

Hingtgen, Robert J

From: Bennett, Jim
Sent: Tuesday, March 25, 2014 10:45 AM
To: Trey Driscoll (tdriscoll@dudek.com)
Cc: Hingtgen, Robert J
Subject: FW: Jacumba Wells
Attachments: Jacumba Well Data Sheets.xls; REVISED20130408PA.pdf; 20131003 well 6 potable to ag well.pdf; 20131008 Jacumba CSD deficiency memo 2013.pdf

Trey,

Here's some info I received from Sean Sterchi for your use on the Jacumba study if you don't already have it.

This goes without saying, but the well log information is confidential (not available to the public) and for use only on the Jacumba Groundwater Study prepared on behalf of the County of San Diego.

Thanks,

Jim Bennett, P.G. #7707, CHG#854
Groundwater Geologist

County of San Diego

Planning & Development Services
5510 Overland Avenue, Suite 110, San Diego, CA 92123
Phone: 858-694-3820 Fax: 858-694-3373

From: Sterchi, Sean (CDPH-DDWEM) [<mailto:Sean.Sterchi@cdph.ca.gov>]
Sent: Monday, March 17, 2014 10:59 AM
To: Bennett, Jim
Subject: Jacumba Wells

No datasheet for Well 6 on e-file. Well 4&5's attached.

Permit Amendment for Well 8 as standby and inactivation of Well 6 attached. We required them to destroy Well 6 within 12 months. Subsequently, they requested to convert to Ag well in attached ltr. We approved the request as part of our inspection letter (page 2 & 3, look at condition #4 on page 3).

Best Regards,

Sean

Sean Sterchi, P.E., San Diego District Engineer
California Department of Public Health
Division of Drinking Water & Environmental Management
Southern California Field Operations Branch
1350 Front St., Rm. 2050, San Diego, CA 92101
619.525.4922 (ph.), .4383 (fax)
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Visit our Website at: <http://www.cdph.ca.gov/programs/Pages/DWP.aspx>



Ron Chapman, MD, MPH
Director & State Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

October 8, 2013

Debby Troutt
General Manager
Jacumba Community Sanitation District
1266 Railroad St
Jacumba, Ca 91934

Dear Ms. Troutt:

**JACUMBA COMMUNITY SANITATION DISTRICT, SYSTEM NO. 3710011
2013 SANITARY SURVEY**

The purpose of this letter is to provide a summary of deficiencies and recommendations for the sanitary survey conducted by Mr. Scott Ketcham on September 24th, 2013 for Jacumba Community Sanitation District (Jacumba) water system. For greater detail on each of the elements discussed below, please feel free to contact me or Mr. Ketcham for a conference call or meeting.

Sanitary Survey Deficiencies:

1. Well 8 Water Treatment Plant

Provision 10 of Jacumba's April 8th, 2013 Permit Amendment 05-14-13PA-004 stated the following:

"Jacumba shall submit a permit amendment application including plans and specifications for the addition of iron and manganese removal treatment to CDPH within twelve (12) months of issuance of this permit amendment."

The last submittal for this project was the preliminary engineering report (PER), dated March 8th, 2013. The PER listed three alternatives for the project:

1. Do Nothing.
2. Install iron and manganese treatment for Well 8.
3. Install iron and manganese treatment for Well 8, additional pumping capacity at Well 7, a solar power grid, and the destruction of Wells 1, 2, 3 & 5.

The PER selected Alternative 3, but did not provide any plans or design specifics for the proposed treatment system or details on its operation.

Action Item:

By December 31, 2013, please submit a project update including 30% or greater plans and specifications along with a draft project schedule for the iron and manganese treatment plant project. If Jacumba is unable to meet this deadline, please contact CDPH to coordinate a meeting or conference call to discuss.

2. Well 6

Provision 18 of Jacumba's April 2013 Permit Amendment 05-14-13PA-004 stated the following:

"Jacumba shall destroy Well 6 using methods in conformance with the Department of Water Resources California Well Standards within twelve (12) months of issuance of this permit."

Since the permit amendment was issued Jacumba has begun using Well 6 for non-potable construction purposes. In order to continue using the source in this manner, Jacumba has requested CDPH reclassify the well as an agriculture source.

Well 6 is sited in a deep fractured rock aquifer that is under volcanic influence. Well 6 has MCL violations for odor threshold, fluoride, and toluene. Additionally, Well 6 has a pH of 9.5, a temperature of 95° F, and a strong sulfuric odor. These water quality characteristics indicate that the aquifer for Well 6 is not same aquifer feeding the adjacent potable sources, Wells 4 & 8. Jacumba has been using Well 6 as a construction source for several years, and monitors the amount of water used daily and the water surface elevation monthly. Jacumba also has been monitoring the effects of pumping Well 6 on Wells 4 and 8, and no impacts on performance of these wells have been noted.

During the inspection CDPH confirmed that Well 6 is not connected to the potable water system, and that the construction tanker fill site is sufficiently air gapped.

CDPH hereby approves Jacumba's request to change the source class designation of Well 6 from inactive to agricultural, contingent on the following provisions:

1. Well 6 is no longer an approved as a source of supply for Jacumba, and shall remain physically disconnected from the potable water distribution system.

2. Jacumba shall ensure that Well 6 is maintained in a condition that prevents surface water runoff or any other contamination from entering into the well.
3. Jacumba shall submit a permit application and receive CDPH approval prior to reactivating Well 6 as a potable source.
4. Jacumba must continue to monitor and maintain records of usage of Well 6 to ensure that pumping rates do not exceed the Well's safe yield or negatively impact Jacumba's ability to meet potable water demands.

3. Well Destruction

Jacumba has two inactive wells and two abandoned wells. The historic record for all four of these sites does not appear to indicate that the wells were abandoned in accordance with Department of Water Resources Bulletins 74-81 and 74-90.

- Wells 3 & 5 are both inactive wells that are 100 feet and 300 feet east, respectfully, of the system's primary well, Well 4.
- Wells 1 & 2 are abandoned wells within 1 mile of the active well sites.

In Jacumba's 2010 sanitary survey CDPH included the following action item.

"By December 31, 2010, must submit a plan for the destruction of Wells 1, 2, 3 & 5 in accordance with Bulletins 74-81 and 74-90."

However, Jacumba has taken no action to destroy Wells 1, 2, 3 & 5. The table below lists a complete inventory of the Jacumba's wells.

<i>Well</i>	<i>Status</i>	<i>Capacity gpm</i>
1	Abandoned	-
2	Abandoned	-
3	Inactive	-
4	Active	200
5	Inactive	-
6	Standby	600
7	Monitoring	-
8	Standby	200
Total Capacity		200

Action Item:

By March 31, 2014, Jacumba must submit an updated CIP that includes a budgeted plan for destroying Wells 1, 2, 3 & 5 in accordance with Bulletins 74-81 and 74-90, Chapter 2, Section 23. See web link below. If Jacumba needs

assistance with developing a CIP and/or rate study, please contact CDPH for an assistance referral to our 3rd party contractors, e.g. CRWA, etc.

http://www.dpla.water.ca.gov/sd/groundwater/california_well_standards/wwws_combined_sec23.html

4. Cross Connection:

1. During the cross connection portion of the inspection CDPH noted that a 1-inch irrigation PVC single check valve, an unapproved backflow prevention device, was installed at the Jacumba Spa (Spa) service connection. Additionally, pursuant to Section 64591, Title 22, of the CCR, a water system shall not use any product that may come into contact with the drinking water that has not been tested and certified as meeting the specifications of NSF International/ American National Standard Institute (NSF) 61. The backflow prevention device currently being used by the Spa does not meet NSF 61 or CCR, Title 17, §7601 criteria.

Jacumba's records indicate that on January 8th, 2013, the Spa was given a 30-day notice to install a reduced pressure principle backflow prevention (RP) device. This period coincides with Jacumba activating the Spa's service connection. However, after the 30-day period expired Jacumba did not follow up with a service disconnection warning letter and the Spa did not install an approved RP device.

Action Item:

By November 15, 2013, Jacumba must submit a summary of the cross connection control program status including actions taken or planned for customers not in compliance with Jacumba's program rules or ordinances.

Recommendation:

CDPH recommends that Jacumba consider revising the cross connection control program shutdown notification procedures to include additional notifications beyond the current 30-day shutdown notice, e.g. 14-day, 7-day, and final 24 – hour notice letters prior to inactivating service connections.

Please note the air gap at the Well 6 construction fill site must be accounted for on future Annual Report to the Drinking Water Program submittals.

5. Vents

The vent screen on the 403,000 Reservoir has settled and has a ½" gap above the screen. This gap is sufficient to allow bats, birds, and insects enter into the

reservoir. Additionally, the insect screen on Well 4's vent is no longer structurally intact and is no longer sufficient to serve as an insect barrier.

Action Item:

By November 29, 2013, Jacumba must submit to CDPH photographic proof of repairs to the aforementioned screens. Repairs must be made with size 8 or finer insect-proof non-corrosive screen.

Recommendation:

CDPH recommends that Jacumba visually inspect of all of the system's vent screens on a monthly basis.

6. Bacteriological Sample Sites: Reservoirs

At both Reservoirs CDPH noted hoses attached to the bacteriological sample sites. If Jacumba elects to keep the hoses on at these sample locations, then anti-syphon backflow prevention devices must be installed onto the faucets. However, these sample locations are intended to be repeat sample sites that would be used in the event of a total coliform or E. coli positive routine sample and threaded sample taps can be difficult to thoroughly disinfection.

Recommendation:

CDPH recommends that Jacumba replaces the threaded sample taps with non-threaded dedicated water quality sampling taps.

7. Bacteriological Sample Sites: Well 4

At Well 4 CDPH noted the raw source sample tap is a threaded faucet that is approximately 6-inches above the ground. After rain events this well site routinely has total coliform positive results. The proximity of this sample tap to the ground, as well as the difficulty in disinfecting threaded sample taps, may play a role in this cycle of positive total coliform results.

Recommendation:

CDPH recommends that Jacumba replaces the threaded sample tap with a non-threaded dedicated water quality sample tap, and move the sample location higher above the ground. Section 10, Figure 7 of the Department of Water Resources Bulletins 74-81 and 74-90, suggests placing the sample tap 3-feet above the slab, see links below. Additionally, Title 22, §64560(c)(3)(E)(2) requires that the well be equipped with a non-threaded down-turned sampling tap located on the discharge line between the wellhead and the check valve.

Ms. Troutt
October 8, 2013

Jacumba
System No. 3710011

http://www.dpla.water.ca.gov/sd/groundwater/california_well_standards/www/www_combined_sec10.html

http://www.dpla.water.ca.gov/sd/groundwater/california_well_standards/figures/74-81fig7.jpg

8. Well 4 Water Quality Analysis

A review Jacumba's water quality data indicates that gross physical constituents were not analyzed in the May 2013 Well 4 sample. In order to overcome this oversight Jacumba took an additional sample on September 16th, 2013.

Action Item:

By November 29, 2013, Jacumba must contact their laboratory to confirm that the sample results were sent via EDT to PS Code 3710011-004 and submit a hard copy of the analysis to CDPH.

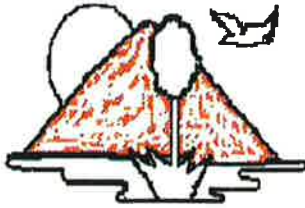
Please respond in writing **by November 15, 2013** regarding when and how the deficiencies outlined above will be addressed. If you have any questions regarding any of the items discussed above, please feel free to contact Mr. Scott Ketcham or me at (619) 525-4922.

Sincerely,



Sean Sterchi, P.E.
District Engineer

cc: Mark McPherson, Chief of Land and Water Quality Division, San Diego County
Department of Environmental Health



STATE OF CALIFORNIA
DEPT. OF PUBLIC HEALTH

OCT - 3 2013

**JACUMBA COMMUNITY SERVICE DISTRICT
JACUMBA COMMUNITY PARK**

1266 RAILROAD STREET
PO BOX 425
JACUMBA, CA 91934
(619)766-4359 PHONE
(619)766-9061 FAX

October 3, 2013

Scott Ketcham
CDPH Sanitary Engineer
San Diego District

Dear Scott,

JSCD is requesting to have Well #6 converted from a domestic well to an agricultural well.

Thank You
Debby Troutt

General Manager



RON CHAPMAN, MD, MPH
Director & State Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

April 8, 2013

Debbie Troutt
General Manager
PO Box 425
Jacumba, CA 91934

Dear Ms. Troutt:

**JACUMBA COMMUNITY SERVICES DISTRICT, SYSTEM NO. 3710011
WELL 8 PERMIT AMMENDMENT (NO. 05-14-13PA-004) REVISION**

The California Department of Public Health (CDPH) has issued a revised domestic water supply permit amendment for the Jacumba Community Service District. The permit amendment and engineering report are enclosed. Please advise CDPH in writing within 30 days if you do not agree to the permit or the permit conditions.

If you have any questions regarding this letter, please contact Nadine Evans at (619) 525-4646.

Sincerely,

Sean Sterchi, P.E.
District Engineer

Enclosure:

- (1) Permit 05-14-13PA-004 (Revision)
- (2) Engineering Report (Revision)

cc: Mark McPherson, Chief of Land & Water Quality Division, County of San Diego,
Department of Environmental Health (w/o attachments)

**CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
DIVISION OF DRINKING WATER AND
ENVIRONMENTAL MANAGEMENT**

**DRINKING WATER FIELD OPERATIONS BRANCH
SAN DIEGO DISTRICT**

JACUMBA COMMUNITY SERVICES DISTRICT

WELL 8

WATER PERMIT NO. 05-14-13PA-004 (REVISION)

System No.: 3710011

San Diego County

April 2013

STATE OF CALIFORNIA

***AMENDMENT TO THE
DOMESTIC WATER SUPPLY PERMIT***

ISSUED TO

**Jacumba Community Services District
System No. 3710011**

PERMIT AMENDMENT NO.: 05-14-13PA-004

DATE: April 8, 2013 (Revision)

ORIGINAL PERMIT NO.: 05-14-02P-015

DATE: December 30, 2002

WHEREAS:

1. Jacumba Community Services District (hereinafter Jacumba) submitted an application to the California Department of Public Health (hereinafter CDPH) on March 14, 2012 for an amendment to the Domestic Water Supply Permit (No. 05-14-02P-015) issued to Jacumba on December 30, 2002.
2. The purpose of the amendment is to allow Jacumba to make the following modifications to the public water system:
 - a) add Well 8 as an approved standby raw water source***
 - b) inactivate Well 6***
3. Jacumba has submitted all of the supporting information required to evaluate the application.
4. CDPH has evaluated the application and the supporting material and has determined that the proposed modifications comply with all applicable State drinking water requirements.

THEREFORE:

1. CDPH hereby approves the application submitted by Jacumba for a permit amendment. The Domestic Water Supply Permit (05-14-02P-015) issued to

Jacumba on December 30, 2002, is hereby amended to inactivate Well 6 and add Well 8 as an approved standby source of raw water supply.

2. This permit amendment is subject to the following conditions:

GENERAL PROVISIONS

1. Jacumba shall comply with all the requirements set forth in the California Safe Drinking Water Act, California Health and Safety Code and any regulations, standards or orders adopted thereunder.
2. The only approved sources for Jacumba are listed below:

Table 1 – Approved Sources

Source	Status	Capacity	PS Code
Well 4	Active Raw	200 gpm	3710011-004
Well 8	Standby	200 gpm	3710011-009

3. The only approved treatment is disinfection by 12.5% sodium hypochlorite solution.
4. No changes, additions, or modifications shall be made to the sources or treatment mentioned in Provision Nos. 2 and 3 unless an amended water supply permit has first been obtained from CDPH.
5. All water supplied by Jacumba for domestic purposes shall meet all Maximum Contaminant Levels (MCLs) established by CDPH. If the water quality does not comply with drinking water standards, additional treatment shall be provided.
6. Pursuant to Section 64590, Title 22, of the California Code of Regulations (CCR), no chemical or product shall be added to drinking water by a water supplier unless the chemical or product is certified as meeting the specifications of NSF International/ American National Standard Institute (NSF/ANSI) 60(Drinking Water Treatment Chemicals-Health Effects).
7. Pursuant to Section 64591, Title 22, of the CCR, a water system shall not use any chemical, material, lubricant, or product that may come into contact with the drinking water that has not been tested and certified as meeting the specifications of NSF/ANSI 61.
8. All persons responsible for the operation and maintenance of the water system shall be certified in accordance with Sections 63750.1 through 64413.7, inclusive, Title 22, of the CCR. In accordance with these requirements, Jacumba shall employ operator(s) that hold the minimum distribution certification issued by the State of California, listed in the following table:

Table 2 – System Classification

Water System Name	Distribution System Classification	Chief Distribution Operator Minimum Certification	Shift Distribution Operator Minimum Certification
Jacumba Community Services District	D1	D1	D1

WELL 8 TREATMENT REQUIREMENTS

9. The standby status of Well 8 shall not be changed to an active source of drinking water supply, unless treatment is provided to meet all existing drinking water standards and prior approval is obtained from CDPH. Specifically, Well 8 shall have continuous reliable disinfection installed and manganese removal treatment shall be provided.
10. Jacumba shall submit a permit amendment application including plans and specifications for the addition of iron and manganese removal treatment to CDPH within twelve (12) months of issuance of this permit amendment.

WELL 8 OPERATIONAL REQUIREMENTS

11. Jacumba shall submit an Operations Plan for Well 8 including provisions 12-15 as stated below a start-up plan that addresses flushing to waste to ensure that slugs of high iron and manganese do not enter the distribution system, and bacteriological and chemical monitoring and reporting requirements.
12. Well 8 shall not be used more than 15 days a year or more than 5 consecutive days per the limitations of use in conformance with Title 22, CCR Section §64414 (c).
13. Public notification shall be provided to customers served by Well 8 prior to use of the well when the use is planned or within 24 hours of placing the well into service for an unplanned emergency. The notification shall include the following at a minimum:
 - a. Explanation of water quality and aesthetic effects of iron and manganese,
 - b. Reason for use of the well
 - c. Anticipated duration of use of the well
 - d. Most recent iron and manganese results from the well
14. Within 3 days after the short-term emergency use of a Well 8, Jacumba shall notify CDPH. The notification shall include information for the reason and

duration of use along with proof of public notification required under Provision #13 above.

15. Jacumba shall flush a minimum of two casing volumes prior to placing Well 8 into service. Jacumba shall collect a raw source water bacteriological sample prior to placing the well into service for planned use or upon placing the well into service in an emergency. After 24 hours of operation, Jacumba shall sample for iron and manganese from Well 8.

WELL 6 INACTIVATION

16. Well 6 is no longer approved as a source of supply for Jacumba, and shall remain physically disconnected from the potable water distribution system.
17. Jacumba shall ensure that Well 6 is maintained in a condition that prevents surface water runoff or any other contamination from entering into the well.
18. Jacumba shall destroy Well 6 using methods in conformance with the Department of Water Resources California Well Standards within twelve (12) months of issuance of this permit.
19. If Jacumba chooses to reactivate Well 6, treatment must be installed and Jacumba shall submit a permit application to CDPH for approval prior to use.
20. Well 6 is hereby waived from the water quality monitoring requirements pursuant to Title 22, Division 4, Chapter 15.

GROUNDWATER BACTERIOLOGICAL MONITORING

20. Jacumba shall monitor the raw source water bacteriological quality, prior to chlorination, on a monthly basis for all groundwater wells operating during the month.
21. All raw source water coliform samples collected at the groundwater wells shall be analyzed using an enumeration method and designated as "special" samples and will not be counted for compliance with the routine distribution system coliform monitoring requirements.
22. All total coliform-positive raw water quality samples shall be analyzed for fecal coliform or E. coli bacteria.
23. Jacumba shall notify CDPH within 24-hours if total coliform-positive or E. coli-positive samples have been obtained from a groundwater well and provide CDPH all follow-up sampling results.
24. Jacumba shall take a coliform sample from any active wells within 24 hours of receiving a distribution system coliform positive in accordance with the Ground Water Rule.
25. Jacumba shall submit an updated Bacteriological Sample Siting and Ground Water Rule Plan to CDPH by May 31, 2013.

26. Groundwater wells that produce raw water containing coliform bacteria shall be removed from service following the collection of a confirmation raw water sample from the well. The raw water sample shall be analyzed for coliform and heterotrophic bacteria. If removal of the well from service may result in a water outage or failure of a drinking water standard, Jacumba shall contact CDPH to discuss interim requirements for the use of this source.
27. Wells that have the confirmation raw water sample from Provision #24 above that is coliform positive shall be removed from service, disinfected, pumped to waste until zero chlorine residual is obtained, and re-sampled after 24 hours for coliform and heterotrophic bacteria using the cycle test procedure. All re-samples shall be negative for coliform and have a heterotrophic plate count (HPC) less than 500 colonies/mL prior to placing the source back into service. If removal of the well from service may result in a water outage or failure of a drinking water standard, Jacumba shall contact CDPH to discuss interim requirements for the use of this source.
28. Jacumba shall comply with the Ground Water Rule (GWR). For each Total Coliform Rule (TCR) distribution system monitoring sample result that is coliform positive, Jacumba shall collect a sample from each active well and analyze for E. coli within 24-hours of learning of the TCR coliform positive. Jacumba shall collect at least one sample from each active well in use at the time the TCR total coliform positive monitoring sample was collected. Jacumba shall conduct Tier 1 Public Notification if a well monitoring sample is E. coli positive.
29. Groundwater wells removed from service for repair and/or maintenance activities shall be disinfected and the raw water tested for coliform and heterotrophic bacteria prior to placing the wells back into service. Groundwater wells shall not be placed back into service to supply the potable water system unless the laboratory results show that the wells are coliform absent.

GROUNDWATER WELL CHEMICAL MONITORING

30. Jacumba shall complete the required source water monitoring Sections 64431-64450, Title 22, CCR. All analyses required for compliance shall be performed by a State-certified laboratory and shall be submitted via Electronic Data Transfer (EDT). The monitoring matrix is included in **Attachment 6** of the Engineering Report.
31. Jacumba shall conduct all inorganic, organic, and radiological monitoring once every compliance cycle, 9 years, unless a waiver has been granted by CDPH pursuant to Sections 64432 (k) or (l) for inorganics, or Sections 64445 (d) for organics.
32. Jacumba shall complete initial Perchlorate monitoring before use of Well 8 as a standby source.

RECORDS AND REPORTING

33. Jacumba shall record the water production output and static and pumping groundwater levels for each well source on a monthly basis at a minimum. Written water production and groundwater depth records shall be maintained by Jacumba for a minimum of ten years and be available to CDPH representatives upon request.
34. Monthly laboratory reports of distribution (for TCR compliance) and raw water bacteriological analysis from each well source operated by Jacumba shall be mailed to CDPH directly by the laboratory by the tenth day of the following month.
35. Jacumba shall have the lab submit chemical water quality data to CDPH using Electronic Data Format (EDF) using the Primary Station Codes listed in Provision #2 of this permit. The PS Code for Well 8 is 3710011-009.

This amendment shall be appended to and shall be considered to be an integral part of the Domestic Water Supply Permit issued to Jacumba Community Services District on December 30, 2002.

FOR THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

4/8/13
(Date)


(Signed District Engineer)

Engineering Report
For Consideration of the Permit Application From
JACUMBA COMMUNITY SERVICES DISTRICT
Serving San Diego County

California Department of Public Health
Drinking Water Field Operations Branch
San Diego District

System No. 3710011
April 8, 2013

Report Prepared By:



Nadine Evans, P.E.
Associate Sanitary Engineer

Report Reviewed By:



Sean Sterchi, P.E.
District Engineer

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I INTRODUCTION

1.1 PURPOSE OF REPORT

By application dated March 14, 2012, Jacumba Community Services District (hereinafter Jacumba) applied for a permit amendment to inactivate Well 6 and add Well 8 as a new potable water source (**Attachment No. 1**). The purpose of this report is to document the sanitary engineering review and make recommendations regarding issuance of an amended domestic water supply permit.

1.2 BACKGROUND INFORMATION

Jacumba is a community water system that supplies water for domestic purposes to approximately 530 residents through 239 service connections to the town of Jacumba, an incorporated area of San Diego County. Jacumba currently operates under California Department of Public Health (hereinafter CDPH) permit 05-14-02P-015 issued on December 30, 2002. Jacumba has only one approved active source, Well 4. The second back up source, Well 6, has been disconnected from the system due to poor water quality. New groundwater community water systems are required by Waterworks Standards to have a minimum of two source wells and existing systems should have the same, i.e. at least one backup source for system reliability. Although the new Well 8 does not meet all water quality standards, special consideration is being given to allow it to be used as a standby source during emergencies to ensure system reliability.

[REDACTED] Well 4 does not have any maximum contaminant level (MCL) violations, but has a pattern of total coliform events. In the past decade, Well 4 has had a dozen total coliform positives. Factors of Well 4's physical location, soil type, and lack of an adequate sanitary seal (the well is 40 feet deep and the seal is 10 feet deep) increase the health hazard of using Well 4. In the 2010 sanitary survey of Jacumba by CDPH, concern was expressed that Well 4 may be groundwater under the direct influence of surface water (GWUDI) and therefore must meet the requirements of the Federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2). The primary source will be Well 8 once removal treatment for iron and manganese is installed and Well 4 will become the emergency backup well. Until then, Well 4 is the approved active source and Well 8 shall be used as a standby source only during emergencies.

Jacumba maintains two different pressure zones with 1 booster station and 1 reservoir for storage of potable water. Jacumba has no interconnections with any other water system. According to the 2011 Annual Report to CDPH, Jacumba provided a total of 21.38 MG of potable water from the groundwater well. Jacumba's approved sources are listed in Table 1. Table 2 lists wells that were previously sources of supply in the system but have since been inactivated. All

of the sources listed in Table 2 have been physically disconnected from the system.

Table 1 – Approved Sources

Source	Status	Capacity	PS Code
Well 4	Active Raw	200 gpm	3710011-004
Well 8	Standby	200 gpm	3710011-009

Table 2 – Inactive Sources

Source	Year Inactivated	PS Code
Well 1	1995	3710011-001
Well 2	1995	3710011-002
Well 3	1995	3710011-003
Well 5	1995	3710011-005
Well 6	2012	3710011-006
Well 7	2009	3710011-008

1.3 BRIEF DESCRIPTION OF THE PROJECT

Well 8 was constructed in 2008 to add an additional groundwater source for Jacumba. [REDACTED] Well 8 is situated in a fractured bedrock aquifer just west of the Jacumba Valley Groundwater Basin. The well is 524 feet deep with screened intervals entirely within the crystalline bedrock.

Well 6 has high water temperature (94 °F), pH of 9.48, fluoride over the MCL, and strong smell of hydrogen sulfide. Jacumba submitted a photograph to CDPH that shows Well 6 has been physically disconnected from the distribution system, which has left Jacumba with only one CDPH approved active well source, Well 4. Jacumba appears to be able to meet the Maximum Day Demand at all times as required in the California Water Works Standards without Well 6 as discussed below in the Sources of Supply section of this report.

Pump testing showed that Well 8 can produce 200 GPM. Well 8 is approximately 390 yards from active Well 4. A site map is included in **Attachment No. 2**. Well 8

does not meet the water quality standards for manganese. However, Well 8 will be permitted by CDPH as a standby source with provisions to ensure Jacumba has a minimum of two approved well sources.

1.4 FACILITIES

Jacumba's water system consists of two wells, a 0.24 million gallon (MG) and a 0.43 MG bolted steel storage tank, two pressure zones, one booster station and hydro-pneumatic tank, six inch transmission line from well field to reservoir and from reservoir to distribution system, three reduced pressure backflow preventer (RPP) devices and 239 service connections.

Jacumba has proposed an iron and manganese removal treatment facility to treat well water from Well 8 and have it permitted as a permanent active source. The facility would consist of 3 or 4 manganese dioxide filters; a backwash flow rate provided by the well pump of 100-250 gpm; a backwash water pond; and a water quality objective of manganese removal to <0.01 mg/L. Jacumba has submitted an application to USDA for funding for the manganese treatment system and submitted a preliminary engineering report. The project as a whole will compete for funding from next years' allocation from USDA-RD.

1.5 SOURCES OF INFORMATION

Information for this report was obtained from previous General Manager Tom Lindenmeyer, current General Manager Debra Troutt, the drinking water source assessment, water quality laboratory reports, annual reports, and other technical information submitted by Jacumba with the permit amendment application.

II INVESTIGATION AND FINDINGS

2.1 SOURCES OF SUPPLY

The community of Jacumba primarily overlies Jacumba Valley, under which is the Jacumba Valley Groundwater Basin. This alluvial groundwater basin is bounded by faults on the east and west and on the north and south by crystalline rocks. Several springs, including hot springs, are located within the basin. Boundary Creek, which enters the basin from the west, contributes much of the surface water recharge to the basin.

A 6-inch polyvinyl chloride (PVC) transmission line connects Well 8 to the existing 6-inch ductile iron pipe (DIP) transmission line from Well 4 to the water storage tanks. There is wellhead disinfection at Well 4 but there is no disinfection at Well 8 and there are no service connections between the wells and the storage tanks. This configuration does not allow Well 8 to be disinfected when Well 4 is not in use; therefore, continuous reliable disinfection at the wellhead of

Well 8 must be installed. Key construction parameters for Well 8 are listed in Table 3 below, and the Well Datasheet is included in **Attachment No. 3**.

Table 3 – Well Construction Summary

Source Name	Well 8
PS_Code	3710011-009
Status	Active
Well Capacity	200 GPM
Well Depth (ft bgs)	524
Sanitary Seal Depth (ft bgs)	130
Depth to Perforations (ft bgs)	153
Casing Diameter (inches)	12
Gravel Pack (Y/N)	Y
Pump-to-Waste Disch.	Y
Pump Type	Submersible
Motor HP	35
Pump Setting Depth	440
Lubrication	Water
Power	Electric
Auxiliary Power	Yes, diesel
Water Quality Issues	Elevated Manganese
Meets Construct. Stds.	Yes
Meets Min. Separation	Yes

Capacity Evaluation

The yield of Well 4 has been rated at 200 gallons per minute and Jacumba has 670,000 gallons of storage capacity. These two elements provide the system with a total source capacity of 958,000 gallons per day.

The California Waterworks Standards requires public water systems to have the capacity to meet the system's Maximum Day Demand (MDD) at all times, and systems with less than 1,000 service connections to meet the MDD with storage capacity. MDD is determined based on the highest MDD reported for the last 10 years; however, only 5 years of data was reviewed for Jacumba. Based on this information, Jacumba's reported MDD of 210,000 gallons occurred in August of 2007.

Based on a total storage capacity of 670,000 gallons, Jacumba has the ability to meet MDD, as required by the California Waterworks Standards, provided the reservoirs are at full capacity.

Based on Jacumba's reported Maximum Day Demand (MDD) of 210,000 gallons for August of 2007, the PHD can be calculated. PHD is determined by dividing the MDD by 24 hours and applying a peaking factor of 1.5. For August 2007, the calculated PHD is 13,125 gallon / hour (gph) (210,000 gallons/ 24 hours x 1.5).

Jacumba's total source capacity is 12,000 gph and the total storage capacity is 167,500 gph (670,000 gallons/4 hours under PHD conditions). Therefore, Jacumba's total source capacity under PHD is 179,500 gph (12,000 gph + 167,500 gph). Based on the calculated total source capacity, Jacumba has the ability to meet PHD for at least four hours (179,500 gph is greater than 13,125 gph).

2.2 SOURCE WATER QUALITY

Water samples were taken from Well 8 on February 27, 2009 for the analysis of general mineral, inorganics, volatile organics, and received by the Institute for Environmental Health (IEH) Environmental Engineering Laboratory, Inc. (EEL) on February 27, 2009 (reported on March 30, 2009). The results indicate that Well 8 currently meets all Primary and Secondary Drinking Water Standards except manganese. The Well 8 water sample test result for manganese is 196 ug/L which is above the Maximum Contaminant Level (MCL) of 50 ug/L. An initial perchlorate sample was not reported. A sample for perchlorate must be taken and reported before using Well 8 as a standby well. Bacteriological samples must be taken and the results must be absent for total and fecal coliform before the well can be permitted for use. All water quality results must be electronically submitted to the CDPH database by the lab using the primary station code (PS Code) assigned the source. The PS code for Well 8 is 3710011-009.

A summary of the initial chemical water quality monitoring results for Well 8 is included in **Attachment No. 5**.

2.3 SOURCE WATER ASSESSMENT

Jacumba completed the Drinking Water Source Assessment for Well 8 in August 2009. The source is considered most vulnerable to the following activities not associated with any detected contaminants: a historic gas station in zone "A" and high density [$>1/\text{acre}$] septic systems in zone "A" (2 year time of travel).

Based on the results of the Source Water Assessment and the initial water quality monitoring for Well 8, it appears the well is may be vulnerable to volatile organic chemical (VOC) contamination or synthetic organic chemical (SOC) contamination.

Jacumba must complete the initial quarterly radiological, VOC and SOC monitoring requirements for Well 8. After the initial monitoring requirements are met and provided no VOC's or SOC's are detected, Jacumba must monitor according to the minimum monitoring requirements contained in the California

Code of Regulations, Title 22, Sections 64431-64463.2, and summarized in **Attachment No. 6.**

The monitoring schedule contains the minimum monitoring requirements. Any detected chemical that was not previously detected is required to be verified and more closely monitored with additional sampling requirements. Any VOC or SOC that is confirmed detected must be monitored on an increased frequency of at least once per quarter.

2.4 TREATMENT

Well 4 is chlorinated at the wellhead discharge at a dose of approximately 2.0 mg/L with 12.5% sodium hypochlorite before entering the reservoir and going out to distribution. Water from standby source Well 8 does not have disinfection injection but can be emergency chlorinated if needed. Well 8 has no other treatment and must use Well 8 only as a standby source until manganese treatment is provided for the well. A standby source is defined as a source that is used no more than 15 days a year and no more than 5 consecutive days per Title 22, CCR Section §64414 (c).

2.5 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The California Department of Public Health (CDPH) as the responsible agency pursuant to California Environmental Quality Act (CEQA) has reviewed the Worksheet for CEQA Exemptions prepared by Jacumba Community Service District (Jacumba) on August 21, 2012. The proposed project is for the replacement of Well No. 6, due to poor water quality, with Well No. 8; the pumping capacity of Well No. 8 is the same (200 gpm) as Well No. 6.

Jacumba has determined that this project is categorically exempt from the California Environmental Quality Act under Class 1 exemption pursuant to CCR, Title 14, Section 15301 and Title 22, Section 60101(a). Jacumba filed a Notice of Exemption (NOE) through the County Clerk's office on September 3, 2003. The CDPH, Environmental Review Unit (ERU) concurs that the project is exempt from CEQA. The ERU will file a NOE through the Governor's Office of Planning and Research, State Clearinghouse upon issuance of the amended water supply permit. The California Department of Fish and Game filing fees do not apply to exempted projects.

As a responsible agency, CDPH has considered the Worksheet for CEQA Exemptions and project description and hereby makes the following findings for the permit amendment:

The Replacement Well No. 8 Project is exempt from CEQA under CCR, Title 14

☒ Class 2 (CCR, Title 14, Sec 15302 and Title 22, Section 60101 (b))

There are no recommended permit conditions.

III APPRAISAL OF SANITARY HAZARDS AND PUBLIC HEALTH SAFEGUARDS

Well 6 does not supply safe, wholesome, and potable water to Jacumba's customers due to the high water temperature (94 °F), high pH of 9.48, fluoride over the MCL, and strong smell of hydrogen sulfide. Therefore, Jacumba inactivated and disconnected this well from the system. Jacumba would need to provide plans for treatment if Well 6 is to be connected to the system and considered an active source in the future. This left Jacumba with only one approved active well source, Well 4.

In order to provide a reliable amount of water to customers and ensure Jacumba has a minimum of two approved well sources, CDPH has approved Well 8 as a standby source for emergency purposes. Well 8 does not meet the water quality standards for manganese. Well 8 must be treated for manganese before it can be permitted as a permanent active source.

There is wellhead disinfection at Well 4 but no disinfection at Well 8. This configuration does not allow Well 8 to be disinfected when Well 4 is not in use; therefore, continuous reliable disinfection at the wellhead of Well 8 must be installed.

Jacumba must complete the initial source water quality monitoring requirements for Well 8 and submit all laboratory reports by electronic data transfer (EDT) to CDPH for review, using the Primary Station Codes (PS_Code: 3710011-009).

IV CONCLUSIONS AND RECOMMENDATIONS

CDPH finds that Jacumba, when operating the sources described in this report, is capable of providing a safe, wholesome and potable water supply. Issuance of an amended domestic water supply permit by CDPH to Jacumba to add Well 8 as a standby source and inactivate Well 6 is recommended subject to the following provisions:

1. Jacumba shall comply with all the requirements set forth in the California Safe Drinking Water Act, California Health and Safety Code and any regulations, standards or orders adopted thereunder.
2. The only approved sources for Jacumba are listed below:

Table 1 – Approved Sources

Source	Status	Capacity	PS Code
Well 4	Active Raw	200 gpm	3710011-004
Well 8	Standby	200 gpm	3710011-009

3. The only approved treatment is disinfection by 12.5% sodium hypochlorite solution.
4. No changes, additions, or modifications shall be made to the sources or treatment mentioned in Provision Nos. 2 and 3 unless an amended water supply permit has first been obtained from CDPH.
5. All water supplied by Jacumba for domestic purposes shall meet all Maximum Contaminant Levels (MCLs) established by CDPH. If the water quality does not comply with drinking water standards, additional treatment shall be provided.
6. Pursuant to Section 64590, Title 22, of the California Code of Regulations (CCR), no chemical or product shall be added to drinking water by a water supplier unless the chemical or product is certified as meeting the specifications of NSF International/ American National Standard Institute (NSF/ANSI) 60(Drinking Water Treatment Chemicals-Health Effects).
7. Pursuant to Section 64591, Title 22, of the CCR, a water system shall not use any chemical, material, lubricant, or product that may come into contact with the drinking water that has not been tested and certified as meeting the specifications of NSF/ANSI 61.
8. All persons responsible for the operation and maintenance of the water system shall be certified in accordance with Sections 63750.1 through 64413.7, inclusive, Title 22, of the CCR. In accordance with these requirements, Jacumba shall employ operator(s) that hold the minimum distribution certification issued by the State of California, listed in the following table:

Table 2 – System Classification

Water System Name	Distribution System Classification	Chief Distribution Operator Minimum Certification	Shift Distribution Operator Minimum Certification
Jacumba Community Services District	D1	D1	D1

WELL 8 TREATMENT REQUIREMENTS

9. The standby status of Well 8 shall not be changed to an active source of drinking water supply, unless treatment is provided to meet all existing drinking water standards and prior approval is obtained from CDPH. Specifically, Well 8 shall have continuous reliable disinfection installed and manganese removal treatment shall be provided.
10. Jacumba shall submit a permit amendment application including plans and specifications for the addition of iron and manganese removal treatment to CDPH within twelve (12) months of issuance of this permit amendment.

WELL 8 OPERATIONAL REQUIREMENTS

11. Jacumba shall submit an Operations Plan for Well 8 including provisions 12-15 as stated below a start-up plan that addresses flushing to waste to ensure that slugs of high iron and manganese do not enter the distribution system, and bacteriological and chemical monitoring and reporting requirements.
12. Well 8 shall not be used more than 15 days a year or more than 5 consecutive days per the limitations of use in conformance with Title 22, CCR Section §64414 (c).
13. Public notification shall be provided to customers served by Well 8 prior to use of the well when the use is planned or within 24 hours of placing the well into service for an unplanned emergency. The notification shall include the following at a minimum:
 - a. Explanation of water quality and aesthetic effects of iron and manganese,
 - b. Reason for use of the well
 - c. Anticipated duration of use of the well
 - d. Most recent iron and manganese results from the well
14. Within 3 days after the short-term emergency use of a Well 8, Jacumba shall notify CDPH. The notification shall include information for the reason and duration of use along with proof of public notification required under Provision #13 above.
15. Jacumba shall flush a minimum of two casing volumes prior to placing Well 8 into service. Jacumba shall collect a raw source water bacteriological sample prior to placing the well into service for planned use or upon placing the well into service in an emergency. After 24 hours of operation, Jacumba shall sample for iron and manganese from Well 8.

WELL 6 INACTIVATION

16. Well 6 is no longer approved as a source of supply for Jacumba, and shall remain physically disconnected from the potable water distribution system.
17. Jacumba shall ensure that Well 6 is maintained in a condition that prevents surface water runoff or any other contamination from entering into the well.
18. Jacumba shall destroy Well 6 using methods in conformance with the Department of Water Resources California Well Standards within twelve (12) months of issuance of this permit.
19. If Jacumba chooses to reactivate Well 6, treatment must be installed and Jacumba shall submit a permit application to CDPH for approval prior to use.
20. Well 6 is hereby waived from the water quality monitoring requirements pursuant to Title 22, Division 4, Chapter 15.

GROUNDWATER BACTERIOLOGICAL MONITORING

20. Jacumba shall monitor the raw source water bacteriological quality, prior to chlorination, on a monthly basis for all groundwater wells operating during the month.
21. All raw source water coliform samples collected at the groundwater wells shall be analyzed using an enumeration method and designated as "special" samples and will not be counted for compliance with the routine distribution system coliform monitoring requirements.
22. All total coliform-positive raw water quality samples shall be analyzed for fecal coliform or E. coli bacteria.
23. Jacumba shall notify CDPH within 24-hours if total coliform-positive or E. coli-positive samples have been obtained from a groundwater well and provide CDPH all follow-up sampling results.
24. Jacumba shall take a coliform sample from any active wells within 24 hours of receiving a distribution system coliform positive in accordance with the Ground Water Rule.
25. Jacumba shall submit an updated Bacteriological Sample Siting and Ground Water Rule Plan to CDPH by May 31, 2013.
26. Groundwater wells that produce raw water containing coliform bacteria shall be removed from service following the collection of a confirmation raw water sample from the well. The raw water sample shall be analyzed for coliform and heterotrophic bacteria. If removal of the well from service may result in a water outage or failure of a drinking water standard,

Jacumba shall contact CDPH to discuss interim requirements for the use of this source.

27. Wells that have the confirmation raw water sample from Provision #24 above that is coliform positive shall be removed from service, disinfected, pumped to waste until zero chlorine residual is obtained, and re-sampled after 24 hours for coliform and heterotrophic bacteria using the cycle test procedure. All re-samples shall be negative for coliform and have a heterotrophic plate count (HPC) less than 500 colonies/mL prior to placing the source back into service. If removal of the well from service may result in a water outage or failure of a drinking water standard, Jacumba shall contact CDPH to discuss interim requirements for the use of this source.
28. Jacumba shall comply with the Ground Water Rule (GWR). For each Total Coliform Rule (TCR) distribution system monitoring sample result that is coliform positive, Jacumba shall collect a sample from each active well and analyze for E. coli within 24-hours of learning of the TCR coliform positive. Jacumba shall collect at least one sample from each active well in use at the time the TCR total coliform positive monitoring sample was collected. Jacumba shall conduct Tier 1 Public Notification if a well monitoring sample is E. coli positive.
29. Groundwater wells removed from service for repair and/or maintenance activities shall be disinfected and the raw water tested for coliform and heterotrophic bacteria prior to placing the wells back into service. Groundwater wells shall not be placed back into service to supply the potable water system unless the laboratory results show that the wells are coliform absent.

GROUNDWATER WELL CHEMICAL MONITORING

30. Jacumba shall complete the required source water monitoring Sections 64431-64450, Title 22, CCR. All analyses required for compliance shall be performed by a State-certified laboratory and shall be submitted via Electronic Data Transfer (EDT). The monitoring matrix is included in **Attachment 6** of the Engineering Report.
31. Jacumba shall conduct all inorganic, organic, and radiological monitoring once every compliance cycle, 9 years, unless a waiver has been granted by CDPH pursuant to Sections 64432 (k) or (l) for inorganics, or Sections 64445 (d) for organics.
32. Jacumba shall complete initial Perchlorate monitoring before use of Well 8 as a standby source.

RECORDS AND REPORTING

33. Jacumba shall record the water production output and static and pumping groundwater levels for each well source on a monthly basis at a minimum. Written water production and groundwater depth records shall be

maintained by Jacumba for a minimum of ten years and be available to CDPH representatives upon request.

34. Monthly laboratory reports of distribution (for TCR compliance) and raw water bacteriological analysis from each well source operated by Jacumba shall be mailed to CDPH directly by the laboratory by the tenth day of the following month.
35. Jacumba shall have the lab submit chemical water quality data to CDPH using Electronic Data Format (EDF) using the Primary Station Codes listed in Provision #2 of this permit. The PS Code for Well 8 is 3710011-009.

V APPENDICES

<u>Attachment</u>	<u>No.</u>
Permit Amendment Application	1
Well Site Map	2
Well Datasheet	3
Well Disinfection Datasheet	4
Summary of Initial Source Water Quality Results	5
Vulnerability Assessment and Monitoring Schedule – Groundwater	6
CEQA Documents	7

Attachment No. 1

Permit Amendment Application

STATE OF CALIFORNIA
APPLICATION
FOR
DOMESTIC WATER SUPPLY PERMIT AMENDMENT
FROM

Applicant: JACUMBA COMMUNITY SERVICE DISTRICT
(Enter the name of legal owner, person(s) or organization)

Address: 1266 RAILROAD ST JACUMBA CA 91934

System Name: JACUMBA COMMUNITY SERVICE DISTRICT

System Number: 3710011

TO: Department of Public Health
Southern California
Drinking Water Field Operations Branch
Riverside District Office
1350 Front Street, Room 2050
San Diego, California, 92101



Pursuant and subject to the requirements of the California Health and Safety Code, Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 7, Section 116550, relating to changes requiring an amended permit, application is hereby made to amend an existing water supply permit to INACTIVATE Well #6 AS THE STANDBY SOURCE AND ACTIVATE

WELL #8 AS NEW EMERGENCY STANDBY SOURCE ON A TEMPORARY BASIS UNTIL THE MANGANESE

TREATMENT SYSTEM FOR WELL #8 IS INSTALLED ALONG WITH COMPLETION OF WELL #7 IMPROVEMENT

AT WHICH TIME WELL #8 WILL BECOME THE PRIMARY WELL WATER SOURCE WITH WELL #7 AS THE PRIMARY

EMERGENCY STANDBY SOURCE WITH WELL #4 AS THE SECONDARY EMERGENCY STANDBY SOURCE.

I (We) declare under penalty of perjury that the statements on this application and on the accompanying attachments are correct to my (our) knowledge and that I (we) are acting under authority and direction of the responsible legal entity under whose name this application is made.

By: TOM LINDENMEYER

Title: GENERAL MANAGER

Address: 1266 RAILROAD ST/ P.O. BOX 425
JACUMBA, CA 91934

Telephone: 619-766-4369

Dated: 3-14-2012

DDW 05/2001

Attachment No. 2

Well Site Map

Attachment No. 4
Well Disinfection Data Sheet

State of California
Department of Health Services

Drinking Water Field Operations Branch
Riverside District

DISINFECTION DATA

System Name:	Jacumba Community Series	System No.:	3710011
Source of Information:	Tom Lindenmeyer	Date:	
Collected By:		Prepared By:	
Well 04 Disinfection		JACUMBA CA	
Site Name/Location		JACUMBA CA	
Type of Disinfectant Used		SODIUM HYPOCHLORITE - RAW	
Application		PUMP HOUSE	
Water Treated (raw, filtered, etc.)		NONE	
Oxidant Demand Character		9758 EPA CONTACT TIME CALC.	
Point of Application		4333	
Mixing		EPA CALCULATOR	
Contact Time (minutes, method of determination)		68GPM	
Minimum Contact Time Before Residual Test		100 GPM	
How is Chlorine Contact Time Determined		200 GPM	
Water Flow Variation		PULSATRON	
Average Daily Flow (gpm)		DIAPHRAGM METERING PUMP	
Maximum Daily Flow (gpm)		12 GALLONS PER DAY	
Peak Hourly Flow (gpm)		NEW	
Equipment Specifications		BUILDING BLOCK	
Make		YES	
Type		ELECTRIC	
Capacity		SODIUM HYPOCHLORITE	
Condition		13%	
Enclosure		50 GALLONS	
Type		ABCANA	
Insulation		15 - 60 GALLONS	
Heating		VENTS	
Chemical Added		Safety Features (Locks, Leak Detection, Vents, Alarms, etc.)	
Type		Operation and Maintenance	
% Available Disinfectant Form		Spare Parts on Hand	
Cylinder or Crock Capacity		YES	
Supplier Re-stocking time		YES	
Stock On Hand		Ability to Make Repairs	
		Equipment Inspection Frequency	
		DAILY	
		Residual Testing	
		Type (Free, Combined, Other)	
		FREE	
		Test Made (DPD, etc.)	
		DPD	
		Type of instrument	
		HACH	
		Continuous or Grab Sampling?	
		GRAB	
		Residual Testing Location	
		STORAGE TANKS	
		Records	
		DAILY	
Frequency of Equipment Calibration			
Reliability Features		YES	
Auxiliary Power		NO	
Automatic Switchover (Y/N)		N/A	
Condition of Scales		N/A	
Alarms			
Defects and Remarks:			

Attachment No. 5
Initial Water Quality Results

WATER SAMPLE TESTS

	<u>IRON</u>	<u>MANGANESE</u>	<u>Ph</u>	<u>DISSOLVED SOLIDS</u>	<u>BARIUM</u>	<u>FLUORIDE</u>
<u>WELL</u>						
#7	124 ug/L	27.0 ug/L	7.60	651 mg/L	NB	0.43 mg/L
→ #8	27 ug/L	196.0 ug/L	7.62	715 mg/L	36.0 ug/L	0.39 mg/L

**Institute for Environmental Health
Environmental Engineering Laboratory, Inc.**

3536 Hancock St. San Diego, CA 92110 | P: (619) 298-6131 | F: (619) 298-6141

TEST REPORT

Recipient: Tom Lindenmeyer
JACUMBA COMM.SERVICE DIST.
P.O. BOX 425
JACUMBA, CA. 91934

Reference: 0939970

Lab ID: 0939970-002

Sample #:

Project#:

Comment:

Report Date: 03/10/2009

Matrix: WATER

Sampled: 02/27/2009 8:30

Received: 02/27/2009 10:45

Collection Address: Jacumba, Ca

Sample Location: Well #8

Description:

Date Started: 02/27/2009

Date Completed: 03/10/2009

PS Code: WAT

General Mineral

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyst
Alkalinity - Bicarbonate	159	mg/L	1.0	-	1	SM2320B	03/01/2009 14:50 MEH
Alkalinity - Carbonate	ND	mg/L	1.0	-	1	SM2320B	03/01/2009 14:50 MEH
Alkalinity - Hydroxide	ND	mg/L	1.0	-	1	SM2320B	03/01/2009 14:50 MEH
Alkalinity - Total	130	mg/L	1.0	-	1	SM2320B	03/01/2009 14:50 MEH
Calcium	113	mg/L	0.1	-	1	EPA200.7	03/04/2009 10:45 AQU
Chloride	165	mg/L	0.2	600	1	EPA 300.0	03/01/2009 11:15 MEH
Conductance, Specific	1,157	uMHO/cm	1	2200	1	SM2510B	02/27/2009 13:27 KT
Copper	ND	ug/L	5	1000	1	EPA200.8	03/04/2009 10:45 AQU
Hardness	366	mg/L	2.0	-	1	SM 3120B	03/10/2009 13:19 MEH
→ Iron	27.0	ug/L	20	300	1	EPA200.7	03/04/2009 10:45 AQU
Magnesium	20.4	mg/L	0.1	-	1	EPA200.7	03/04/2009 10:45 AQU
→ Manganese	196	ug/L	10	50	1	EPA200.7	03/04/2009 10:45 AQU
pH	7.62	none	0.01	0	1	EPA150.	02/27/2009 10:50 MEH
Sodium	58.0	mg/L	1	-	1	EPA200.7	03/04/2009 10:45 AQU
→ Solids, Dissolved	715	mg/L	10	-	1	SM2450C	02/27/2009 13:43 KT
Sulfate	253	mg/L	0.5	600	1	EPA 300.0	03/01/2009 11:15 MEH
Sulfonated Detergent - MBAS	ND	mg/L	0.05	0.5	1	SM 5540C	03/01/2009 17:15 MEH
Zinc	36.0	ug/L	20	5000	1	EPA200.8	03/04/2009 10:45 AQU

Inorganic Chemical

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyst
Aluminum	ND	ug/L	30	1000	1	EPA200.8	03/05/2009 10:45 AQU
Arsenic	ND	ug/L	2	50	1	EPA200.8	03/05/2009 10:45 AQU
→ Barium	36.0	ug/L	2	1000	1	EPA200.8	03/05/2009 10:45 AQU
Cadmium	ND	ug/L	1	5	1	EPA200.8	03/05/2009 10:45 AQU
Chromium, Total	ND	ug/L	1	50	1	EPA200.8	03/05/2009 10:45 AQU
Copper	ND	ug/L	5	1000	1	EPA200.8	03/05/2009 10:45 AQU
Fluoride	0.39	mg/L	0.1	2.0	1	EPA 300.0	03/01/2009 11:15 MEH
Lead	ND	ug/L	4	15	1	EPA200.8	03/05/2009 10:45 AQU
Mercury	ND	ug/L	0.2	2	1	EPA200.8	03/05/2009 10:45 AQU
Nitrogen, Nitrate (as NO3)	ND	mg/L	2.0	45	1	EPA 300.0	03/01/2009 11:15 MEH
Selenium	ND	ug/L	5	50	1	EPA200.8	03/05/2009 10:45 AQU
Silver	ND	ug/L	5	100	1	EPA200.8	03/05/2009 10:45 AQU

RL = Reporting Limit

MCL = Maximum Contaminant Level

MDL = Method Detection Limit

N/A = Not Applicable

Page 2 of 3

The results in this report relate only to the portion of the samples tested.

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Institute for Environmental Health
Environmental Engineering Laboratory, Inc.
3538 Hancock St. San Diego, CA 92110 | P: (619) 298-6131 | F: (619) 298-6141



TEST REPORT

Recipient: Tom Lindenmeyer
JACUMBA COMM.SERVICE DIST.
P.O. BOX 425
JACUMBA, CA 91934
Reference: 0939970
Lab ID: 0939970-002
Sample #:
Project#:
Comment:

Report Date: 03/30/2009
Matrix: WATER
Sampled: 02/27/2009 8:30
Received: 02/27/2009 10:45
Collection Address: Jacumba, Ca
Sample Location: Well #8
Description:
Date Started: 02/27/2009
Date Completed: 03/30/2009
PS Code: WAT

Carbamates By 531.1

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
3-Hydroxycarbofuran	ND	µg/L	3	N/A	1	EPA 531.1	03/18/2009 18:10	BSK
Aldicarb	ND	µg/L	3	N/A	1	EPA 531.1	03/18/2009 18:10	BSK
Aldicarb Sulfoxide	ND	µg/L	3	N/A	1	EPA 531.1	03/18/2009 18:10	BSK
Aldicarb Sulfone	ND	µg/L	2	N/A	1	EPA 531.1	03/06/2009 17:40	BSK
EDMC	100	%	N/A	N/A	1	EPA 531.1	03/18/2009 18:10	BSK
Carbaryl	ND	µg/L	5	N/A	1	EPA 531.1	03/18/2009 18:10	BSK
Carbofuran	ND	µg/L	5	18	1	EPA 531.1	03/18/2009 18:10	BSK
Methomyl	ND	µg/L	2	N/A	1	EPA 531.1	03/18/2009 18:10	BSK
Omethyl	ND	µg/L	20	50	1	EPA 531.1	03/18/2009 18:10	BSK

General Mineral

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Alkalinity - Bicarbonate	159	mg/L	1.0	N/A	1	SM2320B	03/01/2009 14:50	MEH
Alkalinity - Carbonate	ND	mg/L	1.0	N/A	1	SM2320B	03/01/2009 14:50	MEH
Alkalinity - Hydroxide	ND	mg/L	1.0	N/A	1	SM2320B	03/01/2009 14:50	MEH
Alkalinity - Total	130	mg/L	1.0	N/A	1	SM2320B	03/01/2009 14:50	MEH
Calcium	113	mg/L	0.1	N/A	1	EPA200.7	03/04/2009 10:45	AQU
Chloride	165	mg/L	0.2	600	1	EPA 300.0	03/01/2009 11:15	MEH
Conductance, Specific	1,157	µMHO/cm	1	2200	1	SM2510B	02/27/2009 13:27	KT
Copper	ND	ug/L	5	1000	1	EPA200.8	03/04/2009 10:45	AQU
Hardness	366	mg/L	2.0	N/A	1	SM 3120B	03/10/2009 13:19	MEH
→ Iron	27.0	ug/L	20	300	1	EPA200.7	03/04/2009 10:45	AQU
Magnesium	20.4	mg/L	0.1	N/A	1	EPA200.7	03/04/2009 10:45	AQU
→ Manganese	196	ug/L	10	50	1	EPA200.7	03/04/2009 10:45	AQU
pH	7.62	none	0.01	0	1	SM 4500 H	02/27/2009 10:50	MEH
Sodium	68.0	mg/L	1	N/A	1	EPA200.7	03/04/2009 10:45	AQU
→ Solids, Dissolved	715	mg/L	10	N/A	1	SM2450C	02/27/2009 13:43	KT
Sulfate	253	mg/L	0.5	600	1	EPA 300.0	03/01/2009 11:15	MEH
Sulfonated Detergent - MBAS	ND	mg/L	0.05	0.5	1	SM 5540C	03/01/2009 17:15	MEH
Zinc	36.0	ug/L	20	5000	1	EPA200.8	03/04/2009 10:45	AQU

General Physical

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Color, Visual	<3	UNITS	3	15	1	SM 2120B	02/27/2009 12:10	KT
Odor	ND	TON	1	N/A	1	SM 2150	02/27/2009 12:10	KT
→ Turbidity	0.89	NTU	0.10	1.0	1	SM2130B	02/27/2009 12:10	KT

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MCL = Maximum Contaminant Level

MDL = Method Detection Limit

N/A = Not Applicable

Page 5 of 8

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TEST REPORT

Recipient: Tom Lindenmeyer
JACUMBA COMM.SERVICE DIST.
P.O. BOX 425
JACUMBA, CA 91934
Reference: 0939970
Lab ID: 0939970-002
Sample #:
Project#:
Comment:

Report Date: 03/30/2009
Matrix: WATER
Sampled: 02/27/2009 8:30
Received: 02/27/2009 10:45
Collection Address: Jacumba, Ca
Sample Location: Well #8
Description:
Date Started: 02/27/2009
Date Completed: 03/30/2009
PS Code: WAT

Gross Alpha and Beta

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Gross Alpha Counting Error	1.32	pCi/L	N/A	N/A	1	SM 7110B	03/05/2009 12:18	MEH
Gross Beta Counting Error	1.09	pCi/L	N/A	N/A	1	SM 7110B	03/05/2009 12:18	MEH
Radioactivity, Gross Alpha	3.55	pCi/L	3	15	1	SM 7110B	03/05/2009 12:18	MEH
Radioactivity, Gross Beta	10.4	pCi/L	4	N/A	1	SM 7110B/EPA90	03/05/2009 12:18	MEH

Herbicides by EPA 515.1

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
2,4-D (Dichlorophenoxy) Acetic Acid	ND	µg/L	10	70	1	EPA 515.1	03/18/2009 18:03	BSK
2,4,5-T	ND	µg/L	1	N/A	1	EPA 515.1	03/18/2009 18:03	BSK
Bentazon	ND	µg/L	2	18	1	EPA 515.1	03/18/2009 18:03	BSK
Dalapon	ND	µg/L	10	200	1	EPA 515.3	03/18/2009 18:03	BSK
Dicamba	ND	µg/L	1.5	N/A	1	EPA 515.1	03/18/2009 18:03	BSK
Dinoseb	ND	µg/L	2	7	1	EPA 515.1	03/18/2009 18:03	BSK
Dinoseb	ND	µg/L	0.2	1	1	EPA 515.1	03/18/2009 18:03	BSK
Pentachlorophenol	ND	µg/L	1	500	1	EPA 515.1	03/18/2009 18:03	BSK
Picloram	ND	µg/L	1	50	1	EPA 515.1	03/18/2009 18:03	BSK
Silvex	ND	µg/L	1	50	1	EPA 515.1	03/18/2009 18:03	BSK

Inorganic Chemical

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Aluminum	ND	ug/L	30	1000	1	EPA200.8	03/05/2009 10:45	AQU
Arsenic	ND	ug/L	2	50	1	EPA200.8	03/05/2009 10:45	AQU
Barium	36.0	ug/L	2	1000	1	EPA200.8	03/05/2009 10:45	AQU
Cadmium	ND	ug/L	1	5	1	EPA200.8	03/05/2009 10:45	AQU
Chromium, Total	ND	ug/L	1	50	1	EPA200.8	03/05/2009 10:45	AQU
Copper	ND	ug/L	5	1000	1	EPA 300.0	03/01/2009 11:15	MEH
Fluoride	0.39	mg/L	0.1	2.0	1	EPA200.8	03/05/2009 10:45	AQU
Lead	ND	ug/L	4	15	1	EPA200.8	03/05/2009 10:45	AQU
Mercury	ND	ug/L	0.2	2	1	EPA200.8	03/05/2009 10:45	AQU
Nitrogen, Nitrate (as NO3)	ND	mg/L	2.0	45	1	EPA 300.0	03/01/2009 11:15	MEH
Selenium	ND	ug/L	5	50	1	EPA200.8	03/05/2009 10:45	AQU
Silver	ND	ug/L	5	100	1	EPA200.8	03/05/2009 10:45	AQU

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N/A = Not Applicable

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TEST REPORT

Recipient: Tom Lindenmeyer
JACUMBA COMM.SERVICE DIST.
P.O. BOX 425
JACUMBA, CA 91934
Reference: 0939970
Lab ID: 0939970-002
Sample #:
Project#:
Comment:

Report Date: 03/30/2009
Matrix: WATER
Sampled: 02/27/2009 8:30
Received: 02/27/2009 10:45
Collection Address: Jacumba, Ca
Sample Location: Well #8
Description:
Date Started: 02/27/2009
Date Completed: 03/30/2009
PS Code: WAT

Pesticides and PCBs by EPA 505

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Aldrin	ND	µg/L	0.075	N/A	1	EPA 505	03/06/2009 17:40	BSK
Chlordane	ND	µg/L	0.1	0.1	1	EPA 505	03/06/2009 17:40	BSK
Chlorothalonil (Daconil, Bravo)	ND	µg/L	5.0	N/A	1	EPA 505	03/06/2009 17:40	BSK
Dieldrin	ND	µg/L	0.02	N/A	1	EPA 505	03/06/2009 17:40	BSK
Endrin	ND	µg/L	0.1	2	1	EPA 505	03/06/2009 17:40	BSK
Heptachlor	ND	µg/L	0.01	0.01	1	EPA 505	03/06/2009 17:40	BSK
Heptachlor epoxide	ND	µg/L	0.01	0.01	1	EPA 505	03/06/2009 17:40	BSK
Hexachlorobenzene	ND	µg/L	0	1	1	EPA 505	03/06/2009 17:40	BSK
Hexachlorocyclopentadiene	ND	µg/L	1	50	1	EPA 505	03/06/2009 17:40	BSK
Lindane (BHC gamma isomer)	ND	µg/L	0.2	0.2	1	EPA 505	03/06/2009 17:40	BSK
Methoxychlor	ND	µg/L	10	30	1	EPA 505	03/06/2009 17:40	BSK
PCBs: Arochlor Screen	ND	µg/L	0.2	0.5	1	EPA 505	03/06/2009 17:40	BSK
Toxaphene	ND	µg/L	1	3	1	EPA 505	03/06/2009 17:40	BSK
Trifluralin	ND	µg/L	1	N/A	1	EPA 505	03/06/2009 17:40	BSK

Radium (226)

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Radium 226 Counting Error	0.695	pCi/L	N/A	N/A	1	EPA 903.0	03/17/2009 15:01	PAS
Total Alpha Radium (226)	1.07	pCi/L	1.0	5	1	EPA 903.0	03/17/2009 15:01	PAS

Radium (228)

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyzed	Analyst
Radium 228	0.906	pCi/L	1.0	2.0	1	EPA Ra5	03/26/2009 15:01	PAS
Radium 228 Counting Error	0.361	pCi/L	N/A	N/A	1	EPA Ra5	03/26/2009 15:01	PAS

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IACUMBA COMM. SERVICE DIST.
P.O. BOX 425
IACUMBA, CA 91934
Reference: 0939970
Lab ID: 0939970-002
Sample #:
Project#:
Comment:

Report Date: 03/30/2009
Matrix: WATER
Sampled: 02/27/2009 8:30
Received: 02/27/2009 10:43
Collection Address: Jacumba, Ca
Sample Location: Well #8
Description:
Date Started: 02/27/2009
Date Completed: 03/30/2009
PS Code: WAT

SVOCs By EPA 525.2 (Full List)

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyst	Analyst
Alachlor	ND	µg/L	1	2	1	EPA 525.2	03/11/2009 12:44	AQU
Atrazine	ND	µg/L	0.5	1	1	EPA 525.2	03/11/2009 12:44	AQU
Benzo (a) Pyrene	ND	µg/L	0.1	0.2	1	EPA 525.2	03/11/2009 12:44	AQU
Bis(2-ethylhexyl)adipate	ND	µg/L	3	400	1	EPA 525.2	03/11/2009 12:44	AQU
Bis(2-ethylhexyl)phthalate	ND	µg/L	3	4	1	EPA 525.2	03/11/2009 12:44	AQU
Bromacil (Hyvar)	ND	µg/L	10	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Butachlor	ND	µg/L	0.38	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Diazinon	ND	µg/L	0.25	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Dimethoate (Cygon)	ND	µg/L	10	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Metolachlor	ND	µg/L	0.5	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Mesbuzin	ND	µg/L	0.5	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Molinate (Ondram)	ND	µg/L	2	20	1	EPA 525.2	03/11/2009 12:44	AQU
Prometryn (Caparol)	ND	µg/L	2	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Propachlor	ND	µg/L	0.5	N/A	1	EPA 525.2	03/11/2009 12:44	AQU
Simazine	ND	µg/L	1	4	1	EPA 525.2	03/11/2009 12:44	AQU
Thiobencarb (Bolero)	ND	µg/L	1	70	1	EPA 525.2	03/11/2009 12:44	AQU

Test Parameters

Parameter	Result	Units	RL	MCL	Dilution Factor	Method	Analyst	Analyst
Endosulf By EPA 548	ND	ug/L	45	100	1	EPA548.1	03/09/2007 17:40	BSK
Glyphosate By EPA 547	ND	ug/L	25	700	1	EPA547	03/10/2009 17:40	BSK
Uranium	ND	pCi/L	2.0	20	1	EPA200.8	03/09/2009 17:40	BSK

Approval:

QA/QC Officer

Director

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N/A = Not Applicable

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P.O. BOX 425
JACUMBA, CA 91934
Reference: 0939970
Lab ID: 0939970-002
Sample #:
Project#:
Comment:

Report Date:
Matrix: WATER
Sampled: 02/27/2009 8:30
Received: 02/27/2009 10:45
Collection Address: Jacumba, Ca
Sample Location: Well #8
Description:
Date Started: 02/27/2009
Date Completed: 03/30/2009
PS Code: WAT

Analyzed: 3/10/2009 @ 11:11
Analyst: AQU

Method: EPA 524.2
Dilution Factor: 1

VOC By EPA 502.2/524.2

Parameter	Result ug/L	MCL ug/L	RL ug/L	Parameter	Result ug/L	MCL ug/L	RL ug/L
1,1,1,2-Tetrachloroethane	ND	N/A	0.5	Cis-1,2-Dichloroethylene	ND	6	0.5
1,1,1-Trichloroethane	ND	200	0.5	Cis-1,3-Dichloropropene	ND	N/A	0.5
1,1,2,2-Tetrachloroethane	ND	1	0.5	Dibromochloromethane	ND	N/A	0.5
1,1,2-Trichloroethane	ND	5	0.5	Dibromomethane	ND	N/A	0.5
1,1-Dichloroethane	ND	5	0.5	Dichlorodifluoromethane	ND	N/A	0.5
1,1-Dichloroethylene	ND	6	0.5	Dichloromethane(Methylenechlor)	ND	5	0.5
1,1-Dichloropropene	ND	N/A	0.5	Ethylbenzene	ND	300	0.5
1,2-Dichlorobenzene (o-DCB)	ND	600	5	Hexachlorobutadiene	ND	N/A	0.5
1,2,3-Trichlorobenzene	ND	N/A	0.5	Isopropylbenzene (Cumene)	ND	N/A	0.5
1,2,3-Trichloropropane	ND	N/A	0.5	Methyl Tert-butyl Ether (MTBE)	ND	5	1.0
1,2,4-Trichlorobenzene	ND	5	0.5	Monochlorobenzene	ND	70	0.5
1,2,4-Trimethylbenzene	ND	N/A	0.5	Naphthalene	ND	N/A	0.5
1,2-Dichloroethane	ND	0.5	0.5	N-butylbenzene	ND	N/A	0.5
1,2-Dichloropropane	ND	5	0.5	N-propylbenzene	ND	N/A	0.5
1,3,5-Trimethylbenzene	ND	N/A	0.5	P-isopropyltoluene	ND	N/A	0.5
1,3-Dichlorobenzene	ND	N/A	0.5	Sec-butylbenzene	ND	N/A	0.5
1,3-Dichloropropane	ND	N/A	0.5	Styrene	ND	100	0.5
1,3-Dichloropropene	ND	0.5	0.5	Tert-butylbenzene	ND	N/A	0.5
1,4-Dichlorobenzene (p-DCB)	ND	5	0.5	Tetrachloroethylene (PCB)	ND	5	0.5
2,2-Dichloropropane	ND	N/A	0.5	Toluene	ND	150	0.5
2-Chlorotoluene	ND	N/A	0.5	Total Trihalomethanes	0.90	30	0.5
4-Chlorotoluene	ND	N/A	0.5	Trans-1,2-dichloroethylene	ND	10	0.5
Benzene	ND	1.0	0.5	Trans-1,3-dichloropropene	ND	N/A	0.5
Bromobenzene	ND	N/A	0.5	Trichloroethylene (TCE)	ND	5	0.5
Bromochloromethane	ND	N/A	0.5	Trichlorofluoromethane	ND	150	5.00
Bromodichloromethane	ND	N/A	0.5	Vinyl Chloride	ND	0.5	0.5
Bromoform	ND	N/A	0.5	Xylenes	ND	1750	0.5
Bromomethane	ND	N/A	0.5				
Carbon Tetrachloride	ND	0.5	0.5				
Chloroethane	ND	N/A	0.5				
Chloroform	0.90	N/A	0.5				
Chloromethane	ND	N/A	0.5				

Surrogates	% Recovered	QC Limits (%)
1,2-Dichlorobenzene-d4	86%	40 140
4-Bromofluorobenzene	84%	40 140

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N/A = Not Applicable

Page 2 of 3

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TEST REPORT

Recipient:	Tom Lindenmeyer JACUMBA COMM. SERVICE DIST. P.O. BOX 425 JACUMBA, CA 91934	Report Date:	
Reference:	0939978	Matrix:	WATER
Lab ID:	0939970-002	Sampled:	02/27/2009 8:30
Sample #:		Received:	02/27/2009 10:45
Project#:		Collection Address:	Jacumba, Ca
Comment:		Sample Location:	Well #8
		Description:	
		Date Started:	02/27/2009
		Date Completed:	03/30/2009
		PS Code:	WAT

Analyzed: 3/10/2009 @ 11:11
Analyst: AQU

Method: EPA 524.2
Dilution Factor: 1

VOC By EPA 502.2/524.2

Parameter	Result ug/L	MCL ug/L	RL ug/L	Parameter	Result ug/L	MCL ug/L	RL ug/L
-----------	----------------	-------------	------------	-----------	----------------	-------------	------------

Approval: _____
QA/QC Officer

Approval: _____
Director

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Page 3 of 3

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Attachment No. 6
Monitoring Schedule

Standby		Standby STBY	
CD	Constituent	FRQ	
GP	Aggressiveness Index	108	9 years
GP	Bicarbonate	108	9 years
GP	Calcium	108	9 years
GP	Carbonate	108	9 years
GP	Chloride	108	9 years
GP	Color	108	9 years
GP	Copper	108	9 years
GP	Foaming Agents (MBAS)	108	9 years
GP	Hardness Total as CaCO3	108	9 years
GP	Hydroxide	108	9 years
GP	Iron	108	9 years
GP	Magnesium	108	9 years
GP	Manganese	108	9 years
GP	Odor	108	9 years
GP	pH, laboratory	108	9 years
GP	Silver	108	9 years
GP	Sodium	108	9 years
GP	Specific Conductance	108	9 years
GP	Sulfate	108	9 years
GP	Total Dissolved Solids (TDS)	108	9 years
GP	Turbidity, laboratory	108	9 years
GP	Zinc	108	9 years
IO	Aluminum	108	9 years
IO	Antimony	108	9 years
IO	Arsenic	108	9 years
IO	Asbestos	0,999,999	Waived
IO	Barium	108	9 years
IO	Beryllium	108	9 years
IO	Cadmium	108	9 years
IO	Chromium	108	9 years
IO	Cyanide	108	9 years
IO	Fluoride	108	9 years
IO	Lead	108	9 years
IO	Mercury	108	9 years
IO	Nickel	108	9 years
IO	Perchlorate	108	9 years
IO	Selenium	108	9 years
IO	Thallium	108	9 years
NI	Nitrate as NO3	108	9 years
NI	Nitrite as N	108	9 years
RA	Gross Alpha	108	9 years
RA	Gross Beta	0,999,999	Waived
RA	RA 226 for CWS	0,999,999	Waived
RA	RA 226 or Total Radium	0,999,999	Waived
RA	Radium 226	0,999,999	Waived

S1	Trichloroethylene	108	9 years
S1	Trichlorofluoromethane (Freon 11)	108	9 years
S1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 12)	108	9 years
S1	Vinyl Chloride	108	9 years
S1	Xylenes (Total)	108	9 years
S2	Alachlor	0,999,999	Waived
S2	Atrazine	108	9 years
S2	Bentazon	0,999,999	Waived
S2	Benzo(a)pyrene	0,999,999	Waived
S2	Carbofuran	0,999,999	Waived
S2	Chlordane	0,999,999	Waived
S2	Dalapon	0,999,999	Waived
S2	Di(2-ethylhexyl)adipate	0,999,999	Waived
S2	Di(2-ethylhexyl)phthalate	0,999,999	Waived
S2	Dibromochloropropane (DBCP)	0,999,999	Waived
S2	Dinoseb	0,999,999	Waived
S2	Diquat	0,999,999	Waived
S2	Endothall	0,999,999	Waived
S2	Endrin	0,999,999	Waived
S2	Ethylene Dibromide (EDB)	0,999,999	Waived
S2	Glyphosate	0,999,999	Waived
S2	Heptachlor	0,999,999	Waived
S2	Heptachlor Epoxide	0,999,999	Waived
S2	Hexachlorobenzene	0,999,999	Waived
S2	Hexachlorocyclopentadiene	0,999,999	Waived
S2	Lindane	0,999,999	Waived
S2	Methoxychlor	0,999,999	Waived
S2	Molinate	0,999,999	Waived
S2	Oxamyl	0,999,999	Waived
S2	Pentachlorophenol (PCP)	0,999,999	Waived
S2	Picloram	0,999,999	Waived
S2	Polychlorinated biphenyls (PCBs)	0,999,999	Waived
S2	Simazine	108	9 years
S2	Thiobencarb	0,999,999	Waived
S2	Toxaphene	0,999,999	Waived
S2	2,3,7,8-TCDD (Dioxin)	0,999,999	Waived
S2	2,4-D	0,999,999	Waived
S2	2,4,5-TP (Silvex)	0,999,999	Waived
S2	Diazinon	0,999,999	Waived

§64432. Monitoring and Compliance--Inorganic Chemicals.

(o) Transient-noncommunity water systems shall monitor for the inorganic chemicals in Table 64431-A as follows

- (1) All sources shall be monitored at least once for fluoride;
- (2) Surface water sources for parks and other facilities with an average daily population use of more than 1000 people and/or which are determined to be subject to potential contamination based on a sanitary survey shall be monitored at the same frequency as

Attachment No. 7
CEQA Documents

NOTICE OF EXEMPTION

(Categorical)

TO: Office of Planning and Research
P.O. Box 3044
Sacramento, CA 958112-3044

FROM: CA Department of Public Health
San Diego District Office
1350 Front Street, Room 2050
San Diego, CA 92101
Contact: Sean Sterchi
Phone number: (619) 525-4159

SCH#: tba

WATER SYSTEM #: 3710011

PROJECT TITLE: Operation of Replacement Well No. 8

PROJECT LOCATION: In the vicinity of Kumeyaay Highway and McCain Valley Road, within the community of Jacumba, County of San Diego

PROJECT DESCRIPTION: The California Department of Public Health (Department), as the responsible agency, will be issuing a water supply permit. The Jacumba Community Service District proposed project is for the replacement of Well No. 6 with Well No. 8.

PUBLIC AGENCY APPROVING PROJECT AND CARRYING OUT PROJECT: This is to advise that the Department has issued a water supply permit **05-14-13PA-004** for the above described project on **04/8/2013**, and concurs with Jacumba Community Service District that the project is exempt from the California Environmental Quality Act.

Categorical Exemption Status:

- ☐ Class 1 Existing Facilities
(CCR, Title 14, Sec 15301 and Title 22, Section 60101 (a))
- ☒ Class 2 Replacement or Reconstruction
(CCR, Title 14, Sec 15302 and Title 22, Section 60101 (b))
- ☐ Class 3 New Construction or Conversion of Small Structures
(CCR, Title 14, Sec 15303 and Title 22, Section 60101 (c))
- ☐ Class 4 Minor Alterations to Land
(CCR, Title 14, Sec 15304 and Title 22, Section 60101 (d))
- ☐ Class 6 Information Collection
(CCR, Title 14, Sec. 15306 and Title 22 Section 60101)

Reason why project is exempt: The operation of Replacement Well No. 8 will not have a significant effect on the environment.

The California Department of Public Health is a responsible agency for this project and is not responsible for the Department of Fish and Game filing fees.

LEAD AGENCY: Jacumba Community Service District

CONTACT PERSON: Tom Lindenmeyer

PHONE NUMBER: (619) 766-4359

Signature: _____

Date: _____

Name: _____

Sean Sterchi

Title: _____

Senior Sanitary Engineer