		-78	-10.60	<0.8	-5.8	76.81	2119	-363					11.0	
1.7	130	620	19.6		-85	-11.00	0.4	-7.2	80.06	1786	1041					6.8	
		5.3	5.2		-97.50	-12.50	1.5	-5.4	23.39	11670	8614		57	0.707168			
		1		4/28/1993	-96	-12.00											
1.4	33	810	19.8		-95	-12.40	<0.4	-10.0	24.77	11210	13104					6.8	
		25		3/10/1993	-99	-12.30											
1.2	35	820	9.7		-95	-12.30	<0.4	-7.0	29.75	9739	8767					6.9	
0.89	49	720	19.4		-95	-12.30	<0.4	-15.4	29.57	9788	15150					5.3	
4.5		120	26.3		-105	-13.40	<0.9	-9.4	8.90	19430	20827					6.1	
		197			-95	-12.90						16065					
		221			-105	-14.20						19908					
3.3	41	3100	11.4		-92	-12.00	<0.4	-1.9	20.26	12826	1379					9.2	
7.1	20	460	14.7		-96	-12.60	<0.3	Broken		Broken						4.7	
3.5		840	3.0		-96	-13.00	<0.4	-28.1	7.29	21040	31233					27.1	
		4.95	6		-96.50	-12.90	<0.8	-7.5	8.30	19990	19573		109	0.7078321			
		1.74	21		-95.50	-12.50								0.7076498			
7.2	22	140	11.9		-95	-14.60	<0.4	-17.7	7.17	21170	27650					16.4	
		1			-102.0	-13.55											
		0															
	34	210	23.9		-95	-12.50	<0.6	-7.3	34.78	8485	7850					4.4	
3.3	23	170	12.3		-93	-12.60	<0.3	-7.5	20.33	12799	12382					5.8	
		0															
2.7	18	160	9.9		-95	-12.70	<0.4	-10.0	25.83	10874	12768					5.8	
		1.00			-96.0	-12.50											
					-98	-13.00	<0.5										
		0.2		3/11/1993	-91.0	-12.30											
		.2		3/11/1993	-91.0	-21.30											
2.2	49	250	19.7		-93	-12.30	0.7	-0.4	16.09	14678	-9286					5.1	
		30		5/3/1993	-98	-12.50											
		5.0			-105.0	-13.90											
		0															
		56			-106.0	-13.90											
		165										182					
		864										23006					

		158										22112					
		0		4/28/1993	-97	-11.90											
		0.2	4.18		-96.0	-12.8	2.3	-8.3	15.82	14810	15207		273	0.7084092			
		0.2	4.2		-96.0	-12.80	2.3	-8.3	15.82	14810	15207		273	0.7084092			
		5.22	-8		-106.0	-13.9	1.3	-4.4	1.66	32910	28209		36	0.7081748			
		5.22	-8.0		-106.0	-13.90	1.3	-4.4	1.66	32910	28209		36	0.7081748			
		4.7															
		0.51															
		0.52															
		5.5			-106	-13.90											
		16			-105	-13.90											
					-95.5	-12.70											
					-102	-13.40	<0.6										
		0.62	-10.2		-98.5	-13.6	<0.6	-7.8	4.64	24660	24558		150	0.707936			
		0.62	-10.2		-98.5	-13.60	<0.6	-7.8	4.64	24660	24558		150	0.707936			
					-102.0	-8.20											
					-103	-13.60											
		4.5			-103.0	-13.20											
		180															
5	75	270	27.3		-97	-12.70	<0.4	Broken		Broken						-1.4	
		0.24	8.4		-93.0	-12.5	0.9	-5.6	58.51	4305	1541		295	0.7066847			
		0	8.4		-93.0	-12.50	0.9	-5.6	58.51	4305	1541		295	0.7066847			
					-93.0	-12.50											
			22.0														
			20.1														
					-96.0	-12.60											
		150															
		140															
		200															
			7.5					-9.2	74.02	2417	3641						
					-102	-13.50											
		120															
		3100															
6.8	26	210	20.2		-92	-12.30	<0.4	-4.0	16.43	14509	9042					2.5	
11	39	180	28.0		-91	-12.10	<0.5	1.5	23.88	11505	#NUM!					3.3	
79	54	630	25.1		-92	-12.20	<0.3	Broken		Broken						4.3	
		110															
		580															
		5600															
		2000															
		2		3/17/1993	-89.0	-12.10											
		0.17															
		0.7	-16		-106.0	-14.1	<0.8	-6.1	3.01	28140	26063		141	0.7078467			
		0.7	-16.0		-106.0	-14.10	<0.8	-6.1	3.01	28140	26063		141	0.7078467			
		2.4	-26.4		-101.0	-12.6	<1.1	-9.2	2.36	30080	31304		129	0.7083459			
		2400	-26.4		-101.0	-12.60	<1.1	-9.2	2.36	30080	31304		129	0.7083459			
66	4	2200	-20.9		-97	-12.70	<0.8	-8.9	3.65	26590	27547					14.5	
		67200	1.2		-103	-7.50	<1.6	-3.5	1.40	34090	27751	34359		0.707107		6.9	
					-95	-11.60											
					-91.5	-12.00											
					-76	-10.40											
					-87	-11.65											
		0															
					-86	-11.80											

					-90.5	-11.60											
					-90.5	-11.60											
					-91.5	-12.00											
		2900	8.3		-96	-12.10		-2.9	32.10	9130	1078	8467				6.8	470
		1150	5.6		-94	-11.70	1	0.1	28.10	10200	#NUM!	9567				12	<200
		450	1.4		-92	-10.70	<0.7	0.8	0.35	45500	36184	45818	<5			37.9	220
					-90	-11.70											
					-80	-10.50											
					-90.5	-12.15											
		160	21.8		-94	-12.30	1.8	-7.9						0.708142		3.9	2100
					-93	-11.20											
					-104	-13.55											
					-94	-12.10											
					-94.5	-12.60											
		150	7.8		-98	-13.00	1.5	-8.6	26.10	10795	11472	10177	<5	0.706861		5.9	450
		500	9.1		-99	-13.10	1.3	-7.7	25.60	10950	10740	10337	<5	0.707707	-0.1	8.1	83
					-93												
					-96	-12.75											
		0															
		1		4/28/1993	-96.0	-12.50											
							<0.6										
					-97.5	-12.60											
		17															
		48	0.3														
		33	4.0		-85.75	-8.80		-5.2						0.7083481			
					-94.5	-12.50											
		2															
			NS		-85	-8.10	<1.1	-4.3	0.36	45200	40314	45585	14	0.708767		43.9	200
					-90	-10.60											
		270															
					-92.5	-12.05											
		840															
		9100	4.6		-99	-12.90		-9.0	10.08	18430	19477	18025		0.708527	1.3		440
		5600	16.0		-99	-12.80	1.3	-11.5	39.40	7485	10498	6773		0.708182	0.6		<200
		24700	9.3		-106	-13.60		-4.8	2.50	29710	25630	29566		0.708539	0.9		930
							<0.9										
		21			-94.5	-11.55											
		3850	-0.3		-85	-9.80	10.1	-3.5								1.3	180
					-80.0	-8.95											
		8			-86.0	-10.55											
					-101	-13.00											
		69															
					-92.5	-12.00											
					-91.0	-12.00											
		0															
					-91.0	-12.00											
		350	-7.7		-106	-14.00	<0.9	-9.5	5.40	23510	24928	23200	<5	0.707903		7.7	320
		170	15.2		-99	-12.10	<1.4	-7.3	29.00	9940	9309	9306	<5	0.708283	0.4	0.3	230
		650	34.6		-97	-11.60	<1.4	-11.3	97.50	215	3079	35	<5	0.708766	-0.7	3.7	220
			33.4		-97	-11.60	2.7	-11.2	98.20	145	2950	35		0.707661	-0.4	3.7	360
		425000	5.6		-93	-10.60		-4.7	3.20	46100	23478	27526		0.707817	2.1	11.1	<200
		220	7.3		-99	-13.00	<1.6	-8.5	7.70	20620	21184	20267	<5	0.708444	0.9	5.8	280
		5950	-4.8		-106	-14.00		-5.6	0.58	41400	38605	41643	<5	0.708394	-0.6	13	750
		500	-3.1		-102	-13.30		-1.7	2.00	31570	19085	31411		0.708103	0.8	7	<300
		630	3.9		-93	-11.80	3.2	-9.8	50.40	5505	7235	4737		0.708642	0.3	-10.2	250
					-102	-12.65											
					-92.5	-12.30											

		4050	-2.8		-105	-14.00		3.3	0.70	39900	#NUM!	40088		0.709012	0.2		470
		2480	6.5		-98	-12.40		-8.3	58.60	4300	4690	3491		0.708569	0.3		920
					-97	-12.55											
		10															
					-91	-11.95											
		3															
					-93	-12.30											
		11															
		9	5.5		-94.5	-12.10		-6.9						0.708641			
					-97	-12.80											
		11															
		4950	-6.7		-107	-14.10	1.3	-3.9	0.58	41400	35699	41643				8.1	920
		1220	3.9		-101	-12.70	<1.4	-9.8	33.90	8685	10421	8016				10.9	<200
					-97	-12.50											
		5															
					-97.0	-12.50											
		14200	4.3		-107	-14.20	<1.0	0.5	0.32	45000	28147	46559			0.7	25.8	540
					-102	-12.90											
		15															
					-102.0	-12.90											
		14															
		410	19.3		-100	-12.80	1.3	1.4	49.40	5665	#NUM!	4903				26.6	<200
					-96	-12.40											
		14															
					-96.0	-12.40											
		6250	-4.9		-108	-14.20		-2.1	0.70	40300	29215	40088	<5	0.708702	0.2	6.2	450
		5.8	-4.0		-102.5	-13.60		-4.9						0.708532			
			1.7		-106	-13.90		-12.7	2.60	29390	33131	29242	<5		0.6	22.5	<200
		16400	1.5		-105	-14.00		-10.5	2.90	28450	30726	28339	<5	0.70864	0.4	20.2	460
					-101	-13.40											
		19															
					-101.0	-13.40											
					-103	-13.30		-10.8	46.00	6240	8750	5493	<5	0.708419	0.2	4.6	350
					-101	-12.80											
		19															
					-101.0	-12.80											
					-93.0	-12.05											
		1910	6.7		-93	-12.10	<0.7	-3.2	45.30	6370	-898	5619				6.3	200
			-2.9		-104	-13.80		-3.5				25477		0.708291	-1		<200
		470	-3.2		-105	-13.80		-3.3				25278		0.708269	-0.3		<200
		660	10.9		-103	-12.40	<1.0	-11.5				7519		0.70828	0.8		190
									4.10	25640	#DIV/0!	25477					
									4.20	25640	#DIV/0!	25278					
								-11.5	36.00	8220	11223	7519					
					-96	-12.50											
		140	8.1		-97	-12.80	<1.0	-7.2	5.60	23210	22409	22900	<5	0.707957	0	3.6	350
		140	8.9		-97	-12.80	<1.4	-6.5	6.10	22530	20900	22193	<5	0.70794	0.1	3	390
					-99.5	-13.25											
					-102	-13.30											
					-103	-13.60											
		140	10.4		-97	-12.80		-6.3	5.40	23520	21629	23200	<5	0.707815	0.9	6.2	520
					-106	-13.80											
					-105	-13.90											
		0															
					-95	-13.20											
					-103	-13.75											
					-99	-12.80	0.9										
			6.2		-101	-13.10	<1.3	-5.2	4.20	25440	22106	25278		0.708082	0.5		420
		840	5.2		-101	-13.10	<1	-6.4	5.00	24130	22373	23837		0.708079	0.4		570
					-98	-12.70	0.6										
		500	0.2		-106	-14.30	<0.9	-2.3	0.60	41400	31184	41363	<5	0.708509	-0.9		280

		1360	10.3		-99	-12.40	2.2	-9.4	71.30	2725	4114	1870	<5	0.708448	0.4	2	170
							<0.8										
		1393	6.4		-104	-13.70	<1.1	-3.0	1.50	33580	25958	33789	<5	0.708429	0.6	15.8	210
					-94.5	-12.35											
		4700	7.8		-101	-12.20	1.2	-3.7	23.40	11660	5574	11080	<5	0.708233	0.5	8.4	<300
		45600	6.1		-94	-11.50	2.7	-4.8	56.40	4600	598	3808		0.707552	-0.2		<200
		11300	3.3		-103	-12.20	<0.6	-3.5	18.00	13760	7235	13248	<5	0.707313	0.4		470
		NS	1.3		-97	-11.70	1.7	-8.9	57.60	4430	5389	3634	<5	0.707522	0.8	0.5	1100
		8850	1.8		-97	-11.60	1.2	-8.7	58.30	4340	5109	3534	<5	0.707531	0.5	0.8	970
					-84.0	-11.00											
								-9.4	33.58	8765	10162						
					-93.0	-12.55											
					-94	-12.40											
					-92.5	-12.45											
					-92.5	-12.45											
		2350	6.4		-106	-13.40		-4.2	6.70	21750	16639	21417	<5	0.708229	-0.7		220
			0.2		-103	-13.40		-5.2	26.80	10595	7218	9958		0.70847		11.4	<100
		2400	-0.2		-105	-13.50		-5.2	27.60	10340	6982	9715		0.70845		11.8	<200
							0.7										
					-99	-12.90											
		3															
					-97	-12.80											
		1															
					-104	-13.50											
		1															
		1			-108.0	-13.80											
		770	2.1		-105	-13.50		-8.6	3.80	26330	26951	26105	<5				330
		1930	-0.6		-103	-12.70		-7.0	0.26	47000	46843	48275	<5				310
																12.7	
					-95	-12.60											
					-105	-13.80											
					-82	-11.5	1.0										
		0			-106	-13.30											
					-91	-12.1	<1.7										
		0			-96	-12.00											
		0			-95	-12.30											
		0			-95	-12.30											
		0			-91	-11.60											
		0			-91	-11.60											
		1		4/13/1993	-84	-11.70											
		1		4/13/1993	-90	-12.50											
					-98	-13.0	<0.7										
					-94	-12.8	<1.1										
								-11.3								5.9	
		0			-93	-12.60											
		0			-93	-12.70											
					-103	-13.9	<0.7										
					-93	-13.2	0.7										
					-92	-12.7	1.4										
		0			-97	-12.10											
		0			-88	-10.30											
		370	31.2		-88	-10.40	2.4									4.2	
		0			-109	-14.10											
		0			-97	-12.20											
	33	370	31.2														
		0			-99	-12.50											
		0			-99	-12.50											
		0			-97	-12.20											
					-83	-10.6	<1.2										
		0.12	19.4		-84.40	-12.00	3.2	-0.2		5265			4220	0.708674			
				4/28/1993	-87	-11.70											
		0			-88	-11.70											

		0			-87	-11.40											
		0			-90	-12.00											
		2		5/6/1993	-100	-13.70											
					-93	-13.2	1.4										
		1			-84	-9.8	<1.5										
								-9.3								5.2	
		0			-90	-11.60											
		0			-94	-11.70											
					-90	-12.4	1.0										
					-94	-12.9	<1.1										
				4/28/1993	-87	-11.50											
		90	30.1		-86	-10.80	0.9	-10.1								9.7	
								-7.9	89.40	895		0					
		2			-92	-12.20											
		2			-96	-12.40											
		1			-94	-11.20											
		1		4/13/1993	-107	-14.30											
		1			-101	-10.70											
		1			-112	-14.70											
		1			-90	-9.70											
		0			-108	-14.70											
					-90	-12.0	<1.0										
					-83	-10.1	3.1										
					-93	-12.1	0.9										
		6		4/28/1993	-90	-10.10											
86	34	5700	7.6		-74	-7.40											
					-85	-10.8	<1.1										
					-84	-11.3	2.9										
					-95	-12.9	0.9										
		0			-91	-12.00											
					-84	-10.5	0.8										
					-95	-11.9	<0.8										
					-97	-13.3	<0.7										
		0		4/28/1993	-91	-11.70											
		0			-93	-11.60											
		0			-92	-11.40											
		0			-91	-11.55											
	46	170	35.3														
		170	35.3		-90	-11.40	0.7	2.5								10.9	
		0			-83	-11.70											
		0		4/28/1993	-86	-10.90											
	24	260	26.1														
		0			-89	-11.40											
		0			-91	-11.80											
		0			-93	-11.90											
		260	26.1		-89	-11.30	0.8	4.6								6.0	
		0			-93	-11.90											
		0			-85	-11.60											
					-85	-11.9	1.4										
		1			-96	-12.30											
					-92	-13.0	<1.3										
		0			-97	-11.00											
		1			-97	-12.50											
		0			-89	-11.8	<0.7										
		0			-103	-13.70											
		0			-88	-12.3	<1.4										
		0			-109	-14.40											
								-10.9								16.8	
		0			-91	-11.70											
		0			-93	-12.40											
		0			-100	-12.40											
		0			-88	-12.30											
		0		4/28/1993	-82	-11.20											
		0			-86	-11.60											
		0			-85	-10.50											

		0			-83	-11.90											
14	48	400	19.0														
		400	19.0		-85	-10.90	1	-1.0								12.4	
		0			-86	-11.6	<1.1										
		79	24.8		-88	-11.40	0.6									9.3	
				4/28/1993	-86	-11.10											
		0			-88	-11.60											
		0			-88	-12.00											
		0			-90	-12.40											
		0			-85	-11.60											
		0			-96	-11.90											
		0			-88	-11.30											
		0	26.7		-89	-11.60	<0.4									3.3	
		0			-82	-11.2	<1.8										
					-97	-13.6	<1.1										
					-76	-8.9	0.9										
		0		6/3/1993	-91	-12.40											

NAWS-China Lake 429 E. Bowen Building 982 China Lake, CA 93555	Project: Water Samples Project Number: [none] Project Manager: Mike Stoner	**Reported:** 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-01 | Client Sample **Name:** Weiler Well, 7/9/2007 5:50:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	140	mg/L	0.10	0.018	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Magnesium	18	mg/L	0.050	0.019	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Sodium	290	mg/L	0.50	0.12	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Potassium	6.8	mg/L	1.0	0.13	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Bicarbonate	250	mg/L	12	12	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	4	BQG0736	ND	A01
Carbonate	ND	mg/L	6.0	6.0	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	4	BQG0736	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	4	BQG0736	ND	A01
Alkalinity as CaCO3	210	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Chloride	570	mg/L	1.0	0.074	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01
Fluoride	1.3	mg/L	0.10	0.022	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01
Nitrate as NO3	24	mg/L	0.88	0.15	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01,A26,S05
Sulfate	54	mg/L	2.0	0.22	EPA-300.0	07/11/07	07/11/07 19:44	LMB	IC2	2	BQG0470	ND	A01
Total Cations	21	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Total Anions	22	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	410	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
pH	7.41	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	2200	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	1500	mg/L	100	100	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	10	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:53	TDC	KONE-1	1	BQG0537	ND	

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BC LABORATORIES, INC.

NAWS-China Lake 429 E. Bowen Building 982 China Lake, CA 93555	Project: Water Samples Project Number: [none] Project Manager: Mike Stoner	**Reported:** 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-01 | **Client Sample Name:** Weiler Well, 7/9/2007 5:50:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	1.8	mg/L	0.10	0.016	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Copper	13	ug/L	10	2.0	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Manganese	ND	ug/L	10	3.7	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Zinc	23	ug/L	50	6.1	EPA-200.7	07/09/07	07/25/07 14:41	ARD	PE-OP1	1	BQG0776	ND	J

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NAWS-China Lake 429 E. Bowen Building 982 China Lake, CA 93555	Project: Water Samples Project Number: [none] Project Manager: Mike Stoner	**Reported:** 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-02 | **Client Sample Name:** Cow Haven Cyn., 7/9/2007 10:38:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	43	mg/L	0.10	0.018	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Magnesium	8.9	mg/L	0.050	0.019	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Sodium	22	mg/L	0.50	0.12	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Potassium	2.4	mg/L	1.0	0.13	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Bicarbonate	190	mg/L	2.9	2.9	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Carbonate	10	mg/L	1.5	1.5	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Alkalinity as CaCO3	170	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Chloride	6.3	mg/L	0.50	0.037	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	
Fluoride	0.27	mg/L	0.050	0.011	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	
Nitrate as NO3	5.6	mg/L	0.44	0.077	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	A26
Sulfate	15	mg/L	1.0	0.11	EPA-300.0	07/11/07	07/11/07 19:56	LMB	IC2	1	BQG0470	ND	
Total Cations	3.9	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Total Anions	4.0	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	140	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:20	MSA	Calc	1	BQG0590	ND	
pH	8.22	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	363	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	240	mg/L	20	20	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	2	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	37	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:53	TDC	KONE-1	1	BQG0537	ND	J,A26,S05

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BC LABORATORIES, INC.

NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-02 | Client Sample Name: Cow Haven Cyn., 7/9/2007 10:38:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	39	ug/L	100	16	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	J
Total Recoverable Copper	5.2	ug/L	10	2.0	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	J
Total Recoverable Iron	80	ug/L	50	41	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Manganese	81	ug/L	10	3.7	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Zinc	13	ug/L	50	6.1	EPA-200.7	07/09/07	07/25/07 15:07	ARD	PE-OP1	1	BQG0776	ND	J

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BC LABORATORIES, INC.

NAWS-China Lake 429 E. Bowen Building 982 China Lake, CA 93555	Project: Water Samples Project Number: [none] Project Manager: Mike Stoner	**Reported:** 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-03 | Client Sample Name: Sage Cyn., 7/9/2007 11:21:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	96	mg/L	0.10	0.018	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Magnesium	18	mg/L	0.050	0.019	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Sodium	57	mg/L	0.50	0.12	EPA-200.7	07/16/07	07/17/07 14:56	ARD	PE-OP1	1	BQG0700	ND	
Total Recoverable Potassium	1.7	mg/L	1.0	0.13	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Bicarbonate	410	mg/L	5.8	5.8	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	2	BQG0736	ND	A01
Carbonate	ND	mg/L	3.0	3.0	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	2	BQG0736	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	2	BQG0736	ND	A01
Alkalinity as CaCO3	340	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Chloride	21	mg/L	0.50	0.037	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	
Fluoride	2.2	mg/L	0.050	0.011	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	A26
Sulfate	26	mg/L	1.0	0.11	EPA-300.0	07/11/07	07/11/07 20:09	LMB	IC2	1	BQG0470	ND	
Total Cations	8.8	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Total Anions	8.0	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	310	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
pH	8.08	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	696	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	410	mg/L	20	20	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	2	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:56	TDC	KONE-1	1	BQG0537	ND	A26,S05

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BC LABORATORIES, INC.

NAWS-China Lake 429 E. Bowen Building 982 China Lake, CA 93555	Project: Water Samples Project Number: [none] Project Manager: Mike Stoner	**Reported:** 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-03 | **Client Sample Name:** Sage Cyn., 7/9/2007 11:21:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	85	ug/L	100	16	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	J
Total Recoverable Copper	2.3	ug/L	10	2.0	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	J
Total Recoverable Iron	4600	ug/L	50	41	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Manganese	140	ug/L	10	3.7	EPA-200.7	07/16/07	07/16/07 19:50	ARD	PE-OP2	1	BQG0700	ND	
Total Recoverable Zinc	14	ug/L	50	6.1	EPA-200.7	07/16/07	07/17/07 14:56	ARD	PE-OP1	1	BQG0700	ND	J

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BC LABORATORIES, INC.

NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (General Chemistry)

BCL Sample ID: 0707846-04 | Client Sample Name: Horse Cyn., 7/9/2007 12:00:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	57	mg/L	0.10	0.018	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Magnesium	17	mg/L	0.050	0.019	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Sodium	47	mg/L	0.50	0.12	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Potassium	2.5	mg/L	1.0	0.13	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Bicarbonate	320	mg/L	2.9	2.9	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Carbonate	ND	mg/L	1.5	1.5	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	07/16/07	07/16/07 14:05	MAR	BDB	1	BQG0736	ND	
Alkalinity as CaCO3	260	mg/L	2.5	2.5	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Chloride	17	mg/L	0.50	0.037	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	
Fluoride	1.5	mg/L	0.050	0.011	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	
Nitrate as NO3	2.1	mg/L	0.44	0.077	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	A26
Sulfate	36	mg/L	1.0	0.11	EPA-300.0	07/11/07	07/11/07 20:21	LMB	IC2	1	BQG0470	ND	
Total Cations	6.3	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Total Anions	6.6	meq/L	0.10	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
Hardness as CaCO3	210	mg/L	0.50	0.10	Calc	07/13/07	07/27/07 13:21	MSA	Calc	1	BQG0590	ND	
pH	7.84	pH Units	0.05	0.05	EPA-150.1	07/13/07	07/13/07 05:00	MRM	B360	1	BQG0561		
Electrical Conductivity @ 25 C	593	umhos/cm	1.00	1.00	SM-2510B	07/13/07	07/13/07 05:30	MRM	CND-3	1	BQG0562		
Total Dissolved Solids @ 180 C	360	mg/L	20	20	SM-2540C	07/16/07	07/16/07 16:00	VEL	MANUAL	2	BQG1003	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	07/11/07	07/11/07 09:00	CDR	MANUAL	1	BQG0469	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	07/11/07	07/11/07 15:56	TDC	KONE-1	1	BQG0537	ND	A26,S05

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BC LABORATORIES, INC.

NAWS-China Lake
429 E. Bowen
Building 982
China Lake, CA 93555

Project: Water Samples
Project Number: [none]
Project Manager: Mike Stoner

Reported: 07/27/2007 16:38

Water Analysis (Metals)

BCL Sample ID: 0707846-04 | **Client Sample Name:** Horse Cyn., 7/9/2007 12:00:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Boron	68	ug/L	100	16	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	J
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Manganese	ND	ug/L	10	3.7	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	
Total Recoverable Zinc	8.7	ug/L	50	6.1	EPA-200.7	07/09/07	07/25/07 15:11	ARD	PE-OP1	1	BQG0776	ND	J

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Date of Report: 06/25/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0704149

Enclosed are the results of analyses for samples received by the laboratory on 04/10/2007 10:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0704149-01	**COC Number:**	---	**Receive Date:**	04/10/2007 10:50
	Project Number:	---	**Sampling Date:**	04/09/2007 11:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Short Cyn	**Sample Matrix:**	Water
	Sampled By:	---		
0704149-02	**COC Number:**	---	**Receive Date:**	04/10/2007 10:50
	Project Number:	---	**Sampling Date:**	04/09/2007 11:06
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Indian Wells Cyn	**Sample Matrix:**	Water
	Sampled By:	---		
0704149-03	**COC Number:**	---	**Receive Date:**	04/10/2007 10:50
	Project Number:	---	**Sampling Date:**	04/09/2007 10:36
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Soldier Spring	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704149-01 **Client Sample Name:** Short Cyn, 4/9/2007 11:40:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	66	mg/L	0.10	0.018	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	0.028	
Total Recoverable Magnesium	9.3	mg/L	0.050	0.017	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Sodium	41	mg/L	0.50	0.047	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Potassium	0.97	mg/L	1.0	0.13	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	J
Bicarbonate	240	mg/L	2.9	2.9	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824	ND	
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824	ND	
Alkalinity as CaCO3	200	mg/L	2.5	2.5	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Chloride	8.0	mg/L	0.50	0.037	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487	ND	
Fluoride	0.87	mg/L	0.050	0.011	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487	ND	
Sulfate	74	mg/L	1.0	0.11	EPA-300.0	04/10/07	04/10/07 17:53	EDA	IC2	1	BQD0487	ND	
Total Cations	5.9	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Total Anions	5.8	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Hardness as CaCO3	200	mg/L	0.50	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
pH	8.16	pH Units	0.05	0.05	EPA-150.1	04/11/07	04/11/07 14:05	JSM	BDB	1	BQD0573		
Electrical Conductivity @ 25 C	524	umhos/cm	1.00	1.00	EPA-120.1	04/11/07	04/11/07 14:25	JSM	CND-3	1	BQD0571		
Total Dissolved Solids @ 180 C	390	mg/L	20	20	EPA-160.1	04/11/07	04/11/07 16:00	VEL	MANUAL	2	BQD1160	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/11/07	04/11/07 08:15	CDR	SPEC05	1	BQD0684	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/10/07	04/10/07 13:02	TDC	KONE-1	1	BQD0629	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704149-01 **Client Sample Name:** Short Cyn, 4/9/2007 11:40:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Arsenic	1.4	ug/L	2.0	0.89	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	J
Total Recoverable Barium	18	ug/L	10	1.7	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Boron	79	ug/L	100	12	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	J
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	2.6	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	47	
Total Recoverable Lead	0.47	ug/L	1.0	0.12	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	J
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Mercury	0.032	ug/L	0.20	0.026	EPA-245.1	04/18/07	04/20/07 13:30	PRA	CETAC1	1	BQD0909	ND	J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/13/07	04/13/07 16:02	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Zinc	7.9	ug/L	50	5.2	EPA-200.7	04/12/07	04/13/07 12:09	EMC	PE-OP1	1	BQD0618	ND	J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704149-02 **Client Sample Name:** Indian Wells Cyn, 4/9/2007 11:06:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	100	mg/L	0.10	0.018	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	0.028	
Total Recoverable Magnesium	26	mg/L	0.050	0.017	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Sodium	41	mg/L	0.50	0.047	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Potassium	3.2	mg/L	1.0	0.13	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Bicarbonate	240	mg/L	5.8	5.8	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	2	BQD0824	ND	A01
Carbonate	25	mg/L	3.0	3.0	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	2	BQD0824	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	2	BQD0824	ND	A01
Alkalinity as CaCO3	240	mg/L	5.0	5.0	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Chloride	15	mg/L	0.50	0.037	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487	ND	
Fluoride	0.92	mg/L	0.050	0.011	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487	ND	
Sulfate	190	mg/L	1.0	0.11	EPA-300.0	04/10/07	04/10/07 18:06	EDA	IC2	1	BQD0487	ND	
Total Cations	9.0	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Total Anions	9.2	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Hardness as CaCO3	360	mg/L	0.50	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
pH	8.34	pH Units	0.05	0.05	EPA-150.1	04/11/07	04/11/07 14:05	JSM	BDB	1	BQD0573		
Electrical Conductivity @ 25 C	779	umhos/cm	1.00	1.00	EPA-120.1	04/11/07	04/11/07 14:25	JSM	CND-3	1	BQD0571		
Total Dissolved Solids @ 180 C	610	mg/L	33	33	EPA-160.1	04/11/07	04/11/07 16:00	VEL	MANUAL	3.333	BQD1160	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/11/07	04/11/07 08:15	CDR	SPEC05	1	BQD0684	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/10/07	04/10/07 13:02	TDC	KONE-1	1	BQD0629	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704149-02 **Client Sample Name:** Indian Wells Cyn, 4/9/2007 11:06:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	180	ug/L	50	36	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	
Total Recoverable Arsenic	2.2	ug/L	2.0	0.89	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	
Total Recoverable Barium	38	ug/L	10	1.7	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	
Total Recoverable Boron	90	ug/L	100	12	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	J
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	2.6	
Total Recoverable Iron	200	ug/L	50	41	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	47	
Total Recoverable Lead	0.94	ug/L	1.0	0.12	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	J
Total Recoverable Manganese	12	ug/L	10	1.9	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Mercury	0.040	ug/L	0.20	0.026	EPA-245.1	04/18/07	04/20/07 13:41	PRA	CETAC1	1	BQD0909	ND	J
Total Recoverable Nickel	4.6	ug/L	10	3.4	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	J
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/12/07	04/13/07 12:50	PPS	PE-EL1	1	BQD0610	ND	
Total Recoverable Zinc	9.3	ug/L	50	5.2	EPA-200.7	04/12/07	04/13/07 12:14	EMC	PE-OP1	1	BQD0618	ND	J

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Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704149-03 **Client Sample Name:** Soldier Spring, 4/9/2007 10:36:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	49	mg/L	0.10	0.018	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	0.028	
Total Recoverable Magnesium	8.9	mg/L	0.050	0.017	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Sodium	32	mg/L	0.50	0.047	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Potassium	0.29	mg/L	1.0	0.13	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	J
Bicarbonate	200	mg/L	2.9	2.9	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824	ND	
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/16/07	04/16/07 12:30	MAR	BDB	1	BQD0824	ND	
Alkalinity as CaCO3	160	mg/L	2.5	2.5	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Chloride	13	mg/L	0.50	0.037	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487	ND	
Fluoride	0.42	mg/L	0.050	0.011	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487	ND	
Nitrate as NO3	2.4	mg/L	0.44	0.077	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487	ND	
Sulfate	36	mg/L	1.0	0.11	EPA-300.0	04/10/07	04/10/07 18:56	EDA	IC2	1	BQD0487	ND	
Total Cations	4.6	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Total Anions	4.4	meq/L	0.10	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
Hardness as CaCO3	160	mg/L	0.50	0.10	Calc	04/13/07	04/20/07 14:05	TMS	Calc	1	BQD0705	ND	
pH	7.82	pH Units	0.05	0.05	EPA-150.1	04/11/07	04/11/07 14:05	JSM	BDB	1	BQD0573		
Electrical Conductivity @ 25 C	419	umhos/cm	1.00	1.00	EPA-120.1	04/11/07	04/11/07 14:25	JSM	CND-3	1	BQD0571		
Total Dissolved Solids @ 180 C	270	mg/L	20	20	EPA-160.1	04/11/07	04/11/07 16:00	VEL	MANUAL	2	BQD1160	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/11/07	04/11/07 08:15	CDR	SPEC05	1	BQD0684	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/10/07	04/10/07 13:02	TDC	KONE-1	1	BQD0629	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 06/25/2007 8:36
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704149-03 **Client Sample Name:** Soldier Spring, 4/9/2007 10:36:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Arsenic	1.1	ug/L	2.0	0.89	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	J
Total Recoverable Barium	20	ug/L	10	1.7	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Boron	46	ug/L	100	12	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	J
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	2.6	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	47	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Mercury	0.030	ug/L	0.20	0.026	EPA-245.1	04/18/07	04/20/07 13:43	PRA	CETAC1	1	BQD0909	ND	J
Total Recoverable Nickel	3.4	ug/L	10	3.4	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	J
Total Recoverable Selenium	0.87	ug/L	2.0	0.54	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/13/07	04/13/07 16:17	PPS	PE-EL1	1	BQD0637	ND	
Total Recoverable Zinc	20	ug/L	50	5.2	EPA-200.7	04/12/07	04/13/07 12:31	EMC	PE-OP1	1	BQD0618	ND	J

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Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQD0487	Duplicate	0704149-02	15.229	15.268		mg/L	0.3		10		
		Matrix Spike	0704149-02	15.229	125.83	101.01	mg/L		109		80 - 120	
		Matrix Spike Duplicate	0704149-02	15.229	125.83	101.01	mg/L	0	109	10	80 - 120	
Fluoride	BQD0487	Duplicate	0704149-02	0.91500	0.92600		mg/L	1.2		10		
		Matrix Spike	0704149-02	0.91500	2.0636	1.0101	mg/L		114		80 - 120	
		Matrix Spike Duplicate	0704149-02	0.91500	2.0626	1.0101	mg/L	0	114	10	80 - 120	
Nitrate as NO3	BQD0487	Duplicate	0704149-02	ND	ND		mg/L			10		
		Matrix Spike	0704149-02	ND	22.671	22.358	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0704149-02	ND	22.612	22.358	mg/L	0	101	10	80 - 120	
Sulfate	BQD0487	Duplicate	0704149-02	190.94	191.10		mg/L	0.1		10		
		Matrix Spike	0704149-02	190.94	292.30	101.01	mg/L		100		80 - 120	
		Matrix Spike Duplicate	0704149-02	190.94	292.09	101.01	mg/L	0	100	10	80 - 120	
Electrical Conductivity @ 25 C	BQD0571	Duplicate	0704102-01	1810.0	1800.0		umhos/cm	0.6		10		
pH	BQD0573	Duplicate	0704102-01	7.5260	7.5410		pH Units	0.2		20		
Total Recoverable Calcium	BQD0618	Duplicate	0704103-01	78.703	81.245		mg/L	3.2		20		
		Matrix Spike	0704103-01	78.703	94.094	10.000	mg/L		154		75 - 125	A03
		Matrix Spike Duplicate	0704103-01	78.703	90.798	10.000	mg/L	24.0	121	20	75 - 125	A03,Q02
Total Recoverable Magnesium	BQD0618	Duplicate	0704103-01	7.0247	7.2406		mg/L	3.0		20		
		Matrix Spike	0704103-01	7.0247	17.453	10.000	mg/L		104		75 - 125	
		Matrix Spike Duplicate	0704103-01	7.0247	17.564	10.000	mg/L	1.0	105	20	75 - 125	
Total Recoverable Sodium	BQD0618	Duplicate	0704103-01	84.562	88.280		mg/L	4.3		20		
		Matrix Spike	0704103-01	84.562	102.16	10.000	mg/L		176		75 - 125	A03
		Matrix Spike Duplicate	0704103-01	84.562	98.901	10.000	mg/L	20.7	143	20	75 - 125	A03,Q02
Total Recoverable Potassium	BQD0618	Duplicate	0704103-01	5.8743	6.0815		mg/L	3.5		20		
		Matrix Spike	0704103-01	5.8743	16.467	10.000	mg/L		106		75 - 125	
		Matrix Spike Duplicate	0704103-01	5.8743	16.454	10.000	mg/L	0	106	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Nitrite as N	BQD0629	Duplicate	0704149-01	ND	ND		ug/L			10		
		Matrix Spike	0704149-01	ND	529.13	526.32	ug/L		101		90 - 110	
		Matrix Spike Duplicate	0704149-01	ND	532.55	526.32	ug/L	0	101	10	90 - 110	
MBAS	BQD0684	Duplicate	0704103-01	ND	ND		mg/L			20		A01
		Matrix Spike	0704103-01	ND	0.41240	0.40000	mg/L		103		80 - 120	A01
		Matrix Spike Duplicate	0704103-01	ND	0.39740	0.40000	mg/L	3.6	99.4	20	80 - 120	A01
Bicarbonate	BQD0824	Duplicate	0704156-01	329.24	332.72		mg/L	1.1		10		A01
		Matrix Spike	0704156-01	329.24	475.32	152.38	mg/L		95.9		80 - 120	A01
		Matrix Spike Duplicate	0704156-01	329.24	477.64	152.38	mg/L	1.6	97.4	10	80 - 120	A01
Carbonate	BQD0824	Duplicate	0704156-01	ND	ND		mg/L			10		A01
Hydroxide	BQD0824	Duplicate	0704156-01	ND	ND		mg/L			10		A01
Total Dissolved Solids @ 180 C	BQD1160	Duplicate	0704138-01	1905.0	1910.0		mg/L	0.3		10		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Antimony	BQD0610	Duplicate	0704194-01	ND	ND		ug/L			20		
		Matrix Spike	0704194-01	ND	20.455	20.000	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0704194-01	ND	20.540	20.000	ug/L	1.0	103	20	70 - 130	
Total Recoverable Arsenic	BQD0610	Duplicate	0704194-01	ND	ND		ug/L			20		
		Matrix Spike	0704194-01	ND	52.559	50.000	ug/L		105		70 - 130	
		Matrix Spike Duplicate	0704194-01	ND	51.391	50.000	ug/L	1.9	103	20	70 - 130	
Total Recoverable Beryllium	BQD0610	Duplicate	0704194-01	ND	ND		ug/L			20		
		Matrix Spike	0704194-01	ND	21.783	20.000	ug/L		109		70 - 130	
		Matrix Spike Duplicate	0704194-01	ND	21.537	20.000	ug/L	0.9	108	20	70 - 130	
Total Recoverable Cadmium	BQD0610	Duplicate	0704194-01	ND	ND		ug/L			20		
		Matrix Spike	0704194-01	ND	21.083	20.000	ug/L		105		70 - 130	
		Matrix Spike Duplicate	0704194-01	ND	20.572	20.000	ug/L	1.9	103	20	70 - 130	
Total Recoverable Lead	BQD0610	Duplicate	0704194-01	ND	ND		ug/L			20		
		Matrix Spike	0704194-01	ND	55.983	50.000	ug/L		112		70 - 130	
		Matrix Spike Duplicate	0704194-01	ND	53.663	50.000	ug/L	4.6	107	20	70 - 130	
Total Recoverable Selenium	BQD0610	Duplicate	0704194-01	0.94100	0.89300		ug/L	5.2		20		J
		Matrix Spike	0704194-01	0.94100	53.077	50.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0704194-01	0.94100	52.286	50.000	ug/L	1.0	103	20	70 - 130	
Total Recoverable Thallium	BQD0610	Duplicate	0704194-01	ND	ND		ug/L			20		
		Matrix Spike	0704194-01	ND	21.802	20.000	ug/L		109		70 - 130	
		Matrix Spike Duplicate	0704194-01	ND	21.217	20.000	ug/L	2.8	106	20	70 - 130	
Total Recoverable Aluminum	BQD0618	Duplicate	0704103-01	ND	ND		ug/L			20		
		Matrix Spike	0704103-01	ND	1041.5	1000.0	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0704103-01	ND	1053.1	1000.0	ug/L	1.0	105	20	75 - 125	
Total Recoverable Barium	BQD0618	Duplicate	0704103-01	143.73	148.87		ug/L	3.5		20		
		Matrix Spike	0704103-01	143.73	370.55	200.00	ug/L		113		75 - 125	
		Matrix Spike Duplicate	0704103-01	143.73	367.18	200.00	ug/L	0.9	112	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Boron	BQD0618	Duplicate	0704103-01	28.936	28.010		ug/L	3.3		20		J
		Matrix Spike	0704103-01	28.936	1071.1	1000.0	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0704103-01	28.936	1098.4	1000.0	ug/L	2.8	107	20	75 - 125	
Total Recoverable Chromium	BQD0618	Duplicate	0704103-01	1.6902	ND		ug/L			20		
		Matrix Spike	0704103-01	1.6902	199.89	200.00	ug/L		99.1		75 - 125	
		Matrix Spike Duplicate	0704103-01	1.6902	206.02	200.00	ug/L	2.9	102	20	75 - 125	
Total Recoverable Copper	BQD0618	Duplicate	0704103-01	154.47	159.03		ug/L	2.9		20		
		Matrix Spike	0704103-01	154.47	366.60	200.00	ug/L		106		75 - 125	
		Matrix Spike Duplicate	0704103-01	154.47	364.14	200.00	ug/L	0.9	105	20	75 - 125	
Total Recoverable Iron	BQD0618	Duplicate	0704103-01	ND	ND		ug/L			20		
		Matrix Spike	0704103-01	ND	439.30	400.00	ug/L		110		75 - 125	
		Matrix Spike Duplicate	0704103-01	ND	442.30	400.00	ug/L	0.9	111	20	75 - 125	
Total Recoverable Manganese	BQD0618	Duplicate	0704103-01	ND	ND		ug/L			20		
		Matrix Spike	0704103-01	ND	214.05	200.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0704103-01	ND	216.48	200.00	ug/L	0.9	108	20	75 - 125	
Total Recoverable Nickel	BQD0618	Duplicate	0704103-01	3.4489	4.7639		ug/L	32.0		20		J,A02
		Matrix Spike	0704103-01	3.4489	443.16	400.00	ug/L		110		75 - 125	
		Matrix Spike Duplicate	0704103-01	3.4489	454.37	400.00	ug/L	2.7	113	20	75 - 125	
Total Recoverable Silver	BQD0618	Duplicate	0704103-01	ND	ND		ug/L			20		
		Matrix Spike	0704103-01	ND	104.14	100.00	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0704103-01	ND	106.02	100.00	ug/L	1.9	106	20	75 - 125	
Total Recoverable Zinc	BQD0618	Duplicate	0704103-01	46.246	58.855		ug/L	24.0		20		A02
		Matrix Spike	0704103-01	46.246	271.09	200.00	ug/L		112		75 - 125	
		Matrix Spike Duplicate	0704103-01	46.246	274.01	200.00	ug/L	1.8	114	20	75 - 125	
Total Recoverable Antimony	BQD0637	Duplicate	0704149-01	ND	ND		ug/L			20		
		Matrix Spike	0704149-01	ND	21.168	20.408	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0704149-01	ND	20.285	20.408	ug/L	4.5	99.4	20	70 - 130	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Arsenic	BQD0637	Duplicate	0704149-01	1.3740	1.4860		ug/L	7.8		20		J
		Matrix Spike	0704149-01	1.3740	57.597	51.020	ug/L		110		70 - 130	
		Matrix Spike Duplicate	0704149-01	1.3740	55.869	51.020	ug/L	2.8	107	20	70 - 130	
Total Recoverable Beryllium	BQD0637	Duplicate	0704149-01	ND	ND		ug/L			20		
		Matrix Spike	0704149-01	ND	19.759	20.408	ug/L		96.8		70 - 130	
		Matrix Spike Duplicate	0704149-01	ND	19.753	20.408	ug/L	0	96.8	20	70 - 130	
Total Recoverable Cadmium	BQD0637	Duplicate	0704149-01	ND	ND		ug/L			20		
		Matrix Spike	0704149-01	ND	20.980	20.408	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0704149-01	ND	20.536	20.408	ug/L	2.0	101	20	70 - 130	
Total Recoverable Lead	BQD0637	Duplicate	0704149-01	0.46900	0.45400		ug/L	3.3		20		J
		Matrix Spike	0704149-01	0.46900	50.641	51.020	ug/L		98.3		70 - 130	
		Matrix Spike Duplicate	0704149-01	0.46900	50.134	51.020	ug/L	1.0	97.3	20	70 - 130	
Total Recoverable Selenium	BQD0637	Duplicate	0704149-01	ND	ND		ug/L			20		
		Matrix Spike	0704149-01	ND	61.707	51.020	ug/L		121		70 - 130	
		Matrix Spike Duplicate	0704149-01	ND	59.260	51.020	ug/L	4.2	116	20	70 - 130	
Total Recoverable Thallium	BQD0637	Duplicate	0704149-01	ND	ND		ug/L			20		
		Matrix Spike	0704149-01	ND	20.564	20.408	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0704149-01	ND	20.357	20.408	ug/L	1.2	99.8	20	70 - 130	
Total Recoverable Mercury	BQD0909	Duplicate	0704149-01	0.032500	ND		ug/L			20		
		Matrix Spike	0704149-01	0.032500	1.0650	1.0000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0704149-01	0.032500	1.0400	1.0000	ug/L	2.0	101	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQD0487	BQD0487-BS1	LCS	103.17	100.00	0.50	mg/L	103		90 - 110		
Fluoride	BQD0487	BQD0487-BS1	LCS	1.0120	1.0000	0.050	mg/L	101		90 - 110		
Nitrate as NO3	BQD0487	BQD0487-BS1	LCS	22.333	22.134	0.44	mg/L	101		90 - 110		
Sulfate	BQD0487	BQD0487-BS1	LCS	102.33	100.00	1.0	mg/L	102		90 - 110		
Electrical Conductivity @ 25 C	BQD0571	BQD0571-BS1	LCS	297.00	303.00	1.00	umhos/cm	98.0		90 - 110		
pH	BQD0573	BQD0573-BS1	LCS	7.0060	7.0000	0.05	pH Units	100		95 - 105		
Total Recoverable Calcium	BQD0618	BQD0618-BS1	LCS	10.016	10.000	0.10	mg/L	100		85 - 115		
Total Recoverable Magnesium	BQD0618	BQD0618-BS1	LCS	10.122	10.000	0.050	mg/L	101		85 - 115		
Total Recoverable Sodium	BQD0618	BQD0618-BS1	LCS	9.5791	10.000	0.50	mg/L	95.8		85 - 115		
Total Recoverable Potassium	BQD0618	BQD0618-BS1	LCS	9.4500	10.000	1.0	mg/L	94.5		85 - 115		
Nitrite as N	BQD0629	BQD0629-BS1	LCS	503.98	500.00	50	ug/L	101		90 - 110		
MBAS	BQD0684	BQD0684-BS1	LCS	0.20170	0.20000	0.10	mg/L	101		85 - 115		
Bicarbonate	BQD0824	BQD0824-BS1	LCS	127.53	121.90	2.9	mg/L	105		90 - 110		
Total Dissolved Solids @ 180 C	BQD1160	BQD1160-BS1	LCS	600.00	586.00	50	mg/L	102		90 - 110		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Antimony	BQD0610	BQD0610-BS1	LCS	19.247	20.000	2.0	ug/L	96.2		85 - 115		
Total Recoverable Arsenic	BQD0610	BQD0610-BS1	LCS	49.520	50.000	2.0	ug/L	99.0		85 - 115		
Total Recoverable Beryllium	BQD0610	BQD0610-BS1	LCS	20.224	20.000	1.0	ug/L	101		85 - 115		
Total Recoverable Cadmium	BQD0610	BQD0610-BS1	LCS	20.055	20.000	1.0	ug/L	100		85 - 115		
Total Recoverable Lead	BQD0610	BQD0610-BS1	LCS	53.200	50.000	1.0	ug/L	106		85 - 115		
Total Recoverable Selenium	BQD0610	BQD0610-BS1	LCS	49.623	50.000	2.0	ug/L	99.2		85 - 115		
Total Recoverable Thallium	BQD0610	BQD0610-BS1	LCS	20.494	20.000	1.0	ug/L	102		85 - 115		
Total Recoverable Aluminum	BQD0618	BQD0618-BS1	LCS	942.31	1000.0	50	ug/L	94.2		85 - 115		
Total Recoverable Barium	BQD0618	BQD0618-BS1	LCS	204.58	200.00	10	ug/L	102		85 - 115		
Total Recoverable Boron	BQD0618	BQD0618-BS1	LCS	998.51	1000.0	100	ug/L	99.9		85 - 115		
Total Recoverable Chromium	BQD0618	BQD0618-BS1	LCS	200.40	200.00	10	ug/L	100		85 - 115		
Total Recoverable Copper	BQD0618	BQD0618-BS1	LCS	191.99	200.00	10	ug/L	96.0		85 - 115		
Total Recoverable Iron	BQD0618	BQD0618-BS1	LCS	405.05	400.00	50	ug/L	101		85 - 115		
Total Recoverable Manganese	BQD0618	BQD0618-BS1	LCS	208.48	200.00	10	ug/L	104		85 - 115		
Total Recoverable Nickel	BQD0618	BQD0618-BS1	LCS	431.84	400.00	10	ug/L	108		85 - 115		
Total Recoverable Silver	BQD0618	BQD0618-BS1	LCS	98.443	100.00	10	ug/L	98.4		85 - 115		
Total Recoverable Zinc	BQD0618	BQD0618-BS1	LCS	216.00	200.00	50	ug/L	108		85 - 115		
Total Recoverable Antimony	BQD0637	BQD0637-BS1	LCS	21.206	20.000	2.0	ug/L	106		85 - 115		
Total Recoverable Arsenic	BQD0637	BQD0637-BS1	LCS	52.228	50.000	2.0	ug/L	104		85 - 115		
Total Recoverable Beryllium	BQD0637	BQD0637-BS1	LCS	20.735	20.000	1.0	ug/L	104		85 - 115		
Total Recoverable Cadmium	BQD0637	BQD0637-BS1	LCS	21.582	20.000	1.0	ug/L	108		85 - 115		
Total Recoverable Lead	BQD0637	BQD0637-BS1	LCS	54.851	50.000	1.0	ug/L	110		85 - 115		
Total Recoverable Selenium	BQD0637	BQD0637-BS1	LCS	53.251	50.000	2.0	ug/L	107		85 - 115		

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Thallium	BQD0637	BQD0637-BS1	LCS	22.372	20.000	1.0	ug/L	112		85 - 115		
Total Recoverable Mercury	BQD0909	BQD0909-BS1	LCS	1.0200	1.0000	0.20	ug/L	102		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQD0487	BQD0487-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQD0487	BQD0487-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQD0487	BQD0487-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQD0487	BQD0487-BLK1	ND	mg/L	1.0	0.11	
Total Recoverable Calcium	BQD0618	BQD0618-BLK1	0.027691	mg/L	0.10	0.018	J
Total Recoverable Magnesium	BQD0618	BQD0618-BLK1	ND	mg/L	0.050	0.017	
Total Recoverable Sodium	BQD0618	BQD0618-BLK1	ND	mg/L	0.50	0.047	
Total Recoverable Potassium	BQD0618	BQD0618-BLK1	ND	mg/L	1.0	0.13	
Nitrite as N	BQD0629	BQD0629-BLK1	ND	ug/L	50	10	
MBAS	BQD0684	BQD0684-BLK1	ND	mg/L	0.10	0.039	
Alkalinity as CaCO3	BQD0705	BQD0705-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQD0705	BQD0705-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQD0705	BQD0705-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQD0705	BQD0705-BLK1	ND	mg/L	0.50	0.10	
Bicarbonate	BQD0824	BQD0824-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQD0824	BQD0824-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQD0824	BQD0824-BLK1	ND	mg/L	0.81	0.81	
Total Dissolved Solids @ 180 C	BQD1160	BQD1160-BLK1	ND	mg/L	6.7	6.7	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 8:36

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Antimony	BQD0610	BQD0610-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQD0610	BQD0610-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQD0610	BQD0610-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQD0610	BQD0610-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQD0610	BQD0610-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQD0610	BQD0610-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQD0610	BQD0610-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Aluminum	BQD0618	BQD0618-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQD0618	BQD0618-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQD0618	BQD0618-BLK1	ND	ug/L	100	12	
Total Recoverable Chromium	BQD0618	BQD0618-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQD0618	BQD0618-BLK1	2.6444	ug/L	10	2.0	J
Total Recoverable Iron	BQD0618	BQD0618-BLK1	46.640	ug/L	50	41	J
Total Recoverable Manganese	BQD0618	BQD0618-BLK1	ND	ug/L	10	1.9	
Total Recoverable Nickel	BQD0618	BQD0618-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQD0618	BQD0618-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQD0618	BQD0618-BLK1	ND	ug/L	50	5.2	
Total Recoverable Antimony	BQD0637	BQD0637-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQD0637	BQD0637-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQD0637	BQD0637-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQD0637	BQD0637-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQD0637	BQD0637-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQD0637	BQD0637-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQD0637	BQD0637-BLK1	ND	ug/L	1.0	0.13	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Mercury	BQD0909	BQD0909-BLK1	ND	ug/L	0.20	0.026	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
Q02	Matrix spike precision is not within the control limits.

Date of Report: 06/25/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0704004

Enclosed are the results of analyses for samples received by the laboratory on 04/05/2007 10:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0704004-01	**COC Number:**	---	**Receive Date:**	04/05/2007 10:45
	Project Number:	---	**Sampling Date:**	04/04/2007 09:07
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	IWVWD WELL 8	**Sample Matrix:**	Water
	Sampled By:	---		
0704004-02	**COC Number:**	---	**Receive Date:**	04/05/2007 10:45
	Project Number:	---	**Sampling Date:**	04/04/2007 08:46
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	IWVWD WELL 10	**Sample Matrix:**	Water
	Sampled By:	---		
0704004-03	**COC Number:**	---	**Receive Date:**	04/05/2007 10:45
	Project Number:	---	**Sampling Date:**	04/04/2007 08:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	IWVWD WELL 11	**Sample Matrix:**	Water
	Sampled By:	---		
0704004-04	**COC Number:**	---	**Receive Date:**	04/05/2007 10:45
	Project Number:	---	**Sampling Date:**	04/04/2007 08:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	IWVWD WELL 30	**Sample Matrix:**	Water
	Sampled By:	---		
0704004-05	**COC Number:**	---	**Receive Date:**	04/05/2007 10:45
	Project Number:	---	**Sampling Date:**	04/04/2007 08:22
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	IWVWD WELL 31	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-01 **Client Sample Name:** IWVWD WELL 8, 4/4/2007 9:07:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	6.2	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Magnesium	1.7	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Sodium	79	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Potassium	1.2	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Bicarbonate	100	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Carbonate	25	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Alkalinity as CaCO3	130	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
Chloride	30	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295	ND	
Fluoride	1.0	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295	ND	
Nitrate as NO3	2.9	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295	ND	
Sulfate	17	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/06/07 06:05	EDA	IC1	1	BQD0295	ND	
Total Cations	3.9	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
Total Anions	3.8	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
Hardness as CaCO3	22	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
pH	8.94	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	401	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	280	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765	ND	
MBAS	ND	mg/L	0.20	0.078	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	2	BQD0465	ND	A01
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-01 **Client Sample Name:** IWVWD WELL 8, 4/4/2007 9:07:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Arsenic	16	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Barium	8.6	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Boron	600	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	27	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Mercury	0.15	ug/L	0.20	0.026	EPA-245.1	04/12/07	04/18/07 10:41	PRA	CETAC1	1	BQD0589	0.030	J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:40	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 18:46	EMC	PE-OP2	1	BQD0472	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-02 **Client Sample Name:** IWVWD WELL 10, 4/4/2007 8:46:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	8.2	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Magnesium	1.9	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Sodium	79	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Potassium	1.5	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Bicarbonate	97	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Carbonate	23	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
Chloride	41	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295	ND	
Fluoride	1.2	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295	ND	
Nitrate as NO3	3.8	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295	ND	
Sulfate	26	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 22:26	EDA	IC1	1	BQD0295	ND	
Total Cations	4.1	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
Total Anions	4.2	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
Hardness as CaCO3	28	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:54	TMS	Calc	1	BQD0692	ND	
pH	8.82	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	417	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	280	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-02 **Client Sample Name:** IWVWD WELL 10, 4/4/2007 8:46:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Arsenic	16	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Barium	9.4	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Boron	780	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	27	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Mercury	0.17	ug/L	0.20	0.026	EPA-245.1	04/12/07	04/18/07 10:43	PRA	CETAC1	1	BQD0589	0.030	J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:54	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:09	EMC	PE-OP2	1	BQD0472	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-03 **Client Sample Name:** IWVWD WELL 11, 4/4/2007 8:25:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	13	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Magnesium	1.7	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Sodium	140	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Potassium	1.9	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Bicarbonate	89	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Carbonate	15	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:00	MAR	BDB	1	BQD0660	ND	
Alkalinity as CaCO3	98	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692	ND	
Chloride	150	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295	ND	
Fluoride	0.66	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295	ND	
Nitrate as NO3	3.3	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295	ND	
Sulfate	47	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 22:41	EDA	IC1	1	BQD0295	ND	
Total Cations	6.9	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692	ND	
Total Anions	7.4	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692	ND	
Hardness as CaCO3	40	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 18:02	TMS	Calc	1	BQD0692	ND	
pH	8.52	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	769	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	470	mg/L	33	33	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	3.333	BQD0765	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-03 **Client Sample Name:** IWVWD WELL 11, 4/4/2007 8:25:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Arsenic	11	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Barium	10	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Boron	1100	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	27	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Mercury	0.050	ug/L	0.20	0.026	EPA-245.1	04/13/07	04/16/07 09:34	PRA	CETAC1	1	BQD0657	ND	J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:56	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Zinc	5.2	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:16	EMC	PE-OP2	1	BQD0472	ND	J

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-04 **Client Sample Name:** IWVWD WELL 30, 4/4/2007 8:35:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	23	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Magnesium	0.47	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Sodium	46	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Potassium	2.2	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Bicarbonate	100	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661	ND	
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661	ND	
Alkalinity as CaCO3	84	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
Chloride	22	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295	ND	
Fluoride	0.32	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295	ND	
Nitrate as NO3	12	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295	ND	
Sulfate	33	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 22:55	EDA	IC1	1	BQD0295	ND	
Total Cations	3.2	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
Total Anions	3.2	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
Hardness as CaCO3	59	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
pH	8.11	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	328	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	220	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-04 **Client Sample Name:** IWVWD WELL 30, 4/4/2007 8:35:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Arsenic	1.7	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	J
Total Recoverable Barium	23	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Boron	210	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	27	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Chromium	4.8	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Copper	5.3	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Lead	0.72	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	J
Total Recoverable Manganese	2.9	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Mercury	0.058	ug/L	0.20	0.026	EPA-245.1	04/13/07	04/16/07 09:36	PRA	CETAC1	1	BQD0657	ND	J
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Selenium	0.64	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 11:59	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Zinc	7.9	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:22	EMC	PE-OP2	1	BQD0472	ND	J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0704004-05 **Client Sample Name:** IWVWD WELL 31, 4/4/2007 8:22:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	33	mg/L	0.10	0.018	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Magnesium	0.63	mg/L	0.050	0.017	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Sodium	41	mg/L	0.50	0.047	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Potassium	2.6	mg/L	1.0	0.13	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Bicarbonate	110	mg/L	2.9	2.9	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661	ND	
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	04/12/07	04/12/07 14:30	MAR	BDB	1	BQD0661	ND	
Alkalinity as CaCO3	90	mg/L	2.5	2.5	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
Chloride	26	mg/L	0.50	0.037	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295	ND	
Fluoride	0.61	mg/L	0.050	0.011	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295	ND	
Nitrate as NO3	9.4	mg/L	0.44	0.077	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295	ND	
Sulfate	40	mg/L	1.0	0.11	EPA-300.0	04/05/07	04/05/07 23:09	EDA	IC1	1	BQD0295	ND	
Total Cations	3.6	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
Total Anions	3.5	meq/L	0.10	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
Hardness as CaCO3	85	mg/L	0.50	0.10	Calc	04/13/07	04/17/07 17:55	TMS	Calc	1	BQD0692	ND	
pH	7.96	pH Units	0.05	0.05	EPA-150.1	04/09/07	04/09/07 13:00	JSM	B360	1	BQD0429		
Electrical Conductivity @ 25 C	369	umhos/cm	1.00	1.00	EPA-120.1	04/09/07	04/09/07 13:50	JSM	CND-3	1	BQD0432		
Total Dissolved Solids @ 180 C	260	mg/L	20	20	EPA-160.1	04/09/07	04/09/07 09:00	VEL	MANUAL	2	BQD0765	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	04/06/07	04/06/07 06:15	SLC	SPEC05	1	BQD0465	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	04/05/07	04/05/07 14:49	TDC	KONE-1	1	BQD0338	ND	

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Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 06/25/2007 10:27
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0704004-05 **Client Sample Name:** IWVWD WELL 31, 4/4/2007 8:22:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Arsenic	3.1	ug/L	2.0	0.89	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Barium	25	ug/L	10	1.7	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Boron	190	ug/L	100	12	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	27	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Chromium	1.8	ug/L	10	1.6	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Copper	10	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Lead	0.68	ug/L	1.0	0.12	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	J
Total Recoverable Manganese	3.4	ug/L	10	1.9	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Mercury	0.042	ug/L	0.20	0.026	EPA-245.1	04/13/07	04/16/07 09:39	PRA	CETAC1	1	BQD0657	ND	J
Total Recoverable Nickel	5.6	ug/L	10	3.4	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	J
Total Recoverable Selenium	0.66	ug/L	2.0	0.54	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	04/10/07	04/10/07 12:02	PPS	PE-EL1	1	BQD0428	ND	
Total Recoverable Zinc	6.3	ug/L	50	5.2	EPA-200.7	04/10/07	04/11/07 19:27	EMC	PE-OP2	1	BQD0472	ND	J

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQD0295	Duplicate	0704004-01	30.326	30.105		mg/L	0.7		10		
		Matrix Spike	0704004-01	30.326	140.04	101.01	mg/L		109		80 - 120	
		Matrix Spike Duplicate	0704004-01	30.326	139.75	101.01	mg/L	0.9	108	10	80 - 120	
Fluoride	BQD0295	Duplicate	0704004-01	1.0420	1.0130		mg/L	2.8		10		
		Matrix Spike	0704004-01	1.0420	2.0586	1.0101	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0704004-01	1.0420	2.0455	1.0101	mg/L	1.7	99.3	10	80 - 120	
Nitrate as NO3	BQD0295	Duplicate	0704004-01	2.8730	2.9217		mg/L	1.7		10		
		Matrix Spike	0704004-01	2.8730	25.711	22.358	mg/L		102		80 - 120	
		Matrix Spike Duplicate	0704004-01	2.8730	25.801	22.358	mg/L	1.0	103	10	80 - 120	
Sulfate	BQD0295	Duplicate	0704004-01	17.293	17.208		mg/L	0.5		10		
		Matrix Spike	0704004-01	17.293	121.73	101.01	mg/L		103		80 - 120	
		Matrix Spike Duplicate	0704004-01	17.293	121.22	101.01	mg/L	0	103	10	80 - 120	
Nitrite as N	BQD0338	Duplicate	0703975-01	115.96	114.62		ug/L	1.2		10		
		Matrix Spike	0703975-01	115.96	688.78	526.32	ug/L		109		90 - 110	
		Matrix Spike Duplicate	0703975-01	115.96	681.41	526.32	ug/L	1.9	107	10	90 - 110	
pH	BQD0429	Duplicate	0704004-01	8.9400	8.9530		pH Units	0.1		20		
Electrical Conductivity @ 25 C	BQD0432	Duplicate	0703996-01	2140.0	2120.0		umhos/cm	0.9		10		
MBAS	BQD0465	Duplicate	0704004-01	ND	ND		mg/L			20		A01
		Matrix Spike	0704004-01	ND	0.32720	0.40000	mg/L		81.8		80 - 120	A01
		Matrix Spike Duplicate	0704004-01	ND	0.32720	0.40000	mg/L	0	81.8	20	80 - 120	A01
Total Recoverable Calcium	BQD0472	Duplicate	0704024-01	0.064581	0.050307		mg/L	24.8		20		J,A02
		Matrix Spike	0704024-01	0.064581	10.389	10.000	mg/L		103		75 - 125	
		Matrix Spike Duplicate	0704024-01	0.064581	10.372	10.000	mg/L	0	103	20	75 - 125	
Total Recoverable Magnesium	BQD0472	Duplicate	0704024-01	0.032752	0.026446		mg/L	21.3		20		J,A02
		Matrix Spike	0704024-01	0.032752	10.553	10.000	mg/L		105		75 - 125	
		Matrix Spike Duplicate	0704024-01	0.032752	10.605	10.000	mg/L	0.9	106	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Sodium	BQD0472	Duplicate	0704024-01	ND	ND		mg/L			20		
		Matrix Spike	0704024-01	ND	10.101	10.000	mg/L		101		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	10.130	10.000	mg/L	0	101	20	75 - 125	
Total Recoverable Potassium	BQD0472	Duplicate	0704024-01	ND	ND		mg/L			20		
		Matrix Spike	0704024-01	ND	10.401	10.000	mg/L		104		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	10.408	10.000	mg/L	0	104	20	75 - 125	
Bicarbonate	BQD0660	Duplicate	0703932-03	211.00	207.52		mg/L	1.7		10		A01
		Matrix Spike	0703932-03	211.00	357.08	152.38	mg/L		95.9		80 - 120	A01
		Matrix Spike Duplicate	0703932-03	211.00	359.40	152.38	mg/L	1.6	97.4	10	80 - 120	A01
Carbonate	BQD0660	Duplicate	0703932-03	ND	ND		mg/L			10		A01
Hydroxide	BQD0660	Duplicate	0703932-03	ND	ND		mg/L			10		A01
Bicarbonate	BQD0661	Duplicate	0704014-01	282.88	286.36		mg/L	1.2		10		A01
		Matrix Spike	0704014-01	282.88	432.42	152.38	mg/L		98.1		80 - 120	A01
		Matrix Spike Duplicate	0704014-01	282.88	433.58	152.38	mg/L	0.8	98.9	10	80 - 120	A01
Carbonate	BQD0661	Duplicate	0704014-01	ND	ND		mg/L			10		A01
Hydroxide	BQD0661	Duplicate	0704014-01	ND	ND		mg/L			10		A01
Total Dissolved Solids @ 180 C	BQD0765	Duplicate	0704010-01	1393.3	1446.7		mg/L	3.8		10		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Antimony	BQD0428	Duplicate	0704004-01	ND	ND		ug/L			20		
		Matrix Spike	0704004-01	ND	22.223	20.408	ug/L		109		70 - 130	
		Matrix Spike Duplicate	0704004-01	ND	22.462	20.408	ug/L	0.9	110	20	70 - 130	
Total Recoverable Arsenic	BQD0428	Duplicate	0704004-01	15.849	15.713		ug/L	0.9		20		
		Matrix Spike	0704004-01	15.849	70.947	51.020	ug/L		108		70 - 130	
		Matrix Spike Duplicate	0704004-01	15.849	71.495	51.020	ug/L	0.9	109	20	70 - 130	
Total Recoverable Beryllium	BQD0428	Duplicate	0704004-01	ND	ND		ug/L			20		
		Matrix Spike	0704004-01	ND	20.881	20.408	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0704004-01	ND	21.090	20.408	ug/L	1.0	103	20	70 - 130	
Total Recoverable Cadmium	BQD0428	Duplicate	0704004-01	ND	ND		ug/L			20		
		Matrix Spike	0704004-01	ND	21.265	20.408	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0704004-01	ND	21.561	20.408	ug/L	1.9	106	20	70 - 130	
Total Recoverable Lead	BQD0428	Duplicate	0704004-01	ND	ND		ug/L			20		
		Matrix Spike	0704004-01	ND	49.713	51.020	ug/L		97.4		70 - 130	
		Matrix Spike Duplicate	0704004-01	ND	49.606	51.020	ug/L	0.2	97.2	20	70 - 130	
Total Recoverable Selenium	BQD0428	Duplicate	0704004-01	ND	ND		ug/L			20		
		Matrix Spike	0704004-01	ND	58.894	51.020	ug/L		115		70 - 130	
		Matrix Spike Duplicate	0704004-01	ND	59.949	51.020	ug/L	2.6	118	20	70 - 130	
Total Recoverable Thallium	BQD0428	Duplicate	0704004-01	ND	ND		ug/L			20		
		Matrix Spike	0704004-01	ND	19.656	20.408	ug/L		96.3		70 - 130	
		Matrix Spike Duplicate	0704004-01	ND	19.951	20.408	ug/L	1.5	97.8	20	70 - 130	
Total Recoverable Aluminum	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	1011.2	1000.0	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	1021.1	1000.0	ug/L	1.0	102	20	75 - 125	
Total Recoverable Barium	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	209.52	200.00	ug/L		105		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	211.00	200.00	ug/L	0.9	106	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Boron	BQD0472	Duplicate	0704024-01	102.44	97.568		ug/L	4.9		20		J
		Matrix Spike	0704024-01	102.44	1088.6	1000.0	ug/L		98.6		75 - 125	
		Matrix Spike Duplicate	0704024-01	102.44	1102.6	1000.0	ug/L	1.4	100	20	75 - 125	
Total Recoverable Chromium	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	199.94	200.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	200.28	200.00	ug/L	0	100	20	75 - 125	
Total Recoverable Copper	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	196.77	200.00	ug/L		98.4		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	197.79	200.00	ug/L	0.5	98.9	20	75 - 125	
Total Recoverable Iron	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	375.18	400.00	ug/L		93.8		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	387.41	400.00	ug/L	3.3	96.9	20	75 - 125	
Total Recoverable Manganese	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	178.13	200.00	ug/L		89.1		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	180.74	200.00	ug/L	1.4	90.4	20	75 - 125	
Total Recoverable Nickel	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	425.34	400.00	ug/L		106		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	426.31	400.00	ug/L	0.9	107	20	75 - 125	
Total Recoverable Silver	BQD0472	Duplicate	0704024-01	ND	ND		ug/L			20		
		Matrix Spike	0704024-01	ND	100.10	100.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0704024-01	ND	100.60	100.00	ug/L	1.0	101	20	75 - 125	
Total Recoverable Zinc	BQD0472	Duplicate	0704024-01	5.9913	5.9264		ug/L	1.1		20		J
		Matrix Spike	0704024-01	5.9913	228.55	200.00	ug/L		111		75 - 125	
		Matrix Spike Duplicate	0704024-01	5.9913	231.52	200.00	ug/L	1.8	113	20	75 - 125	
Total Recoverable Mercury	BQD0589	Duplicate	0703869-01	0.097500	0.11000		ug/L	12.0		20		J
		Matrix Spike	0703869-01	0.097500	1.1625	1.0000	ug/L		106		70 - 130	
		Matrix Spike Duplicate	0703869-01	0.097500	1.2550	1.0000	ug/L	9.0	116	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Mercury	BQD0657	Duplicate	0704087-01	2.7500	2.6000		ug/L	5.6		20		J,A01
		Matrix Spike	0704087-01	2.7500	3.1000	1.0000	ug/L		35.0		70 - 130	J,A01,A03
		Matrix Spike Duplicate	0704087-01	2.7500	3.2000	1.0000	ug/L	25.0	45.0	20	70 - 130	J,A01,A03,Q02

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQD0295	BQD0295-BS1	LCS	104.24	100.00	0.50	mg/L	104		90 - 110		
Fluoride	BQD0295	BQD0295-BS1	LCS	1.0440	1.0000	0.050	mg/L	104		90 - 110		
Nitrate as NO3	BQD0295	BQD0295-BS1	LCS	22.559	22.134	0.44	mg/L	102		90 - 110		
Sulfate	BQD0295	BQD0295-BS1	LCS	102.36	100.00	1.0	mg/L	102		90 - 110		
Nitrite as N	BQD0338	BQD0338-BS1	LCS	539.54	500.00	50	ug/L	108		90 - 110		
pH	BQD0429	BQD0429-BS1	LCS	7.0040	7.0000	0.05	pH Units	100		95 - 105		
Electrical Conductivity @ 25 C	BQD0432	BQD0432-BS1	LCS	307.00	303.00	1.00	umhos/cm	101		90 - 110		
MBAS	BQD0465	BQD0465-BS1	LCS	0.19860	0.20000	0.10	mg/L	99.3		85 - 115		
Total Recoverable Calcium	BQD0472	BQD0472-BS1	LCS	10.233	10.000	0.10	mg/L	102		85 - 115		
Total Recoverable Magnesium	BQD0472	BQD0472-BS1	LCS	10.500	10.000	0.050	mg/L	105		85 - 115		
Total Recoverable Sodium	BQD0472	BQD0472-BS1	LCS	9.9890	10.000	0.50	mg/L	99.9		85 - 115		
Total Recoverable Potassium	BQD0472	BQD0472-BS1	LCS	10.310	10.000	1.0	mg/L	103		85 - 115		
Bicarbonate	BQD0660	BQD0660-BS1	LCS	125.79	121.90	2.9	mg/L	103		90 - 110		
Bicarbonate	BQD0661	BQD0661-BS1	LCS	126.37	121.90	2.9	mg/L	104		90 - 110		
Total Dissolved Solids @ 180 C	BQD0765	BQD0765-BS1	LCS	570.00	586.00	50	mg/L	97.3		90 - 110		

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Antimony	BQD0428	BQD0428-BS1	LCS	21.350	20.000	2.0	ug/L	107		85 - 115		
Total Recoverable Arsenic	BQD0428	BQD0428-BS1	LCS	51.012	50.000	2.0	ug/L	102		85 - 115		
Total Recoverable Beryllium	BQD0428	BQD0428-BS1	LCS	20.013	20.000	1.0	ug/L	100		85 - 115		
Total Recoverable Cadmium	BQD0428	BQD0428-BS1	LCS	20.021	20.000	1.0	ug/L	100		85 - 115		
Total Recoverable Lead	BQD0428	BQD0428-BS1	LCS	49.933	50.000	1.0	ug/L	99.9		85 - 115		
Total Recoverable Selenium	BQD0428	BQD0428-BS1	LCS	50.956	50.000	2.0	ug/L	102		85 - 115		
Total Recoverable Thallium	BQD0428	BQD0428-BS1	LCS	19.788	20.000	1.0	ug/L	98.9		85 - 115		
Total Recoverable Aluminum	BQD0472	BQD0472-BS1	LCS	999.97	1000.0	50	ug/L	100		85 - 115		
Total Recoverable Barium	BQD0472	BQD0472-BS1	LCS	205.29	200.00	10	ug/L	103		85 - 115		
Total Recoverable Boron	BQD0472	BQD0472-BS1	LCS	1019.6	1000.0	100	ug/L	102		85 - 115		
Total Recoverable Chromium	BQD0472	BQD0472-BS1	LCS	199.53	200.00	10	ug/L	99.8		85 - 115		
Total Recoverable Copper	BQD0472	BQD0472-BS1	LCS	196.00	200.00	10	ug/L	98.0		85 - 115		
Total Recoverable Iron	BQD0472	BQD0472-BS1	LCS	372.67	400.00	50	ug/L	93.2		85 - 115		
Total Recoverable Manganese	BQD0472	BQD0472-BS1	LCS	176.17	200.00	10	ug/L	88.1		85 - 115		
Total Recoverable Nickel	BQD0472	BQD0472-BS1	LCS	422.77	400.00	10	ug/L	106		85 - 115		
Total Recoverable Silver	BQD0472	BQD0472-BS1	LCS	99.829	100.00	10	ug/L	99.8		85 - 115		
Total Recoverable Zinc	BQD0472	BQD0472-BS1	LCS	219.45	200.00	50	ug/L	110		85 - 115		
Total Recoverable Mercury	BQD0589	BQD0589-BS1	LCS	1.0775	1.0000	0.20	ug/L	108		85 - 115		
Total Recoverable Mercury	BQD0657	BQD0657-BS1	LCS	1.0100	1.0000	0.20	ug/L	101		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQD0295	BQD0295-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQD0295	BQD0295-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQD0295	BQD0295-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQD0295	BQD0295-BLK1	ND	mg/L	1.0	0.11	
Nitrite as N	BQD0338	BQD0338-BLK1	ND	ug/L	50	10	
MBAS	BQD0465	BQD0465-BLK1	ND	mg/L	0.10	0.039	
Total Recoverable Calcium	BQD0472	BQD0472-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQD0472	BQD0472-BLK1	ND	mg/L	0.050	0.017	
Total Recoverable Sodium	BQD0472	BQD0472-BLK1	ND	mg/L	0.50	0.047	
Total Recoverable Potassium	BQD0472	BQD0472-BLK1	ND	mg/L	1.0	0.13	
Bicarbonate	BQD0660	BQD0660-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQD0660	BQD0660-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQD0660	BQD0660-BLK1	ND	mg/L	0.81	0.81	
Bicarbonate	BQD0661	BQD0661-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQD0661	BQD0661-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQD0661	BQD0661-BLK1	ND	mg/L	0.81	0.81	
Alkalinity as CaCO3	BQD0692	BQD0692-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQD0692	BQD0692-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQD0692	BQD0692-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQD0692	BQD0692-BLK1	ND	mg/L	0.50	0.10	
Total Dissolved Solids @ 180 C	BQD0765	BQD0765-BLK1	ND	mg/L	6.7	6.7	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 06/25/2007 10:27

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Antimony	BQD0428	BQD0428-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQD0428	BQD0428-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQD0428	BQD0428-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQD0428	BQD0428-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQD0428	BQD0428-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQD0428	BQD0428-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQD0428	BQD0428-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Aluminum	BQD0472	BQD0472-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQD0472	BQD0472-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQD0472	BQD0472-BLK1	26.976	ug/L	100	12	J
Total Recoverable Chromium	BQD0472	BQD0472-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQD0472	BQD0472-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQD0472	BQD0472-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQD0472	BQD0472-BLK1	ND	ug/L	10	1.9	
Total Recoverable Nickel	BQD0472	BQD0472-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQD0472	BQD0472-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQD0472	BQD0472-BLK1	ND	ug/L	50	5.2	
Total Recoverable Mercury	BQD0589	BQD0589-BLK1	0.030000	ug/L	0.20	0.026	J
Total Recoverable Mercury	BQD0657	BQD0657-BLK1	ND	ug/L	0.20	0.026	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
Q02	Matrix spike precision is not within the control limits.

Date of Report: 03/27/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0702148

Enclosed are the results of analyses for samples received by the laboratory on 02/21/2007 10:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0702148-01	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/07/2007 12:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Marguard well	**Sample Matrix:**	Water
	Sampled By:	---		
0702148-02	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/07/2007 12:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Pennix Well	**Sample Matrix:**	Water
	Sampled By:	---		
0702148-03	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/07/2007 13:52
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	25138-03 GO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702148-04	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/19/2007 14:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Five-mile Cyn	**Sample Matrix:**	Water
	Sampled By:	---		
0702148-05	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/19/2007 14:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Nine-mile Cyn	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0702148-06	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/19/2007 15:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	No name Cyn	**Sample Matrix:**	Water
	Sampled By:	---		
0702148-07	**COC Number:**	---	**Receive Date:**	02/21/2007 10:25
	Project Number:	---	**Sampling Date:**	02/19/2007 15:26
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	Sand Cyn	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-01 **Client Sample Name:** Marguard well, 2/7/2007 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	1.8	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	ND	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	65	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	0.64	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	J
Bicarbonate	88	mg/L	2.9	2.9	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Carbonate	25	mg/L	1.5	1.5	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Alkalinity as CaCO3	110	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Chloride	5.0	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	
Fluoride	0.22	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	
Nitrate as NO3	12	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	A26,S05
Sulfate	14	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/22/07 02:25	LMB	IC2	1	BQB1112	ND	
Total Cations	2.9	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Total Anions	2.9	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	4.5	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
pH	8.98	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	281	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	180	mg/L	10	10	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	1	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1253	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-01 **Client Sample Name:** Marguard well, 2/7/2007 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	4.5	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	ND	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	120	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	0.14	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Manganese	9.0	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:30	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.3	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:37	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	12	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 14:51	EMC	PE-OP2	1	BQB1600	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-02 **Client Sample Name:** Pennix Well, 2/7/2007 12:35:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	35	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	5.5	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	54	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	2.3	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	140	mg/L	2.9	2.9	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Carbonate	6.3	mg/L	1.5	1.5	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	1	BQB1673	ND	S05
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Chloride	25	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	
Fluoride	0.71	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	
Nitrate as NO3	7.7	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	A26,S05
Sulfate	53	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/22/07 02:43	LMB	IC2	1	BQB1112	ND	
Total Cations	4.6	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Total Anions	4.5	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	110	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
pH	8.10	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	423	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	290	mg/L	20	20	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	2	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1253	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-02 **Client Sample Name:** Pennix Well, 2/7/2007 12:35:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	2.2	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	49	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	250	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	3.3	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	5.4	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:28	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.3	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:40	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	43	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 15:30	EMC	PE-OP2	1	BQB1600	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-03 | **Client Sample Name:** 25138-03 GO1, 2/7/2007 1:52:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	97	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	40	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	72	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	6.8	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	480	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1673	ND	A01,S05
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1673	ND	A01,S05
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1673	ND	A01,S05
Alkalinity as CaCO3	390	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Chloride	23	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	
Fluoride	0.75	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	
Nitrate as NO3	6.8	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	A26,S05
Sulfate	130	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/22/07 03:02	LMB	IC2	1	BQB1112	ND	
Total Cations	11	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Total Anions	11	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	410	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:20	TMS	Calc	1	BQB1323	ND	
pH	7.69	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	909	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	520	mg/L	33	33	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	3.333	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1253	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-03 **Client Sample Name:** 25138-03 GO1, 2/7/2007 1:52:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	4.4	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	60	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	160	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	12	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	0.76	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Manganese	3.6	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:26	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.9	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:52	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	8.8	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:30	EMC	PE-OP2	1	BQB1600	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-04 **Client Sample Name:** Five-mile Cyn, 2/19/2007 2:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	94	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	43	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	97	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	9.0	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	390	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	320	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	60	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	
Fluoride	1.4	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	0.10	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	J
Sulfate	220	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 12:25	LMB	IC2	1	BQB1174	ND	
Total Cations	13	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	13	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	410	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.27	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	1030	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	740	mg/L	33	33	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	3.333	BQC0314	ND	
MBAS	0.039	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	J
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-04 | **Client Sample Name:** Five-mile Cyn, 2/19/2007 2:15:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	33	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Boron	370	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	0.17	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	0.17	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	2.4	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Iron	43	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	J
Total Recoverable Lead	0.40	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	0.16	J
Total Recoverable Manganese	23	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:19	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.2	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:10	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:36	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-05 **Client Sample Name:** Nine-mile Cyn, 2/19/2007 2:40:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	93	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	73	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	90	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	7.5	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	490	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	57	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	500	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	35	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Fluoride	1.1	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Sulfate	150	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 12:44	LMB	IC2	1	BQB1174	ND	
Total Cations	15	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	14	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	530	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.38	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	1080	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	640	mg/L	50	50	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	5	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 12:59	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-05 | **Client Sample Name:** Nine-mile Cyn, 2/19/2007 2:40:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	46	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	170	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	72	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	31	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:17	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	0.55	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:55	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:43	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-06 **Client Sample Name:** No name Cyn, 2/19/2007 3:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	110	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	59	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	96	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	5.4	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	620	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	510	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	29	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Fluoride	2.3	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Sulfate	180	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 14:54	LMB	IC2	1	BQB1174	ND	
Total Cations	15	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	15	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	520	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.08	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	1150	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	720	mg/L	50	50	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	5	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 13:02	TDC	KONE-1	1	BQB1455	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-06 **Client Sample Name:** No name Cyn, 2/19/2007 3:00:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	24	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	260	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	390	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:15	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	0.60	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 12:57	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:49	EMC	PE-OP2	1	BQB1600	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0702148-07 **Client Sample Name:** Sand Cyn, 2/19/2007 3:26:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	79	mg/L	0.10	0.018	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	0.025	
Total Recoverable Magnesium	25	mg/L	0.050	0.017	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Sodium	90	mg/L	0.50	0.047	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Potassium	6.3	mg/L	1.0	0.13	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Bicarbonate	370	mg/L	5.8	5.8	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Carbonate	35	mg/L	3.0	3.0	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/27/07	02/27/07 11:00	MAR	BDB	2	BQB1674	ND	A01
Alkalinity as CaCO3	360	mg/L	2.5	2.5	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Chloride	23	mg/L	0.50	0.037	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Fluoride	1.7	mg/L	0.050	0.011	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Sulfate	94	mg/L	1.0	0.11	EPA-300.0	02/20/07	02/21/07 13:02	LMB	IC2	1	BQB1174	ND	
Total Cations	10	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Total Anions	10	meq/L	0.10	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
Hardness as CaCO3	300	mg/L	0.50	0.10	Calc	02/22/07	03/08/07 10:21	TMS	Calc	1	BQB1323	ND	
pH	8.38	pH Units	0.05	0.05	EPA-150.1	02/23/07	02/23/07 12:35	JSM	B360	1	BQB1483		
Electrical Conductivity @ 25 C	807	umhos/cm	1.00	1.00	EPA-120.1	02/23/07	02/23/07 13:40	JSM	CND-3	1	BQB1488		
Total Dissolved Solids @ 180 C	480	mg/L	33	33	EPA-160.1	02/23/07	02/23/07 09:00	VEL	MANUAL	3.333	BQC0314	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/21/07	02/21/07 12:30	SLC	SPEC05	1	BQB1254	ND	
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/21/07	02/21/07 13:02	TDC	KONE-1	1	BQB1455	ND	

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Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:17
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702148-07 **Client Sample Name:** Sand Cyn, 2/19/2007 3:26:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	14	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	48	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	400	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/02/07 16:04	PRA	CETAC1	1	BQC0138	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:00	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Zinc	ND	ug/L	50	5.2	EPA-200.7	02/27/07	02/28/07 16:56	EMC	PE-OP2	1	BQB1600	ND	

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Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQB1112	Duplicate	0702131-01	126.54	126.62		mg/L	0.1		10		
		Matrix Spike	0702131-01	126.54	218.90	101.01	mg/L		91.4		80 - 120	
		Matrix Spike Duplicate	0702131-01	126.54	219.09	101.01	mg/L	0.2	91.6	10	80 - 120	
Fluoride	BQB1112	Duplicate	0702131-01	0.30900	0.31600		mg/L	2.2		10		
		Matrix Spike	0702131-01	0.30900	1.3848	1.0101	mg/L		107		80 - 120	
		Matrix Spike Duplicate	0702131-01	0.30900	1.3263	1.0101	mg/L	5.8	101	10	80 - 120	
Nitrate as NO3	BQB1112	Duplicate	0702131-01	37.902	37.947		mg/L	0.1		10		
		Matrix Spike	0702131-01	37.902	60.696	22.358	mg/L		102		80 - 120	
		Matrix Spike Duplicate	0702131-01	37.902	60.553	22.358	mg/L	1.0	101	10	80 - 120	
Sulfate	BQB1112	Duplicate	0702131-01	54.532	54.573		mg/L	0.1		10		
		Matrix Spike	0702131-01	54.532	163.56	101.01	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0702131-01	54.532	163.41	101.01	mg/L	0	108	10	80 - 120	
Chloride	BQB1174	Duplicate	0702148-07	22.669	22.643		mg/L	0.1		10		
		Matrix Spike	0702148-07	22.669	133.30	101.01	mg/L		110		80 - 120	
		Matrix Spike Duplicate	0702148-07	22.669	133.35	101.01	mg/L	0	110	10	80 - 120	
Fluoride	BQB1174	Duplicate	0702148-07	1.7250	1.6990		mg/L	1.5		10		
		Matrix Spike	0702148-07	1.7250	2.8192	1.0101	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0702148-07	1.7250	2.7293	1.0101	mg/L	8.3	99.4	10	80 - 120	
Nitrate as NO3	BQB1174	Duplicate	0702148-07	ND	ND		mg/L			10		
		Matrix Spike	0702148-07	ND	22.478	22.358	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0702148-07	ND	22.465	22.358	mg/L	1.0	100	10	80 - 120	
Sulfate	BQB1174	Duplicate	0702148-07	93.522	93.429		mg/L	0.1		10		
		Matrix Spike	0702148-07	93.522	200.75	101.01	mg/L		106		80 - 120	
		Matrix Spike Duplicate	0702148-07	93.522	201.00	101.01	mg/L	0	106	10	80 - 120	
MBAS	BQB1253	Duplicate	0702128-01	ND	0.078200		mg/L			20		J,A01
		Matrix Spike	0702128-01	ND	0.46540	0.40000	mg/L		116		80 - 120	J,A01
		Matrix Spike Duplicate	0702128-01	ND	0.46540	0.40000	mg/L	0	116	20	80 - 120	J,A01

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
MBAS	BQB1254	Duplicate	0702142-01	ND	ND		mg/L			20		A01
		Matrix Spike	0702142-01	ND	0.43820	0.40000	mg/L		110		80 - 120	J,A01
		Matrix Spike Duplicate	0702142-01	ND	0.43820	0.40000	mg/L	0	110	20	80 - 120	J,A01
Nitrite as N	BQB1455	Duplicate	0702148-01	ND	ND		ug/L			10		A26,S05
		Matrix Spike	0702148-01	ND	509.25	526.32	ug/L		96.8		90 - 110	A26,S05
		Matrix Spike Duplicate	0702148-01	ND	510.37	526.32	ug/L	0.2	97.0	10	90 - 110	A26,S05
pH	BQB1483	Duplicate	0702148-01	8.9810	8.9950		pH Units	0.2		20		
Electrical Conductivity @ 25 C	BQB1488	Duplicate	0702142-01	300.00	301.00		umhos/cm	0.3		10		
Total Recoverable Calcium	BQB1600	Duplicate	0702148-01	1.8027	1.7628		mg/L	2.2		20		
		Matrix Spike	0702148-01	1.8027	12.701	10.000	mg/L		109		75 - 125	
		Matrix Spike Duplicate	0702148-01	1.8027	12.573	10.000	mg/L	0.9	108	20	75 - 125	
Total Recoverable Magnesium	BQB1600	Duplicate	0702148-01	ND	ND		mg/L			20		
		Matrix Spike	0702148-01	ND	10.429	10.000	mg/L		104		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	10.463	10.000	mg/L	1.0	105	20	75 - 125	
Total Recoverable Sodium	BQB1600	Duplicate	0702148-01	65.129	65.208		mg/L	0.1		20		
		Matrix Spike	0702148-01	65.129	76.374	10.000	mg/L		112		75 - 125	
		Matrix Spike Duplicate	0702148-01	65.129	77.870	10.000	mg/L	12.6	127	20	75 - 125	A03
Total Recoverable Potassium	BQB1600	Duplicate	0702148-01	0.63810	0.62889		mg/L	1.5		20		J
		Matrix Spike	0702148-01	0.63810	10.369	10.000	mg/L		97.3		75 - 125	
		Matrix Spike Duplicate	0702148-01	0.63810	10.271	10.000	mg/L	1.0	96.3	20	75 - 125	
Bicarbonate	BQB1673	Duplicate	0702104-02	191.28	191.28		mg/L	0		10		A01
		Matrix Spike	0702104-02	191.28	344.32	152.38	mg/L		100		80 - 120	A01
		Matrix Spike Duplicate	0702104-02	191.28	345.48	152.38	mg/L	1.0	101	10	80 - 120	A01
Carbonate	BQB1673	Duplicate	0702104-02	ND	ND		mg/L			10		A01
Hydroxide	BQB1673	Duplicate	0702104-02	ND	ND		mg/L			10		A01

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Bicarbonate	BQB1674	Duplicate	0702128-01	197.08	200.56		mg/L	1.8		10		A01
		Matrix Spike	0702128-01	197.08	348.96	152.38	mg/L		99.7		80 - 120	A01
		Matrix Spike Duplicate	0702128-01	197.08	350.12	152.38	mg/L	0.3	100	10	80 - 120	A01
Carbonate	BQB1674	Duplicate	0702128-01	ND	ND		mg/L			10		A01
Hydroxide	BQB1674	Duplicate	0702128-01	ND	ND		mg/L			10		A01
Total Dissolved Solids @ 180 C	BQC0314	Duplicate	0702142-01	220.00	210.00		mg/L	4.7		10		

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Antimony	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.612	20.408	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	21.467	20.408	ug/L	3.9	105	20	70 - 130	
Total Recoverable Arsenic	BQB1596	Duplicate	0701983-01	1.1640	0.98200		ug/L	17.0		20		J
		Matrix Spike	0701983-01	1.1640	54.477	51.020	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0701983-01	1.1640	56.263	51.020	ug/L	3.8	108	20	70 - 130	
Total Recoverable Beryllium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.852	20.408	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	22.407	20.408	ug/L	7.5	110	20	70 - 130	
Total Recoverable Cadmium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.143	20.408	ug/L		98.7		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	21.162	20.408	ug/L	5.2	104	20	70 - 130	
Total Recoverable Lead	BQB1596	Duplicate	0701983-01	0.43200	0.40900		ug/L	5.5		20		J
		Matrix Spike	0701983-01	0.43200	51.840	51.020	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701983-01	0.43200	54.514	51.020	ug/L	4.8	106	20	70 - 130	
Total Recoverable Selenium	BQB1596	Duplicate	0701983-01	5.3400	5.3120		ug/L	0.5		20		
		Matrix Spike	0701983-01	5.3400	62.629	51.020	ug/L		112		70 - 130	
		Matrix Spike Duplicate	0701983-01	5.3400	64.250	51.020	ug/L	2.6	115	20	70 - 130	
Total Recoverable Thallium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	19.829	20.408	ug/L		97.2		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	20.857	20.408	ug/L	4.8	102	20	70 - 130	
Total Recoverable Aluminum	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	995.12	1000.0	ug/L		99.5		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	994.82	1000.0	ug/L	0	99.5	20	75 - 125	
Total Recoverable Barium	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	219.65	200.00	ug/L		110		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	220.18	200.00	ug/L	0	110	20	75 - 125	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Boron	BQB1600	Duplicate	0702148-01	117.12	114.15		ug/L	2.6		20		
		Matrix Spike	0702148-01	117.12	1138.2	1000.0	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702148-01	117.12	1155.1	1000.0	ug/L	1.9	104	20	75 - 125	
Total Recoverable Chromium	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	200.60	200.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	202.54	200.00	ug/L	1.0	101	20	75 - 125	
Total Recoverable Copper	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	216.87	200.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	219.10	200.00	ug/L	1.8	110	20	75 - 125	
Total Recoverable Iron	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	414.86	400.00	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	419.71	400.00	ug/L	1.0	105	20	75 - 125	
Total Recoverable Manganese	BQB1600	Duplicate	0702148-01	8.9510	8.7453		ug/L	2.3		20		J
		Matrix Spike	0702148-01	8.9510	191.45	200.00	ug/L		91.2		75 - 125	
		Matrix Spike Duplicate	0702148-01	8.9510	192.97	200.00	ug/L	0.9	92.0	20	75 - 125	
Total Recoverable Nickel	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	450.66	400.00	ug/L		113		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	444.02	400.00	ug/L	1.8	111	20	75 - 125	
Total Recoverable Silver	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	101.54	100.00	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	101.86	100.00	ug/L	0	102	20	75 - 125	
Total Recoverable Zinc	BQB1600	Duplicate	0702148-01	12.141	8.8994		ug/L	30.8		20		J,A02
		Matrix Spike	0702148-01	12.141	263.77	200.00	ug/L		126		75 - 125	Q03
		Matrix Spike Duplicate	0702148-01	12.141	242.11	200.00	ug/L	9.1	115	20	75 - 125	
Total Recoverable Antimony	BQB1603	Duplicate	0702010-01	1.2140	1.2670		ug/L	4.3		20		J
		Matrix Spike	0702010-01	1.2140	21.545	20.000	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.2140	22.537	20.000	ug/L	4.8	107	20	70 - 130	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Arsenic	BQB1603	Duplicate	0702010-01	8.9940	9.1820		ug/L	2.1		20		
		Matrix Spike	0702010-01	8.9940	58.594	50.000	ug/L		99.2		70 - 130	
		Matrix Spike Duplicate	0702010-01	8.9940	61.391	50.000	ug/L	5.7	105	20	70 - 130	
Total Recoverable Beryllium	BQB1603	Duplicate	0702010-01	ND	ND		ug/L			20		
		Matrix Spike	0702010-01	ND	22.258	20.000	ug/L		111		70 - 130	
		Matrix Spike Duplicate	0702010-01	ND	24.092	20.000	ug/L	7.8	120	20	70 - 130	
Total Recoverable Cadmium	BQB1603	Duplicate	0702010-01	0.21600	0.26600		ug/L	20.7		20		J,A02
		Matrix Spike	0702010-01	0.21600	22.176	20.000	ug/L		110		70 - 130	
		Matrix Spike Duplicate	0702010-01	0.21600	23.116	20.000	ug/L	3.6	114	20	70 - 130	
Total Recoverable Lead	BQB1603	Duplicate	0702010-01	1.4070	1.8140		ug/L	25.3		20		A02
		Matrix Spike	0702010-01	1.4070	54.693	50.000	ug/L		107		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.4070	57.345	50.000	ug/L	4.6	112	20	70 - 130	
Total Recoverable Selenium	BQB1603	Duplicate	0702010-01	1.6060	1.7130		ug/L	6.4		20		J
		Matrix Spike	0702010-01	1.6060	49.358	50.000	ug/L		95.5		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.6060	53.240	50.000	ug/L	7.6	103	20	70 - 130	
Total Recoverable Thallium	BQB1603	Duplicate	0702010-01	ND	ND		ug/L			20		
		Matrix Spike	0702010-01	ND	20.850	20.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0702010-01	ND	22.015	20.000	ug/L	5.6	110	20	70 - 130	
Total Recoverable Mercury	BQC0138	Duplicate	0702148-07	ND	ND		ug/L			20		
		Matrix Spike	0702148-07	ND	0.98750	1.0000	ug/L		98.8		70 - 130	
		Matrix Spike Duplicate	0702148-07	ND	0.98250	1.0000	ug/L	0.6	98.2	20	70 - 130	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQB1112	BQB1112-BS1	LCS	106.11	100.00	0.50	mg/L	106		90 - 110		
Fluoride	BQB1112	BQB1112-BS1	LCS	1.0620	1.0000	0.050	mg/L	106		90 - 110		
Nitrate as NO3	BQB1112	BQB1112-BS1	LCS	22.506	22.134	0.44	mg/L	102		90 - 110		
Sulfate	BQB1112	BQB1112-BS1	LCS	103.90	100.00	1.0	mg/L	104		90 - 110		
Chloride	BQB1174	BQB1174-BS1	LCS	104.71	100.00	0.50	mg/L	105		90 - 110		
Fluoride	BQB1174	BQB1174-BS1	LCS	0.99900	1.0000	0.050	mg/L	99.9		90 - 110		
Nitrate as NO3	BQB1174	BQB1174-BS1	LCS	22.209	22.134	0.44	mg/L	100		90 - 110		
Sulfate	BQB1174	BQB1174-BS1	LCS	102.64	100.00	1.0	mg/L	103		90 - 110		
MBAS	BQB1253	BQB1253-BS1	LCS	0.19200	0.20000	0.50	mg/L	96.0		85 - 115		J
MBAS	BQB1254	BQB1254-BS1	LCS	0.19200	0.20000	0.50	mg/L	96.0		85 - 115		J
Nitrite as N	BQB1455	BQB1455-BS1	LCS	489.82	500.00	50	ug/L	98.0		90 - 110		
pH	BQB1483	BQB1483-BS1	LCS	7.0030	7.0000	0.05	pH Units	100		95 - 105		
Electrical Conductivity @ 25 C	BQB1488	BQB1488-BS1	LCS	318.00	303.00	1.00	umhos/cm	105		90 - 110		
Total Recoverable Calcium	BQB1600	BQB1600-BS1	LCS	10.730	10.000	0.10	mg/L	107		85 - 115		
Total Recoverable Magnesium	BQB1600	BQB1600-BS1	LCS	10.428	10.000	0.050	mg/L	104		85 - 115		
Total Recoverable Sodium	BQB1600	BQB1600-BS1	LCS	10.542	10.000	0.50	mg/L	105		85 - 115		
Total Recoverable Potassium	BQB1600	BQB1600-BS1	LCS	9.5942	10.000	1.0	mg/L	95.9		85 - 115		
Bicarbonate	BQB1673	BQB1673-BS1	LCS	126.95	121.90	2.9	mg/L	104		90 - 110		
Bicarbonate	BQB1674	BQB1674-BS1	LCS	126.95	121.90	2.9	mg/L	104		90 - 110		
Total Dissolved Solids @ 180 C	BQC0314	BQC0314-BS1	LCS	570.00	586.00	50	mg/L	97.3		90 - 110		

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Antimony	BQB1596	BQB1596-BS1	LCS	20.158	20.000	2.0	ug/L	101		85 - 115		
Total Recoverable Arsenic	BQB1596	BQB1596-BS1	LCS	50.429	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1596	BQB1596-BS1	LCS	21.723	20.000	1.0	ug/L	109		85 - 115		
Total Recoverable Cadmium	BQB1596	BQB1596-BS1	LCS	20.569	20.000	1.0	ug/L	103		85 - 115		
Total Recoverable Lead	BQB1596	BQB1596-BS1	LCS	54.392	50.000	1.0	ug/L	109		85 - 115		
Total Recoverable Selenium	BQB1596	BQB1596-BS1	LCS	51.683	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Thallium	BQB1596	BQB1596-BS1	LCS	20.838	20.000	1.0	ug/L	104		85 - 115		
Total Recoverable Aluminum	BQB1600	BQB1600-BS1	LCS	961.96	1000.0	50	ug/L	96.2		85 - 115		
Total Recoverable Barium	BQB1600	BQB1600-BS1	LCS	216.50	200.00	10	ug/L	108		85 - 115		
Total Recoverable Boron	BQB1600	BQB1600-BS1	LCS	1016.1	1000.0	100	ug/L	102		85 - 115		
Total Recoverable Chromium	BQB1600	BQB1600-BS1	LCS	202.67	200.00	10	ug/L	101		85 - 115		
Total Recoverable Copper	BQB1600	BQB1600-BS1	LCS	211.23	200.00	10	ug/L	106		85 - 115		
Total Recoverable Iron	BQB1600	BQB1600-BS1	LCS	373.46	400.00	50	ug/L	93.4		85 - 115		
Total Recoverable Manganese	BQB1600	BQB1600-BS1	LCS	180.13	200.00	10	ug/L	90.1		85 - 115		
Total Recoverable Nickel	BQB1600	BQB1600-BS1	LCS	447.06	400.00	10	ug/L	112		85 - 115		
Total Recoverable Silver	BQB1600	BQB1600-BS1	LCS	101.60	100.00	10	ug/L	102		85 - 115		
Total Recoverable Zinc	BQB1600	BQB1600-BS1	LCS	226.93	200.00	50	ug/L	113		85 - 115		
Total Recoverable Antimony	BQB1603	BQB1603-BS1	LCS	20.237	20.000	2.0	ug/L	101		85 - 115		
Total Recoverable Arsenic	BQB1603	BQB1603-BS1	LCS	50.616	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1603	BQB1603-BS1	LCS	22.452	20.000	1.0	ug/L	112		85 - 115		
Total Recoverable Cadmium	BQB1603	BQB1603-BS1	LCS	21.329	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Lead	BQB1603	BQB1603-BS1	LCS	55.471	50.000	1.0	ug/L	111		85 - 115		
Total Recoverable Selenium	BQB1603	BQB1603-BS1	LCS	51.316	50.000	2.0	ug/L	103		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Thallium	BQB1603	BQB1603-BS1	LCS	21.339	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Mercury	BQC0138	BQC0138-BS1	LCS	1.0025	1.0000	0.20	ug/L	100		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQB1112	BQB1112-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQB1112	BQB1112-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQB1112	BQB1112-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQB1112	BQB1112-BLK1	ND	mg/L	1.0	0.11	
Chloride	BQB1174	BQB1174-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQB1174	BQB1174-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQB1174	BQB1174-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQB1174	BQB1174-BLK1	ND	mg/L	1.0	0.11	
MBAS	BQB1253	BQB1253-BLK1	ND	mg/L	0.50	0.039	
MBAS	BQB1254	BQB1254-BLK1	ND	mg/L	0.50	0.039	
Alkalinity as CaCO3	BQB1323	BQB1323-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQB1323	BQB1323-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQB1323	BQB1323-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQB1323	BQB1323-BLK1	ND	mg/L	0.50	0.10	
Nitrite as N	BQB1455	BQB1455-BLK1	ND	ug/L	50	12	
Total Recoverable Calcium	BQB1600	BQB1600-BLK1	0.025386	mg/L	0.10	0.018	J
Total Recoverable Magnesium	BQB1600	BQB1600-BLK1	ND	mg/L	0.050	0.017	
Total Recoverable Sodium	BQB1600	BQB1600-BLK1	ND	mg/L	0.50	0.047	
Total Recoverable Potassium	BQB1600	BQB1600-BLK1	ND	mg/L	1.0	0.13	
Bicarbonate	BQB1673	BQB1673-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQB1673	BQB1673-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQB1673	BQB1673-BLK1	ND	mg/L	0.81	0.81	
Bicarbonate	BQB1674	BQB1674-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQB1674	BQB1674-BLK1	ND	mg/L	1.5	1.5	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Hydroxide	BQB1674	BQB1674-BLK1	ND	mg/L	0.81	0.81	
Total Dissolved Solids @ 180 C	BQC0314	BQC0314-BLK1	ND	mg/L	6.7	6.7	

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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Antimony	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Aluminum	BQB1600	BQB1600-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQB1600	BQB1600-BLK1	ND	ug/L	100	12	
Total Recoverable Chromium	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQB1600	BQB1600-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQB1600	BQB1600-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.9	
Total Recoverable Nickel	BQB1600	BQB1600-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQB1600	BQB1600-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQB1600	BQB1600-BLK1	ND	ug/L	50	5.2	
Total Recoverable Antimony	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1603	BQB1603-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1603	BQB1603-BLK1	0.17300	ug/L	1.0	0.088	J
Total Recoverable Lead	BQB1603	BQB1603-BLK1	0.15600	ug/L	1.0	0.12	J
Total Recoverable Selenium	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1603	BQB1603-BLK1	ND	ug/L	1.0	0.13	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:17

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Mercury	BQC0138	BQC0138-BLK1	ND	ug/L	0.20	0.026	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.

Date of Report: 03/27/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0701401

Enclosed are the results of analyses for samples received by the laboratory on 02/06/2007 10:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701401-01	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	01/11/2007 13:35	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	26139-14P01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-02	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	01/11/2007 15:01	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	26139-09H01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-03	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	01/11/2007 16:02	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	26139-09M01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-04	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	01/11/2007 16:55	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	25139-31R01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-05	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	01/12/2007 10:30	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	25138-13J01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701401-06	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	01/15/2007 11:40	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	NAVY LB	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-07	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/02/2007 12:51	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	CAMPBELL RANCH	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-08	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/02/2007 14:15	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	27138-09Q01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-09	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/02/2007 15:37	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	27137-09C02	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-10	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/02/2007 16:30	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	28138-18F01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701401-11	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/03/2007 08:30	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	27138-09C01	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-12	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/03/2007 10:35	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	27138-10C02	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-13	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/03/2007 11:06	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	Childers Well	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-14	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/03/2007 11:25	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	Standard Well	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			
0701401-15	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/04/2007 10:47	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	Sawmill Well	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:16

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701401-16	**COC Number:**	28347	**Receive Date:**	02/06/2007 10:30	District ID:
	Project Number:	---	**Sampling Date:**	02/04/2007 11:15	System Number:
	Sampling Location:	---	**Sample Depth:**	---	Station Number:
	Sampling Point:	Little Lake Outlet	**Sample Matrix:**	Water	Holding Times Met:
	Sampled By:	Mike Stoner			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-01 **Client Sample Name:** 26139-14P01, 1/11/2007 1:35:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	30	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	10	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	25	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	2.7	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	120	mg/L	2.9	2.9	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0887	ND	A26,S05
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0887	ND	A26,S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0887	ND	A26,S05
Alkalinity as CaCO3	100	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:01	TMS	Calc	1	BQB0691	ND	
Chloride	33	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 19:31	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.62	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 19:31	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 19:31	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	22	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 19:31	LMB	IC1	1	BQB0332	ND	
Total Cations	3.4	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:01	TMS	Calc	1	BQB0691	ND	
Total Anions	3.4	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:01	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	120	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:01	TMS	Calc	1	BQB0691	ND	
pH	7.96	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	360	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	250	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0668	ND	A26,S05
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0559	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:08	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-01 **Client Sample Name:** 26139-14P01, 1/11/2007 1:35:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	45	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	J
Total Recoverable Manganese	56	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	ND	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 15:39	ARD	PE-OP1	1	BQB0675	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-02 **Client Sample Name:** 26139-09H01, 1/11/2007 3:01:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	39	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	6.1	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	59	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	2.6	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	120	mg/L	2.9	2.9	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0887	ND	A26,S05
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0887	ND	A26,S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0887	ND	A26,S05
Alkalinity as CaCO3	100	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	48	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 20:47	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.46	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 20:47	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	1.3	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 20:47	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	82	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 20:47	LMB	IC1	1	BQB0332	ND	
Total Cations	5.1	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	5.1	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	120	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.11	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	551	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	340	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0668	ND	A26,S05
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0559	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:08	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-02 | **Client Sample Name:** 26139-09H01, 1/11/2007 3:01:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	8.8	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 15:42	ARD	PE-OP1	1	BQB0675	ND	J

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-03 **Client Sample Name:** 26139-09M01, 1/11/2007 4:02:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	2.2	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	0.14	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	63	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	1.8	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	96	mg/L	2.9	2.9	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	A26,S05
Carbonate	22	mg/L	1.5	1.5	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	A26,S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	A26,S05
Alkalinity as CaCO3	110	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	19	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 21:06	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.54	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 21:06	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 21:06	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	7.8	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 21:06	LMB	IC1	1	BQB0332	ND	
Total Cations	2.9	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	3.0	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	6.1	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.86	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	303	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	180	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0668	ND	A26,S05
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0559	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:08	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-03 **Client Sample Name:** 26139-09M01, 1/11/2007 4:02:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	6.7	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	J
Total Recoverable Zinc	7.3	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:00	ARD	PE-OP1	1	BQB0675	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-04 **Client Sample Name:** 25139-31R01, 1/11/2007 4:55:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	65	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	15	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	100	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	3.7	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	200	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01,A26,S05
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01,A26,S05
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01,A26,S05
Alkalinity as CaCO3	160	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	92	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 21:24	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.38	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 21:24	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	0.35	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 21:24	LMB	IC1	1	BQB0332	ND	J,A26,S05
Sulfate	160	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 21:24	LMB	IC1	1	BQB0332	ND	
Total Cations	8.9	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	9.1	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	220	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.04	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	898	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	550	mg/L	33	33	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	3.333	BQB0668	ND	A26,S05
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0559	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:08	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-04 **Client Sample Name:** 25139-31R01, 1/11/2007 4:55:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	46	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	ND	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:05	ARD	PE-OP1	1	BQB0675	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-05 **Client Sample Name:** 25138-13J01, 1/12/2007 10:30:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	12	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	5.2	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	92	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	8.2	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	240	mg/L	2.9	2.9	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	A26,S05
Carbonate	2.8	mg/L	1.5	1.5	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	A26,S05
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	A26,S05
Alkalinity as CaCO3	210	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	28	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 21:43	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.20	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 21:43	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	1.0	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 21:43	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	12	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 21:43	LMB	IC1	1	BQB0332	ND	
Total Cations	5.2	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	5.2	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	53	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.32	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	512	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	280	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0668	ND	A26,S05
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0559	ND	A26,S05
Nitrite as N	670	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:08	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-05 | **Client Sample Name:** 25138-13J01, 1/12/2007 10:30:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	49	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	J
Total Recoverable Manganese	31	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	19	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:10	ARD	PE-OP1	1	BQB0675	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-06 **Client Sample Name:** NAVY LB, 1/15/2007 11:40:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	52	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	37	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	160	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	15	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	460	mg/L	12	12	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0886	ND	A01,A26,S05
Carbonate	ND	mg/L	6.0	6.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0886	ND	A01,A26,S05
Hydroxide	ND	mg/L	3.2	3.2	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0886	ND	A01,A26,S05
Alkalinity as CaCO3	380	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	110	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 22:40	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.73	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 22:40	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 22:40	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	140	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 22:40	LMB	IC1	1	BQB0332	ND	
Total Cations	13	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	14	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	280	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.22	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	1240	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	790	mg/L	50	50	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	5	BQB0668	ND	A26,S05
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0559	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:10	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-06 | **Client Sample Name:** NAVY LB, 1/15/2007 11:40:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	8.1	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	J
Total Recoverable Iron	260	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	92	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	230	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:15	ARD	PE-OP1	1	BQB0675	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-07 **Client Sample Name:** CAMPBELL RANCH, 2/2/2007 12:51:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	69	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	12	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	100	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	3.5	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	150	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	130	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 22:59	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.51	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 22:59	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	3.2	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 22:59	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	140	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 22:59	LMB	IC1	1	BQB0332	ND	
Total Cations	8.9	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	9.1	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	220	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.16	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	932	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	560	mg/L	33	33	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	3.333	BQB0668	ND	
MBAS	ND	mg/L	0.20	0.078	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	2	BQB0560	ND	A01,A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:10	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-07 **Client Sample Name:** CAMPBELL RANCH, 2/2/2007 12:51:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	45	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:20	ARD	PE-OP1	1	BQB0675	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-08 **Client Sample Name:** 27138-09Q01, 2/2/2007 2:15:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	68	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	19	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	55	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	3.2	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	320	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Alkalinity as CaCO3	260	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Chloride	17	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 23:18	LMB	IC1	1	BQB0332	0.13	
Fluoride	0.11	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/06/07 23:18	LMB	IC1	1	BQB0332	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 23:18	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	81	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 23:18	LMB	IC1	1	BQB0332	ND	
Total Cations	7.4	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Total Anions	7.4	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	250	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:02	TMS	Calc	1	BQB0691	ND	
pH	8.08	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	682	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0420		
Total Dissolved Solids @ 180 C	430	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0668	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:10	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-08 | **Client Sample Name:** 27138-09Q01, 2/2/2007 2:15:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	820	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	430	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	59	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:24	ARD	PE-OP1	1	BQB0675	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-09 **Client Sample Name:** 27137-09C02, 2/2/2007 3:37:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	29	mg/L	0.10	0.018	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Magnesium	13	mg/L	0.050	0.019	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Sodium	290	mg/L	0.50	0.047	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Potassium	12	mg/L	1.0	0.13	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Bicarbonate	350	mg/L	12	12	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0886	ND	A01
Carbonate	18	mg/L	6.0	6.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0886	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0886	ND	A01
Alkalinity as CaCO3	320	mg/L	2.5	2.5	Calc	02/12/07	03/09/07 10:59	TMS	Calc	1	BQB0691	ND	
Chloride	140	mg/L	0.50	0.037	EPA-300.0	02/26/07	02/26/07 23:59	EDA	IC1	1	BQB0332	0.13	
Fluoride	1.9	mg/L	0.050	0.011	EPA-300.0	02/26/07	02/26/07 23:59	EDA	IC1	1	BQB0332	ND	
Nitrate as NO3	4.2	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 23:36	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	190	mg/L	1.0	0.11	EPA-300.0	02/26/07	02/26/07 23:59	EDA	IC1	1	BQB0332	ND	
Total Cations	15	meq/L	0.10	0.10	Calc	02/12/07	03/09/07 10:59	TMS	Calc	1	BQB0691	ND	
Total Anions	14	meq/L	0.10	0.10	Calc	02/12/07	03/09/07 10:59	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	130	mg/L	0.50	0.10	Calc	02/12/07	03/09/07 10:59	TMS	Calc	1	BQB0691	ND	
pH	8.32	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0424		
Electrical Conductivity @ 25 C	1440	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	980	mg/L	50	50	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	5	BQB0668	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 10:10	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-09 | **Client Sample Name:** 27137-09C02, 2/2/2007 3:37:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	44	ug/L	10	2.0	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Iron	21000	ug/L	50	41	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Manganese	720	ug/L	10	1.9	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	
Total Recoverable Zinc	92	ug/L	50	7.3	EPA-200.7	02/12/07	02/14/07 16:29	ARD	PE-OP1	1	BQB0675	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-10 **Client Sample Name:** 28138-18F01, 2/2/2007 4:30:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	1.9	mg/L	0.10	0.018	EPA-200.7	02/26/07	02/28/07 10:58	EMC	PE-OP2	1	BQB1599		
Total Recoverable Magnesium	0.25	mg/L	0.050	0.017	EPA-200.7	02/26/07	02/28/07 10:58	EMC	PE-OP2	1	BQB1599		
Total Recoverable Sodium	220	mg/L	0.50	0.047	EPA-200.7	02/26/07	02/28/07 10:58	EMC	PE-OP2	1	BQB1599		
Total Recoverable Potassium	2.0	mg/L	1.0	0.13	EPA-200.7	02/26/07	02/28/07 10:58	EMC	PE-OP2	1	BQB1599		
Bicarbonate	240	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Carbonate	66	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Alkalinity as CaCO3	300	mg/L	2.5	2.5	Calc	02/12/07	03/01/07 10:56	TMS	Calc	1	BQB0691	ND	
Chloride	35	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/06/07 23:55	LMB	IC1	1	BQB0332	0.13	
Fluoride	14	mg/L	0.25	0.055	EPA-300.0	02/06/07	02/07/07 11:32	LMB	IC1	5	BQB0332	ND	A01
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/06/07 23:55	LMB	IC1	1	BQB0332	ND	A26,S05
Sulfate	100	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/06/07 23:55	LMB	IC1	1	BQB0332	ND	
Total Cations	9.9	meq/L	0.10	0.10	Calc	02/12/07	03/01/07 10:56	TMS	Calc	1	BQB0691	ND	
Total Anions	9.8	meq/L	0.10	0.10	Calc	02/12/07	03/01/07 10:56	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	5.8	mg/L	0.50	0.10	Calc	02/12/07	03/01/07 10:56	TMS	Calc	1	BQB0691	ND	
pH	9.02	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	965	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	630	mg/L	33	33	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	3.333	BQB0668	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:17	TDC	KONE-1	1	BQB0478	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-10 **Client Sample Name:** 28138-18F01, 2/2/2007 4:30:00PM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 16:42	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Iron	850	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 16:42	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	19	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 16:42	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Zinc	14	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 16:42	ARD	PE-OP1	1	BQB0758	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-11 **Client Sample Name:** 27138-09C01, 2/3/2007 8:30:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	20	mg/L	0.10	0.018	EPA-200.7	02/26/07	02/28/07 11:04	EMC	PE-OP2	1	BQB1599		
Total Recoverable Magnesium	5.3	mg/L	0.050	0.017	EPA-200.7	02/26/07	02/28/07 11:04	EMC	PE-OP2	1	BQB1599		
Total Recoverable Sodium	140	mg/L	0.50	0.047	EPA-200.7	02/26/07	02/28/07 11:04	EMC	PE-OP2	1	BQB1599		
Total Recoverable Potassium	5.8	mg/L	1.0	0.13	EPA-200.7	02/26/07	02/28/07 11:04	EMC	PE-OP2	1	BQB1599		
Bicarbonate	130	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Carbonate	10	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0886	ND	A01
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	02/12/07	03/13/07 15:21	TMS	Calc	1	BQB0691	ND	
Chloride	29	mg/L	0.50	0.037	EPA-300.0	02/26/07	02/27/07 01:15	EDA	IC1	1	BQB0333	0.13	
Fluoride	0.66	mg/L	0.050	0.011	EPA-300.0	02/26/07	02/27/07 01:15	EDA	IC1	1	BQB0333	ND	
Nitrate as NO3	4.1	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/07/07 00:14	LMB	IC1	1	BQB0333	ND	A26,S05
Sulfate	130	mg/L	1.0	0.11	EPA-300.0	02/26/07	02/27/07 01:15	EDA	IC1	1	BQB0333	ND	
Total Cations	7.5	meq/L	0.10	0.10	Calc	02/12/07	03/13/07 15:21	TMS	Calc	1	BQB0691	ND	
Total Anions	6.1	meq/L	0.10	0.10	Calc	02/12/07	03/13/07 15:21	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	70	mg/L	0.50	0.10	Calc	02/12/07	03/13/07 15:21	TMS	Calc	1	BQB0691	ND	
pH	8.34	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	614	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	460	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0669	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:17	TDC	KONE-1	1	BQB0479	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-11 **Client Sample Name:** 27138-09C01, 2/3/2007 8:30:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	150	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 17:26	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Iron	28000	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 17:26	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	590	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 17:26	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Zinc	130	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 17:26	ARD	PE-OP1	1	BQB0758	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-12 **Client Sample Name:** 27138-10C02, 2/3/2007 10:35:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	2.7	mg/L	0.10	0.018	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Magnesium	0.097	mg/L	0.050	0.019	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Sodium	98	mg/L	0.50	0.047	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	0.051	
Total Recoverable Potassium	1.1	mg/L	1.0	0.13	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	
Bicarbonate	150	mg/L	2.9	2.9	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	
Carbonate	ND	mg/L	1.5	1.5	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	
Hydroxide	ND	mg/L	0.81	0.81	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	1	BQB0886	ND	
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Chloride	18	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/07/07 00:51	LMB	IC1	1	BQB0333	0.13	
Fluoride	0.42	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/07/07 00:51	LMB	IC1	1	BQB0333	ND	
Nitrate as NO3	4.2	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/07/07 00:51	LMB	IC1	1	BQB0333	ND	A26,S05
Sulfate	67	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/07/07 00:51	LMB	IC1	1	BQB0333	ND	
Total Cations	4.4	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Total Anions	4.4	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	7.2	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
pH	8.46	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	487	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	300	mg/L	20	20	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	2	BQB0669	ND	
MBAS	0.26	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	56	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:17	TDC	KONE-1	1	BQB0479	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-12 | **Client Sample Name:** 27138-10C02, 2/3/2007 10:35:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Iron	98	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	3.9	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	J
Total Recoverable Zinc	7.9	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 17:31	ARD	PE-OP1	1	BQB0758	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-13 **Client Sample Name:** Childers Well, 2/3/2007 11:06:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	91	mg/L	0.10	0.018	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Magnesium	21	mg/L	0.050	0.019	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Sodium	98	mg/L	0.50	0.047	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	0.051	
Total Recoverable Potassium	7.0	mg/L	1.0	0.13	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	
Bicarbonate	260	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0887	ND	A01
Carbonate	ND	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0887	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0887	ND	A01
Alkalinity as CaCO3	210	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Chloride	100	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/07/07 01:10	LMB	IC1	1	BQB0333	0.13	
Fluoride	0.74	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/07/07 01:10	LMB	IC1	1	BQB0333	ND	
Nitrate as NO3	20	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/07/07 01:10	LMB	IC1	1	BQB0333	ND	A26,S05
Sulfate	120	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/07/07 01:10	LMB	IC1	1	BQB0333	ND	
Total Cations	11	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Total Anions	10	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	320	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
pH	8.18	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	993	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	600	mg/L	33	33	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	3.333	BQB0669	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:17	TDC	KONE-1	1	BQB0479	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-13 **Client Sample Name:** Childers Well, 2/3/2007 11:06:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	9.1	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	J
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	ND	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Zinc	120	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 17:35	ARD	PE-OP1	1	BQB0758	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-14 **Client Sample Name:** Standard Well, 2/3/2007 11:25:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	57	mg/L	0.10	0.018	EPA-200.7	02/26/07	02/28/07 11:10	EMC	PE-OP2	1	BQB1599		
Total Recoverable Magnesium	13	mg/L	0.050	0.017	EPA-200.7	02/26/07	02/28/07 11:10	EMC	PE-OP2	1	BQB1599		
Total Recoverable Sodium	110	mg/L	0.50	0.047	EPA-200.7	02/26/07	02/28/07 11:10	EMC	PE-OP2	1	BQB1599		
Total Recoverable Potassium	3.9	mg/L	1.0	0.13	EPA-200.7	02/26/07	02/28/07 11:10	EMC	PE-OP2	1	BQB1599		
Bicarbonate	200	mg/L	5.8	5.8	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0887	ND	A01
Carbonate	3.4	mg/L	3.0	3.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0887	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	2	BQB0887	ND	A01
Alkalinity as CaCO3	170	mg/L	2.5	2.5	Calc	02/12/07	03/01/07 10:58	TMS	Calc	1	BQB0691	ND	
Chloride	85	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/07/07 03:22	LMB	IC1	1	BQB0333	0.13	
Fluoride	0.54	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/07/07 03:22	LMB	IC1	1	BQB0333	ND	
Nitrate as NO3	0.60	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/07/07 03:22	LMB	IC1	1	BQB0333	ND	A26,S05
Sulfate	140	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/07/07 03:22	LMB	IC1	1	BQB0333	ND	
Total Cations	8.9	meq/L	0.10	0.10	Calc	02/12/07	03/01/07 10:58	TMS	Calc	1	BQB0691	ND	
Total Anions	8.7	meq/L	0.10	0.10	Calc	02/12/07	03/01/07 10:58	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	200	mg/L	0.50	0.10	Calc	02/12/07	03/01/07 10:58	TMS	Calc	1	BQB0691	ND	
pH	8.23	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	886	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	560	mg/L	33	33	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	3.333	BQB0669	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:17	TDC	KONE-1	1	BQB0479	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-14 **Client Sample Name:** Standard Well, 2/3/2007 11:25:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 17:40	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Iron	ND	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 17:40	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	2.9	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 17:40	ARD	PE-OP1	1	BQB0758	ND	J
Total Recoverable Zinc	59	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 17:40	ARD	PE-OP1	1	BQB0758	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-15 | **Client Sample Name:** Sawmill Well, 2/4/2007 10:47:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	68	mg/L	0.10	0.018	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Magnesium	39	mg/L	0.050	0.019	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Sodium	350	mg/L	0.50	0.047	EPA-200.7	02/13/07	02/16/07 09:14	ARD	PE-OP1	1	BQB0758	0.051	
Total Recoverable Potassium	18	mg/L	1.0	0.13	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	
Bicarbonate	770	mg/L	12	12	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0887	ND	A01
Carbonate	ND	mg/L	6.0	6.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0887	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0887	ND	A01
Alkalinity as CaCO3	640	mg/L	2.5	2.5	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Chloride	180	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/07/07 01:29	LMB	IC1	1	BQB0333	0.13	
Fluoride	1.0	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/07/07 01:29	LMB	IC1	1	BQB0333	ND	
Nitrate as NO3	5.1	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/07/07 01:29	LMB	IC1	1	BQB0333	ND	A26,S05
Sulfate	180	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/07/07 01:29	LMB	IC1	1	BQB0333	ND	
Total Cations	22	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Total Anions	22	meq/L	0.10	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	330	mg/L	0.50	0.10	Calc	02/12/07	02/23/07 18:03	TMS	Calc	1	BQB0691	ND	
pH	8.13	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	1960	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	1100	mg/L	100	100	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	10	BQB0669	ND	
MBAS	ND	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:21	TDC	KONE-1	1	BQB0479	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-15 **Client Sample Name:** Sawmill Well, 2/4/2007 10:47:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	9.8	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	J
Total Recoverable Iron	5800	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	150	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Zinc	23	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 18:06	ARD	PE-OP1	1	BQB0758	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0701401-16 | **Client Sample Name:** Little Lake Outlet, 2/4/2007 11:15:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	53	mg/L	0.10	0.018	EPA-200.7	02/26/07	02/28/07 11:36	EMC	PE-OP2	1	BQB1599		
Total Recoverable Magnesium	75	mg/L	0.050	0.017	EPA-200.7	02/26/07	02/28/07 11:36	EMC	PE-OP2	1	BQB1599		
Total Recoverable Sodium	300	mg/L	0.50	0.047	EPA-200.7	02/26/07	02/28/07 11:36	EMC	PE-OP2	1	BQB1599		
Total Recoverable Potassium	26	mg/L	1.0	0.13	EPA-200.7	02/26/07	02/28/07 11:36	EMC	PE-OP2	1	BQB1599		
Bicarbonate	610	mg/L	12	12	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0887	ND	A01
Carbonate	110	mg/L	6.0	6.0	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0887	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	EPA-310.1	02/14/07	02/14/07 14:00	MAR	BDB	4	BQB0887	ND	A01
Alkalinity as CaCO3	690	mg/L	2.5	2.5	Calc	02/12/07	03/01/07 11:01	TMS	Calc	1	BQB0691	ND	
Chloride	210	mg/L	0.50	0.037	EPA-300.0	02/06/07	02/07/07 01:48	LMB	IC1	1	BQB0333	0.13	
Fluoride	1.1	mg/L	0.050	0.011	EPA-300.0	02/06/07	02/07/07 01:48	LMB	IC1	1	BQB0333	ND	
Nitrate as NO3	ND	mg/L	0.44	0.077	EPA-300.0	02/06/07	02/07/07 01:48	LMB	IC1	1	BQB0333	ND	A26,S05
Sulfate	190	mg/L	1.0	0.11	EPA-300.0	02/06/07	02/07/07 01:48	LMB	IC1	1	BQB0333	ND	
Total Cations	22	meq/L	0.10	0.10	Calc	02/12/07	03/01/07 11:01	TMS	Calc	1	BQB0691	ND	
Total Anions	24	meq/L	0.10	0.10	Calc	02/12/07	03/01/07 11:01	TMS	Calc	1	BQB0691	ND	
Hardness as CaCO3	440	mg/L	0.50	0.10	Calc	02/12/07	03/01/07 11:01	TMS	Calc	1	BQB0691	ND	
pH	8.60	pH Units	0.05	0.05	EPA-150.1	02/07/07	02/07/07 14:05	JSM	B360	1	BQB0425		
Electrical Conductivity @ 25 C	2080	umhos/cm	1.00	1.00	EPA-120.1	02/07/07	02/07/07 17:00	JSM	CND-3	1	BQB0421		
Total Dissolved Solids @ 180 C	1300	mg/L	100	100	EPA-160.1	02/08/07	02/08/07 14:30	VEL	MANUAL	10	BQB0669	ND	
MBAS	0.13	mg/L	0.10	0.039	EPA-425.1	02/07/07	02/07/07 07:45	SLC	SPEC05	1	BQB0560	ND	A26,S05
Nitrite as N	ND	ug/L	50	12	EPA-353.2	02/07/07	02/07/07 11:21	TDC	KONE-1	1	BQB0479	ND	A26,S05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:16
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0701401-16 | **Client Sample Name:** Little Lake Outlet, 2/4/2007 11:15:00AM, Mike Stoner

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Copper	ND	ug/L	10	2.0	EPA-200.7	02/13/07	02/14/07 18:11	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Iron	890	ug/L	50	41	EPA-200.7	02/13/07	02/14/07 18:11	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Manganese	64	ug/L	10	1.9	EPA-200.7	02/13/07	02/14/07 18:11	ARD	PE-OP1	1	BQB0758	ND	
Total Recoverable Zinc	ND	ug/L	50	7.3	EPA-200.7	02/13/07	02/14/07 18:11	ARD	PE-OP1	1	BQB0758	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:16

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQB0332	Duplicate	0701401-01	32.819	32.812		mg/L	0.0		10		
		Matrix Spike	0701401-01	32.819	139.58	101.01	mg/L		106		80 - 120	
		Matrix Spike Duplicate	0701401-01	32.819	141.46	101.01	mg/L	1.9	108	10	80 - 120	
Fluoride	BQB0332	Duplicate	0701401-01	0.61900	0.61800		mg/L	0.2		10		
		Matrix Spike	0701401-01	0.61900	1.7444	1.0101	mg/L		111		80 - 120	
		Matrix Spike Duplicate	0701401-01	0.61900	1.6394	1.0101	mg/L	9.4	101	10	80 - 120	
Nitrate as NO3	BQB0332	Duplicate	0701401-01	ND	ND		mg/L			10		A26,S05
		Matrix Spike	0701401-01	ND	21.709	22.358	mg/L		97.1		80 - 120	A26,S05
		Matrix Spike Duplicate	0701401-01	ND	22.040	22.358	mg/L	1.5	98.6	10	80 - 120	A26,S05
Sulfate	BQB0332	Duplicate	0701401-01	21.999	21.964		mg/L	0.2		10		
		Matrix Spike	0701401-01	21.999	121.23	101.01	mg/L		98.2		80 - 120	
		Matrix Spike Duplicate	0701401-01	21.999	123.08	101.01	mg/L	1.8	100	10	80 - 120	
Chloride	BQB0333	Duplicate	0701401-14	84.775	85.094		mg/L	0.4		10		
		Matrix Spike	0701401-14	84.775	190.74	101.01	mg/L		105		80 - 120	
		Matrix Spike Duplicate	0701401-14	84.775	189.73	101.01	mg/L	1.0	104	10	80 - 120	
Fluoride	BQB0333	Duplicate	0701401-14	0.54400	0.57400		mg/L	5.4		10		
		Matrix Spike	0701401-14	0.54400	1.6333	1.0101	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0701401-14	0.54400	1.5707	1.0101	mg/L	5.7	102	10	80 - 120	
Nitrate as NO3	BQB0333	Duplicate	0701401-14	0.59762	0.60647		mg/L	1.5		10		A26,S05
		Matrix Spike	0701401-14	0.59762	22.219	22.358	mg/L		96.7		80 - 120	A26,S05
		Matrix Spike Duplicate	0701401-14	0.59762	22.237	22.358	mg/L	0.1	96.8	10	80 - 120	A26,S05
Sulfate	BQB0333	Duplicate	0701401-14	140.14	140.55		mg/L	0.3		10		
		Matrix Spike	0701401-14	140.14	241.07	101.01	mg/L		99.9		80 - 120	
		Matrix Spike Duplicate	0701401-14	140.14	239.75	101.01	mg/L	1.3	98.6	10	80 - 120	
Electrical Conductivity @ 25 C	BQB0420	Duplicate	0701390-03	3560.0	3540.0		umhos/cm	0.6		10		
Electrical Conductivity @ 25 C	BQB0421	Duplicate	0701401-09	1440.0	1430.0		umhos/cm	0.7		10		
pH	BQB0424	Duplicate	0701390-03	4.2140	4.2010		pH Units	0.3		20		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
pH	BQB0425	Duplicate	0701401-10	9.0250	9.0410		pH Units	0.2		20		
Nitrite as N	BQB0478	Duplicate	0701401-01	ND	ND		ug/L			10		A26,S05
		Matrix Spike	0701401-01	ND	528.26	526.32	ug/L		100		90 - 110	A26,S05
		Matrix Spike Duplicate	0701401-01	ND	531.99	526.32	ug/L	1.0	101	10	90 - 110	A26,S05
Nitrite as N	BQB0479	Duplicate	0701401-11	ND	ND		ug/L			10		A26,S05
		Matrix Spike	0701401-11	ND	531.79	526.32	ug/L		101		90 - 110	A26,S05
		Matrix Spike Duplicate	0701401-11	ND	533.83	526.32	ug/L	0	101	10	90 - 110	A26,S05
MBAS	BQB0559	Duplicate	0701344-01	ND	ND		mg/L			20		A01
		Matrix Spike	0701344-01	ND	0.38180	0.40000	mg/L		95.4		80 - 120	A01
		Matrix Spike Duplicate	0701344-01	ND	0.38180	0.40000	mg/L	0	95.4	20	80 - 120	A01
MBAS	BQB0560	Duplicate	0701401-07	ND	ND		mg/L			20		A01,A26,S05
		Matrix Spike	0701401-07	ND	0.37840	0.40000	mg/L		94.6		80 - 120	A01,A26,S05
		Matrix Spike Duplicate	0701401-07	ND	0.37840	0.40000	mg/L	0	94.6	20	80 - 120	A01,A26,S05
Total Dissolved Solids @ 180 C	BQB0668	Duplicate	0701401-01	246.00	248.00		mg/L	0.8		10		A26,S05
Total Dissolved Solids @ 180 C	BQB0669	Duplicate	0701401-11	456.00	450.00		mg/L	1.3		10		
Total Recoverable Calcium	BQB0675	Duplicate	0701450-01	49.865	49.932		mg/L	0.1		20		
		Matrix Spike	0701450-01	49.865	60.328	10.000	mg/L		105		75 - 125	
		Matrix Spike Duplicate	0701450-01	49.865	59.319	10.000	mg/L	10.5	94.5	20	75 - 125	
Total Recoverable Magnesium	BQB0675	Duplicate	0701450-01	17.774	17.862		mg/L	0.5		20		
		Matrix Spike	0701450-01	17.774	27.852	10.000	mg/L		101		75 - 125	
		Matrix Spike Duplicate	0701450-01	17.774	27.402	10.000	mg/L	4.8	96.3	20	75 - 125	
Total Recoverable Sodium	BQB0675	Duplicate	0701450-01	42.818	43.138		mg/L	0.7		20		
		Matrix Spike	0701450-01	42.818	52.858	10.000	mg/L		100		75 - 125	
		Matrix Spike Duplicate	0701450-01	42.818	52.988	10.000	mg/L	2.0	102	20	75 - 125	
Total Recoverable Potassium	BQB0675	Duplicate	0701450-01	14.405	14.589		mg/L	1.3		20		
		Matrix Spike	0701450-01	14.405	25.052	10.000	mg/L		106		75 - 125	
		Matrix Spike Duplicate	0701450-01	14.405	24.642	10.000	mg/L	3.8	102	20	75 - 125	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Calcium	BQB0758	Duplicate	0701380-01	25.455	25.573		mg/L	0.5		20		
		Matrix Spike	0701380-01	25.455	36.898	10.000	mg/L		114		75 - 125	
		Matrix Spike Duplicate	0701380-01	25.455	36.076	10.000	mg/L	7.3	106	20	75 - 125	
Total Recoverable Magnesium	BQB0758	Duplicate	0701380-01	8.8765	8.9355		mg/L	0.7		20		
		Matrix Spike	0701380-01	8.8765	19.370	10.000	mg/L		105		75 - 125	
		Matrix Spike Duplicate	0701380-01	8.8765	19.053	10.000	mg/L	2.9	102	20	75 - 125	
Total Recoverable Sodium	BQB0758	Duplicate	0701380-01	49.650	49.993		mg/L	0.7		20		
		Matrix Spike	0701380-01	49.650	61.574	10.000	mg/L		119		75 - 125	
		Matrix Spike Duplicate	0701380-01	49.650	61.038	10.000	mg/L	4.3	114	20	75 - 125	
Total Recoverable Potassium	BQB0758	Duplicate	0701380-01	1.3651	1.3816		mg/L	1.2		20		
		Matrix Spike	0701380-01	1.3651	11.504	10.000	mg/L		101		75 - 125	
		Matrix Spike Duplicate	0701380-01	1.3651	11.114	10.000	mg/L	3.5	97.5	20	75 - 125	
Bicarbonate	BQB0886	Duplicate	0701401-04	197.08	193.60		mg/L	1.8		10		A01,A26,S05
		Matrix Spike	0701401-04	197.08	348.96	152.38	mg/L		99.7		80 - 120	A01,A26,S05
		Matrix Spike Duplicate	0701401-04	197.08	350.12	152.38	mg/L	0.3	100	10	80 - 120	A01,A26,S05
Carbonate	BQB0886	Duplicate	0701401-04	ND	ND		mg/L			10		A01,A26,S05
Hydroxide	BQB0886	Duplicate	0701401-04	ND	ND		mg/L			10		A01,A26,S05
Bicarbonate	BQB0887	Duplicate	0701401-13	259.68	260.84		mg/L	0.4		10		A01
		Matrix Spike	0701401-13	259.68	415.04	152.38	mg/L		102		80 - 120	A01
		Matrix Spike Duplicate	0701401-13	259.68	412.72	152.38	mg/L	2.0	100	10	80 - 120	A01
Carbonate	BQB0887	Duplicate	0701401-13	ND	ND		mg/L			10		A01
Hydroxide	BQB0887	Duplicate	0701401-13	ND	ND		mg/L			10		A01

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Copper	BQB0675	Duplicate	0701450-01	2.9496	2.8409		ug/L	3.8		20		J
		Matrix Spike	0701450-01	2.9496	201.76	200.00	ug/L		99.4		75 - 125	
		Matrix Spike Duplicate	0701450-01	2.9496	204.13	200.00	ug/L	1.6	101	20	75 - 125	
Total Recoverable Iron	BQB0675	Duplicate	0701450-01	208.52	216.16		ug/L	3.6		20		
		Matrix Spike	0701450-01	208.52	645.59	400.00	ug/L		109		75 - 125	
		Matrix Spike Duplicate	0701450-01	208.52	655.57	400.00	ug/L	2.7	112	20	75 - 125	
Total Recoverable Manganese	BQB0675	Duplicate	0701450-01	6.3616	6.4432		ug/L	1.3		20		J
		Matrix Spike	0701450-01	6.3616	221.66	200.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0701450-01	6.3616	220.29	200.00	ug/L	0.9	107	20	75 - 125	
Total Recoverable Zinc	BQB0675	Duplicate	0701450-01	ND	10.534		ug/L			20		J
		Matrix Spike	0701450-01	ND	210.28	200.00	ug/L		105		75 - 125	
		Matrix Spike Duplicate	0701450-01	ND	211.86	200.00	ug/L	0.9	106	20	75 - 125	
Total Recoverable Copper	BQB0758	Duplicate	0701380-01	ND	ND		ug/L			20		
		Matrix Spike	0701380-01	ND	205.18	200.00	ug/L		103		75 - 125	
		Matrix Spike Duplicate	0701380-01	ND	205.40	200.00	ug/L	0	103	20	75 - 125	
Total Recoverable Iron	BQB0758	Duplicate	0701380-01	ND	ND		ug/L			20		
		Matrix Spike	0701380-01	ND	477.95	400.00	ug/L		119		75 - 125	
		Matrix Spike Duplicate	0701380-01	ND	460.58	400.00	ug/L	3.4	115	20	75 - 125	
Total Recoverable Manganese	BQB0758	Duplicate	0701380-01	3.9468	2.7038		ug/L	37.4		20		J,A02
		Matrix Spike	0701380-01	3.9468	224.96	200.00	ug/L		111		75 - 125	
		Matrix Spike Duplicate	0701380-01	3.9468	222.76	200.00	ug/L	1.8	109	20	75 - 125	
Total Recoverable Zinc	BQB0758	Duplicate	0701380-01	8.1056	7.5842		ug/L	6.6		20		J
		Matrix Spike	0701380-01	8.1056	226.02	200.00	ug/L		109		75 - 125	
		Matrix Spike Duplicate	0701380-01	8.1056	221.10	200.00	ug/L	2.8	106	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:16

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQB0332	BQB0332-BS1	LCS	101.52	100.00	0.50	mg/L	102		90 - 110		
Fluoride	BQB0332	BQB0332-BS1	LCS	1.0120	1.0000	0.050	mg/L	101		90 - 110		
Nitrate as NO3	BQB0332	BQB0332-BS1	LCS	21.656	22.134	0.44	mg/L	97.8		90 - 110		
Sulfate	BQB0332	BQB0332-BS1	LCS	98.155	100.00	1.0	mg/L	98.2		90 - 110		
Chloride	BQB0333	BQB0333-BS1	LCS	101.20	100.00	0.50	mg/L	101		90 - 110		
Fluoride	BQB0333	BQB0333-BS1	LCS	0.99500	1.0000	0.050	mg/L	99.5		90 - 110		
Nitrate as NO3	BQB0333	BQB0333-BS1	LCS	21.620	22.134	0.44	mg/L	97.7		90 - 110		
Sulfate	BQB0333	BQB0333-BS1	LCS	98.028	100.00	1.0	mg/L	98.0		90 - 110		
Electrical Conductivity @ 25 C	BQB0420	BQB0420-BS1	LCS	320.00	303.00	1.00	umhos/cm	106		90 - 110		
Electrical Conductivity @ 25 C	BQB0421	BQB0421-BS1	LCS	320.00	303.00	1.00	umhos/cm	106		90 - 110		
pH	BQB0424	BQB0424-BS1	LCS	7.0350	7.0000	0.10	pH Units	100		95 - 105		
pH	BQB0425	BQB0425-BS1	LCS	7.0310	7.0000	0.10	pH Units	100		95 - 105		
Nitrite as N	BQB0478	BQB0478-BS1	LCS	499.82	500.00	50	ug/L	100		90 - 110		
Nitrite as N	BQB0479	BQB0479-BS1	LCS	502.32	500.00	50	ug/L	100		90 - 110		
MBAS	BQB0559	BQB0559-BS1	LCS	0.18920	0.20000	0.10	mg/L	94.6		85 - 115		
MBAS	BQB0560	BQB0560-BS1	LCS	0.18920	0.20000	0.10	mg/L	94.6		85 - 115		
Total Dissolved Solids @ 180 C	BQB0668	BQB0668-BS1	LCS	560.00	586.00	50	mg/L	95.6		90 - 110		
Total Dissolved Solids @ 180 C	BQB0669	BQB0669-BS1	LCS	560.00	586.00	50	mg/L	95.6		90 - 110		
Total Recoverable Calcium	BQB0675	BQB0675-BS1	LCS	10.453	10.000	0.10	mg/L	105		85 - 115		
Total Recoverable Magnesium	BQB0675	BQB0675-BS1	LCS	10.183	10.000	0.050	mg/L	102		85 - 115		
Total Recoverable Sodium	BQB0675	BQB0675-BS1	LCS	10.041	10.000	0.50	mg/L	100		85 - 115		
Total Recoverable Potassium	BQB0675	BQB0675-BS1	LCS	9.7436	10.000	1.0	mg/L	97.4		85 - 115		
Total Recoverable Calcium	BQB0758	BQB0758-BS1	LCS	10.567	10.000	0.10	mg/L	106		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:16

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Magnesium	BQB0758	BQB0758-BS1	LCS	10.318	10.000	0.050	mg/L	103		85 - 115		
Total Recoverable Sodium	BQB0758	BQB0758-BS1	LCS	10.130	10.000	0.50	mg/L	101		85 - 115		
Total Recoverable Potassium	BQB0758	BQB0758-BS1	LCS	10.062	10.000	1.0	mg/L	101		85 - 115		
Bicarbonate	BQB0886	BQB0886-BS1	LCS	128.11	121.90	2.9	mg/L	105		90 - 110		
Bicarbonate	BQB0887	BQB0887-BS1	LCS	128.11	121.90	2.9	mg/L	105		90 - 110		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Copper	BQB0675	BQB0675-BS1	LCS	193.57	200.00	10	ug/L	96.8		85 - 115		
Total Recoverable Iron	BQB0675	BQB0675-BS1	LCS	430.95	400.00	50	ug/L	108		85 - 115		
Total Recoverable Manganese	BQB0675	BQB0675-BS1	LCS	215.05	200.00	10	ug/L	108		85 - 115		
Total Recoverable Zinc	BQB0675	BQB0675-BS1	LCS	220.37	200.00	50	ug/L	110		85 - 115		
Total Recoverable Copper	BQB0758	BQB0758-BS1	LCS	196.81	200.00	10	ug/L	98.4		85 - 115		
Total Recoverable Iron	BQB0758	BQB0758-BS1	LCS	443.61	400.00	50	ug/L	111		85 - 115		
Total Recoverable Manganese	BQB0758	BQB0758-BS1	LCS	217.59	200.00	10	ug/L	109		85 - 115		
Total Recoverable Zinc	BQB0758	BQB0758-BS1	LCS	219.58	200.00	50	ug/L	110		85 - 115		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQB0332	BQB0332-BLK1	0.12600	mg/L	0.50	0.037	J
Fluoride	BQB0332	BQB0332-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQB0332	BQB0332-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQB0332	BQB0332-BLK1	ND	mg/L	1.0	0.11	
Chloride	BQB0333	BQB0333-BLK1	0.13200	mg/L	0.50	0.037	J
Fluoride	BQB0333	BQB0333-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQB0333	BQB0333-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQB0333	BQB0333-BLK1	ND	mg/L	1.0	0.11	
Nitrite as N	BQB0478	BQB0478-BLK1	ND	ug/L	50	12	
Nitrite as N	BQB0479	BQB0479-BLK1	ND	ug/L	50	12	
MBAS	BQB0559	BQB0559-BLK1	ND	mg/L	0.10	0.039	
MBAS	BQB0560	BQB0560-BLK1	ND	mg/L	0.10	0.039	
Total Dissolved Solids @ 180 C	BQB0668	BQB0668-BLK1	ND	mg/L	6.7	6.7	
Total Dissolved Solids @ 180 C	BQB0669	BQB0669-BLK1	ND	mg/L	6.7	6.7	
Total Recoverable Calcium	BQB0675	BQB0675-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQB0675	BQB0675-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQB0675	BQB0675-BLK1	ND	mg/L	0.50	0.047	
Total Recoverable Potassium	BQB0675	BQB0675-BLK1	ND	mg/L	1.0	0.13	
Alkalinity as CaCO3	BQB0691	BQB0691-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQB0691	BQB0691-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQB0691	BQB0691-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQB0691	BQB0691-BLK1	ND	mg/L	0.50	0.10	
Total Recoverable Calcium	BQB0758	BQB0758-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQB0758	BQB0758-BLK1	ND	mg/L	0.050	0.019	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:16

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Sodium	BQB0758	BQB0758-BLK1	0.051231	mg/L	0.50	0.047	J
Total Recoverable Potassium	BQB0758	BQB0758-BLK1	ND	mg/L	1.0	0.13	
Bicarbonate	BQB0886	BQB0886-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQB0886	BQB0886-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQB0886	BQB0886-BLK1	ND	mg/L	0.81	0.81	
Bicarbonate	BQB0887	BQB0887-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQB0887	BQB0887-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQB0887	BQB0887-BLK1	ND	mg/L	0.81	0.81	

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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Copper	BQB0675	BQB0675-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQB0675	BQB0675-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQB0675	BQB0675-BLK1	ND	ug/L	10	1.9	
Total Recoverable Zinc	BQB0675	BQB0675-BLK1	ND	ug/L	50	7.3	
Total Recoverable Copper	BQB0758	BQB0758-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQB0758	BQB0758-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQB0758	BQB0758-BLK1	ND	ug/L	10	1.9	
Total Recoverable Zinc	BQB0758	BQB0758-BLK1	ND	ug/L	50	7.3	

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Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A26	Sample received past holding time.
S05	The sample holding time was exceeded.

Date of Report: 03/27/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0702234

Enclosed are the results of analyses for samples received by the laboratory on 02/22/2007 11:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0702234-01	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/11/2007 13:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	26139-14 PO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-02	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/11/2007 15:01
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	26139-09 HO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-03	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/11/2007 16:02
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	26139-09 MO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-04	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/11/2007 16:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	25139-31 RO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-05	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/12/2007 10:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	25138-13 JO1	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0702234-06	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/14/2007 12:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	NAVY WELL 15	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-07	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/14/2007 12:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	NAVY WELL 30	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-08	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/14/2007 12:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	NAvY WELL 31	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-09	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	01/15/2007 11:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	NAVY WELL LB	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-10	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/02/2007 12:51
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	CAMBELL RANCH	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0702234-11	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/02/2007 14:51
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138 - 09 QO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-12	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/02/2007 15:37
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27137 - 09 Q02	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-13	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/02/2007 16:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	28138 - 18 FO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-14	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/03/2007 08:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138 - 09 CO1	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-15	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/03/2007 10:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138 - 10 CO2	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0702234-16	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/03/2007 11:06
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	CHILDERS WELL	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-17	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/03/2007 11:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	STANDARD WELL	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-18	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/04/2007 10:47
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SAWMILL WELL	**Sample Matrix:**	Water
	Sampled By:	---		
0702234-19	**COC Number:**	---	**Receive Date:**	02/22/2007 11:10
	Project Number:	---	**Sampling Date:**	02/04/2007 11:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	LITTLE LAKE OUTLET	**Sample Matrix:**	Water
	Sampled By:	---		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-01 **Client Sample Name:** 26139-14 PO1, 1/11/2007 1:35:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 17:02	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	7.2	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	22	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 17:02	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	140	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 17:02	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 17:02	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 11:55	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 17:02	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 17:02	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:03	PPS	PE-EL1	1	BQB1596	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-02 **Client Sample Name:** 26139-09 HO1, 1/11/2007 3:01:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 17:07	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	7.1	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	20	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 17:07	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	460	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 17:07	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 17:07	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	0.16	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:05	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 17:07	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	1.1	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 17:07	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:06	PPS	PE-EL1	1	BQB1596	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-03 **Client Sample Name:** 26139-09 MO1, 1/11/2007 4:02:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 17:14	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Arsenic	3.5	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Barium	ND	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 17:14	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Boron	840	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 17:14	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 17:14	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:07	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 17:14	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 17:14	EMC	PE-OP2	1	BQB1600	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:09	PPS	PE-EL1	1	BQB1596	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-04 **Client Sample Name:** 25139-31 RO1, 1/11/2007 4:55:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 17:51	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	1.4	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Barium	33	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 17:51	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	810	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 17:51	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	1.9	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 17:51	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:10	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 17:51	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	1.1	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 17:51	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:45	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number:	[none]	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-05 **Client Sample Name:** 25138-13 JO1, 1/12/2007 10:30:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	2600	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 18:28	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	81	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 18:28	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	0.072	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Boron	340	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 18:28	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	0.17	
Total Recoverable Chromium	3.1	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 18:28	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Lead	0.91	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	0.16	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:16	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	4.3	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 18:28	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 18:28	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:13	PPS	PE-EL1	1	BQB1603	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-06 **Client Sample Name:** NAVY WELL 15, 1/14/2007 12:25:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 18:35	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Barium	34	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 18:35	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	210	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 18:35	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 18:35	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	0.15	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:18	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 18:35	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	1.2	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 18:35	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:56	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-07 **Client Sample Name:** NAVY WELL 30, 1/14/2007 12:45:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 18:41	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	3.3	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Barium	23	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 18:41	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	170	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 18:41	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 18:41	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	ND	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:20	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 18:41	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	0.86	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 18:41	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 13:59	PPS	PE-EL1	1	BQB1597	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-08 **Client Sample Name:** NAvY WELL 31, 1/14/2007 12:55:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 18:47	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	2.7	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Barium	18	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 18:47	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	160	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 18:47	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 18:47	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	0.21	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:22	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 18:47	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	0.83	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 18:47	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:02	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-09 **Client Sample Name:** NAVY WELL LB, 1/15/2007 11:40:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 19:12	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	3.3	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Barium	41	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 19:12	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	3100	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 19:12	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 19:12	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	0.28	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:25	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 19:12	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 19:12	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:05	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-10 **Client Sample Name:** CAMBELL RANCH, 2/2/2007 12:51:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 19:18	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	0.89	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Barium	49	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 19:18	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	720	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 19:18	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 19:18	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	0.25	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:27	PRA	CETAC1	1	BQC0160	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 19:18	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	0.98	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 19:18	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:08	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-11 | **Client Sample Name:** 27138 - 09 QO1, 2/2/2007 2:51:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	2200	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 19:24	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Arsenic	11	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	39	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 19:24	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	0.053	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Boron	180	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 19:24	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	0.21	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	0.17	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 19:24	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	2.3	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	0.16	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:37	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	6.2	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 19:24	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 19:24	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:15	PPS	PE-EL1	1	BQB1603	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-12 **Client Sample Name:** 27137 - 09 Q02, 2/2/2007 3:37:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	12000	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 19:31	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	6.2	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Arsenic	79	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	54	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 19:31	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Beryllium	0.31	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Boron	630	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 19:31	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	0.32	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	0.17	J
Total Recoverable Chromium	1.8	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 19:31	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Lead	3.4	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	0.16	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:48	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	5.6	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 19:31	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Selenium	4.5	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 19:31	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:18	PPS	PE-EL1	1	BQB1603	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-13 **Client Sample Name:** 28138 - 18 FO1, 2/2/2007 4:30:00PM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	79	ug/L	50	36	EPA-200.7	02/27/07	02/28/07 19:37	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	66	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Barium	4.0	ug/L	10	1.7	EPA-200.7	02/27/07	02/28/07 19:37	EMC	PE-OP2	1	BQB1601	ND	J
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	2200	ug/L	100	12	EPA-200.7	02/27/07	02/28/07 19:37	EMC	PE-OP2	1	BQB1601	15	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/27/07	02/28/07 19:37	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Lead	0.60	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:50	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/27/07	02/28/07 19:37	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Selenium	ND	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/27/07	02/28/07 19:37	EMC	PE-OP2	1	BQB1601	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:11	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-14 **Client Sample Name:** 27138 - 09 CO1, 2/3/2007 8:30:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	4000	ug/L	50	36	EPA-200.7	02/28/07	02/28/07 21:18	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Arsenic	6.8	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	26	ug/L	10	1.7	EPA-200.7	02/28/07	02/28/07 21:18	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Beryllium	0.087	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Boron	210	ug/L	100	12	EPA-200.7	02/28/07	02/28/07 21:18	EMC	PE-OP2	1	BQB1664	24	
Total Recoverable Cadmium	0.14	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	0.17	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/28/07	02/28/07 21:18	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Lead	1.8	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	0.16	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:53	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	4.1	ug/L	10	3.4	EPA-200.7	02/28/07	02/28/07 21:18	EMC	PE-OP2	1	BQB1664	ND	J
Total Recoverable Selenium	0.80	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/28/07	02/28/07 21:18	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:21	PPS	PE-EL1	1	BQB1603	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-15 | **Client Sample Name:** 27138 - 10 CO2, 2/3/2007 10:35:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	15000	ug/L	50	36	EPA-200.7	02/28/07	02/28/07 21:24	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Antimony	0.72	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Arsenic	5.0	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	ND	
Total Recoverable Barium	75	ug/L	10	1.7	EPA-200.7	02/28/07	02/28/07 21:24	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Beryllium	0.60	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Boron	270	ug/L	100	12	EPA-200.7	02/28/07	02/28/07 21:24	EMC	PE-OP2	1	BQB1664	24	
Total Recoverable Cadmium	0.39	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	0.17	J
Total Recoverable Chromium	2.4	ug/L	10	1.6	EPA-200.7	02/28/07	02/28/07 21:24	EMC	PE-OP2	1	BQB1664	ND	J
Total Recoverable Lead	6.0	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	0.16	
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 12:59	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	8.5	ug/L	10	3.4	EPA-200.7	02/28/07	02/28/07 21:24	EMC	PE-OP2	1	BQB1664	ND	J
Total Recoverable Selenium	1.9	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/28/07	02/28/07 21:24	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/27/07 15:24	PPS	PE-EL1	1	BQB1603	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-16 **Client Sample Name:** CHILDERS WELL, 2/3/2007 11:06:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/28/07	02/28/07 20:40	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	1.7	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Barium	130	ug/L	10	1.7	EPA-200.7	02/28/07	02/28/07 20:40	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	620	ug/L	100	12	EPA-200.7	02/28/07	02/28/07 20:40	EMC	PE-OP2	1	BQB1664	24	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/28/07	02/28/07 20:40	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Lead	0.17	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 13:01	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/28/07	02/28/07 20:40	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Selenium	2.0	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/28/07	02/28/07 20:40	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:19	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-17 **Client Sample Name:** STANDARD WELL, 2/3/2007 11:25:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/28/07	02/28/07 21:31	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	1.2	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Barium	35	ug/L	10	1.7	EPA-200.7	02/28/07	02/28/07 21:31	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	820	ug/L	100	12	EPA-200.7	02/28/07	02/28/07 21:31	EMC	PE-OP2	1	BQB1664	24	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/28/07	02/28/07 21:31	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Lead	0.16	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	0.030	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 13:03	PRA	CETAC1	1	BQC0161	ND	J,A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/28/07	02/28/07 21:31	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Selenium	0.83	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/28/07	02/28/07 21:31	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:22	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-18 **Client Sample Name:** SAWMILL WELL, 2/4/2007 10:47:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	ND	ug/L	50	36	EPA-200.7	02/28/07	02/28/07 21:57	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Arsenic	6.7	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Barium	38	ug/L	10	1.7	EPA-200.7	02/28/07	02/28/07 21:57	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Boron	7400	ug/L	100	12	EPA-200.7	02/28/07	02/28/07 21:57	EMC	PE-OP2	1	BQB1664	24	
Total Recoverable Cadmium	ND	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/28/07	02/28/07 21:57	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Lead	0.21	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 13:05	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/28/07	02/28/07 21:57	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Selenium	1.4	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/28/07	02/28/07 21:57	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 14:25	PPS	PE-EL1	1	BQB1597	ND	

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 03/27/2007 11:18
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0702234-19 **Client Sample Name:** LITTLE LAKE OUTLET, 2/4/2007 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	140	ug/L	50	36	EPA-200.7	02/28/07	02/28/07 22:03	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Antimony	0.92	ug/L	2.0	0.39	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	ND	J
Total Recoverable Arsenic	86	ug/L	2.0	0.89	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	ND	
Total Recoverable Barium	34	ug/L	10	1.7	EPA-200.7	02/28/07	02/28/07 22:03	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.016	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	ND	
Total Recoverable Boron	5700	ug/L	100	12	EPA-200.7	02/28/07	02/28/07 22:03	EMC	PE-OP2	1	BQB1664	24	
Total Recoverable Cadmium	0.10	ug/L	1.0	0.088	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	ND	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	02/28/07	02/28/07 22:03	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Lead	0.24	ug/L	1.0	0.12	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	0.12	J
Total Recoverable Mercury	ND	ug/L	0.20	0.026	EPA-245.1	03/02/07	03/05/07 13:08	PRA	CETAC1	1	BQC0161	ND	A26,S05
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	02/28/07	02/28/07 22:03	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Selenium	0.56	ug/L	2.0	0.54	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	02/28/07	02/28/07 22:03	EMC	PE-OP2	1	BQB1664	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.13	EPA-200.8	02/27/07	02/28/07 16:18	PPS	PE-EL1	1	BQB1604	ND	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Antimony	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.612	20.408	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	21.467	20.408	ug/L	3.9	105	20	70 - 130	
Total Recoverable Arsenic	BQB1596	Duplicate	0701983-01	1.1640	0.98200		ug/L	17.0		20		J
		Matrix Spike	0701983-01	1.1640	54.477	51.020	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0701983-01	1.1640	56.263	51.020	ug/L	3.8	108	20	70 - 130	
Total Recoverable Beryllium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.852	20.408	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	22.407	20.408	ug/L	7.5	110	20	70 - 130	
Total Recoverable Cadmium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	20.143	20.408	ug/L		98.7		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	21.162	20.408	ug/L	5.2	104	20	70 - 130	
Total Recoverable Lead	BQB1596	Duplicate	0701983-01	0.43200	0.40900		ug/L	5.5		20		J
		Matrix Spike	0701983-01	0.43200	51.840	51.020	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701983-01	0.43200	54.514	51.020	ug/L	4.8	106	20	70 - 130	
Total Recoverable Selenium	BQB1596	Duplicate	0701983-01	5.3400	5.3120		ug/L	0.5		20		
		Matrix Spike	0701983-01	5.3400	62.629	51.020	ug/L		112		70 - 130	
		Matrix Spike Duplicate	0701983-01	5.3400	64.250	51.020	ug/L	2.6	115	20	70 - 130	
Total Recoverable Thallium	BQB1596	Duplicate	0701983-01	ND	ND		ug/L			20		
		Matrix Spike	0701983-01	ND	19.829	20.408	ug/L		97.2		70 - 130	
		Matrix Spike Duplicate	0701983-01	ND	20.857	20.408	ug/L	4.8	102	20	70 - 130	
Total Recoverable Antimony	BQB1597	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	20.379	20.408	ug/L		99.9		70 - 130	
		Matrix Spike Duplicate	0702234-04	ND	21.001	20.408	ug/L	3.1	103	20	70 - 130	
Total Recoverable Arsenic	BQB1597	Duplicate	0702234-04	1.4290	1.5370		ug/L	7.3		20		J
		Matrix Spike	0702234-04	1.4290	54.093	51.020	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0702234-04	1.4290	54.737	51.020	ug/L	1.0	104	20	70 - 130	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Beryllium	BQB1597	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	20.745	20.408	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0702234-04	ND	21.039	20.408	ug/L	1.0	103	20	70 - 130	
Total Recoverable Cadmium	BQB1597	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	20.167	20.408	ug/L		98.8		70 - 130	
		Matrix Spike Duplicate	0702234-04	ND	20.977	20.408	ug/L	4.2	103	20	70 - 130	
Total Recoverable Lead	BQB1597	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	51.196	51.020	ug/L		100		70 - 130	
		Matrix Spike Duplicate	0702234-04	ND	52.533	51.020	ug/L	3.0	103	20	70 - 130	
Total Recoverable Selenium	BQB1597	Duplicate	0702234-04	1.0860	1.1900		ug/L	9.1		20		J
		Matrix Spike	0702234-04	1.0860	57.288	51.020	ug/L		110		70 - 130	
		Matrix Spike Duplicate	0702234-04	1.0860	58.144	51.020	ug/L	1.8	112	20	70 - 130	
Total Recoverable Thallium	BQB1597	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	19.902	20.408	ug/L		97.5		70 - 130	
		Matrix Spike Duplicate	0702234-04	ND	20.130	20.408	ug/L	1.1	98.6	20	70 - 130	
Total Recoverable Aluminum	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	995.12	1000.0	ug/L		99.5		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	994.82	1000.0	ug/L	0	99.5	20	75 - 125	
Total Recoverable Barium	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	219.65	200.00	ug/L		110		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	220.18	200.00	ug/L	0	110	20	75 - 125	
Total Recoverable Boron	BQB1600	Duplicate	0702148-01	117.12	114.15		ug/L	2.6		20		
		Matrix Spike	0702148-01	117.12	1138.2	1000.0	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702148-01	117.12	1155.1	1000.0	ug/L	1.9	104	20	75 - 125	
Total Recoverable Chromium	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	200.60	200.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	202.54	200.00	ug/L	1.0	101	20	75 - 125	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Nickel	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	450.66	400.00	ug/L		113		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	444.02	400.00	ug/L	1.8	111	20	75 - 125	
Total Recoverable Silver	BQB1600	Duplicate	0702148-01	ND	ND		ug/L			20		
		Matrix Spike	0702148-01	ND	101.54	100.00	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702148-01	ND	101.86	100.00	ug/L	0	102	20	75 - 125	
Total Recoverable Aluminum	BQB1601	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	952.16	1000.0	ug/L		95.2		75 - 125	
		Matrix Spike Duplicate	0702234-04	ND	967.11	1000.0	ug/L	1.6	96.7	20	75 - 125	
Total Recoverable Barium	BQB1601	Duplicate	0702234-04	32.520	32.562		ug/L	0.1		20		
		Matrix Spike	0702234-04	32.520	245.50	200.00	ug/L		106		75 - 125	
		Matrix Spike Duplicate	0702234-04	32.520	247.70	200.00	ug/L	1.9	108	20	75 - 125	
Total Recoverable Boron	BQB1601	Duplicate	0702234-04	813.45	803.59		ug/L	1.2		20		
		Matrix Spike	0702234-04	813.45	1825.3	1000.0	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0702234-04	813.45	1837.7	1000.0	ug/L	1.0	102	20	75 - 125	
Total Recoverable Chromium	BQB1601	Duplicate	0702234-04	1.8703	1.6093		ug/L	15.0		20		J
		Matrix Spike	0702234-04	1.8703	197.69	200.00	ug/L		97.9		75 - 125	
		Matrix Spike Duplicate	0702234-04	1.8703	197.23	200.00	ug/L	0.2	97.7	20	75 - 125	
Total Recoverable Nickel	BQB1601	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	426.30	400.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0702234-04	ND	426.11	400.00	ug/L	0	107	20	75 - 125	
Total Recoverable Silver	BQB1601	Duplicate	0702234-04	ND	ND		ug/L			20		
		Matrix Spike	0702234-04	ND	100.88	100.00	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0702234-04	ND	100.65	100.00	ug/L	0	101	20	75 - 125	
Total Recoverable Antimony	BQB1603	Duplicate	0702010-01	1.2140	1.2670		ug/L	4.3		20		J
		Matrix Spike	0702010-01	1.2140	21.545	20.000	ug/L		102		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.2140	22.537	20.000	ug/L	4.8	107	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:18

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Arsenic	BQB1603	Duplicate	0702010-01	8.9940	9.1820		ug/L	2.1		20		
		Matrix Spike	0702010-01	8.9940	58.594	50.000	ug/L		99.2		70 - 130	
		Matrix Spike Duplicate	0702010-01	8.9940	61.391	50.000	ug/L	5.7	105	20	70 - 130	
Total Recoverable Beryllium	BQB1603	Duplicate	0702010-01	ND	ND		ug/L			20		
		Matrix Spike	0702010-01	ND	22.258	20.000	ug/L		111		70 - 130	
		Matrix Spike Duplicate	0702010-01	ND	24.092	20.000	ug/L	7.8	120	20	70 - 130	
Total Recoverable Cadmium	BQB1603	Duplicate	0702010-01	0.21600	0.26600		ug/L	20.7		20		J,A02
		Matrix Spike	0702010-01	0.21600	22.176	20.000	ug/L		110		70 - 130	
		Matrix Spike Duplicate	0702010-01	0.21600	23.116	20.000	ug/L	3.6	114	20	70 - 130	
Total Recoverable Lead	BQB1603	Duplicate	0702010-01	1.4070	1.8140		ug/L	25.3		20		A02
		Matrix Spike	0702010-01	1.4070	54.693	50.000	ug/L		107		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.4070	57.345	50.000	ug/L	4.6	112	20	70 - 130	
Total Recoverable Selenium	BQB1603	Duplicate	0702010-01	1.6060	1.7130		ug/L	6.4		20		J
		Matrix Spike	0702010-01	1.6060	49.358	50.000	ug/L		95.5		70 - 130	
		Matrix Spike Duplicate	0702010-01	1.6060	53.240	50.000	ug/L	7.6	103	20	70 - 130	
Total Recoverable Thallium	BQB1603	Duplicate	0702010-01	ND	ND		ug/L			20		
		Matrix Spike	0702010-01	ND	20.850	20.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0702010-01	ND	22.015	20.000	ug/L	5.6	110	20	70 - 130	
Total Recoverable Antimony	BQB1604	Duplicate	0702234-19	0.91600	0.87500		ug/L	4.6		20		J
		Matrix Spike	0702234-19	0.91600	21.785	20.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0702234-19	0.91600	21.966	20.000	ug/L	1.0	105	20	70 - 130	
Total Recoverable Arsenic	BQB1604	Duplicate	0702234-19	85.987	85.604		ug/L	0.4		20		
		Matrix Spike	0702234-19	85.987	139.95	50.000	ug/L		108		70 - 130	
		Matrix Spike Duplicate	0702234-19	85.987	140.81	50.000	ug/L	1.8	110	20	70 - 130	
Total Recoverable Beryllium	BQB1604	Duplicate	0702234-19	ND	ND		ug/L			20		
		Matrix Spike	0702234-19	ND	19.731	20.000	ug/L		98.7		70 - 130	
		Matrix Spike Duplicate	0702234-19	ND	19.659	20.000	ug/L	0.4	98.3	20	70 - 130	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Cadmium	BQB1604	Duplicate	0702234-19	0.10400	ND		ug/L			20		
		Matrix Spike	0702234-19	0.10400	19.995	20.000	ug/L		99.5		70 - 130	
		Matrix Spike Duplicate	0702234-19	0.10400	20.294	20.000	ug/L	1.5	101	20	70 - 130	
Total Recoverable Lead	BQB1604	Duplicate	0702234-19	0.24100	0.26000		ug/L	7.6		20		J
		Matrix Spike	0702234-19	0.24100	50.197	50.000	ug/L		99.9		70 - 130	
		Matrix Spike Duplicate	0702234-19	0.24100	49.599	50.000	ug/L	1.2	98.7	20	70 - 130	
Total Recoverable Selenium	BQB1604	Duplicate	0702234-19	0.55800	ND		ug/L			20		
		Matrix Spike	0702234-19	0.55800	52.088	50.000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0702234-19	0.55800	52.454	50.000	ug/L	1.0	104	20	70 - 130	
Total Recoverable Thallium	BQB1604	Duplicate	0702234-19	ND	ND		ug/L			20		
		Matrix Spike	0702234-19	ND	19.933	20.000	ug/L		99.7		70 - 130	
		Matrix Spike Duplicate	0702234-19	ND	19.753	20.000	ug/L	0.9	98.8	20	70 - 130	
Total Recoverable Aluminum	BQB1664	Duplicate	0702234-16	ND	ND		ug/L			20		
		Matrix Spike	0702234-16	ND	958.75	1000.0	ug/L		95.9		75 - 125	
		Matrix Spike Duplicate	0702234-16	ND	954.45	1000.0	ug/L	0.5	95.4	20	75 - 125	
Total Recoverable Barium	BQB1664	Duplicate	0702234-16	126.93	128.80		ug/L	1.5		20		
		Matrix Spike	0702234-16	126.93	340.10	200.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0702234-16	126.93	335.34	200.00	ug/L	2.8	104	20	75 - 125	
Total Recoverable Boron	BQB1664	Duplicate	0702234-16	624.49	635.73		ug/L	1.8		20		
		Matrix Spike	0702234-16	624.49	1661.8	1000.0	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0702234-16	624.49	1649.9	1000.0	ug/L	1.0	103	20	75 - 125	
Total Recoverable Chromium	BQB1664	Duplicate	0702234-16	ND	ND		ug/L			20		
		Matrix Spike	0702234-16	ND	198.97	200.00	ug/L		99.5		75 - 125	
		Matrix Spike Duplicate	0702234-16	ND	199.39	200.00	ug/L	0.2	99.7	20	75 - 125	
Total Recoverable Nickel	BQB1664	Duplicate	0702234-16	ND	ND		ug/L			20		
		Matrix Spike	0702234-16	ND	431.26	400.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0702234-16	ND	432.12	400.00	ug/L	0	108	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: [none]
Project Manager: Mike Stoner

Reported: 03/27/2007 11:18

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Silver	BQB1664	Duplicate	0702234-16	ND	ND		ug/L			20		
		Matrix Spike	0702234-16	ND	101.51	100.00	ug/L		102		75 - 125	
		Matrix Spike Duplicate	0702234-16	ND	102.14	100.00	ug/L	0	102	20	75 - 125	
Total Recoverable Mercury	BQC0160	Duplicate	0702234-01	ND	0.032500		ug/L			20		J,A26,S05
		Matrix Spike	0702234-01	ND	0.97500	1.0000	ug/L		97.5		70 - 130	A26,S05
		Matrix Spike Duplicate	0702234-01	ND	0.97750	1.0000	ug/L	0.3	97.8	20	70 - 130	A26,S05
Total Recoverable Mercury	BQC0161	Duplicate	0702234-11	ND	ND		ug/L			20		A26,S05
		Matrix Spike	0702234-11	ND	0.98500	1.0000	ug/L		98.5		70 - 130	A26,S05
		Matrix Spike Duplicate	0702234-11	ND	0.97500	1.0000	ug/L	1.0	97.5	20	70 - 130	A26,S05

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Antimony	BQB1596	BQB1596-BS1	LCS	20.158	20.000	2.0	ug/L	101		85 - 115		
Total Recoverable Arsenic	BQB1596	BQB1596-BS1	LCS	50.429	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1596	BQB1596-BS1	LCS	21.723	20.000	1.0	ug/L	109		85 - 115		
Total Recoverable Cadmium	BQB1596	BQB1596-BS1	LCS	20.569	20.000	1.0	ug/L	103		85 - 115		
Total Recoverable Lead	BQB1596	BQB1596-BS1	LCS	54.392	50.000	1.0	ug/L	109		85 - 115		
Total Recoverable Selenium	BQB1596	BQB1596-BS1	LCS	51.683	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Thallium	BQB1596	BQB1596-BS1	LCS	20.838	20.000	1.0	ug/L	104		85 - 115		
Total Recoverable Antimony	BQB1597	BQB1597-BS1	LCS	20.429	20.000	2.0	ug/L	102		85 - 115		
Total Recoverable Arsenic	BQB1597	BQB1597-BS1	LCS	50.374	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1597	BQB1597-BS1	LCS	21.987	20.000	1.0	ug/L	110		85 - 115		
Total Recoverable Cadmium	BQB1597	BQB1597-BS1	LCS	20.685	20.000	1.0	ug/L	103		85 - 115		
Total Recoverable Lead	BQB1597	BQB1597-BS1	LCS	54.219	50.000	1.0	ug/L	108		85 - 115		
Total Recoverable Selenium	BQB1597	BQB1597-BS1	LCS	52.316	50.000	2.0	ug/L	105		85 - 115		
Total Recoverable Thallium	BQB1597	BQB1597-BS1	LCS	20.731	20.000	1.0	ug/L	104		85 - 115		
Total Recoverable Aluminum	BQB1600	BQB1600-BS1	LCS	961.96	1000.0	50	ug/L	96.2		85 - 115		
Total Recoverable Barium	BQB1600	BQB1600-BS1	LCS	216.50	200.00	10	ug/L	108		85 - 115		
Total Recoverable Boron	BQB1600	BQB1600-BS1	LCS	1016.1	1000.0	100	ug/L	102		85 - 115		
Total Recoverable Chromium	BQB1600	BQB1600-BS1	LCS	202.67	200.00	10	ug/L	101		85 - 115		
Total Recoverable Nickel	BQB1600	BQB1600-BS1	LCS	447.06	400.00	10	ug/L	112		85 - 115		
Total Recoverable Silver	BQB1600	BQB1600-BS1	LCS	101.60	100.00	10	ug/L	102		85 - 115		
Total Recoverable Aluminum	BQB1601	BQB1601-BS1	LCS	971.41	1000.0	50	ug/L	97.1		85 - 115		
Total Recoverable Barium	BQB1601	BQB1601-BS1	LCS	219.18	200.00	10	ug/L	110		85 - 115		
Total Recoverable Boron	BQB1601	BQB1601-BS1	LCS	1035.2	1000.0	100	ug/L	104		85 - 115		

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Chromium	BQB1601	BQB1601-BS1	LCS	205.16	200.00	10	ug/L	103		85 - 115		
Total Recoverable Nickel	BQB1601	BQB1601-BS1	LCS	450.18	400.00	10	ug/L	113		85 - 115		
Total Recoverable Silver	BQB1601	BQB1601-BS1	LCS	103.30	100.00	10	ug/L	103		85 - 115		
Total Recoverable Antimony	BQB1603	BQB1603-BS1	LCS	20.237	20.000	2.0	ug/L	101		85 - 115		
Total Recoverable Arsenic	BQB1603	BQB1603-BS1	LCS	50.616	50.000	2.0	ug/L	101		85 - 115		
Total Recoverable Beryllium	BQB1603	BQB1603-BS1	LCS	22.452	20.000	1.0	ug/L	112		85 - 115		
Total Recoverable Cadmium	BQB1603	BQB1603-BS1	LCS	21.329	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Lead	BQB1603	BQB1603-BS1	LCS	55.471	50.000	1.0	ug/L	111		85 - 115		
Total Recoverable Selenium	BQB1603	BQB1603-BS1	LCS	51.316	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Thallium	BQB1603	BQB1603-BS1	LCS	21.339	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Antimony	BQB1604	BQB1604-BS1	LCS	20.977	20.000	2.0	ug/L	105		85 - 115		
Total Recoverable Arsenic	BQB1604	BQB1604-BS1	LCS	52.141	50.000	2.0	ug/L	104		85 - 115		
Total Recoverable Beryllium	BQB1604	BQB1604-BS1	LCS	20.552	20.000	1.0	ug/L	103		85 - 115		
Total Recoverable Cadmium	BQB1604	BQB1604-BS1	LCS	20.953	20.000	1.0	ug/L	105		85 - 115		
Total Recoverable Lead	BQB1604	BQB1604-BS1	LCS	54.054	50.000	1.0	ug/L	108		85 - 115		
Total Recoverable Selenium	BQB1604	BQB1604-BS1	LCS	52.886	50.000	2.0	ug/L	106		85 - 115		
Total Recoverable Thallium	BQB1604	BQB1604-BS1	LCS	21.446	20.000	1.0	ug/L	107		85 - 115		
Total Recoverable Aluminum	BQB1664	BQB1664-BS1	LCS	949.22	1000.0	50	ug/L	94.9		85 - 115		
Total Recoverable Barium	BQB1664	BQB1664-BS1	LCS	215.59	200.00	10	ug/L	108		85 - 115		
Total Recoverable Boron	BQB1664	BQB1664-BS1	LCS	999.53	1000.0	100	ug/L	100		85 - 115		
Total Recoverable Chromium	BQB1664	BQB1664-BS1	LCS	196.28	200.00	10	ug/L	98.1		85 - 115		
Total Recoverable Nickel	BQB1664	BQB1664-BS1	LCS	439.66	400.00	10	ug/L	110		85 - 115		
Total Recoverable Silver	BQB1664	BQB1664-BS1	LCS	98.796	100.00	10	ug/L	98.8		85 - 115		

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Mercury	BQC0160	BQC0160-BS1	LCS	0.98750	1.0000	0.20	ug/L	98.8		85 - 115		
Total Recoverable Mercury	BQC0161	BQC0161-BS1	LCS	0.93500	1.0000	0.20	ug/L	93.5		85 - 115		

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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Antimony	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQB1596	BQB1596-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1596	BQB1596-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Antimony	BQB1597	BQB1597-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1597	BQB1597-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1597	BQB1597-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1597	BQB1597-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQB1597	BQB1597-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQB1597	BQB1597-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1597	BQB1597-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Aluminum	BQB1600	BQB1600-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQB1600	BQB1600-BLK1	ND	ug/L	100	12	
Total Recoverable Chromium	BQB1600	BQB1600-BLK1	ND	ug/L	10	1.6	
Total Recoverable Nickel	BQB1600	BQB1600-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQB1600	BQB1600-BLK1	ND	ug/L	10	2.0	
Total Recoverable Aluminum	BQB1601	BQB1601-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQB1601	BQB1601-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQB1601	BQB1601-BLK1	14.828	ug/L	100	12	J
Total Recoverable Chromium	BQB1601	BQB1601-BLK1	ND	ug/L	10	1.6	

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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Nickel	BQB1601	BQB1601-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQB1601	BQB1601-BLK1	ND	ug/L	10	2.0	
Total Recoverable Antimony	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1603	BQB1603-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1603	BQB1603-BLK1	0.17300	ug/L	1.0	0.088	J
Total Recoverable Lead	BQB1603	BQB1603-BLK1	0.15600	ug/L	1.0	0.12	J
Total Recoverable Selenium	BQB1603	BQB1603-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1603	BQB1603-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Antimony	BQB1604	BQB1604-BLK1	ND	ug/L	2.0	0.39	
Total Recoverable Arsenic	BQB1604	BQB1604-BLK1	ND	ug/L	2.0	0.89	
Total Recoverable Beryllium	BQB1604	BQB1604-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Cadmium	BQB1604	BQB1604-BLK1	ND	ug/L	1.0	0.088	
Total Recoverable Lead	BQB1604	BQB1604-BLK1	ND	ug/L	1.0	0.12	
Total Recoverable Selenium	BQB1604	BQB1604-BLK1	ND	ug/L	2.0	0.54	
Total Recoverable Thallium	BQB1604	BQB1604-BLK1	ND	ug/L	1.0	0.13	
Total Recoverable Aluminum	BQB1664	BQB1664-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQB1664	BQB1664-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQB1664	BQB1664-BLK1	23.693	ug/L	100	12	J
Total Recoverable Chromium	BQB1664	BQB1664-BLK1	ND	ug/L	10	1.6	
Total Recoverable Nickel	BQB1664	BQB1664-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQB1664	BQB1664-BLK1	ND	ug/L	10	2.0	
Total Recoverable Mercury	BQC0160	BQC0160-BLK1	ND	ug/L	0.20	0.026	
Total Recoverable Mercury	BQC0161	BQC0161-BLK1	ND	ug/L	0.20	0.026	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A02	The difference between duplicate readings is less than the PQL.
A26	Sample received past holding time.
S05	The sample holding time was exceeded.

Date of Report: 11/08/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Arsenic Pilot Study
BC Work Order: 0712427

Enclosed are the results of analyses for samples received by the laboratory on 10/23/2007 11:07. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Linda Phoudamneun
Client Service Rep

Authorized Signature

Dept. of Health Services Drinking Water Field Op/Branch, 1200 Discovery Dr., Ste. 100 Bakersfield, CA 93309 Attn: Lois Holsapple

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0712427-01	**COC Number:**	---	**Receive Date:**	10/23/2007 11:07	Metal Analysis: 2-Lab Filtered and Acidified
	Project Number:	---	**Sampling Date:**	10/20/2007 11:30	
	Sampling Location:	---	**Sample Depth:**	---	
	Sampling Point:	27138	**Sample Matrix:**	Water	
	Sampled By:	---			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/08/2007 10:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Draft: Water Analysis (General Chemistry)

BCL Sample ID: 0712427-01 **Client Sample Name:** 27138, 10/20/2007 11:30:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	51	mg/L	0.10	0.018	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Magnesium	16	mg/L	0.050	0.019	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Sodium	220	mg/L	0.50	0.12	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Potassium	11	mg/L	1.0	0.13	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Bicarbonate	380	mg/L	12	12	SM-2320B	10/25/07	10/25/07 09:40	JSM	BDB	4	BQJ1602	ND	A01
Carbonate	ND	mg/L	6.0	6.0	SM-2320B	10/25/07	10/25/07 09:40	JSM	BDB	4	BQJ1602	ND	A01
Hydroxide	ND	mg/L	3.2	3.2	SM-2320B	10/25/07	10/25/07 09:40	JSM	BDB	4	BQJ1602	ND	A01
Chloride	79	mg/L	0.50	0.037	EPA-300.0	10/24/07	10/24/07 03:32	LMB	IC1	1	BQJ1399	ND	
Fluoride	0.81	mg/L	0.050	0.011	EPA-300.0	10/24/07	10/24/07 03:32	LMB	IC1	1	BQJ1399	ND	
Nitrate as NO3	0.85	mg/L	0.44	0.077	EPA-300.0	10/24/07	10/24/07 03:32	LMB	IC1	1	BQJ1399	ND	A26,S05
Sulfate	170	mg/L	1.0	0.11	EPA-300.0	10/24/07	10/24/07 03:32	LMB	IC1	1	BQJ1399	ND	
pH	8.05	pH Units	0.05	0.05	EPA-150.1	10/24/07	10/24/07 13:45	JSM	B360	1	BQJ1504		
Electrical Conductivity @ 25 C	1060	umhos/cm	1.00	1.00	SM-2510B	10/24/07	10/24/07 11:35	JSM	CND-3	1	BQJ1503		
Total Dissolved Solids @ 180 C	780	mg/L	33	33	SM-2540C	10/26/07	10/26/07 14:00	JLR	MANUAL	3.333	BQJ1792	ND	
Color	20	Color Units	1.0	1.0	SM-2120B	10/23/07	10/23/07 10:00	MAR	MANUAL	1	BQJ1516		A26,S05
Turbidity	68	NT Units	0.20	0.20	EPA-180.1	10/23/07	10/23/07 10:00	MAR	T2100	2	BQJ1512		A01,A26,S05
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/24/07	10/24/07 09:00	CDR	SPEC05	1	BQK0140	ND	A26,S05
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/23/07	10/23/07 17:29	TDC	KONE-1	1	BQJ1468	ND	A26,S05

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Naval Air Weapons Station - China Lake	Project: Arsenic Pilot Study	**Reported:** 11/08/2007 10:51
429 E. Bowan	Project Number: [none]	
China Lake, CA 93555	Project Manager: Mike Stoner	

Draft: Water Analysis (Metals)

BCL Sample ID: 0712427-01 **Client Sample Name:** 27138, 10/20/2007 11:30:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	24000	ug/L	50	36	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Antimony	3.6	ug/L	2.0	0.097	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	0.097	
Total Recoverable Arsenic	54	ug/L	2.0	0.37	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	
Total Recoverable Barium	160	ug/L	10	1.7	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Beryllium	0.89	ug/L	1.0	0.043	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	J
Total Recoverable Boron	500	ug/L	100	16	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Cadmium	0.69	ug/L	1.0	0.025	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	J
Total Recoverable Chromium	11	ug/L	10	1.6	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Copper	160	ug/L	10	2.0	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Iron	20000	ug/L	50	41	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Lead	18	ug/L	1.0	0.057	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	0.10	
Total Recoverable Manganese	1100	ug/L	10	3.7	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	11/05/07	11/06/07 11:06	MEV	CETAC1	1	BQK0224	ND	
Total Recoverable Nickel	20	ug/L	10	3.4	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Selenium	1.9	ug/L	2.0	0.47	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.016	EPA-200.8	11/05/07	11/07/07 16:17	PPS	PE-EL1	1	BQK0186	ND	
Total Recoverable Zinc	180	ug/L	50	6.1	EPA-200.7	11/05/07	11/06/07 16:00	LDG	PE-OP2	1	BQK0185	ND	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQJ1399	Duplicate	0712442-02	128.43	128.68		mg/L	0.2		10		
		Matrix Spike	0712442-02	128.43	234.11	101.01	mg/L		105		80 - 120	
		Matrix Spike Duplicate	0712442-02	128.43	233.98	101.01	mg/L	1.0	104	10	80 - 120	
Fluoride	BQJ1399	Duplicate	0712442-02	0.13900	0.14500		mg/L	4.2		10		
		Matrix Spike	0712442-02	0.13900	1.2394	1.0101	mg/L		109		80 - 120	
		Matrix Spike Duplicate	0712442-02	0.13900	1.2303	1.0101	mg/L	0.9	108	10	80 - 120	
Nitrate as NO3	BQJ1399	Duplicate	0712442-02	47.092	47.150		mg/L	0.1		10		
		Matrix Spike	0712442-02	47.092	69.774	22.358	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0712442-02	47.092	69.823	22.358	mg/L	1.0	102	10	80 - 120	
Sulfate	BQJ1399	Duplicate	0712442-02	218.88	219.20		mg/L	0.1		10		
		Matrix Spike	0712442-02	218.88	320.84	101.01	mg/L		101		80 - 120	
		Matrix Spike Duplicate	0712442-02	218.88	320.77	101.01	mg/L	0	101	10	80 - 120	
Nitrite as N	BQJ1468	Duplicate	0712410-11	ND	ND		ug/L			10		
		Matrix Spike	0712410-11	ND	510.09	526.32	ug/L		96.9		90 - 110	
		Matrix Spike Duplicate	0712410-11	ND	512.56	526.32	ug/L	0.5	97.4	10	90 - 110	
Electrical Conductivity @ 25 C	BQJ1503	Duplicate	0712388-05	216.00	215.00		umhos/cm	0.5		10		
pH	BQJ1504	Duplicate	0712365-01	7.9100	7.9210		pH Units	0.1		20		
Turbidity	BQJ1512	Duplicate	0712377-01	135.00	135.00		NT Units	0		10		A01
Color	BQJ1516	Duplicate	0712377-01	4.0000	4.0000		Color Units	0		20		
Bicarbonate	BQJ1602	Duplicate	0712378-01	127.52	126.36		mg/L	0.9		10		A01
		Matrix Spike	0712378-01	127.52	282.88	152.38	mg/L		102		80 - 120	A01
		Matrix Spike Duplicate	0712378-01	127.52	285.20	152.38	mg/L	1.0	103	10	80 - 120	A01
Carbonate	BQJ1602	Duplicate	0712378-01	ND	ND		mg/L			10		A01
Hydroxide	BQJ1602	Duplicate	0712378-01	ND	ND		mg/L			10		A01
Total Dissolved Solids @ 180 C	BQJ1792	Duplicate	0712417-01	9720.0	9660.0		mg/L	0.6		10		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
MBAS	BQK0140	Duplicate	0712454-03	ND	ND		mg/L			20		A01
		Matrix Spike	0712454-03	ND	0.39700	0.40000	mg/L		99.2		80 - 120	A01
		Matrix Spike Duplicate	0712454-03	ND	0.40420	0.40000	mg/L	1.8	101	20	80 - 120	A01
Total Recoverable Calcium	BQK0185	Duplicate	0712390-01	35.076	34.070		mg/L	2.9		20		
		Matrix Spike	0712390-01	35.076	44.488	10.000	mg/L		94.1		75 - 125	
		Matrix Spike Duplicate	0712390-01	35.076	44.448	10.000	mg/L	0.4	93.7	20	75 - 125	
Total Recoverable Magnesium	BQK0185	Duplicate	0712390-01	8.7847	8.5461		mg/L	2.8		20		
		Matrix Spike	0712390-01	8.7847	18.169	10.000	mg/L		93.8		75 - 125	
		Matrix Spike Duplicate	0712390-01	8.7847	18.447	10.000	mg/L	2.9	96.6	20	75 - 125	
Total Recoverable Sodium	BQK0185	Duplicate	0712390-01	27.727	27.219		mg/L	1.8		20		
		Matrix Spike	0712390-01	27.727	37.131	10.000	mg/L		94.0		75 - 125	
		Matrix Spike Duplicate	0712390-01	27.727	37.313	10.000	mg/L	2.0	95.9	20	75 - 125	
Total Recoverable Potassium	BQK0185	Duplicate	0712390-01	1.8405	1.7929		mg/L	2.6		20		
		Matrix Spike	0712390-01	1.8405	11.517	10.000	mg/L		96.8		75 - 125	
		Matrix Spike Duplicate	0712390-01	1.8405	11.546	10.000	mg/L	0.3	97.1	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Aluminum	BQK0185	Duplicate	0712390-01	1541.0	1505.0		ug/L	2.4		20		
		Matrix Spike	0712390-01	1541.0	3202.1	1000.0	ug/L		166		75 - 125	Q03
		Matrix Spike Duplicate	0712390-01	1541.0	3219.9	1000.0	ug/L	1.2	168	20	75 - 125	Q03
Total Recoverable Barium	BQK0185	Duplicate	0712390-01	27.473	27.223		ug/L	0.9		20		
		Matrix Spike	0712390-01	27.473	223.03	200.00	ug/L		97.8		75 - 125	
		Matrix Spike Duplicate	0712390-01	27.473	223.39	200.00	ug/L	0.2	98.0	20	75 - 125	
Total Recoverable Boron	BQK0185	Duplicate	0712390-01	319.94	318.88		ug/L	0.3		20		
		Matrix Spike	0712390-01	319.94	1303.5	1000.0	ug/L		98.4		75 - 125	
		Matrix Spike Duplicate	0712390-01	319.94	1343.9	1000.0	ug/L	3.6	102	20	75 - 125	
Total Recoverable Chromium	BQK0185	Duplicate	0712390-01	6.5220	6.5738		ug/L	0.8		20		J
		Matrix Spike	0712390-01	6.5220	197.96	200.00	ug/L		95.7		75 - 125	
		Matrix Spike Duplicate	0712390-01	6.5220	201.83	200.00	ug/L	2.1	97.7	20	75 - 125	
Total Recoverable Copper	BQK0185	Duplicate	0712390-01	4.0380	3.9950		ug/L	1.1		20		J
		Matrix Spike	0712390-01	4.0380	194.86	200.00	ug/L		95.4		75 - 125	
		Matrix Spike Duplicate	0712390-01	4.0380	195.64	200.00	ug/L	0.4	95.8	20	75 - 125	
Total Recoverable Iron	BQK0185	Duplicate	0712390-01	5685.1	5355.6		ug/L	6.0		20		
		Matrix Spike	0712390-01	5685.1	5952.7	400.00	ug/L		66.9		75 - 125	A03
		Matrix Spike Duplicate	0712390-01	5685.1	6040.6	400.00	ug/L	28.2	88.9	20	75 - 125	A03,Q02
Total Recoverable Manganese	BQK0185	Duplicate	0712390-01	383.14	394.56		ug/L	2.9		20		
		Matrix Spike	0712390-01	383.14	583.83	200.00	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0712390-01	383.14	584.97	200.00	ug/L	1.0	101	20	75 - 125	
Total Recoverable Nickel	BQK0185	Duplicate	0712390-01	9.2300	8.8212		ug/L	4.5		20		J
		Matrix Spike	0712390-01	9.2300	427.81	400.00	ug/L		105		75 - 125	
		Matrix Spike Duplicate	0712390-01	9.2300	426.38	400.00	ug/L	1.0	104	20	75 - 125	
Total Recoverable Silver	BQK0185	Duplicate	0712390-01	ND	ND		ug/L			20		
		Matrix Spike	0712390-01	ND	105.19	100.00	ug/L		105		75 - 125	
		Matrix Spike Duplicate	0712390-01	ND	105.41	100.00	ug/L	0	105	20	75 - 125	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Zinc	BQK0185	Duplicate	0712390-01	214.48	206.87		ug/L	3.6		20		
		Matrix Spike	0712390-01	214.48	416.78	200.00	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0712390-01	214.48	412.79	200.00	ug/L	1.8	99.2	20	75 - 125	
Total Recoverable Antimony	BQK0186	Duplicate	0712404-01	0.14100	0.10200		ug/L	32.1		20		J,A02
		Matrix Spike	0712404-01	0.14100	20.751	20.000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0712404-01	0.14100	20.719	20.000	ug/L	0	103	20	70 - 130	
Total Recoverable Arsenic	BQK0186	Duplicate	0712404-01	12.252	12.441		ug/L	1.5		20		
		Matrix Spike	0712404-01	12.252	59.777	50.000	ug/L		95.0		70 - 130	
		Matrix Spike Duplicate	0712404-01	12.252	59.996	50.000	ug/L	0.5	95.5	20	70 - 130	
Total Recoverable Beryllium	BQK0186	Duplicate	0712404-01	ND	ND		ug/L			20		
		Matrix Spike	0712404-01	ND	17.551	20.000	ug/L		87.8		70 - 130	
		Matrix Spike Duplicate	0712404-01	ND	17.481	20.000	ug/L	0.5	87.4	20	70 - 130	
Total Recoverable Cadmium	BQK0186	Duplicate	0712404-01	ND	ND		ug/L			20		
		Matrix Spike	0712404-01	ND	18.845	20.000	ug/L		94.2		70 - 130	
		Matrix Spike Duplicate	0712404-01	ND	18.906	20.000	ug/L	0.3	94.5	20	70 - 130	
Total Recoverable Lead	BQK0186	Duplicate	0712404-01	0.63700	0.62300		ug/L	2.2		20		J
		Matrix Spike	0712404-01	0.63700	45.105	50.000	ug/L		88.9		70 - 130	
		Matrix Spike Duplicate	0712404-01	0.63700	45.690	50.000	ug/L	1.3	90.1	20	70 - 130	
Total Recoverable Selenium	BQK0186	Duplicate	0712404-01	ND	ND		ug/L			20		
		Matrix Spike	0712404-01	ND	45.975	50.000	ug/L		92.0		70 - 130	
		Matrix Spike Duplicate	0712404-01	ND	46.216	50.000	ug/L	0.4	92.4	20	70 - 130	
Total Recoverable Thallium	BQK0186	Duplicate	0712404-01	0.048000	ND		ug/L			20		
		Matrix Spike	0712404-01	0.048000	17.775	20.000	ug/L		88.6		70 - 130	
		Matrix Spike Duplicate	0712404-01	0.048000	18.105	20.000	ug/L	1.9	90.3	20	70 - 130	
Total Recoverable Mercury	BQK0224	Duplicate	0712407-12	ND	ND		ug/L			20		
		Matrix Spike	0712407-12	ND	0.96500	1.0000	ug/L		96.5		70 - 130	
		Matrix Spike Duplicate	0712407-12	ND	0.96000	1.0000	ug/L	0.5	96.0	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQJ1399	BQJ1399-BS1	LCS	107.26	100.00	0.50	mg/L	107		90 - 110		
Fluoride	BQJ1399	BQJ1399-BS1	LCS	1.0400	1.0000	0.050	mg/L	104		90 - 110		
Nitrate as NO3	BQJ1399	BQJ1399-BS1	LCS	23.050	22.134	0.44	mg/L	104		90 - 110		
Sulfate	BQJ1399	BQJ1399-BS1	LCS	103.45	100.00	1.0	mg/L	103		90 - 110		
Nitrite as N	BQJ1468	BQJ1468-BS1	LCS	482.13	500.00	50	ug/L	96.4		90 - 110		
Electrical Conductivity @ 25 C	BQJ1503	BQJ1503-BS1	LCS	301.00	303.00	1.00	umhos/cm	99.3		90 - 110		
pH	BQJ1504	BQJ1504-BS1	LCS	7.0280	7.0000	0.05	pH Units	100		95 - 105		
Bicarbonate	BQJ1602	BQJ1602-BS1	LCS	127.53	121.90	2.9	mg/L	105		90 - 110		
Total Dissolved Solids @ 180 C	BQJ1792	BQJ1792-BS1	LCS	595.00	586.00	50	mg/L	102		90 - 110		
MBAS	BQK0140	BQK0140-BS1	LCS	0.20030	0.20000	0.10	mg/L	100		85 - 115		
Total Recoverable Calcium	BQK0185	BQK0185-BS1	LCS	9.5915	10.000	0.10	mg/L	95.9		85 - 115		
Total Recoverable Magnesium	BQK0185	BQK0185-BS1	LCS	9.8642	10.000	0.050	mg/L	98.6		85 - 115		
Total Recoverable Sodium	BQK0185	BQK0185-BS1	LCS	10.070	10.000	0.50	mg/L	101		85 - 115		
Total Recoverable Potassium	BQK0185	BQK0185-BS1	LCS	9.6974	10.000	1.0	mg/L	97.0		85 - 115		

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Draft: Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Aluminum	BQK0185	BQK0185-BS1	LCS	966.46	1000.0	50	ug/L	96.6		85 - 115		
Total Recoverable Barium	BQK0185	BQK0185-BS1	LCS	193.48	200.00	10	ug/L	96.7		85 - 115		
Total Recoverable Boron	BQK0185	BQK0185-BS1	LCS	958.10	1000.0	100	ug/L	95.8		85 - 115		
Total Recoverable Chromium	BQK0185	BQK0185-BS1	LCS	186.44	200.00	10	ug/L	93.2		85 - 115		
Total Recoverable Copper	BQK0185	BQK0185-BS1	LCS	177.60	200.00	10	ug/L	88.8		85 - 115		
Total Recoverable Iron	BQK0185	BQK0185-BS1	LCS	408.87	400.00	50	ug/L	102		85 - 115		
Total Recoverable Manganese	BQK0185	BQK0185-BS1	LCS	212.01	200.00	10	ug/L	106		85 - 115		
Total Recoverable Nickel	BQK0185	BQK0185-BS1	LCS	407.07	400.00	10	ug/L	102		85 - 115		
Total Recoverable Silver	BQK0185	BQK0185-BS1	LCS	101.41	100.00	10	ug/L	101		85 - 115		
Total Recoverable Zinc	BQK0185	BQK0185-BS1	LCS	206.34	200.00	50	ug/L	103		85 - 115		
Total Recoverable Antimony	BQK0186	BQK0186-BS1	LCS	21.960	20.000	2.0	ug/L	110		85 - 115		
Total Recoverable Arsenic	BQK0186	BQK0186-BS1	LCS	51.357	50.000	2.0	ug/L	103		85 - 115		
Total Recoverable Beryllium	BQK0186	BQK0186-BS1	LCS	18.418	20.000	1.0	ug/L	92.1		85 - 115		
Total Recoverable Cadmium	BQK0186	BQK0186-BS1	LCS	20.108	20.000	1.0	ug/L	101		85 - 115		
Total Recoverable Lead	BQK0186	BQK0186-BS1	LCS	48.715	50.000	1.0	ug/L	97.4		85 - 115		
Total Recoverable Selenium	BQK0186	BQK0186-BS1	LCS	49.972	50.000	2.0	ug/L	99.9		85 - 115		
Total Recoverable Thallium	BQK0186	BQK0186-BS1	LCS	19.452	20.000	1.0	ug/L	97.3		85 - 115		
Total Recoverable Mercury	BQK0224	BQK0224-BS1	LCS	0.97000	1.0000	0.20	ug/L	97.0		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQJ1399	BQJ1399-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQJ1399	BQJ1399-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQJ1399	BQJ1399-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQJ1399	BQJ1399-BLK1	ND	mg/L	1.0	0.11	
Nitrite as N	BQJ1468	BQJ1468-BLK1	ND	ug/L	50	10	
Bicarbonate	BQJ1602	BQJ1602-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQJ1602	BQJ1602-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQJ1602	BQJ1602-BLK1	ND	mg/L	0.81	0.81	
Total Dissolved Solids @ 180 C	BQJ1792	BQJ1792-BLK1	ND	mg/L	6.7	6.7	
MBAS	BQK0140	BQK0140-BLK1	ND	mg/L	0.10	0.039	
Total Recoverable Calcium	BQK0185	BQK0185-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQK0185	BQK0185-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQK0185	BQK0185-BLK1	ND	mg/L	0.50	0.12	
Total Recoverable Potassium	BQK0185	BQK0185-BLK1	ND	mg/L	1.0	0.13	

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Draft: Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Aluminum	BQK0185	BQK0185-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQK0185	BQK0185-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQK0185	BQK0185-BLK1	ND	ug/L	100	16	
Total Recoverable Chromium	BQK0185	BQK0185-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQK0185	BQK0185-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQK0185	BQK0185-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQK0185	BQK0185-BLK1	ND	ug/L	10	3.7	
Total Recoverable Nickel	BQK0185	BQK0185-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQK0185	BQK0185-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQK0185	BQK0185-BLK1	ND	ug/L	50	6.1	
Total Recoverable Antimony	BQK0186	BQK0186-BLK1	0.097000	ug/L	2.0	0.097	J
Total Recoverable Arsenic	BQK0186	BQK0186-BLK1	ND	ug/L	2.0	0.37	
Total Recoverable Beryllium	BQK0186	BQK0186-BLK1	ND	ug/L	1.0	0.043	
Total Recoverable Cadmium	BQK0186	BQK0186-BLK1	ND	ug/L	1.0	0.025	
Total Recoverable Lead	BQK0186	BQK0186-BLK1	0.10100	ug/L	1.0	0.057	J
Total Recoverable Selenium	BQK0186	BQK0186-BLK1	ND	ug/L	2.0	0.47	
Total Recoverable Thallium	BQK0186	BQK0186-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Mercury	BQK0224	BQK0224-BLK1	ND	ug/L	0.20	0.022	

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Draft: Water Analysis (General Chemistry)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Nitrite as N	0710898-5	0710898-CCV9	CCV, Beginning	10/23/2007 17:29	0.50666	0.50000	mg/L	101	90 - 110	
		0710898-CCVA	CCV, Ending	10/23/2007 17:33	0.50719	0.50000	mg/L	101	90 - 110	
Fluoride	0710905-1	0710905-ICV1	ICV	10/23/2007 19:12	1.0860	1.0000	mg/L	109	90 - 110	
		0710905-CCV2	CCV, Beginning	10/24/2007 01:30	1.0020	1.0000	mg/L	100	90 - 110	
		0710905-CCV3	CCV, Ending	10/24/2007 04:32	1.0390	1.0000	mg/L	104	90 - 110	
Nitrate as NO3	0710905-1	0710905-ICV1	ICV	10/23/2007 19:12	23.666	22.140	mg/L	107	90 - 110	
		0710905-CCV2	CCV, Beginning	10/24/2007 01:30	22.360	22.134	mg/L	101	90 - 110	
		0710905-CCV3	CCV, Ending	10/24/2007 04:32	22.298	22.134	mg/L	101	90 - 110	
Chloride	0710905-3	0710905-ICV1	ICV	10/23/2007 19:12	102.78	100.00	mg/L	103	90 - 110	
		0710905-CCV2	CCV, Beginning	10/24/2007 01:30	103.98	100.00	mg/L	104	90 - 110	
		0710905-CCV3	CCV, Ending	10/24/2007 04:32	103.91	100.00	mg/L	104	90 - 110	
Sulfate	0710905-3	0710905-ICV1	ICV	10/23/2007 19:12	100.16	100.00	mg/L	100	90 - 110	
		0710905-CCV2	CCV, Beginning	10/24/2007 01:30	100.32	100.00	mg/L	100	90 - 110	
		0710905-CCV3	CCV, Ending	10/24/2007 04:32	100.50	100.00	mg/L	100	90 - 110	
MBAS	0711299-1	0711299-ICV1	ICV	10/24/2007 09:00	0.21620	0.20000	mg/L	108	90 - 110	
		0711299-ICV1	CCV, Beginning	10/24/2007 09:00	0.21620	0.20000	mg/L	108	90 - 110	
		0711299-CCV1	CCV, Ending	10/24/2007 09:00	0.20030	0.20000	mg/L	100	90 - 110	
Total Recoverable Calcium	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	50.379	50.000	mg/L	101	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	47.973	50.000	mg/L	95.9	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	48.662	50.000	mg/L	97.3	90 - 110	
Total Recoverable Magnesium	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	50.582	50.000	mg/L	101	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	48.271	50.000	mg/L	96.5	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	48.982	50.000	mg/L	98.0	90 - 110	
Total Recoverable Sodium	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	50.080	50.000	mg/L	100	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	48.278	50.000	mg/L	96.6	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	49.233	50.000	mg/L	98.5	90 - 110	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Arsenic Pilot Study
Project Number: [none]
Project Manager: Mike Stoner

Reported: 11/08/2007 10:51

Draft: Water Analysis (General Chemistry)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Potassium	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	49.430	50.000	mg/L	98.9	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	47.968	50.000	mg/L	95.9	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	48.852	50.000	mg/L	97.7	90 - 110	

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Draft: Water Analysis (Metals)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Mercury	0711356-1	0711356-ICV1	ICV	11/06/2007 09:51	0.40700	0.40000	ug/L	102	95 - 105	
		0711356-CCV3	CCV, Beginning	11/06/2007 10:59	0.39800	0.40000	ug/L	99.5	90 - 110	
		0711356-CCV4	CCV, Ending	11/06/2007 11:16	0.40600	0.40000	ug/L	102	90 - 110	
Total Recoverable Aluminum	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	50.033	50.000	mg/L	100	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	49.736	50.000	mg/L	99.5	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	50.625	50.000	mg/L	101	90 - 110	
Total Recoverable Barium	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	2.4993	2.5000	mg/L	100	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	2.4086	2.5000	mg/L	96.3	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	2.4296	2.5000	mg/L	97.2	90 - 110	
Total Recoverable Boron	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	2.4890	2.5000	mg/L	99.6	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	2.4300	2.5000	mg/L	97.2	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	2.4455	2.5000	mg/L	97.8	90 - 110	
Total Recoverable Chromium	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	0.48735	0.50000	mg/L	97.5	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	0.49011	0.50000	mg/L	98.0	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	0.49162	0.50000	mg/L	98.3	90 - 110	
Total Recoverable Copper	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	0.48959	0.50000	mg/L	97.9	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	0.48377	0.50000	mg/L	96.8	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	0.48765	0.50000	mg/L	97.5	90 - 110	
Total Recoverable Iron	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	51.388	50.000	mg/L	103	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	51.003	50.000	mg/L	102	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	51.880	50.000	mg/L	104	90 - 110	
Total Recoverable Manganese	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	50.610	50.000	mg/L	101	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	50.038	50.000	mg/L	100	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	50.473	50.000	mg/L	101	90 - 110	
Total Recoverable Nickel	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	0.50273	0.50000	mg/L	101	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	0.50982	0.50000	mg/L	102	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	0.51248	0.50000	mg/L	102	90 - 110	

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Draft: Water Analysis (Metals)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Silver	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	0.24230	0.25000	mg/L	96.9	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	0.23736	0.25000	mg/L	94.9	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	0.23866	0.25000	mg/L	95.5	90 - 110	
Total Recoverable Zinc	0711410-1	0711410-ICV1	ICV	11/06/2007 08:34	2.5741	2.5000	mg/L	103	95 - 105	
		0711410-CCV4	CCV, Beginning	11/06/2007 15:09	2.4902	2.5000	mg/L	99.6	90 - 110	
		0711410-CCV5	CCV, Ending	11/06/2007 16:15	2.5149	2.5000	mg/L	101	90 - 110	
Total Recoverable Antimony	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	47.898	50.000	ug/L	95.8	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	47.898	50.000	ug/L	95.8	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	40.971	40.000	ug/L	102	90 - 110	
Total Recoverable Arsenic	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	120.34	125.00	ug/L	96.3	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	120.34	125.00	ug/L	96.3	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	96.834	100.00	ug/L	96.8	90 - 110	
Total Recoverable Beryllium	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	47.482	50.000	ug/L	95.0	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	47.482	50.000	ug/L	95.0	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	43.822	40.000	ug/L	110	90 - 110	
Total Recoverable Cadmium	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	49.365	50.000	ug/L	98.7	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	49.365	50.000	ug/L	98.7	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	39.919	40.000	ug/L	99.8	90 - 110	
Total Recoverable Lead	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	123.81	125.00	ug/L	99.0	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	123.81	125.00	ug/L	99.0	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	99.531	100.00	ug/L	99.5	90 - 110	
Total Recoverable Selenium	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	121.69	125.00	ug/L	97.4	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	121.69	125.00	ug/L	97.4	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	98.232	100.00	ug/L	98.2	90 - 110	
Total Recoverable Thallium	0711458-1	0711458-ICV1	ICV	11/07/2007 15:33	50.432	50.000	ug/L	101	90 - 110	
		0711458-ICV1	CCV, Beginning	11/07/2007 15:33	50.432	50.000	ug/L	101	90 - 110	
		0711458-CCV1	CCV, Ending	11/07/2007 16:19	40.002	40.000	ug/L	100	90 - 110	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes And Definitions

CCV	Continuing Calibration Verification
ICV	Initial Calibration Verification
J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.

Date of Report: 11/08/2007

Mike Stoner

Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

RE: Indian Wells Valley Water
BC Work Order: 0712043

Enclosed are the results of analyses for samples received by the laboratory on 10/16/2007 17:03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Linda Phoudamneun
Client Service Rep

Authorized Signature

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0712043-01	**COC Number:**	---	**Receive Date:**	10/16/2007 17:03
	Project Number:	---	**Sampling Date:**	10/11/2007 10:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138-14 MO1	**Sample Matrix:**	Water
	Sampled By:	---		
0712043-02	**COC Number:**	---	**Receive Date:**	10/16/2007 17:03
	Project Number:	---	**Sampling Date:**	10/11/2007 10:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138-27MO1	**Sample Matrix:**	Water
	Sampled By:	---		
0712043-03	**COC Number:**	---	**Receive Date:**	10/16/2007 17:03
	Project Number:	---	**Sampling Date:**	10/11/2007 11:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	27138-17 AO1	**Sample Matrix:**	Water
	Sampled By:	---		

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Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712043-01 **Client Sample Name:** 27138-14 MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	23	mg/L	0.10	0.018	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Magnesium	3.8	mg/L	0.050	0.019	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Sodium	77	mg/L	0.50	0.12	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Potassium	3.1	mg/L	1.0	0.13	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Bicarbonate	140	mg/L	2.9	2.9	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Carbonate	ND	mg/L	1.5	1.5	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Alkalinity as CaCO3	110	mg/L	2.5	2.5	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
Chloride	14	mg/L	0.50	0.037	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Fluoride	0.22	mg/L	0.050	0.011	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Nitrate as NO3	12	mg/L	0.44	0.077	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Sulfate	74	mg/L	1.0	0.11	EPA-300.0	10/12/07	10/12/07 17:52	FAD	IC2	1	BQJ0842	ND	
Total Cations	4.9	meq/L	0.10	0.10	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
Total Anions	4.4	meq/L	0.10	0.10	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
Hardness as CaCO3	74	mg/L	0.50	0.10	Calc	10/17/07	11/05/07 09:43	MSA	Calc	1	BQJ1105	ND	
pH	8.20	pH Units	0.05	0.05	EPA-150.1	10/16/07	10/16/07 11:45	JSM	B360	1	BQJ1016		
Electrical Conductivity @ 25 C	425	umhos/cm	1.00	1.00	SM-2510B	10/16/07	10/16/07 13:00	JSM	CND-3	1	BQJ1021		
Total Dissolved Solids @ 180 C	290	mg/L	20	20	SM-2540C	10/18/07	10/18/07 10:00	JLR	MANUAL	2	BQJ1506	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/12/07	10/12/07 14:00	CDR	SPEC05	1	BQJ0922	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/12/07	10/12/07 15:13	TDC	KONE-1	1	BQJ0940	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0712043-01 **Client Sample Name:** 27138-14 MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	1100	ug/L	50	36	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Antimony	0.56	ug/L	2.0	0.097	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Arsenic	4.2	ug/L	2.0	0.37	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Barium	7.0	ug/L	10	1.7	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Beryllium	0.078	ug/L	1.0	0.043	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Boron	110	ug/L	100	16	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Cadmium	0.048	ug/L	1.0	0.025	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Copper	2.3	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Iron	910	ug/L	50	41	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Lead	0.87	ug/L	1.0	0.057	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Manganese	71	ug/L	10	3.7	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	10/18/07	10/19/07 14:43	MEV	CETAC1	1	BQJ1161	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Selenium	1.2	ug/L	2.0	0.47	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.016	EPA-200.8	10/18/07	10/23/07 03:39	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Zinc	7.7	ug/L	50	6.1	EPA-200.7	10/18/07	10/19/07 12:33	LDG	PE-OP2	1	BQJ1186	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712043-02 **Client Sample Name:** 27138-27MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	40	mg/L	0.10	0.018	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Magnesium	9.5	mg/L	0.050	0.019	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Sodium	46	mg/L	0.50	0.12	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Potassium	3.3	mg/L	1.0	0.13	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Bicarbonate	150	mg/L	2.9	2.9	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Carbonate	ND	mg/L	1.5	1.5	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Hydroxide	ND	mg/L	0.81	0.81	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	1	BQJ1056	ND	
Alkalinity as CaCO3	120	mg/L	2.5	2.5	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
Chloride	16	mg/L	0.50	0.037	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Fluoride	0.96	mg/L	0.050	0.011	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Nitrate as NO3	9.7	mg/L	0.44	0.077	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Sulfate	33	mg/L	1.0	0.11	EPA-300.0	10/12/07	10/12/07 18:55	FAD	IC2	1	BQJ0842	ND	
Total Cations	4.9	meq/L	0.10	0.10	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
Total Anions	3.8	meq/L	0.10	0.10	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
Hardness as CaCO3	140	mg/L	0.50	0.10	Calc	10/17/07	10/25/07 21:47	MSA	Calc	1	BQJ1105	ND	
pH	8.02	pH Units	0.05	0.05	EPA-150.1	10/16/07	10/16/07 11:45	JSM	B360	1	BQJ1016		
Electrical Conductivity @ 25 C	367	umhos/cm	1.00	1.00	SM-2510B	10/16/07	10/16/07 13:00	JSM	CND-3	1	BQJ1021		
Total Dissolved Solids @ 180 C	260	mg/L	20	20	SM-2540C	10/18/07	10/18/07 10:00	JLR	MANUAL	2	BQJ1506	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/12/07	10/12/07 14:00	CDR	SPEC05	1	BQJ0922	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/12/07	10/12/07 15:13	TDC	KONE-1	1	BQJ0940	ND	

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Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number:	AB303	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0712043-02 **Client Sample Name:** 27138-27MO1, 10/11/2007 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	8900	ug/L	50	36	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Antimony	0.13	ug/L	2.0	0.097	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Arsenic	1.0	ug/L	2.0	0.37	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Barium	120	ug/L	10	1.7	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Beryllium	0.38	ug/L	1.0	0.043	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Boron	180	ug/L	100	16	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Cadmium	0.099	ug/L	1.0	0.025	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Chromium	6.0	ug/L	10	1.6	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Copper	20	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Iron	9200	ug/L	50	41	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Lead	4.7	ug/L	1.0	0.057	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Manganese	280	ug/L	10	3.7	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	10/18/07	10/19/07 14:46	MEV	CETAC1	1	BQJ1161	ND	
Total Recoverable Nickel	4.7	ug/L	10	3.4	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Selenium	0.81	ug/L	2.0	0.47	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Thallium	0.071	ug/L	1.0	0.016	EPA-200.8	10/18/07	10/23/07 03:41	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Zinc	46	ug/L	50	6.1	EPA-200.7	10/18/07	10/19/07 13:20	LDG	PE-OP2	1	BQJ1186	ND	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project: Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number: AB303	
China Lake, CA 93555	Project Manager: Mike Stoner	

Water Analysis (General Chemistry)

BCL Sample ID: 0712043-03 **Client Sample Name:** 27138-17 AO1, 10/11/2007 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Calcium	120	mg/L	0.10	0.018	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Magnesium	19	mg/L	0.050	0.019	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Sodium	54	mg/L	0.50	0.12	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Potassium	2.8	mg/L	1.0	0.13	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Bicarbonate	260	mg/L	5.8	5.8	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	2	BQJ1056	ND	A01
Carbonate	ND	mg/L	3.0	3.0	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	2	BQJ1056	ND	A01
Hydroxide	ND	mg/L	1.6	1.6	SM-2320B	10/16/07	10/16/07 13:20	JSM	BDB	2	BQJ1056	ND	A01
Alkalinity as CaCO3	210	mg/L	2.5	2.5	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
Chloride	19	mg/L	0.50	0.037	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Fluoride	0.22	mg/L	0.050	0.011	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Nitrate as NO3	2.5	mg/L	0.44	0.077	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Sulfate	75	mg/L	1.0	0.11	EPA-300.0	10/12/07	10/12/07 19:08	FAD	IC2	1	BQJ0842	ND	
Total Cations	9.8	meq/L	0.10	0.10	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
Total Anions	6.4	meq/L	0.10	0.10	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
Hardness as CaCO3	370	mg/L	0.50	0.10	Calc	10/17/07	11/06/07 10:33	MSA	Calc	1	BQJ1105	ND	
pH	7.90	pH Units	0.05	0.05	EPA-150.1	10/16/07	10/16/07 11:45	JSM	B360	1	BQJ1016		
Electrical Conductivity @ 25 C	574	umhos/cm	1.00	1.00	SM-2510B	10/16/07	10/16/07 13:00	JSM	CND-3	1	BQJ1021		
Total Dissolved Solids @ 180 C	390	mg/L	20	20	SM-2540C	10/18/07	10/18/07 10:00	JLR	MANUAL	2	BQJ1506	ND	
MBAS	ND	mg/L	0.10	0.039	SM-5540C	10/12/07	10/12/07 14:00	CDR	SPEC05	1	BQJ0922	ND	
Nitrite as N	ND	ug/L	50	10	EPA-353.2	10/12/07	10/12/07 15:13	TDC	KONE-1	1	BQJ0940	ND	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Naval Air Weapons Station - China Lake	Project:	Indian Wells Valley Water	**Reported:** 11/08/2007 10:50
429 E. Bowan	Project Number:	AB303	
China Lake, CA 93555	Project Manager:	Mike Stoner	

Water Analysis (Metals)

BCL Sample ID: 0712043-03 **Client Sample Name:** 27138-17 AO1, 10/11/2007 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Recoverable Aluminum	750	ug/L	50	36	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Antimony	ND	ug/L	2.0	0.097	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Arsenic	ND	ug/L	2.0	0.37	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Barium	41	ug/L	10	1.7	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Beryllium	ND	ug/L	1.0	0.043	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Boron	110	ug/L	100	16	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Cadmium	ND	ug/L	1.0	0.025	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Chromium	ND	ug/L	10	1.6	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Copper	3.4	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	J
Total Recoverable Iron	890	ug/L	50	41	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Lead	0.33	ug/L	1.0	0.057	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Manganese	36	ug/L	10	3.7	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	10/25/07	10/26/07 08:51	MEV	CETAC1	1	BQJ1566	ND	
Total Recoverable Nickel	ND	ug/L	10	3.4	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Selenium	1.3	ug/L	2.0	0.47	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	J
Total Recoverable Silver	ND	ug/L	10	2.0	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	
Total Recoverable Thallium	ND	ug/L	1.0	0.016	EPA-200.8	10/18/07	10/23/07 03:44	PPS	PE-EL1	1	BQJ1188	ND	
Total Recoverable Zinc	6.7	ug/L	50	6.1	EPA-200.7	10/18/07	10/19/07 13:24	LDG	PE-OP2	1	BQJ1186	ND	J

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Chloride	BQJ0842	Duplicate	0712031-01	71.571	71.488		mg/L	0.1		10		
		Matrix Spike	0712031-01	71.571	184.84	101.01	mg/L		112		80 - 120	
		Matrix Spike Duplicate	0712031-01	71.571	184.36	101.01	mg/L	0	112	10	80 - 120	
Fluoride	BQJ0842	Duplicate	0712031-01	1.6000	1.4750		mg/L	8.1		10		
		Matrix Spike	0712031-01	1.6000	2.6374	1.0101	mg/L		103		80 - 120	
		Matrix Spike Duplicate	0712031-01	1.6000	2.6313	1.0101	mg/L	1.0	102	10	80 - 120	
Nitrate as NO3	BQJ0842	Duplicate	0712031-01	1.8327	1.8150		mg/L	1.0		10		
		Matrix Spike	0712031-01	1.8327	25.036	22.358	mg/L		104		80 - 120	
		Matrix Spike Duplicate	0712031-01	1.8327	24.875	22.358	mg/L	1.0	103	10	80 - 120	
Sulfate	BQJ0842	Duplicate	0712031-01	89.141	89.269		mg/L	0.1		10		
		Matrix Spike	0712031-01	89.141	198.48	101.01	mg/L		108		80 - 120	
		Matrix Spike Duplicate	0712031-01	89.141	198.40	101.01	mg/L	0	108	10	80 - 120	
MBAS	BQJ0922	Duplicate	0711982-01	ND	ND		mg/L			20		A01
		Matrix Spike	0711982-01	ND	0.40560	0.40000	mg/L		101		80 - 120	A01
		Matrix Spike Duplicate	0711982-01	ND	0.41240	0.40000	mg/L	2.0	103	20	80 - 120	A01
Nitrite as N	BQJ0940	Duplicate	0712042-01	ND	ND		ug/L			10		A26,S05
		Matrix Spike	0712042-01	ND	509.82	526.32	ug/L		96.9		90 - 110	A26,S05
		Matrix Spike Duplicate	0712042-01	ND	508.55	526.32	ug/L	0.3	96.6	10	90 - 110	A26,S05
pH	BQJ1016	Duplicate	0712036-01	7.9220	7.9330		pH Units	0.1		20		
Electrical Conductivity @ 25 C	BQJ1021	Duplicate	0712043-01	425.00	422.00		umhos/cm	0.7		10		
Bicarbonate	BQJ1056	Duplicate	0712043-03	262.00	260.84		mg/L	0.4		10		A01
		Matrix Spike	0712043-03	262.00	417.36	152.38	mg/L		102		80 - 120	A01
		Matrix Spike Duplicate	0712043-03	262.00	417.36	152.38	mg/L	0	102	10	80 - 120	A01
Carbonate	BQJ1056	Duplicate	0712043-03	ND	ND		mg/L			10		A01
Hydroxide	BQJ1056	Duplicate	0712043-03	ND	ND		mg/L			10		A01

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Calcium	BQJ1186	Duplicate	0712043-01	23.259	24.679		mg/L	5.9		20		
		Matrix Spike	0712043-01	23.259	31.491	10.000	mg/L		82.3		75 - 125	
		Matrix Spike Duplicate	0712043-01	23.259	32.257	10.000	mg/L	8.9	90.0	20	75 - 125	
Total Recoverable Magnesium	BQJ1186	Duplicate	0712043-01	3.7514	4.1079		mg/L	9.1		20		
		Matrix Spike	0712043-01	3.7514	14.125	10.000	mg/L		104		75 - 125	
		Matrix Spike Duplicate	0712043-01	3.7514	14.561	10.000	mg/L	3.8	108	20	75 - 125	
Total Recoverable Sodium	BQJ1186	Duplicate	0712043-01	76.726	82.397		mg/L	7.1		20		
		Matrix Spike	0712043-01	76.726	80.925	10.000	mg/L		42.0		75 - 125	A03
		Matrix Spike Duplicate	0712043-01	76.726	82.913	10.000	mg/L	38.3	61.9	20	75 - 125	A03,Q02
Total Recoverable Potassium	BQJ1186	Duplicate	0712043-01	3.1412	3.4136		mg/L	8.3		20		
		Matrix Spike	0712043-01	3.1412	12.764	10.000	mg/L		96.2		75 - 125	
		Matrix Spike Duplicate	0712043-01	3.1412	13.045	10.000	mg/L	2.9	99.0	20	75 - 125	
Total Dissolved Solids @ 180 C	BQJ1506	Duplicate	0712036-01	456.66	433.33		mg/L	5.2		10		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Mercury	BQJ1161	Duplicate	0712011-02	ND	ND		ug/L			20		
		Matrix Spike	0712011-02	ND	1.0850	1.0000	ug/L		108		70 - 130	
		Matrix Spike Duplicate	0712011-02	ND	1.0700	1.0000	ug/L	0.9	107	20	70 - 130	
Total Recoverable Aluminum	BQJ1186	Duplicate	0712043-01	1130.4	1377.6		ug/L	19.7		20		
		Matrix Spike	0712043-01	1130.4	4061.5	1000.0	ug/L		293		75 - 125	Q03
		Matrix Spike Duplicate	0712043-01	1130.4	4421.8	1000.0	ug/L	11.6	329	20	75 - 125	Q03
Total Recoverable Barium	BQJ1186	Duplicate	0712043-01	6.9792	7.5878		ug/L	8.4		20		J
		Matrix Spike	0712043-01	6.9792	209.23	200.00	ug/L		101		75 - 125	
		Matrix Spike Duplicate	0712043-01	6.9792	215.48	200.00	ug/L	2.9	104	20	75 - 125	
Total Recoverable Boron	BQJ1186	Duplicate	0712043-01	114.66	119.60		ug/L	4.2		20		
		Matrix Spike	0712043-01	114.66	1114.3	1000.0	ug/L		100		75 - 125	
		Matrix Spike Duplicate	0712043-01	114.66	1139.9	1000.0	ug/L	3.0	103	20	75 - 125	
Total Recoverable Chromium	BQJ1186	Duplicate	0712043-01	ND	ND		ug/L			20		
		Matrix Spike	0712043-01	ND	187.62	200.00	ug/L		93.8		75 - 125	
		Matrix Spike Duplicate	0712043-01	ND	194.47	200.00	ug/L	3.6	97.2	20	75 - 125	
Total Recoverable Copper	BQJ1186	Duplicate	0712043-01	2.2975	3.3424		ug/L	37.1		20		J,A02
		Matrix Spike	0712043-01	2.2975	199.06	200.00	ug/L		98.4		75 - 125	
		Matrix Spike Duplicate	0712043-01	2.2975	203.26	200.00	ug/L	1.6	100	20	75 - 125	
Total Recoverable Iron	BQJ1186	Duplicate	0712043-01	910.53	1077.4		ug/L	16.8		20		
		Matrix Spike	0712043-01	910.53	1870.0	400.00	ug/L		240		75 - 125	Q03
		Matrix Spike Duplicate	0712043-01	910.53	2029.4	400.00	ug/L	15.4	280	20	75 - 125	Q03
Total Recoverable Manganese	BQJ1186	Duplicate	0712043-01	71.324	82.877		ug/L	15.0		20		
		Matrix Spike	0712043-01	71.324	288.07	200.00	ug/L		108		75 - 125	
		Matrix Spike Duplicate	0712043-01	71.324	300.33	200.00	ug/L	6.3	115	20	75 - 125	
Total Recoverable Nickel	BQJ1186	Duplicate	0712043-01	ND	ND		ug/L			20		
		Matrix Spike	0712043-01	ND	398.76	400.00	ug/L		99.7		75 - 125	
		Matrix Spike Duplicate	0712043-01	ND	413.80	400.00	ug/L	3.3	103	20	75 - 125	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Silver	BQJ1186	Duplicate	0712043-01	ND	ND		ug/L			20		
		Matrix Spike	0712043-01	ND	107.15	100.00	ug/L		107		75 - 125	
		Matrix Spike Duplicate	0712043-01	ND	109.68	100.00	ug/L	2.8	110	20	75 - 125	
Total Recoverable Zinc	BQJ1186	Duplicate	0712043-01	7.6711	8.9211		ug/L	15.1		20		J
		Matrix Spike	0712043-01	7.6711	214.84	200.00	ug/L		104		75 - 125	
		Matrix Spike Duplicate	0712043-01	7.6711	221.24	200.00	ug/L	2.8	107	20	75 - 125	
Total Recoverable Antimony	BQJ1188	Duplicate	0711990-01	0.17000	0.11600		ug/L	37.8		20		J,A02
		Matrix Spike	0711990-01	0.17000	19.616	20.000	ug/L		97.2		70 - 130	
		Matrix Spike Duplicate	0711990-01	0.17000	19.833	20.000	ug/L	1.1	98.3	20	70 - 130	
Total Recoverable Arsenic	BQJ1188	Duplicate	0711990-01	19.818	20.489		ug/L	3.3		20		
		Matrix Spike	0711990-01	19.818	67.714	50.000	ug/L		95.8		70 - 130	
		Matrix Spike Duplicate	0711990-01	19.818	67.265	50.000	ug/L	0.9	94.9	20	70 - 130	
Total Recoverable Beryllium	BQJ1188	Duplicate	0711990-01	ND	ND		ug/L			20		
		Matrix Spike	0711990-01	ND	19.318	20.000	ug/L		96.6		70 - 130	
		Matrix Spike Duplicate	0711990-01	ND	18.816	20.000	ug/L	2.6	94.1	20	70 - 130	
Total Recoverable Cadmium	BQJ1188	Duplicate	0711990-01	0.070000	0.070000		ug/L	0		20		J
		Matrix Spike	0711990-01	0.070000	18.988	20.000	ug/L		94.6		70 - 130	
		Matrix Spike Duplicate	0711990-01	0.070000	19.640	20.000	ug/L	3.3	97.8	20	70 - 130	
Total Recoverable Lead	BQJ1188	Duplicate	0711990-01	4.1850	4.2170		ug/L	0.8		20		
		Matrix Spike	0711990-01	4.1850	51.875	50.000	ug/L		95.4		70 - 130	
		Matrix Spike Duplicate	0711990-01	4.1850	52.928	50.000	ug/L	2.2	97.5	20	70 - 130	
Total Recoverable Selenium	BQJ1188	Duplicate	0711990-01	ND	ND		ug/L			20		
		Matrix Spike	0711990-01	ND	47.391	50.000	ug/L		94.8		70 - 130	
		Matrix Spike Duplicate	0711990-01	ND	46.865	50.000	ug/L	1.2	93.7	20	70 - 130	
Total Recoverable Thallium	BQJ1188	Duplicate	0711990-01	0.11700	ND		ug/L			20		
		Matrix Spike	0711990-01	0.11700	19.012	20.000	ug/L		94.5		70 - 130	
		Matrix Spike Duplicate	0711990-01	0.11700	19.547	20.000	ug/L	2.8	97.2	20	70 - 130	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Total Recoverable Mercury	BQJ1566	Duplicate	0712043-03	ND	ND		ug/L			20		
		Matrix Spike	0712043-03	ND	1.0650	1.0000	ug/L		106		70 - 130	
		Matrix Spike Duplicate	0712043-03	ND	1.0300	1.0000	ug/L	2.9	103	20	70 - 130	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Chloride	BQJ0842	BQJ0842-BS1	LCS	109.53	100.00	0.50	mg/L	110		90 - 110		
Fluoride	BQJ0842	BQJ0842-BS1	LCS	1.0390	1.0000	0.050	mg/L	104		90 - 110		
Nitrate as NO3	BQJ0842	BQJ0842-BS1	LCS	23.081	22.134	0.44	mg/L	104		90 - 110		
Sulfate	BQJ0842	BQJ0842-BS1	LCS	105.95	100.00	1.0	mg/L	106		90 - 110		
MBAS	BQJ0922	BQJ0922-BS1	LCS	0.19080	0.20000	0.10	mg/L	95.4		85 - 115		
Nitrite as N	BQJ0940	BQJ0940-BS1	LCS	481.77	500.00	50	ug/L	96.4		90 - 110		
pH	BQJ1016	BQJ1016-BS1	LCS	7.0290	7.0000	0.05	pH Units	100		95 - 105		
Electrical Conductivity @ 25 C	BQJ1021	BQJ1021-BS1	LCS	302.00	303.00	1.00	umhos/cm	99.7		90 - 110		
Bicarbonate	BQJ1056	BQJ1056-BS1	LCS	127.53	121.90	2.9	mg/L	105		90 - 110		
Total Recoverable Calcium	BQJ1186	BQJ1186-BS1	LCS	10.309	10.000	0.10	mg/L	103		85 - 115		
Total Recoverable Magnesium	BQJ1186	BQJ1186-BS1	LCS	10.648	10.000	0.050	mg/L	106		85 - 115		
Total Recoverable Sodium	BQJ1186	BQJ1186-BS1	LCS	10.245	10.000	0.50	mg/L	102		85 - 115		
Total Recoverable Potassium	BQJ1186	BQJ1186-BS1	LCS	10.129	10.000	1.0	mg/L	101		85 - 115		
Total Dissolved Solids @ 180 C	BQJ1506	BQJ1506-BS1	LCS	585.00	586.00	50	mg/L	99.8		90 - 110		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Total Recoverable Mercury	BQJ1161	BQJ1161-BS1	LCS	1.0075	1.0000	0.20	ug/L	101		85 - 115		
Total Recoverable Aluminum	BQJ1186	BQJ1186-BS1	LCS	985.62	1000.0	50	ug/L	98.6		85 - 115		
Total Recoverable Barium	BQJ1186	BQJ1186-BS1	LCS	206.83	200.00	10	ug/L	103		85 - 115		
Total Recoverable Boron	BQJ1186	BQJ1186-BS1	LCS	1010.0	1000.0	100	ug/L	101		85 - 115		
Total Recoverable Chromium	BQJ1186	BQJ1186-BS1	LCS	192.24	200.00	10	ug/L	96.1		85 - 115		
Total Recoverable Copper	BQJ1186	BQJ1186-BS1	LCS	191.86	200.00	10	ug/L	95.9		85 - 115		
Total Recoverable Iron	BQJ1186	BQJ1186-BS1	LCS	423.30	400.00	50	ug/L	106		85 - 115		
Total Recoverable Manganese	BQJ1186	BQJ1186-BS1	LCS	217.09	200.00	10	ug/L	109		85 - 115		
Total Recoverable Nickel	BQJ1186	BQJ1186-BS1	LCS	408.08	400.00	10	ug/L	102		85 - 115		
Total Recoverable Silver	BQJ1186	BQJ1186-BS1	LCS	108.87	100.00	10	ug/L	109		85 - 115		
Total Recoverable Zinc	BQJ1186	BQJ1186-BS1	LCS	218.79	200.00	50	ug/L	109		85 - 115		
Total Recoverable Antimony	BQJ1188	BQJ1188-BS1	LCS	19.387	20.000	2.0	ug/L	96.9		85 - 115		
Total Recoverable Arsenic	BQJ1188	BQJ1188-BS1	LCS	48.526	50.000	2.0	ug/L	97.1		85 - 115		
Total Recoverable Beryllium	BQJ1188	BQJ1188-BS1	LCS	19.008	20.000	1.0	ug/L	95.0		85 - 115		
Total Recoverable Cadmium	BQJ1188	BQJ1188-BS1	LCS	19.334	20.000	1.0	ug/L	96.7		85 - 115		
Total Recoverable Lead	BQJ1188	BQJ1188-BS1	LCS	48.843	50.000	1.0	ug/L	97.7		85 - 115		
Total Recoverable Selenium	BQJ1188	BQJ1188-BS1	LCS	49.538	50.000	2.0	ug/L	99.1		85 - 115		
Total Recoverable Thallium	BQJ1188	BQJ1188-BS1	LCS	19.416	20.000	1.0	ug/L	97.1		85 - 115		
Total Recoverable Mercury	BQJ1566	BQJ1566-BS1	LCS	0.97750	1.0000	0.20	ug/L	97.8		85 - 115		

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Chloride	BQJ0842	BQJ0842-BLK1	ND	mg/L	0.50	0.037	
Fluoride	BQJ0842	BQJ0842-BLK1	ND	mg/L	0.050	0.011	
Nitrate as NO3	BQJ0842	BQJ0842-BLK1	ND	mg/L	0.44	0.077	
Sulfate	BQJ0842	BQJ0842-BLK1	ND	mg/L	1.0	0.11	
MBAS	BQJ0922	BQJ0922-BLK1	ND	mg/L	0.10	0.039	
Nitrite as N	BQJ0940	BQJ0940-BLK1	ND	ug/L	50	10	
Bicarbonate	BQJ1056	BQJ1056-BLK1	ND	mg/L	2.9	2.9	
Carbonate	BQJ1056	BQJ1056-BLK1	ND	mg/L	1.5	1.5	
Hydroxide	BQJ1056	BQJ1056-BLK1	ND	mg/L	0.81	0.81	
Alkalinity as CaCO3	BQJ1105	BQJ1105-BLK1	ND	mg/L	2.5	2.5	
Total Cations	BQJ1105	BQJ1105-BLK1	ND	meq/L	0.10	0.10	
Total Anions	BQJ1105	BQJ1105-BLK1	ND	meq/L	0.10	0.10	
Hardness as CaCO3	BQJ1105	BQJ1105-BLK1	ND	mg/L	0.50	0.10	
Total Recoverable Calcium	BQJ1186	BQJ1186-BLK1	ND	mg/L	0.10	0.018	
Total Recoverable Magnesium	BQJ1186	BQJ1186-BLK1	ND	mg/L	0.050	0.019	
Total Recoverable Sodium	BQJ1186	BQJ1186-BLK1	ND	mg/L	0.50	0.12	
Total Recoverable Potassium	BQJ1186	BQJ1186-BLK1	ND	mg/L	1.0	0.13	
Total Dissolved Solids @ 180 C	BQJ1506	BQJ1506-BLK1	ND	mg/L	6.7	6.7	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Recoverable Mercury	BQJ1161	BQJ1161-BLK1	ND	ug/L	0.20	0.022	
Total Recoverable Aluminum	BQJ1186	BQJ1186-BLK1	ND	ug/L	50	36	
Total Recoverable Barium	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	1.7	
Total Recoverable Boron	BQJ1186	BQJ1186-BLK1	ND	ug/L	100	16	
Total Recoverable Chromium	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	1.6	
Total Recoverable Copper	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	2.0	
Total Recoverable Iron	BQJ1186	BQJ1186-BLK1	ND	ug/L	50	41	
Total Recoverable Manganese	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	3.7	
Total Recoverable Nickel	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	3.4	
Total Recoverable Silver	BQJ1186	BQJ1186-BLK1	ND	ug/L	10	2.0	
Total Recoverable Zinc	BQJ1186	BQJ1186-BLK1	ND	ug/L	50	6.1	
Total Recoverable Antimony	BQJ1188	BQJ1188-BLK1	ND	ug/L	2.0	0.097	
Total Recoverable Arsenic	BQJ1188	BQJ1188-BLK1	ND	ug/L	2.0	0.37	
Total Recoverable Beryllium	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.043	
Total Recoverable Cadmium	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.025	
Total Recoverable Lead	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.057	
Total Recoverable Selenium	BQJ1188	BQJ1188-BLK1	ND	ug/L	2.0	0.47	
Total Recoverable Thallium	BQJ1188	BQJ1188-BLK1	ND	ug/L	1.0	0.016	
Total Recoverable Mercury	BQJ1566	BQJ1566-BLK1	ND	ug/L	0.20	0.022	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (General Chemistry)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Chloride	0710587-1	0710587-ICV1	ICV	10/12/2007 15:33	104.17	100.00	mg/L	104	90 - 110	
		0710587-ICV1	CCV, Beginning	10/12/2007 15:33	104.17	100.00	mg/L	104	90 - 110	
		0710587-CCV1	CCV, Ending	10/12/2007 18:05	106.33	100.00	mg/L	106	90 - 110	
Fluoride	0710587-1	0710587-ICV1	ICV	10/12/2007 15:33	0.93300	1.0000	mg/L	93.3	90 - 110	
		0710587-ICV1	CCV, Beginning	10/12/2007 15:33	0.93300	1.0000	mg/L	93.3	90 - 110	
		0710587-CCV1	CCV, Ending	10/12/2007 18:05	1.0470	1.0000	mg/L	105	90 - 110	
Nitrate as NO3	0710587-1	0710587-ICV1	ICV	10/12/2007 15:33	23.493	22.140	mg/L	106	90 - 110	
		0710587-ICV1	CCV, Beginning	10/12/2007 15:33	23.493	22.140	mg/L	106	90 - 110	
		0710587-CCV1	CCV, Ending	10/12/2007 18:05	22.391	22.134	mg/L	101	90 - 110	
Sulfate	0710587-1	0710587-ICV1	ICV	10/12/2007 15:33	101.52	100.00	mg/L	102	90 - 110	
		0710587-ICV1	CCV, Beginning	10/12/2007 15:33	101.52	100.00	mg/L	102	90 - 110	
		0710587-CCV1	CCV, Ending	10/12/2007 18:05	102.90	100.00	mg/L	103	90 - 110	
Chloride	0710587-2	0710587-ICV1	ICV	10/12/2007 15:33	104.17	100.00	mg/L	104	90 - 110	
		0710587-CCV1	CCV, Beginning	10/12/2007 18:05	106.33	100.00	mg/L	106	90 - 110	
		0710587-CCV2	CCV, Ending	10/12/2007 20:36	106.79	100.00	mg/L	107	90 - 110	
Fluoride	0710587-2	0710587-ICV1	ICV	10/12/2007 15:33	0.93300	1.0000	mg/L	93.3	90 - 110	
		0710587-CCV1	CCV, Beginning	10/12/2007 18:05	1.0470	1.0000	mg/L	105	90 - 110	
		0710587-CCV2	CCV, Ending	10/12/2007 20:36	1.0120	1.0000	mg/L	101	90 - 110	
Nitrate as NO3	0710587-2	0710587-ICV1	ICV	10/12/2007 15:33	23.493	22.140	mg/L	106	90 - 110	
		0710587-CCV1	CCV, Beginning	10/12/2007 18:05	22.391	22.134	mg/L	101	90 - 110	
		0710587-CCV2	CCV, Ending	10/12/2007 20:36	22.369	22.134	mg/L	101	90 - 110	
Sulfate	0710587-2	0710587-ICV1	ICV	10/12/2007 15:33	101.52	100.00	mg/L	102	90 - 110	
		0710587-CCV1	CCV, Beginning	10/12/2007 18:05	102.90	100.00	mg/L	103	90 - 110	
		0710587-CCV2	CCV, Ending	10/12/2007 20:36	103.06	100.00	mg/L	103	90 - 110	
Nitrite as N	0710592-4	0710592-CCV6	CCV, Beginning	10/12/2007 15:13	0.49327	0.50000	mg/L	98.7	90 - 110	
		0710592-CCV7	CCV, Ending	10/12/2007 15:16	0.49658	0.50000	mg/L	99.3	90 - 110	

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Water Analysis (General Chemistry)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Calcium	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	49.110	50.000	mg/L	98.2	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	49.979	50.000	mg/L	100	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	51.731	50.000	mg/L	103	90 - 110	
Total Recoverable Magnesium	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	49.428	50.000	mg/L	98.9	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	50.305	50.000	mg/L	101	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	52.050	50.000	mg/L	104	90 - 110	
Total Recoverable Sodium	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	48.611	50.000	mg/L	97.2	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	49.093	50.000	mg/L	98.2	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	50.807	50.000	mg/L	102	90 - 110	
Total Recoverable Potassium	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	48.077	50.000	mg/L	96.2	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	48.741	50.000	mg/L	97.5	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	50.446	50.000	mg/L	101	90 - 110	
Total Recoverable Calcium	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	49.110	50.000	mg/L	98.2	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	51.731	50.000	mg/L	103	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	49.609	50.000	mg/L	99.2	90 - 110	
Total Recoverable Magnesium	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	49.428	50.000	mg/L	98.9	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	52.050	50.000	mg/L	104	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	49.991	50.000	mg/L	100	90 - 110	
Total Recoverable Sodium	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	48.611	50.000	mg/L	97.2	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	50.807	50.000	mg/L	102	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	49.104	50.000	mg/L	98.2	90 - 110	
Total Recoverable Potassium	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	48.077	50.000	mg/L	96.2	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	50.446	50.000	mg/L	101	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	48.867	50.000	mg/L	97.7	90 - 110	
MBAS	0710766-4	0710766-ICV1	ICV	10/12/2007 13:00	0.20620	0.20000	mg/L	103	90 - 110	
		0710766-CCV5	CCV, Beginning	10/12/2007 14:00	0.19080	0.20000	mg/L	95.4	90 - 110	
		0710766-CCV6	CCV, Ending	10/12/2007 14:00	0.19080	0.20000	mg/L	95.4	90 - 110	

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Water Analysis (Metals)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Mercury	0710726-2	0710726-ICV1	ICV	10/19/2007 14:05	0.40200	0.40000	ug/L	100	95 - 105	
		0710726-CCV1	CCV, Beginning	10/19/2007 14:31	0.40300	0.40000	ug/L	101	90 - 110	
		0710726-CCV2	CCV, Ending	10/19/2007 14:48	0.41100	0.40000	ug/L	103	90 - 110	
Total Recoverable Aluminum	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	48.322	50.000	mg/L	96.6	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	48.428	50.000	mg/L	96.9	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	50.639	50.000	mg/L	101	90 - 110	
Total Recoverable Barium	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	2.4422	2.5000	mg/L	97.7	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	2.4601	2.5000	mg/L	98.4	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	2.5542	2.5000	mg/L	102	90 - 110	
Total Recoverable Boron	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	2.4192	2.5000	mg/L	96.8	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	2.4588	2.5000	mg/L	98.4	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	2.4558	2.5000	mg/L	98.2	90 - 110	
Total Recoverable Chromium	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	0.48630	0.50000	mg/L	97.3	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	0.48377	0.50000	mg/L	96.8	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	0.48637	0.50000	mg/L	97.3	90 - 110	
Total Recoverable Copper	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	0.48296	0.50000	mg/L	96.6	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	0.49559	0.50000	mg/L	99.1	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	0.49401	0.50000	mg/L	98.8	90 - 110	
Total Recoverable Iron	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	49.637	50.000	mg/L	99.3	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	49.854	50.000	mg/L	99.7	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	52.146	50.000	mg/L	104	90 - 110	
Total Recoverable Manganese	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	49.842	50.000	mg/L	99.7	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	51.563	50.000	mg/L	103	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	51.836	50.000	mg/L	104	90 - 110	
Total Recoverable Nickel	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	0.51315	0.50000	mg/L	103	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	0.48841	0.50000	mg/L	97.7	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	0.48839	0.50000	mg/L	97.7	90 - 110	

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Water Analysis (Metals)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Silver	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	0.23951	0.25000	mg/L	95.8	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	0.24532	0.25000	mg/L	98.1	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	0.24289	0.25000	mg/L	97.2	90 - 110	
Total Recoverable Zinc	0710750-1	0710750-ICV1	ICV	10/19/2007 07:30	2.5202	2.5000	mg/L	101	95 - 105	
		0710750-CCV3	CCV, Beginning	10/19/2007 12:12	2.5003	2.5000	mg/L	100	90 - 110	
		0710750-CCV4	CCV, Ending	10/19/2007 13:11	2.5998	2.5000	mg/L	104	90 - 110	
Total Recoverable Aluminum	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	48.322	50.000	mg/L	96.6	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	50.639	50.000	mg/L	101	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	49.398	50.000	mg/L	98.8	90 - 110	
Total Recoverable Barium	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	2.4422	2.5000	mg/L	97.7	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	2.5542	2.5000	mg/L	102	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	2.4619	2.5000	mg/L	98.5	90 - 110	
Total Recoverable Boron	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	2.4192	2.5000	mg/L	96.8	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	2.4558	2.5000	mg/L	98.2	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	2.4156	2.5000	mg/L	96.6	90 - 110	
Total Recoverable Chromium	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	0.48630	0.50000	mg/L	97.3	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	0.48637	0.50000	mg/L	97.3	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	0.48209	0.50000	mg/L	96.4	90 - 110	
Total Recoverable Copper	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	0.48296	0.50000	mg/L	96.6	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	0.49401	0.50000	mg/L	98.8	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	0.48734	0.50000	mg/L	97.5	90 - 110	
Total Recoverable Iron	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	49.637	50.000	mg/L	99.3	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	52.146	50.000	mg/L	104	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	50.817	50.000	mg/L	102	90 - 110	
Total Recoverable Manganese	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	49.842	50.000	mg/L	99.7	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	51.836	50.000	mg/L	104	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	50.713	50.000	mg/L	101	90 - 110	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (Metals)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Nickel	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	0.51315	0.50000	mg/L	103	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	0.48839	0.50000	mg/L	97.7	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	0.48747	0.50000	mg/L	97.5	90 - 110	
Total Recoverable Silver	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	0.23951	0.25000	mg/L	95.8	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	0.24289	0.25000	mg/L	97.2	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	0.23922	0.25000	mg/L	95.7	90 - 110	
Total Recoverable Zinc	0710750-2	0710750-ICV1	ICV	10/19/2007 07:30	2.5202	2.5000	mg/L	101	95 - 105	
		0710750-CCV4	CCV, Beginning	10/19/2007 13:11	2.5998	2.5000	mg/L	104	90 - 110	
		0710750-CCV5	CCV, Ending	10/19/2007 14:02	2.5198	2.5000	mg/L	101	90 - 110	
Total Recoverable Beryllium	0710844-1	0710844-ICV1	ICV	10/22/2007 15:03	46.705	50.000	ug/L	93.4	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	36.325	40.000	ug/L	90.8	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	39.292	40.000	ug/L	98.2	90 - 110	
Total Recoverable Cadmium	0710844-1	0710844-ICV1	ICV	10/22/2007 15:03	49.798	50.000	ug/L	99.6	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	38.595	40.000	ug/L	96.5	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	40.040	40.000	ug/L	100	90 - 110	
Total Recoverable Antimony	0710844-2	0710844-ICV1	ICV	10/22/2007 15:03	48.018	50.000	ug/L	96.0	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	39.550	40.000	ug/L	98.9	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	40.456	40.000	ug/L	101	90 - 110	
Total Recoverable Arsenic	0710844-2	0710844-ICV1	ICV	10/22/2007 15:03	118.08	125.00	ug/L	94.5	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	98.782	100.00	ug/L	98.8	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	99.453	100.00	ug/L	99.5	90 - 110	
Total Recoverable Selenium	0710844-2	0710844-ICV1	ICV	10/22/2007 15:03	118.14	125.00	ug/L	94.5	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	100.13	100.00	ug/L	100	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	101.67	100.00	ug/L	102	90 - 110	
Total Recoverable Thallium	0710844-2	0710844-ICV1	ICV	10/22/2007 15:03	50.028	50.000	ug/L	100	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	38.123	40.000	ug/L	95.3	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	38.139	40.000	ug/L	95.3	90 - 110	

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Naval Air Weapons Station - China Lake
429 E. Bowan
China Lake, CA 93555

Project: Indian Wells Valley Water
Project Number: AB303
Project Manager: Mike Stoner

Reported: 11/08/2007 10:50

Water Analysis (Metals)

Quality Control Report - Instrumental Parameters

Constituent	CCV Ref ID	QC Sample ID	Sample Type	Run Date	Result	True Value	Units	%Found	Control Limits	Lab Quals
Total Recoverable Lead	0710844-3	0710844-ICV1	ICV	10/22/2007 15:03	123.63	125.00	ug/L	98.9	90 - 110	
		0710844-CCVL	CCV, Beginning	10/23/2007 03:27	94.684	100.00	ug/L	94.7	90 - 110	
		0710844-CCVM	CCV, Ending	10/23/2007 04:01	94.943	100.00	ug/L	94.9	90 - 110	
Total Recoverable Mercury	0710966-1	0710966-ICV1	ICV	10/26/2007 08:42	0.39800	0.40000	ug/L	99.5	95 - 105	
		0710966-ICV1	CCV, Beginning	10/26/2007 08:42	0.39800	0.40000	ug/L	99.5	95 - 105	
		0710966-CCV1	CCV, Ending	10/26/2007 09:08	0.40100	0.40000	ug/L	100	90 - 110	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes And Definitions

CCV	Continuing Calibration Verification
ICV	Initial Calibration Verification
J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A26	Sample received past holding time.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
1	VERT	12774.0	20268.0	2900.0	872	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	90	-99	-99	-99	-99	-99
90.0	90	-99	-99	-99	-99	-99
91.0	50	-99	-99	-99	-99	-99
95.0	50	-99	-99	-99	-99	-99
96.0	90	-99	-99	-99	-99	-99
140.0	90	-99	-99	-99	-99	-99
141.0	50	-99	-99	-99	-99	-99
335.0	50	-99	-99	-99	-99	-99
336.0	40	-99	-99	-99	-99	-99
795.0	40	-99	-99	-99	-99	-99
796.0	50	-99	-99	-99	-99	-99
805.0	50	-99	-99	-99	-99	-99
806.0	40	-99	-99	-99	-99	-99
825.0	40	-99	-99	-99	-99	-99
826.0	60	-99	-99	-99	-99	-99
850.0	60	-99	-99	-99	-99	-99
851.0	40	-99	-99	-99	-99	-99
860.0	40	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
2	VERT	6812.00	20266.	3090.0	601	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
105.0	60	-99	-99	-99	-99	-99
106.0	50	-99	-99	-99	-99	-99
340.0	50	-99	-99	-99	-99	-99
341.0	60	-99	-99	-99	-99	-99
360.0	60	-99	-99	-99	-99	-99
361.0	50	-99	-99	-99	-99	-99
525.0	50	-99	-99	-99	-99	-99
526.0	60	-99	-99	-99	-99	-99
540.0	60	-99	-99	-99	-99	-99
541.0	50	-99	-99	-99	-99	-99
550.0	50	-99	-99	-99	-99	-99
551.0	60	-99	-99	-99	-99	-99
601.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
3	VERT	25545.00	15327.	2660.0	630	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
110.0	50	-99	-99	-99	-99	-99
111.0	70	-99	-99	-99	-99	-99

115.0	70	-99	-99	-99	-99	-99
116.0	50	-99	-99	-99	-99	-99
155.0	50	-99	-99	-99	-99	-99
156.0	20	-99	-99	-99	-99	-99
160.0	20	-99	-99	-99	-99	-99
161.0	40	-99	-99	-99	-99	-99
165.0	40	-99	-99	-99	-99	-99
166.0	50	-99	-99	-99	-99	-99
195.0	50	-99	-99	-99	-99	-99
196.0	40	-99	-99	-99	-99	-99
210.0	40	-99	-99	-99	-99	-99
211.0	50	-99	-99	-99	-99	-99
270.0	50	-99	-99	-99	-99	-99
271.0	40	-99	-99	-99	-99	-99
275.0	40	-99	-99	-99	-99	-99
276.0	50	-99	-99	-99	-99	-99
290.0	50	-99	-99	-99	-99	-99
291.0	40	-99	-99	-99	-99	-99
345.0	40	-99	-99	-99	-99	-99
346.0	50	-99	-99	-99	-99	-99
515.0	50	-99	-99	-99	-99	-99
516.0	40	-99	-99	-99	-99	-99
570.0	40	-99	-99	-99	-99	-99
571.0	30	-99	-99	-99	-99	-99
575.0	30	-99	-99	-99	-99	-99
576.0	50	-99	-99	-99	-99	-99
585.0	50	-99	-99	-99	-99	-99
586.0	40	-99	-99	-99	-99	-99
590.0	40	-99	-99	-99	-99	-99
591.0	50	-99	-99	-99	-99	-99
610.0	50	-99	-99	-99	-99	-99
611.0	30	-99	-99	-99	-99	-99
615.0	30	-99	-99	-99	-99	-99
616.0	40	-99	-99	-99	-99	-99
635.0	40	-99	-99	-99	-99	-99
636.0	50	-99	-99	-99	-99	-99
695.0	50	-99	-99	-99	-99	-99
696.0	20	-99	-99	-99	-99	-99
700.0	20	-99	-99	-99	-99	-99
701.0	40	-99	-99	-99	-99	-99
705.0	40	-99	-99	-99	-99	-99
706.0	50	-99	-99	-99	-99	-99
725.0	50	-99	-99	-99	-99	-99
726.0	40	-99	-99	-99	-99	-99
740.0	40	-99	-99	-99	-99	-99
741.0	20	-99	-99	-99	-99	-99
745.0	20	-99	-99	-99	-99	-99
746.0	50	-99	-99	-99	-99	-99
755.0	50	-99	-99	-99	-99	-99
756.0	20	-99	-99	-99	-99	-99
765.0	20	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
4	VERT	7834.00	16349.0	3090.0	490	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
60.0	60	-99	-99	-99	-99	-99
60.1	90	-99	-99	-99	-99	-99
120.0	90	-99	-99	-99	-99	-99
120.1	50	-99	-99	-99	-99	-99
125.0	50	-99	-99	-99	-99	-99
125.1	90	-99	-99	-99	-99	-99
135.0	90	-99	-99	-99	-99	-99
135.1	50	-99	-99	-99	-99	-99
205.0	50	-99	-99	-99	-99	-99
205.1	60	-99	-99	-99	-99	-99
255.0	60	-99	-99	-99	-99	-99
255.1	50	-99	-99	-99	-99	-99
280.0	50	-99	-99	-99	-99	-99
280.1	60	-99	-99	-99	-99	-99
290.0	60	-99	-99	-99	-99	-99
290.1	50	-99	-99	-99	-99	-99
315.0	50	-99	-99	-99	-99	-99
315.1	60	-99	-99	-99	-99	-99
330.0	60	-99	-99	-99	-99	-99
330.1	50	-99	-99	-99	-99	-99
350.0	50	-99	-99	-99	-99	-99
350.1	60	-99	-99	-99	-99	-99
490.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
5	VERT	16689.0	8174.0	2852.0	2848.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
250.0	60	-99	-99	-99	-99	-99
251.0	20	-99	-99	-99	-99	-99
280.0	20	-99	-99	-99	-99	-99
281.0	50	-99	-99	-99	-99	-99
350.0	50	-99	-99	-99	-99	-99
351.0	60	-99	-99	-99	-99	-99
400.0	60	-99	-99	-99	-99	-99
401.0	20	-99	-99	-99	-99	-99
430.0	20	-99	-99	-99	-99	-99
431.0	60	-99	-99	-99	-99	-99
450.0	60	-99	-99	-99	-99	-99
451.0	20	-99	-99	-99	-99	-99
470.0	20	-99	-99	-99	-99	-99
471.0	60	-99	-99	-99	-99	-99
510.0	60	-99	-99	-99	-99	-99
511.0	20	-99	-99	-99	-99	-99
520.0	20	-99	-99	-99	-99	-99
521.0	50	-99	-99	-99	-99	-99
580.0	50	-99	-99	-99	-99	-99
581.0	20	-99	-99	-99	-99	-99
610.0	20	-99	-99	-99	-99	-99
611.0	60	-99	-99	-99	-99	-99

760.0	60	-99	-99	-99	-99	-99
761.0	40	-99	-99	-99	-99	-99
800.0	40	-99	-99	-99	-99	-99
801.0	20	-99	-99	-99	-99	-99
880.0	20	-99	-99	-99	-99	-99
881.0	40	-99	-99	-99	-99	-99
1370.0	40	-99	-99	-99	-99	-99
1371.0	20	-99	-99	-99	-99	-99
1420.0	20	-99	-99	-99	-99	-99
1421.0	40	-99	-99	-99	-99	-99
1890.0	40	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
6	VERT	16689.0	25034.0	2655.0	2020.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
380.0	50	-99	-99	-99	-99	-99
381.0	40	-99	-99	-99	-99	-99
580.0	40	-99	-99	-99	-99	-99
581.0	60	-99	-99	-99	-99	-99
630.0	60	-99	-99	-99	-99	-99
631.0	30	-99	-99	-99	-99	-99
760.0	30	-99	-99	-99	-99	-99
761.0	40	-99	-99	-99	-99	-99
1220.0	40	-99	-99	-99	-99	-99
1221.0	30	-99	-99	-99	-99	-99
1240.0	30	-99	-99	-99	-99	-99
1241.0	40	-99	-99	-99	-99	-99
1970.0	40	-99	-99	-99	-99	-99
1971.0	60	-99	-99	-99	-99	-99
2020.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
7	VERT	25034.0	14986.0	2660.0	690.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
70.0	50	-99	-99	-99	-99	-99
71.0	90	-99	-99	-99	-99	-99
100.0	90	-99	-99	-99	-99	-99
101.0	50	-99	-99	-99	-99	-99
105.0	50	-99	-99	-99	-99	-99
106.0	90	-99	-99	-99	-99	-99
125.0	90	-99	-99	-99	-99	-99
126.0	50	-99	-99	-99	-99	-99
155.0	50	-99	-99	-99	-99	-99
156.0	100	-99	-99	-99	-99	-99
160.0	100	-99	-99	-99	-99	-99
161.0	50	-99	-99	-99	-99	-99
235.0	50	-99	-99	-99	-99	-99

236.0	60	-99	-99	-99	-99	-99
270.0	60	-99	-99	-99	-99	-99
271.0	50	-99	-99	-99	-99	-99
770.0	50	-99	-99	-99	-99	-99
771.0	20	-99	-99	-99	-99	-99
900.0	20	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
8	VERT	1703.0	9877.0	3130.0	1045.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
10.0	50	-99	-99	-99	-99	-99
11.0	50	-99	-99	-99	-99	-99
30.0	50	-99	-99	-99	-99	-99
31.0	60	-99	-99	-99	-99	-99
65.0	60	-99	-99	-99	-99	-99
66.0	50	-99	-99	-99	-99	-99
100.0	50	-99	-99	-99	-99	-99
101.0	60	-99	-99	-99	-99	-99
110.0	60	-99	-99	-99	-99	-99
111.0	50	-99	-99	-99	-99	-99
120.0	50	-99	-99	-99	-99	-99
121.0	60	-99	-99	-99	-99	-99
400.0	60	-99	-99	-99	-99	-99
401.0	50	-99	-99	-99	-99	-99
480.0	50	-99	-99	-99	-99	-99
481.0	30	-99	-99	-99	-99	-99
490.0	30	-99	-99	-99	-99	-99
491.0	50	-99	-99	-99	-99	-99
495.0	50	-99	-99	-99	-99	-99
496.0	60	-99	-99	-99	-99	-99
510.0	60	-99	-99	-99	-99	-99
511.0	50	-99	-99	-99	-99	-99
530.0	50	-99	-99	-99	-99	-99
531.0	60	-99	-99	-99	-99	-99
830.0	60	-99	-99	-99	-99	-99
831.0	30	-99	-99	-99	-99	-99
870.0	30	-99	-99	-99	-99	-99
871.0	50	-99	-99	-99	-99	-99
930.0	50	-99	-99	-99	-99	-99
931.0	60	-99	-99	-99	-99	-99
1045.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
9	VERT	8515.0	16008.0	3080.0	500.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
45.0	60	-99	-99	-99	-99	-99
45.1	50	-99	-99	-99	-99	-99

50.0	50	-99	-99	-99	-99	-99
50.1	60	-99	-99	-99	-99	-99
90.0	60	-99	-99	-99	-99	-99
90.1	40	-99	-99	-99	-99	-99
95.0	40	-99	-99	-99	-99	-99
95.1	60	-99	-99	-99	-99	-99
155.0	60	-99	-99	-99	-99	-99
155.1	50	-99	-99	-99	-99	-99
160.0	50	-99	-99	-99	-99	-99
160.1	60	-99	-99	-99	-99	-99
170.0	60	-99	-99	-99	-99	-99
171.1	50	-99	-99	-99	-99	-99
175.0	50	-99	-99	-99	-99	-99
175.5	60	-99	-99	-99	-99	-99
200.0	60	-99	-99	-99	-99	-99
200.1	40	-99	-99	-99	-99	-99
215.0	40	-99	-99	-99	-99	-99
215.1	60	-99	-99	-99	-99	-99
235.0	60	-99	-99	-99	-99	-99
235.1	50	-99	-99	-99	-99	-99
265.0	50	-99	-99	-99	-99	-99
265.1	60	-99	-99	-99	-99	-99
280.0	60	-99	-99	-99	-99	-99
281.1	50	-99	-99	-99	-99	-99
290.0	50	-99	-99	-99	-99	-99
291.1	60	-99	-99	-99	-99	-99
300.0	60	-99	-99	-99	-99	-99
300.1	50	-99	-99	-99	-99	-99
495.0	50	-99	-99	-99	-99	-99
495.1	30	-99	-99	-99	-99	-99
500.0	30	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
10	VERT	51260.0	35592.0	2376.3	760.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	80	-99	-99	-99	-99	-99
321.0	80	-99	-99	-99	-99	-99
321.1	40	-99	-99	-99	-99	-99
351.0	40	-99	-99	-99	-99	-99
351.1	80	-99	-99	-99	-99	-99
421.0	80	-99	-99	-99	-99	-99
421.1	40	-99	-99	-99	-99	-99
506.0	40	-99	-99	-99	-99	-99
506.1	80	-99	-99	-99	-99	-99
601.0	80	-99	-99	-99	-99	-99
601.1	10	-99	-99	-99	-99	-99
631.0	10	-99	-99	-99	-99	-99
631.1	40	-99	-99	-99	-99	-99
681.0	40	-99	-99	-99	-99	-99
681.1	80	-99	-99	-99	-99	-99
760.0	80	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
11	VERT	58413.0	36615.0	2336.3	812.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	80	-99	-99	-99	-99	-99
11.0	80	-99	-99	-99	-99	-99
11.1	40	-99	-99	-99	-99	-99
61.0	40	-99	-99	-99	-99	-99
61.1	80	-99	-99	-99	-99	-99
111.0	80	-99	-99	-99	-99	-99
111.1	40	-99	-99	-99	-99	-99
126.0	40	-99	-99	-99	-99	-99
126.1	80	-99	-99	-99	-99	-99
166.0	80	-99	-99	-99	-99	-99
166.1	40	-99	-99	-99	-99	-99
181.0	40	-99	-99	-99	-99	-99
181.1	80	-99	-99	-99	-99	-99
201.0	80	-99	-99	-99	-99	-99
201.1	40	-99	-99	-99	-99	-99
216.0	40	-99	-99	-99	-99	-99
216.1	10	-99	-99	-99	-99	-99
236.0	10	-99	-99	-99	-99	-99
236.1	80	-99	-99	-99	-99	-99
256.0	80	-99	-99	-99	-99	-99
256.1	10	-99	-99	-99	-99	-99
306.0	10	-99	-99	-99	-99	-99
306.1	40	-99	-99	-99	-99	-99
326.0	40	-99	-99	-99	-99	-99
326.1	10	-99	-99	-99	-99	-99
351.0	10	-99	-99	-99	-99	-99
351.1	80	-99	-99	-99	-99	-99
381.0	80	-99	-99	-99	-99	-99
381.1	40	-99	-99	-99	-99	-99
391.0	40	-99	-99	-99	-99	-99
391.1	10	-99	-99	-99	-99	-99
396.0	10	-99	-99	-99	-99	-99
396.1	80	-99	-99	-99	-99	-99
431.0	80	-99	-99	-99	-99	-99
431.1	40	-99	-99	-99	-99	-99
441.0	40	-99	-99	-99	-99	-99
441.1	80	-99	-99	-99	-99	-99
503.0	80	-99	-99	-99	-99	-99
503.1	40	-99	-99	-99	-99	-99
531.0	40	-99	-99	-99	-99	-99
531.1	10	-99	-99	-99	-99	-99
601.0	10	-99	-99	-99	-99	-99
601.1	80	-99	-99	-99	-99	-99
761.0	80	-99	-99	-99	-99	-99
761.1	10	-99	-99	-99	-99	-99
771.0	10	-99	-99	-99	-99	-99
771.1	80	-99	-99	-99	-99	-99
812.0	80	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
12	VERT	64373.0	36615.0	2299.1	681.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	80	-99	-99	-99	-99	-99
109.0	80	-99	-99	-99	-99	-99
109.1	10	-99	-99	-99	-99	-99
149.0	10	-99	-99	-99	-99	-99
149.1	80	-99	-99	-99	-99	-99
161.0	80	-99	-99	-99	-99	-99
161.1	40	-99	-99	-99	-99	-99
172.0	40	-99	-99	-99	-99	-99
172.1	10	-99	-99	-99	-99	-99
181.0	10	-99	-99	-99	-99	-99
181.1	80	-99	-99	-99	-99	-99
209.0	80	-99	-99	-99	-99	-99
209.1	10	-99	-99	-99	-99	-99
291.0	10	-99	-99	-99	-99	-99
291.1	80	-99	-99	-99	-99	-99
301.0	80	-99	-99	-99	-99	-99
301.1	10	-99	-99	-99	-99	-99
326.0	10	-99	-99	-99	-99	-99
326.1	40	-99	-99	-99	-99	-99
339.0	40	-99	-99	-99	-99	-99
339.1	10	-99	-99	-99	-99	-99
351.0	10	-99	-99	-99	-99	-99
351.1	80	-99	-99	-99	-99	-99
364.0	80	-99	-99	-99	-99	-99
364.1	10	-99	-99	-99	-99	-99
377.0	10	-99	-99	-99	-99	-99
377.1	80	-99	-99	-99	-99	-99
399.0	80	-99	-99	-99	-99	-99
399.1	40	-99	-99	-99	-99	-99
409.0	40	-99	-99	-99	-99	-99
409.1	80	-99	-99	-99	-99	-99
418.0	80	-99	-99	-99	-99	-99
418.1	10	-99	-99	-99	-99	-99
442.0	10	-99	-99	-99	-99	-99
442.1	80	-99	-99	-99	-99	-99
464.0	80	-99	-99	-99	-99	-99
464.1	10	-99	-99	-99	-99	-99
569.0	10	-99	-99	-99	-99	-99
569.1	80	-99	-99	-99	-99	-99
604.0	80	-99	-99	-99	-99	-99
604.1	40	-99	-99	-99	-99	-99
624.0	40	-99	-99	-99	-99	-99
624.1	80	-99	-99	-99	-99	-99
680.0	80	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
13	VERT	71185.0	43937.0	2257.3	980.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10

0.0	80	-99	-99	-99	-99	-99
41.0	80	-99	-99	-99	-99	-99
41.1	40	-99	-99	-99	-99	-99
65.0	40	-99	-99	-99	-99	-99
65.1	80	-99	-99	-99	-99	-99
79.0	80	-99	-99	-99	-99	-99
79.1	40	-99	-99	-99	-99	-99
104.0	40	-99	-99	-99	-99	-99
104.1	10	-99	-99	-99	-99	-99
175.0	10	-99	-99	-99	-99	-99
175.1	40	-99	-99	-99	-99	-99
204.0	40	-99	-99	-99	-99	-99
204.1	10	-99	-99	-99	-99	-99
307.0	10	-99	-99	-99	-99	-99
307.1	40	-99	-99	-99	-99	-99
342.0	40	-99	-99	-99	-99	-99
342.1	10	-99	-99	-99	-99	-99
692.0	10	-99	-99	-99	-99	-99
692.1	40	-99	-99	-99	-99	-99
802.0	40	-99	-99	-99	-99	-99
802.1	80	-99	-99	-99	-99	-99
1291.0	80	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
14	VERT	47173.0	20266.0	2508.0	2024.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
600.0	50	-99	-99	-99	-99	-99
600.1	60	-99	-99	-99	-99	-99
1240.0	60	-99	-99	-99	-99	-99
1240.1	20	-99	-99	-99	-99	-99
1380.0	20	-99	-99	-99	-99	-99
1380.1	20	-99	-99	-99	-99	-99
1410.0	20	-99	-99	-99	-99	-99
1410.1	10	-99	-99	-99	-99	-99
1680.0	10	-99	-99	-99	-99	-99
1680.1	40	-99	-99	-99	-99	-99
1740.0	40	-99	-99	-99	-99	-99
1740.1	30	-99	-99	-99	-99	-99
1880.0	30	-99	-99	-99	-99	-99
1880.1	40	-99	-99	-99	-99	-99
1970.0	40	-99	-99	-99	-99	-99
1970.1	30	-99	-99	-99	-99	-99
2024.0	30	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
15	VERT	14305.0	51942.0	2518.6	2013.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99

900.0	50	-99	-99	-99	-99	-99
900.1	40	-99	-99	-99	-99	-99
930.0	40	-99	-99	-99	-99	-99
930.1	50	-99	-99	-99	-99	-99
1020.0	50	-99	-99	-99	-99	-99
1020.1	40	-99	-99	-99	-99	-99
1030.0	40	-99	-99	-99	-99	-99
1030.1	50	-99	-99	-99	-99	-99
2000.0	50	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
16	VERT	27759.0	37466.0	2417.0	560.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
20.0	50	-99	-99	-99	-99	-99
20.1	60	-99	-99	-99	-99	-99
110.0	60	-99	-99	-99	-99	-99
110.1	50	-99	-99	-99	-99	-99
385.0	50	-99	-99	-99	-99	-99
385.1	40	-99	-99	-99	-99	-99
403.0	40	-99	-99	-99	-99	-99
403.1	60	-99	-99	-99	-99	-99
430.0	60	-99	-99	-99	-99	-99
430.1	40	-99	-99	-99	-99	-99
490.0	40	-99	-99	-99	-99	-99
490.1	60	-99	-99	-99	-99	-99
560.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
17	VERT	51090.0	39510.0	2362.0	1030.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
140.0	50	-99	-99	-99	-99	-99
140.1	60	-99	-99	-99	-99	-99
170.0	60	-99	-99	-99	-99	-99
170.1	50	-99	-99	-99	-99	-99
340.0	50	-99	-99	-99	-99	-99
340.1	20	-99	-99	-99	-99	-99
400.0	20	-99	-99	-99	-99	-99
400.1	70	-99	-99	-99	-99	-99
410.0	70	-99	-99	-99	-99	-99
410.1	20	-99	-99	-99	-99	-99
430.0	20	-99	-99	-99	-99	-99
430.1	10	-99	-99	-99	-99	-99
450.0	10	-99	-99	-99	-99	-99
450.1	70	-99	-99	-99	-99	-99
470.0	70	-99	-99	-99	-99	-99
470.1	50	-99	-99	-99	-99	-99
510.0	50	-99	-99	-99	-99	-99

510.1	70	-99	-99	-99	-99	-99
560.0	70	-99	-99	-99	-99	-99
560.1	10	-99	-99	-99	-99	-99
580.0	10	-99	-99	-99	-99	-99
580.1	20	-99	-99	-99	-99	-99
600.0	20	-99	-99	-99	-99	-99
600.1	50	-99	-99	-99	-99	-99
610.0	50	-99	-99	-99	-99	-99
610.1	60	-99	-99	-99	-99	-99
660.0	60	-99	-99	-99	-99	-99
660.1	20	-99	-99	-99	-99	-99
700.0	20	-99	-99	-99	-99	-99
700.1	10	-99	-99	-99	-99	-99
720.0	10	-99	-99	-99	-99	-99
720.1	20	-99	-99	-99	-99	-99
750.0	20	-99	-99	-99	-99	-99
750.1	70	-99	-99	-99	-99	-99
1030.0	70	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
18	VERT	36104.0	36955.0	2410.0	1015.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
115.0	60	-99	-99	-99	-99	-99
115.1	70	-99	-99	-99	-99	-99
120.0	70	-99	-99	-99	-99	-99
120.1	60	-99	-99	-99	-99	-99
150.0	60	-99	-99	-99	-99	-99
150.1	30	-99	-99	-99	-99	-99
155.0	30	-99	-99	-99	-99	-99
155.1	60	-99	-99	-99	-99	-99
160.0	60	-99	-99	-99	-99	-99
160.1	70	-99	-99	-99	-99	-99
180.0	70	-99	-99	-99	-99	-99
180.1	60	-99	-99	-99	-99	-99
295.0	60	-99	-99	-99	-99	-99
295.1	70	-99	-99	-99	-99	-99
300.0	70	-99	-99	-99	-99	-99
300.1	20	-99	-99	-99	-99	-99
315.0	20	-99	-99	-99	-99	-99
315.1	70	-99	-99	-99	-99	-99
440.0	70	-99	-99	-99	-99	-99
440.1	50	-99	-99	-99	-99	-99
450.0	50	-99	-99	-99	-99	-99
450.1	10	-99	-99	-99	-99	-99
460.0	10	-99	-99	-99	-99	-99
460.1	70	-99	-99	-99	-99	-99
640.0	70	-99	-99	-99	-99	-99
640.1	50	-99	-99	-99	-99	-99
645.0	50	-99	-99	-99	-99	-99
645.1	70	-99	-99	-99	-99	-99
780.0	70	-99	-99	-99	-99	-99
780.1	10	-99	-99	-99	-99	-99

805.0	10	-99	-99	-99	-99	-99
805.1	70	-99	-99	-99	-99	-99
990.0	70	-99	-99	-99	-99	-99
990.1	20	-99	-99	-99	-99	-99
1015.0	20	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
19	VERT	39680.0	36955.0	2395.0	1010.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
160.0	60	-99	-99	-99	-99	-99
160.1	70	-99	-99	-99	-99	-99
300.0	70	-99	-99	-99	-99	-99
300.1	10	-99	-99	-99	-99	-99
310.0	10	-99	-99	-99	-99	-99
310.1	70	-99	-99	-99	-99	-99
340.0	70	-99	-99	-99	-99	-99
340.1	60	-99	-99	-99	-99	-99
460.0	60	-99	-99	-99	-99	-99
460.1	70	-99	-99	-99	-99	-99
530.0	70	-99	-99	-99	-99	-99
530.1	10	-99	-99	-99	-99	-99
540.0	10	-99	-99	-99	-99	-99
540.1	70	-99	-99	-99	-99	-99
550.0	70	-99	-99	-99	-99	-99
550.1	60	-99	-99	-99	-99	-99
610.0	60	-99	-99	-99	-99	-99
610.1	70	-99	-99	-99	-99	-99
670.0	70	-99	-99	-99	-99	-99
670.1	60	-99	-99	-99	-99	-99
700.0	60	-99	-99	-99	-99	-99
700.1	70	-99	-99	-99	-99	-99
730.0	70	-99	-99	-99	-99	-99
730.1	60	-99	-99	-99	-99	-99
740.0	60	-99	-99	-99	-99	-99
740.1	70	-99	-99	-99	-99	-99
790.0	70	-99	-99	-99	-99	-99
790.1	50	-99	-99	-99	-99	-99
850.0	50	-99	-99	-99	-99	-99
850.1	60	-99	-99	-99	-99	-99
860.0	60	-99	-99	-99	-99	-99
860.1	70	-99	-99	-99	-99	-99
870.0	70	-99	-99	-99	-99	-99
870.1	60	-99	-99	-99	-99	-99
890.0	60	-99	-99	-99	-99	-99
890.1	70	-99	-99	-99	-99	-99
900.0	70	-99	-99	-99	-99	-99
900.1	60	-99	-99	-99	-99	-99
1010.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS

20	VERT	42751.0	35597.0	2405.0	1960.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
350.0	60	-99	-99	-99	-99	-99
350.1	30	-99	-99	-99	-99	-99
360.0	30	-99	-99	-99	-99	-99
360.1	60	-99	-99	-99	-99	-99
410.0	60	-99	-99	-99	-99	-99
410.1	30	-99	-99	-99	-99	-99
480.0	30	-99	-99	-99	-99	-99
480.1	20	-99	-99	-99	-99	-99
500.0	20	-99	-99	-99	-99	-99
500.1	60	-99	-99	-99	-99	-99
1200.0	60	-99	-99	-99	-99	-99
1200.1	30	-99	-99	-99	-99	-99
1320.0	30	-99	-99	-99	-99	-99
1320.1	60	-99	-99	-99	-99	-99
1390.0	60	-99	-99	-99	-99	-99
1390.1	30	-99	-99	-99	-99	-99
1810.0	30	-99	-99	-99	-99	-99
1810.1	60	-99	-99	-99	-99	-99
1968.0	60	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
21	VERT	31020.0	46860.0	2360.0	300.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
80.0	50	-99	-99	-99	-99	-99
80.1	40	-99	-99	-99	-99	-99
140.0	40	-99	-99	-99	-99	-99
140.1	30	-99	-99	-99	-99	-99
200.0	30	-99	-99	-99	-99	-99
200.1	40	-99	-99	-99	-99	-99
260.0	40	-99	-99	-99	-99	-99
260.1	10	-99	-99	-99	-99	-99
280.0	10	-99	-99	-99	-99	-99
280.1	50	-99	-99	-99	-99	-99
285.0	50	-99	-99	-99	-99	-99
285.1	10	-99	-99	-99	-99	-99
300.0	10	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
22	VERT	29040.0	44880.0	2400.0	405.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	90	-99	-99	-99	-99	-99
40.0	90	-99	-99	-99	-99	-99
40.1	80	-99	-99	-99	-99	-99

120.0	80	-99	-99	-99	-99	-99
120.1	90	-99	-99	-99	-99	-99
180.0	90	-99	-99	-99	-99	-99
180.1	40	-99	-99	-99	-99	-99
300.0	40	-99	-99	-99	-99	-99
300.1	60	-99	-99	-99	-99	-99
320.0	60	-99	-99	-99	-99	-99
320.1	50	-99	-99	-99	-99	-99
360.0	50	-99	-99	-99	-99	-99
360.1	40	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
23	VERT	49500.0	50820.0	2305.0	480.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	40	-99	-99	-99	-99	-99
5.0	40	-99	-99	-99	-99	-99
5.1	50	-99	-99	-99	-99	-99
10.0	50	-99	-99	-99	-99	-99
10.1	20	-99	-99	-99	-99	-99
15.0	20	-99	-99	-99	-99	-99
15.1	50	-99	-99	-99	-99	-99
360.0	50	-99	-99	-99	-99	-99
360.1	20	-99	-99	-99	-99	-99
365.0	20	-99	-99	-99	-99	-99
365.1	10	-99	-99	-99	-99	-99
480.0	10	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
24	VERT	38946.0	50820.0	2300.0	705.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	60	-99	-99	-99	-99	-99
5.0	60	-99	-99	-99	-99	-99
5.1	40	-99	-99	-99	-99	-99
15.0	40	-99	-99	-99	-99	-99
15.1	60	-99	-99	-99	-99	-99
20.0	60	-99	-99	-99	-99	-99
20.1	40	-99	-99	-99	-99	-99
125.0	40	-99	-99	-99	-99	-99
125.1	50	-99	-99	-99	-99	-99
130.0	50	-99	-99	-99	-99	-99
130.1	40	-99	-99	-99	-99	-99
150.0	40	-99	-99	-99	-99	-99
150.1	50	-99	-99	-99	-99	-99
160.0	50	-99	-99	-99	-99	-99
160.1	40	-99	-99	-99	-99	-99
170.0	40	-99	-99	-99	-99	-99
170.1	50	-99	-99	-99	-99	-99
185.0	50	-99	-99	-99	-99	-99
185.1	40	-99	-99	-99	-99	-99

230.0	40	-99	-99	-99	-99	-99
230.1	30	-99	-99	-99	-99	-99
290.0	30	-99	-99	-99	-99	-99
290.1	40	-99	-99	-99	-99	-99
325.0	40	-99	-99	-99	-99	-99
325.1	20	-99	-99	-99	-99	-99
335.0	20	-99	-99	-99	-99	-99
335.1	10	-99	-99	-99	-99	-99
395.0	10	-99	-99	-99	-99	-99
395.1	20	-99	-99	-99	-99	-99
565.0	20	-99	-99	-99	-99	-99
565.1	10	-99	-99	-99	-99	-99
590.0	10	-99	-99	-99	-99	-99
590.1	20	-99	-99	-99	-99	-99
620.0	20	-99	-99	-99	-99	-99
620.1	10	-99	-99	-99	-99	-99
650.0	10	-99	-99	-99	-99	-99
650.1	30	-99	-99	-99	-99	-99
685.0	30	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
25	VERT	19140.0	46860.0	2515.0	505.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	90	-99	-99	-99	-99	-99
120.0	90	-99	-99	-99	-99	-99
120.1	80	-99	-99	-99	-99	-99
200.0	80	-99	-99	-99	-99	-99
200.1	100	-99	-99	-99	-99	-99
300.0	100	-99	-99	-99	-99	-99
300.1	80	-99	-99	-99	-99	-99
505.0	80	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
26	VERT	13200.0	39600.0	2790.0	500.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	40	-99	-99	-99	-99	-99
280.0	40	-99	-99	-99	-99	-99
280.1	30	-99	-99	-99	-99	-99
360.0	30	-99	-99	-99	-99	-99
360.1	40	-99	-99	-99	-99	-99
400.0	40	-99	-99	-99	-99	-99
400.1	30	-99	-99	-99	-99	-99
500.0	30	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
27	VERT	2640.0	44880.0	3500.0	300.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	50	-99	-99	-99	-99	-99
127.0	50	-99	-99	-99	-99	-99
127.1	100	-99	-99	-99	-99	-99
134.0	100	-99	-99	-99	-99	-99
134.1	40	-99	-99	-99	-99	-99
170.0	40	-99	-99	-99	-99	-99
170.1	50	-99	-99	-99	-99	-99
180.0	50	-99	-99	-99	-99	-99
180.1	60	-99	-99	-99	-99	-99
260.0	60	-99	-99	-99	-99	-99
260.1	100	-99	-99	-99	-99	-99
290.0	100	-99	-99	-99	-99	-99
290.1	10	-99	-99	-99	-99	-99
300.0	10	-99	-99	-99	-99	-99

WELL ID	TYPE	SRF.CRD.X	RF.CRD.Y	KB	T.D.	WS
28	VERT	38946.0	50820.0	2300.0	705.0	1

DEPTH-TOP	LITHO	SAT	porosity	oil sat	wat sat	VF=10
0.0	10	-99	-99	-99	-99	-99
10.0	10	-99	-99	-99	-99	-99
10.1	100	-99	-99	-99	-99	-99
15.0	100	-99	-99	-99	-99	-99
15.1	10	-99	-99	-99	-99	-99
20.0	10	-99	-99	-99	-99	-99
20.1	90	-99	-99	-99	-99	-99
35.0	90	-99	-99	-99	-99	-99
35.1	60	-99	-99	-99	-99	-99
40.0	60	-99	-99	-99	-99	-99
40.1	100	-99	-99	-99	-99	-99
60.0	100	-99	-99	-99	-99	-99
60.1	60	-99	-99	-99	-99	-99
75.0	60	-99	-99	-99	-99	-99
75.1	100	-99	-99	-99	-99	-99
80.0	100	-99	-99	-99	-99	-99
80.1	50	-99	-99	-99	-99	-99
95.0	50	-99	-99	-99	-99	-99
95.1	60	-99	-99	-99	-99	-99
130.0	60	-99	-99	-99	-99	-99
130.1	80	-99	-99	-99	-99	-99
150.0	80	-99	-99	-99	-99	-99
150.1	50	-99	-99	-99	-99	-99
165.0	50	-99	-99	-99	-99	-99
165.1	60	-99	-99	-99	-99	-99
185.0	60	-99	-99	-99	-99	-99
185.1	90	-99	-99	-99	-99	-99
220.0	90	-99	-99	-99	-99	-99
220.1	60	-99	-99	-99	-99	-99
255.0	60	-99	-99	-99	-99	-99
255.1	50	-99	-99	-99	-99	-99
300.0	50	-99	-99	-99	-99	-99
300.1	30	-99	-99	-99	-99	-99

360.0	30	-99	-99	-99	-99	-99
360.1	70	-99	-99	-99	-99	-99
395.0	70	-99	-99	-99	-99	-99
395.1	10	-99	-99	-99	-99	-99
400.0	10	-99	-99	-99	-99	-99
400.1	20	-99	-99	-99	-99	-99
603.0	20	-99	-99	-99	-99	-99

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