Bighorn-Desert View Water Agency

Board of Directors
Michael McBride, President
Judy Corl-Lorono, Vice President
David Larson, Director
Terry Burkhart, Director
J. Dennis Staley, Director

Marina D West, PG, General Manager

A Public Agency

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BOARD OF DIRECTORS' REGULAR MEETING AGENDA

BOARD MEETING OFFICE
1720 N. Cherokee Trail, Landers, CA 92285
Tuesday, April 24, 2012 - 6:00 p.m.

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL**

4. **APPROVAL OF AGENDA**

DISCUSSION AND ACTION ITEMS - The Board of Directors and Staff will discuss the following items, and the Board will consider taking action, if so inclined.

The Public is invited to comment on any item on the agenda during discussion of that item.

When giving your public comment, please have your information prepared, if you wish to be identified for the record then please state your name. Due to time constraints, each member of the public will be allotted three-minutes to provide their public comment.

5. **CONSIDER DISSOLVING LOCAL AGENCY FORMATION COMMISSION (LAFCO) AD HOC COMMITTEE**
   Board considers taking the following action(s):
   1. Board to receive Ad Hoc Committee final verbal report; and
   2. Consider dissolving the Local Agency Formation Commission (LAFCO) Ad Hoc Committee.

6. **CONSIDER ADOPTING POLICY NO. 12P-XX A STATEMENT OF BOARD POLICY ESTABLISHING THE CRITERIA FOR AGENCY FINANICIAL RESERVES**
   Board considers taking the following action(s):
   1. Adopt Policy No. 12P-XX A Statement of Board Policy Establishing the Criteria for Agency Financial Reserves.

7. **CONSIDER ADOPTING RESOLUTION NO. 12R-XX PUBLIC RECORDS RETENTION AND DESTRUCTION POLICY**

Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Public Records Retention and Destruction Policy.

8. **CONSIDER ADOPTING RESOLUTION NO. 12R-XX OPPOSING SECTION 7.8 OF THE STATE WATER RESOURCES CONTROL BOARD'S FINAL DRAFT SEPTIC TANK POLICY**

Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Opposing Section 7.8 of State Water Resources Control Board Final Draft "*Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems*"

9. **CONSIDER ADOPTING RESOLUTION NO. 12R-XX OPPOSING THE ELIMINATION OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – COLORADO RIVER REGION**

Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Opposing the Elimination of the California Regional Water Quality Control Board – Colorado Region.

10. **RECEIVE AND FILE JOHNSON VALLEY HYDROLOGIC INVESTIGATION REPORT AND AUTHORIZE CHANGE ORDER NO. 1 TO DANIEL B. STEVENS & ASSOC. FOR TIME EXTENSION UNTIL APRIL 24, 2012 AT NO COST**

Board considers taking the following action(s):

1. Receive and file Johnson Valley Hydrologic Investigation Report dated April 16, 2012.
2. Authorize Change Order No. 1 to Daniel B Stephens & Assoc. for a time extension until the April 24, 2012 Receive and File date, at no cost to the Agency.

11. **DISBURSEMENTS MARCH 2012**

Board considers taking the following action(s):

1. Ratify Check Register (payment of bills) for March 2012.

12. **CONSENT ITEMS** - The following items are expected to be routine and non-controversial and will be acted on by the Board at one time without discussion, unless a member of the Public or member of the Board requests that an item be held for discussion or further action.

a. Financial Statements March 2012
    1. Balance Sheet
    2. Statement of Revenue and Expense
    3. General Account (Union Bank)
    4. Disbursements
    5. Local Agency Investment Fund Balance Timeline
b. Consumption & Billing Comparison Report, March 2012
c. Service Order Report, March 2012
d. Production Report, March 2012
e. PLEGS Committee Regular Meeting Report, February 16, 2012
f. Special Board Meeting Minutes, April 3, 2012
g. Resolution No. 12R-XX Consenting to Join the Health Benefits Program of the ACWA Joint Powers Insurance Authority – Staff Recommends that the Board adopt Resolution 12R-XX Consenting to join the Health Benefits Program of the ACWA Joint Powers Insurance Authority, ratifying the action of the ACWA Health Benefits Authority Board of Directors to terminate the Health Benefits Authority Joint Powers

Agreement, and authorizing and directing the General Manager to execute all necessary documents.

Board considers taking the following action(s):

1. Approve as presented (Items a - g):

13. MATTERS REMOVED FROM CONSENT ITEMS

14. PUBLIC COMMENT PERIOD

Any person may address the Board on any matter within the Agency's jurisdiction on items not appearing on this agenda.

When giving your public comment, please have your information prepared, if you wish to be identified for the record then please state your name. Due to time constraints, each member of the public will be allotted three-minutes to provide their public comment. State Law prohibits the Board of Directors from discussing or taking action on items not included on the agenda.

15. VERBAL REPORTS - Including Reports on Courses/Conferences/Meetings.

a. GENERAL MANAGER'S REPORT
b. DIRECTORS' REPORT
c. PRESIDENT'S REPORT

16. FUTURE AGENDA ITEMS

17. ADJOURNMENT

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted in the main lobby of the Bighorn-Desert View Water Agency, 622 S. Jemez Trail, Yucca Valley, CA not less than 72 hours if prior to a Regular meeting, date and time above; or in accordance with California Government Code Section 54956 this agenda has been posted not less than 24 hours if prior to a Special meeting, date and time above.

As a general rule, agenda reports or other written documentation has been prepared or organized with respect to each item of business listed on the agenda.

Copies of these materials and other discloseable public records in connection with an open session agenda item, are also on file with and available for inspection at the Office of the Agency Secretary, 622 S. Jemez Trail, Yucca Valley, California, during regular business hours, 8:00 A.M. to 4:30 P.M., Monday through Friday. If such writings are distributed to members of the Board of Directors on the day of a Board meeting, the writings will be available at the entrance to the Board of Directors meeting room at the Bighorn-Desert View Water Agency.

Internet: Once uploaded, agenda materials can also be viewed at www.bdvwa.org.

Public Comments: You may wish to submit your comments in writing to assure that you are able to express yourself adequately.

Per Government Code Section 54954.2, any person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in the meeting, should contact the Board's Secretary at 760-364-2315 during Agency business hours.

BIGHORN DESERT VIEW WATER AGENCY
AGENDA ITEM SUBMITTAL

Meeting Date: April 24, 2012

To: Board of Directors

Budgeted: N/A
Budgeted Amount: N/A
Cost: N/A

From: Marina D. West

General Counsel Approval: N/A
CEQA Compliance: N/A

Subject: Consider Adopting Policy No. 12P-XX A Statement of Board Policy Establishing the Criteria for Agency Financial Reserves

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SUMMARY

Staff and Board agree that a Policy be establish to designate general ledger fund sub-accounts to differentiate the prescribed uses for financial reserve monies currently retained in the Local Agency Investment Fund (LAIF).

RECOMMENDATION

The Board considers taking the following action(s):

1. Adopt Policy No. 12P-XX A Statement of Board Policy Establishing the Criteria for Agency Financial Reserves.

BACKGROUND/ANALYSIS

Staff and Board agree that the board establish designated fund accounts, in the form of general ledger sub-accounts, to differentiate the prescribed uses for monies retained in the Local Agency Investment Fund (LAIF).

The LAIF account is used to hold monies that are not immediately needed because LAIF pays interest (currently 0.38%) whereas the Union Bank checking account does not.

The sub-accounts will provide more transparency in our financial reporting by tracking where the monies retained in LAIF are expected to be spent. The attached Chart of Accounts indicated the LAIF sub-accounts categories which were reviewed and approved by the Board on April 3rd.

A draft policy statement is attached. The purpose of the policy is to define the sub-accounts, set goals for some funds, and describe authorization for the use of the sub-accounts. *Reporting to the Board will occur each month in the form of the "month-end general ledger* Balance Sheet-Investments" Section.

On April 3 the Board of Directors recommended funding goals for the Emergency Contingencies Fund and the Replacement and Refurbishment Fund of at least $200,000 each. The remaining unencumbered cash can provide for Capital Improvement Projects, budget shortfalls, etc.

Staff recommends the Board adopt Policy No. 12R-XX establishing the criteria for the Agency's financial reserves.

PRIOR RELEVANT BOARD ACTION(S)

4/3/2012 Board discussed Policy for establishing criteria for Agency financial reserves and *provided direction to staff.*

3/14/2012 Finance/Public Relations/Personnel/Education Committee discussed Policy for establishing criteria for Agency financial reserves.

7/14/98 98P-02 A Statement of Board Policy Establishing the Criteria for Agency Financial Reserves.

GENERAL FUND

ASSETS

01 -1204 2	WALTERS HYDRANT REPAIR	
01 11130	FA ORGANIZATION	
01 11131	ACCUMMULATED DEP ORGANIZATION	
01 11135	FA LAND	
01 11140	FA LAND & BUILDINGS	
01 11150	FA YARDS	
01 11160	FA FUELS TANKS	
01 11170	FA WATER SYSTEM	
01 11180	FA SHOP EQUIPMENT	
01 11181	FA MOBILE EQUIPMENT	
01 11190	FA OFFICE EQUIPMENT	
01 11400	ACCUMULATED DEPRECIATION	
01 12004	WIP BLUCKER ANNEXATION	
01 12005	WIP EPA GRANT	
01 12006	WIP FLAMINGO HTS ASSN, SEC35	INACTIVE
01 12038	WIP HAHM INTERNATIONAL	
01 12039	WIP AIR VAC MAINTENANCE	
01 12040	WIP HYDRANT MAINTENANCE	
01 12041	WIP-JVHI LAND	
01 12042	WALTERS HYDRANT REPAIR	
01 12043	WIP - JVHI WELL	
01 12044	PRV 13 REREFURBISH	
01 12045	PRV 14 REFURBISH	
01 13120	CASH UNION BANK OF CA	
01 13130	CASH CASH DRAWERS BASE FUND	
01 13140	CASH FEMA	
01 13303	LAIF UNENCUMBERED CASH FUND	
01 13306	LAIF-BASIC FACILITIES CHGS	
01 13307	LAIF-CUSTOMER DEPOSITS	
01 13309	LAIF EMERGENCY CONTINGENCIES	
01 13310	LAIF REPLACE & REFURBISH FUND	
01 13311	LAIF ENCUMBERED FOR PROJECTS	
01 13400	CASH PETTY CASH FUND	
01 13600	A/R INTEREST EARNINGS	
01 13710	A/R WATER	
01 13711	A/R AVAILABILITY-STANDBY	
01 13712	A/R AVAILABILITY-STANDBY IDB	
01 13713	A/R UNBILLED	
01 13800	A/R PROPERTY TAXES	
01 13801	A/R MISCELLANEOUS	
01 13802	A/R MISCELLANEOUS 2	
01 13803	ACCRUED RECIEVABLE	
01 13900	A/R CUSTOMER PROJECTS	
01 13901	CUSTOMER UPGRADE 629-342-47	
01 13950	2009-2010 LIEN RECEIVABLE	
01 13951	2010-2011 LIEN RECEIVABLE	
01 14300	INVENTORY-OFFICE SUPPLIES	
01 14301	INVENTORY-WATER SYSTEM PARTS	
01 14400	PREPAYMENTS	
01 14401	PREPAYMENTS WORKERS COMP INSUR	
01 14402	PREPAYMENTS PL & PD LIAB INS	
01 15400	BOND ISSUE COSTS	

POLICY STATEMENT
No. 12P-XX

A POLICY OF THE BOARD OF DIRECTORS OF THE BIGHORN-DESERT VIEW WATER AGENCY ESTABLISHING CRITERIA FOR AGENCY FINANCIAL RESERVES

The Board of Directors of the Bighorn-Desert View Water Agency, acting as the elected legislative body of the Agency, so far as practical, shall fix such rate or rates for water in the Agency and in each improvement district, provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extension, and enlargements, pay the interest on any bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due, pursuant to California State Water Code Appendix, Section 112-25.

In order to fulfill the fiduciary responsibilities of the Agency, the financial reserve account shall be established, maintained and updated periodically based on the following criteria.

The financial reserve account shall consist of:

Account No. 01-13303 – LAIF Unencumbered Cash
Account No. 01-13306 – LAIF Basic Facilities Charge
Account No. 01-13307 – LAIF Customer Deposits
Account No. 01-13309 – LAIF Emergency Contingencies
Account No. 01-13310 – LAIF Replacement & Refurbishment
Account No. 01-13311 – LAIF Encumbered for Projects

Authorization for use of funds within the financial reserve account shall be as follows:

1. Emergency Contingencies Fund: Expenditures from this fund shall be authorized by the Board of Directors upon presentation of evidence that unencumbered cash is not available to meet an immediate need such as water system repairs or in response to an unforeseen circumstance (e.g. water quality issue or natural disaster)
2. Replacement & Refurbishment Fund: Expenditures from this fund shall be authorized by the Board of Directors upon presentation of project costs not contemplated in the annual Operating Budget (e.g. well pump replacement or refurbishment, well rehabilitation, reservoir rehabilitation, etc.).

3. Basic Facilities Charges Fund: Expenditures from this fund shall be authorized by the Board of Directors as new capital projects (e.g. mainline extensions, new reservoirs, new wells, etc.).
4. Encumbered Funds for Approved Projects: As the Board of Directors authorizes expenditures from another reserve account the specified account will be reduced and the Encumbered Funds account will be increased to show that the funds have been appropriately "set aside" for payment of invoices as the authorized work proceeds.
5. Current Customer Deposits: The balance in this fund represents the approximate balance of customer deposits held by the Agency and refunded per the current Rules and Regulations for Water Service.
6. Unencumbered Cash Fund: Represents the difference between the total cash reserves and the balances in the identified funds.

Fund Goals: The Board of Directors hereby establishes "fund goals", which should be reviewed periodically to maintain effectiveness, for the following reserve account funds:

- Emergency Contingencies Fund Minimum Goal: $200,000
- Replacement & Refurbishment Fund Minimum Goal: $200,000

Effective immediately the General Manager shall establish the financial reserve account funds as set forth in this Policy Statement, with Policy Statement No. 98P-02 hereby rescinded.

I, the undersigned, hereby certify that I am the duly-appointed Secretary of the Board of Directors of the Bighorn-Desert View Water Agency, and that at a regular meeting of the Board held on April 24, 2012, the foregoing Policy 12P-XX was adopted by said Board, and that it has not been rescinded or amended since the date of its adoption, and is now in full force and effect.

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David Larson, Board Secretary

BIGHORN DESERT VIEW WATER AGENCY
AGENDA ITEM SUBMITTAL

Meeting Date: April 24, 2012

To: Board of Directors

Budgeted: Yes
Budgeted Amount: est. $93K + EPA share
Cost: On budget

From: Marina D. West

General Counsel Approval: N/A
CEQA Compliance: *June 29, 2010*

Subject: Consider Adoption of Resolution No. 12R-XX Public Records Retention and Destruction Policy

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SUMMARY

The Agency currently operates under Policy No. 97P-08 which then established a retention schedule for public records. Staff felt an updated policy was warranted. Working with both legal counsel and the Planning/Legislative/Engineering/Grants/Security Standing Committee, staff has prepared the attached Resolution concerning the retention and destruction of public records.

Staff recommends adoption of Resolution No. 12R-XX Public Records Retention and Destruction Policy.

RECOMMENDATION

The Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Public Records Retention and Destruction Policy

BACKGROUND/ANALYSIS

No additional analysis provided.

PRIOR RELEVANT BOARD ACTION(S)

5/13/1997 Policy No. 97P-08 Adopt Policy Establishing a Retention Schedule for Public Records of the Agency.

RESOLUTION NO. 12R-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF THE BIGHORN-DESERT VIEW WATER AGENCY ADOPTING A PUBLIC RECORDS RETENTION AND DESTRUCTION POLICY

WHEREAS, The Board of Directors of the Bighorn-Desert View Water Agency desires to implement a policy for the retention of public records according to provisions of the Government Code and the California Public Records Act; and

WHEREAS, the Government Code allows for the destruction of some public documents under certain circumstances, except those that are prepared or received in a manner required by state statute; and

WHEREAS, this Resolution rescinds and repeals Policy No. 97P-08.

NOW, THEREFORE, THE BOARD OF DIRECTORS HEREBY RESOLVES:

Section 1: Purpose

As a result of the growth of the Agency and increase in the number of customers, the logistical demands of cataloging, storing and retrieving Agency records, documents, instruments, books and papers (collectively, "records") has caused an increase in the amount of staff time devoted to such tasks, and the Agency is running out of space within which to store its records. Therefore, it is the purpose of this Resolution to adopt guidelines governing the retention and disposal of Agency records, to ensure prompt and accurate retrieval of records and to ensure compliance with legal and regulatory requirements.

Section 2: Retention of Public Records

Agency records shall be kept **in either**: (a) its original paper form, or (b) electronically, provided that the electronic copy complies with the requirement of **Section 4** below. Whether kept in paper form or electronically, records shall be kept for the minimum period of time required by law (see **Section 5**, below), or until the record is no longer required, whichever period is longer. When one section of the policy conflicts with another, that which provides for the longer retention period will be honored.

Section 3: Expiration of Retention Period: Destruction of Records

Upon expiration of the retention period applicable to an Agency record, the record may be destroyed in one of the following two ways:

A. **No Copy Retained, Permission Required:** if the record is proposed to be destroyed without retaining an electronic copy, or if the record is less than 2 years old, the record shall only be destroyed with the permission of the Agency General Counsel; or

B. **Copy Retained, No Permission Required:** if the record is proposed to be destroyed but an electronic copy will be made and maintained according to the provisions of **Section 4** below, no permission to destroy the record is necessary.

Section 4: Requirements for Making Electronic Copies of Records

Agency records may be destroyed without the written consent of the Agency General Counsel if all of the following conditions are complied with:

A. The record is electronically recorded in a trusted system that does not permit additions, deletions or changes to the original record; **and**

B. The device used to reproduce the record is one which accurately and legibly reproduces the original thereof in all details and does not permit additions, deletions, or changes to the original document images; **and**

C. A **second true electronic copy** of archival quality of the original version shall be kept in a safe and separate place for security purposes.

No page of any records shall be destroyed if any page cannot be reproduced electronically with full legibility. Every un-reproducible page shall be permanently preserved for the period of time required by law in a manner that will afford easy reference.

For the purposes of this Section, every reproduction shall be deemed to be an original record and a transcript, exemplification or certified copy of any reproduction shall be deemed to be a transcript, exemplification or certified copy, as the case may be, of the original.

Section 5: Retention of Agency Records by Service Category

Administrative Services:

Indefinitely:	Records affecting title to the Agency's real property (deeds, easements, etc.) Board of Directors Meeting Minutes Board Standing Committee Meeting Reports Board of Directors Meeting Audio and Video Records Ordinances and Resolutions Administrative Policy Manual (current policies only) Historical Documents • Audits • Agency Organic Act and associated amendments • Master Plan, Feasibility Studies, Groundwater Management Plan, etc.
3 years:	Agenda Packets Applications for appointment to Boards, Commissions and Committees Membership in municipal organizations and groups Election petitions (initiative, referendum, recall and nomination) Press releases Public Information Request correspondence(s) (After PIR closed/completed) General correspondence
10 years	Service contracts (after expiration) Proof of Publication Statements of Economic Interest (Form 700) for designated employees Ethics Training (AB 1234) Certifications Joint Powers and Cooperative Agreements (after expiration)

Finance:

3 years	Accounts Receivable (Billing) Records • Daily Meter Reading Journal • Record of Delinquent Billing • Month End Reports (e.g. Monthly Trial Balance, Pending A/R, Water Control Report, Customer Deposits on Account) • Taxes Receivable (general levy, Ad Valorem, Revenue bonds Accounts Payable Records • Monthly Bank Reconciliation • Cancelled checks • Bank statements • Vendor records Fixed Assets (following disposal of asset) General Correspondence
10 years	General Ledger Municipal Bonds (after pay-off) Insurance Policies (Workers' Compensation, Liability, E&O, etc.) California Public Employee Retirement System (CalPERS) Contracts (after expiration) Accounts Receivable Billing Register Accounts Receivable Closing Register Warrant register

Human Resources:

Indefinitely	Certain CalPERS records to determine benefits due
3 years	Personnel Records (after employment has ended or upon vacating elected/appointed office) • Personnel files • Loyalty oaths • Safety Training Records • Federal Immigration (Form I-9) records • Minors' work permits • Internal investigations of employee misconduct Medical (HIPPA) Records • Family and Medical Leave Act records • California Family Rights Act records • Medical insurance plans (expired) Payroll Information • Time cards • Wage rate tables • Records of additions to or deductions from wages • Payroll records • Income Tax Withholding Records • Federal Unemployment Tax Records • FICA Contributions Records Job applications (inc. job ads, test papers, physical exams <in HIPPA file>, etc.) Expired Insurance Policies General correspondence (employee memos, notices, etc.)
10 years	Occupational Injury and Illness • OSHA Log and Summary of Occupational Injury and Illnesses • Employees' Claims for Worker's Compensation Benefits • Employer's Report of Occupational Injury or Illness • Reports to the Division of Worker's Compensation • Doctor's First Report of Occupational Injury or Illness • All medical records and reports • WCAB Orders and Awards • Records of payment of compensation benefits • Worker's Compensation Claim Log • Copies of applications for adjudication of claim filed with the WCAB CalPERS contracts and related documents (after expiration or termination) Illness and Injury Prevention Program inspection and training records
30 years	Records of employee exposure to hazards (e.g. toxic chemicals, high levels of noise, airborne contaminants and blood borne pathogens.

Information Systems:

3 years	E-mails and correspondence

Planning:

Indefinitely	Sphere of Influence Annexations Variances
3 years	General correspondence Recorded documents pertaining to private property (e.g. lot line adjustments, parcel mergers) (Note: these documents are normally recorded by the County of San Bernardino County Clerk)
10 years	Environmental Impact Reports (EIR), California Environmental) Quality Act (CEQA) Negative Declarations, Mitigated Negative Declarations, Categorical Exemptions Grant documents (e.g. Community Development Block Grants, State and Federal grant documents) Planning grants and other funding requests (unless other retention required by grantor)

Public Works/Maintenance:

Indefinitely	As-built plans and drawings, Atlas Facility Maintenance Records • Water Level Data • Water Quality Lab Reports • Major Repair/Refurbishment • Valve Exercising • Fire Hydrant Maintenance • Storage Reservoir Maintenance Customer Files by Assessor Parcel Number (e.g. application for water service, site detail drawings, correspondence, and maintenance records)
3 years	Preliminary notices Unaccepted bids and proposals to construct or install Unaccepted bids for professional services (e.g. design, inspection, etc.) Agency (miscellaneous) Service Orders General correspondence
3 years (after completion)	Accepted bids and proposals to construct or install or professional services Certified payroll Conditional waivers
10 years (after completion)	Performance and Maintenance Bonds Soils reports Hydrology reports Inspection logs Structural Calculation(s) Department of Public Health • Sanitary Surveys • Citations
30 years	Department of Public Health • Consumer Confidence Reports (CCR) • Lead and Copper Monitoring Reports (lab analysis, certifications) • State Certifications

Risk Management:

10 years	Claims and Litigation files (closed cases)

PASSED, APPROVED, AND ADOPTED by the Board of Directors to Bighorn-Desert View Water Agency this 24th day of April 2012.

By _____
Michael McBride, President of the Board

ATTEST:

_____
David Larson, Secretary of the Board

BIGHORN DESERT VIEW WATER AGENCY
AGENDA ITEM SUBMITTAL

Meeting Date: April 24, 2012

To: Board of Directors

Budgeted: N/A
Budgeted Amount: N/A
Cost: Unknown at this time

From: Marina D. West

General Counsel Approval: N/A
CEQA Compliance: N/A

Subject: Consider Adopting Resolution No. 12R-XX Opposing Section 7.8 of the State Water Resources Control Board's Final Draft Septic Tank Policy

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SUMMARY

The Planning/Engineering/Legislative/Grant/Security Committee heard on April 19th of septic tank regulations being proposed by the State Water Resources Control Board. The Committee, staff and Mojave Water Agency oppose these new regulations.

The attached information was published by MWA on April 19th following their Legal, Legislative, Public Information Committee meeting.

RECOMMENDATION

The Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Opposing Section 7.8 of the State Water Resources Control Board Final Draft "*Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems*".

BACKGROUND/ANALYSIS

See attached MWA staff report and Final Draft "*Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems*", specifically Section 7.8 (page 24).

PRIOR RELEVANT BOARD ACTION(S)

None

RESOLUTION NO. 12R-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF THE BIGHORN-DESERT VIEW WATER AGENCY OPPOSING SECTION 7.8 OF THE FINAL DRAFT *"WATER QUALITY CONTROL POLICY FOR SITING, DESIGN, OPERATION AND MAINTENANCE OF ON-SITE WASTERWATER TREATMENT SYSTEMS"*, OF THE STATE WATER RESOURCES CONTROL BOARD

WHEREAS, on March 20, 2012 the State Water Resources Control Board (SWRCB) released the Final Draft *Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems* ("Policy"); and

WHEREAS, the entire population within the service territory of the Agency live in dwelling units served by onsite wastewater treatment systems ("septic systems"); and

WHEREAS, the Agency is located within the territory of the Mojave Water Agency (MWA) and approximately half of the population within the MWA boundaries also rely on septic systems; and

WHEREAS, under current regulations property owners within the Agency and MWA boundaries have enjoyed the ability, or potential, to develop land at a density of up to one dwelling unit per 0.5 acres, for properties relying on septic systems; and

WHEREAS, under Tier 1 of the Policy the maximum density allowed for properties relying on septic systems would be restricted to one dwelling unit per 2.5 acres (Section 7.8 of the Policy). This portion of the Policy has the potential to negatively impact property owners within both the Agency's and MWA's service territories; and

WHEREAS, a 1993 report by the United States Geological Survey (USGS Water-Resources Investigations Report 93-4137) indicates that in the Mojave River Basin "current on-site domestic-wastewater disposal practices pose little immediate threat to the local ground-water resource". The report further indicates septic systems contribute substantial return flows to groundwater and slow the decline of groundwater levels. This is a significant benefit to the region's water resources.

WHEREAS, Septic return flows contribute significantly to the water balance for the *Ames/Reche Spreading Grounds and Recovery Program and Management Agreement* recently executed by the Agency. Proposed changes in state policy could negatively impact the groundwater resources of the Agency in the future but lowering baseline production allocations.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Bighorn-Desert View Water Agency opposes Section 7.8 of the Final Draft Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems.

PASSED, APPROVED AND ADOPTED by the Board of Directors to Bighorn-Desert View Water Agency this 24th day of April 2012.

By _____
Michael McBride, President of the Board

ATTEST:

_____
David Larson, Secretary of the Board

Mojave Water Agency

DATE: April 26, 2012

TO: Board of Directors

FROM: Kirby Brill, General Manager

BY: Lance Eckhart, Principal Hydrogeologist

SUBJECT: **Consider Adopting Resolution No. 949-12 Opposing Section 7.8 of the State Water Resources Control Board's Final Draft Septic Tank Policy**

RECOMMENDATION

Staff recommends that the Board adopt Resolution No.949-12 opposing Section 7.8 of the State Water Resources Control Board (SWRCB) Final Draft Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems ("OWTS Policy"), dated March 20, 2012.

PREVIOUS CONSIDERATION BY COMMITTEE/BOARD OF DIRECTORS

- Board of Directors – April 12, 2012: During public comment, Carl Coleman described the concerns he has regarding the OWTS Policy. The Board requested that staff review the OWTS Policy and bring a recommendation back to the Board.
- Legal, Legislative and Public Information Committee – April 19, 2012: The Committee recommended that the Board oppose the Policy.

BACKGROUND

On March 20, 2012 the SWRCB released a Final Draft of the OWTS Policy. The stated purpose of the Policy is to allow the continued use of "onsite wastewater treatment systems" (OWTS, or "septic tanks") while protecting water quality and public health. The Policy establishes a statewide, risk-based, tiered approach to the regulation and management of OWTS. OWTS are placed into tiers, with differing levels of requirements depending upon the tier they fall under.

The SWRCB will hold a public hearing regarding the OWTS Policy on May 2, 2012, and an adoption hearing June 19, 2012. Written comments are due to the SWRCB on May 4, 2012.

ANALYSIS

Previous studies prepared by MWA staff have indicated that roughly **one half of the population living within MWA is served by septic tanks.** Currently, septic tanks are allowed at a density of one dwelling unit or its equivalent per 0.5 acres of land. Section 7.8, page 24, of the OWTS Policy would restrict new or replacement septic systems under Tier 1 to a maximum density of **one dwelling unit or its equivalent per 2.5 acres of land.** Section 7.8 states:

> *The average density for any subdivision of property occurring after the effective date of this Policy and implemented under Tier 1 shall not exceed one single-family dwelling unit, or its equivalent, per 2.5 acres for those units that rely on OWTS.*

Property owners have in the past been able to enjoy the potential to utilize their land with up to one dwelling per 0.5 acres for dwellings on septic systems; therefore this change in the density requirement **has the potential to negatively impact many property owners within MWA.** The Policy appears to allow new development at higher densities than what is allowed under Tier 1, but only if the local agencies implementing the Policy prepare a Local Agency Management Program. **Preparation of a Local Agency Management Program may not be a reasonable alternative** because it would be costly, difficult to implement, and would still require the approval of the SWRCB.

The current allowed density of one dwelling unit per 0.5 acres is supported by a 1993 report prepared by the US Geological Survey ("Potential for Ground-Water Contamination from Movement of Wastewater Through the Unsaturated Zone, Upper Mojave River Basin, California," Water-Resources Investigations Report 93-4137). The report evaluated densities of 1 to 4 dwelling units per acre, and concluded that in the Mojave River Basin "current onsite domestic-wastewater disposal practices pose **little immediate threat to the local ground-water resource.**" The USGS report also indicates septic systems contribute substantial return flows to groundwater and slow the decline of groundwater levels. This is a significant benefit to the region's water resources.

Per the Board of Director's request and further direction from the Legal Legislative and Public Information Committee, staff has prepared a draft resolution opposing Section 7.8 of the OWTS Policy.

FISCAL IMPACT

No fiscal impact

ATTACHMENT

Resolution No. 949-12
Final Draft Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems

RESOLUTION NO. 949-12

RESOLUTION OF THE MOJAVE WATER AGENCY OPPOSING SECTION 7.8 OF THE FINAL DRAFT WATER QUALITY CONTROL POLICY FOR SITING, DESIGN, OPERATION, AND MANTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS, OF THE STATE WATER RESOURCES CONTROL BOARD

WHEREAS, on March 20, 2012 the State Water Resources Control Board (SWRCB) released the Final Draft Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems ("Policy"); and,

WHEREAS, approximately half of the population within the Mojave Water Agency (MWA) boundaries live in dwelling units served by onsite wastewater treatment systems ("OWTS", "septic systems"); and,

WHEREAS, under current regulations property owners within MWA have enjoyed the ability, or potential, to develop land at a density of up to one dwelling unit per 0.5 acres, for properties relying on septic systems; and

WHEREAS, under Tier 1 of the Policy the maximum density allowed for properties relying on septic systems would be restricted to one dwelling unit per 2.5 acres (Section 7.8 of the Policy). This portion of the Policy has the potential to negatively impact property owners within MWA; and,

WHEREAS, a 1993 report by the United States Geological Survey (USGS Water-Resources Investigations Report 93-4137) indicates that in the Mojave River Basin "current onsite domestic-wastewater disposal practices pose little immediate threat to the local ground-water resource." The report further indicates septic systems contribute substantial return flows to groundwater and slow the decline of groundwater levels. This is a significant benefit to the region's water resources.

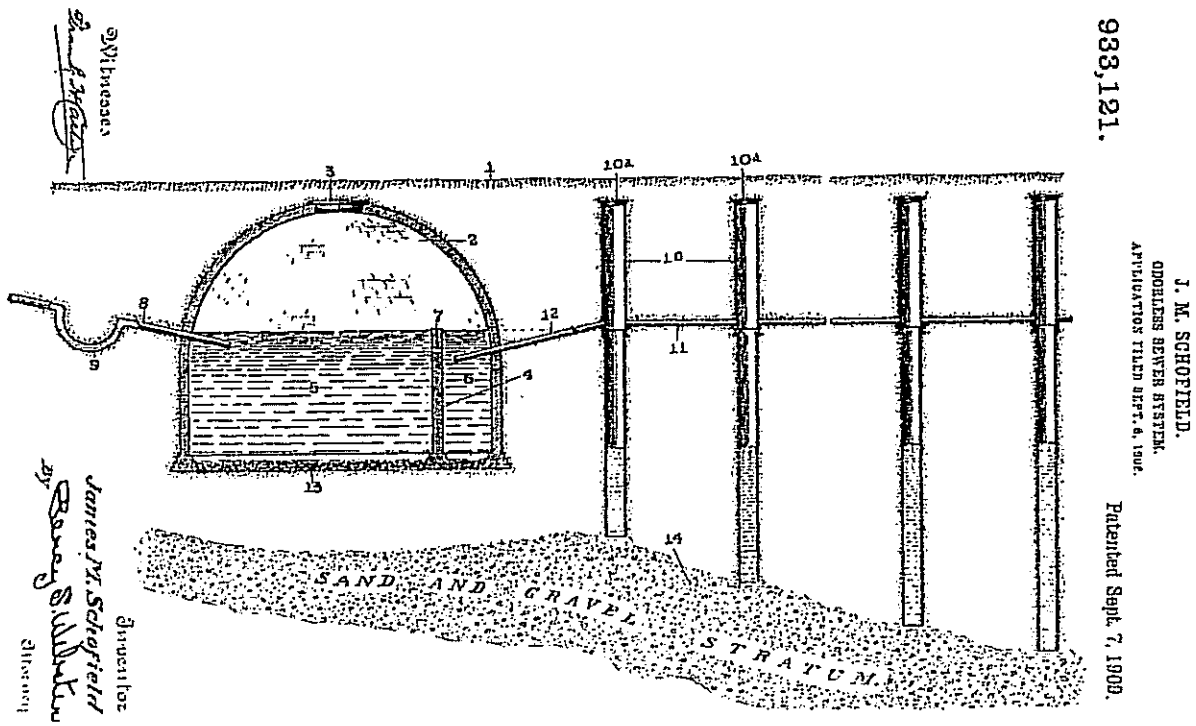
NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Mojave Water Agency opposes Section 7.8 of the Final Draft Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems.

ADOPTED this 26th day of April, 2012.

_____
Art Bishop, President

ATTEST:

_____
Doug Shumway, Secretary



Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems

March 20, 2012

CALIFORNIA
Water Boards

STATE WATER RESOURCES CONTROL BOARD

REGIONAL WATER QUALITY CONTROL BOARDS

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Final Draft

Preamble – Purpose and Scope – Structure of the Policy

3/20/2012

Preamble

Onsite wastewater treatment systems (OWTS) are useful and necessary structures that allow habitation at locations that are removed from centralized wastewater treatment systems. When properly sited, designed, operated, and maintained, OWTS treat domestic wastewater to reduce its polluting impact on the environment and most importantly protect public health. Estimates for the number of installations of OWTS in California at the time of this Policy are that more than 1.2 million systems are installed and operating. The vast majority of these are functioning in a satisfactory manner and meeting their intended purpose.

However there have been occasions in California where OWTS for a varied list of reasons have not satisfactorily protected either water quality or public health. Some instances of these failures are related to the OWTS not being able to adequately treat and dispose of waste as a result of poor design or improper site conditions. Others have occurred where the systems are operating as designed but their densities are such that the combined effluent resulting from multiple systems is more than can be assimilated into the environment. From these failures we must learn how to improve our usage of OWTS and prevent such failures from happening again.

As California's population continues to grow, and we see both increased rural housing densities and the building of residences and other structures in more varied terrain than we ever have before, we increase the risks of causing environmental damage and creating public health risks from the use of OWTS. What may have been effective in the past may not continue to be as conditions and circumstances surrounding particular locations change. So necessarily more scrutiny of our installation of OWTS is demanded of all those involved, while maintaining an appropriate balance of only the necessary requirements so that the use of OWTS remains viable.

Purpose and Scope of the Policy

The purpose of this Policy is to allow the continued use of OWTS, while protecting water quality and public health. This Policy recognizes that responsible local agencies can provide the most effective means to manage OWTS on a routine basis. Therefore as an important element, it is the intent of this policy to efficiently utilize and improve upon where necessary existing local programs through coordination between the State and local agencies. To accomplish this purpose, this Policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS. In particular, the Policy requires actions for identified areas where OWTS contribute to water quality degradation that adversely affect beneficial uses.

Final Draft

Preamble – Purpose and Scope – Structure of the Policy

3/20/2012

This Policy only authorizes subsurface disposal of domestic strength, and in limited instances high strength, wastewater and establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters of the State and preventing or correcting conditions of pollution and nuisance. And finally, this Policy also conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their systems when they meet the conditions set forth in the Policy. Nothing in this Policy supersedes or requires modification of Total Maximum Daily Loads or Basin Plan prohibitions of discharges from OWTS.

This Policy applies to OWTS on federal, state, and Tribal lands to the extent authorized by law or agreement.

Structure of the Policy

This Policy is structured into ten major parts:

Definitions
Definitions for all the major terms used in this Policy are provided within this part and wherever used in the Policy the definition given here overrides any other possible definition.
[Section 1]

Responsibilities and Duties
Implementation of this Policy involves individual OWTS owners; local agencies, be they counties, cities, or any other subdivision of state government with permitting powers over OWTS; Regional Water Quality Control Boards; and the State Water Resources Control Board.
[Sections 2, 3, 4, and 5]

Tier 0 – Existing OWTS
Existing OWTS that are properly functioning, and do not meet the conditions of failing systems or otherwise require corrective action (for example, to prevent groundwater impairment) as specifically described in Tier 4, and are not determined to be contributing to an impairment of surface water as specifically described in Tier 3, are automatically included in Tier 0.
[Section 6]

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Preamble – Purpose and Scope – Structure of the Policy

3/20/2012

Tier 1 – Low-Risk New or Replacement OWTS
New or replacement OWTS that meet low risk siting and design requirements as specified in Tier 1, where there is not an approved Local Agency Management Program per Tier 2.
[Sections 7 and 8]

Tier 2 – Local Agency Management Program for New or Replacement OWTS
California is well known for its extreme range of geological and climatic conditions. As such, the establishment of a single set of criteria for OWTS would either be too restrictive so as to protect for the most sensitive case, or would have broad allowances that would not be protective enough under some circumstances. To accommodate this extreme variance, local agencies may submit management programs ("Local Agency Management Programs") for approval, and upon approval then manage the installation of new and replacement OWTS under that program.

Local Agency Management Programs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health. In order to address local conditions, Local Agency Management Programs may include standards that differ from the Tier 1 requirements for new and replacement OWTS contained in Sections 7 and 8. As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. Once the Local Agency Management Program is approved, new and replacement OWTS that are included within the Local Agency Management Program may be approved by the Local Agency. A Local Agency, at its discretion, may include Tier 1 standards within its Tier 2 Local Agency Management Program for some or all of its jurisdiction. However, once a Local Agency Management Program is approved, it shall supersede Tier 1 and all future OWTS decisions will be governed by the Tier 2 Local Agency Management Program until it is modified, withdrawn, or revoked.
[Section 9]

Tier 3 – Impaired Areas
OWTS that are near impaired water bodes may be addressed by a TMDL and its implementation program, or special provisions contained in a Local Agency Management Program. If there is no TMDL or special provisions, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 must meet the specific requirements of Tier 3.
[Section 10]

Tier 4 – OWTS Requiring Corrective Action
OWTS that require corrective action or are either presently failing or fail at any time while this Policy is in effect are automatically included in Tier 4 and must follow the requirements as specified.
[Section 11]

Conditional Waiver of Waste Discharge Requirements
The requirement to submit a report of waste discharge for discharges from OWTS that are in conformance with this policy is waived.
[Section 12]

Effective Date
When this Policy becomes effective.
[Section 13]

Financial Assistance
Procedures for local agencies to apply for funds to establish low interest loan programs for the assistance of OWTS owners in meeting the requirements of this Policy.
[Section 14]

Attachment 1
AB 885 Regulatory Program Timelines.

Attachment 2

Tables 4 and 5 specifically identify those impaired water bodies that have Tier 3 requirements and must have a completed TMDL by the date specified.

Attachment 3

Table 6 shows where one Regional Water Board has been designated to review and, if appropriate, approve new Local Agency Management Plans for a local agency that is within multiple Regional Water Boards' jurisdiction.

What Tier Applies to my OWTS?

Existing OWTS that conform to the requirements for Tier 0 will remain in Tier 0 as long as they continue to meet those requirements. An existing OWTS will temporarily move from Tier 0 to Tier 4 if it is determined that corrective action is needed. The existing OWTS will return to Tier 0 once the corrective action is completed. Any major repairs conducted as corrective action must comply with Tier 1 requirements or Tier 2 requirements, whichever are in effect for that local area. An existing OWTS will move from Tier 0 to Tier 3 if it is adjacent to an impaired water body listed on Attachment 2, or is covered by a TMDL implementation plan.

In areas with no approved Local Agency Management Plan, new and replacement OWTS that conform to the requirements of Tier 1 will remain in Tier 1 as long as they continue to meet those requirements. A new or replacement OWTS will temporarily move from Tier 1 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 1 once the corrective action is completed. A new or replacement OWTS will move from Tier 1 to Tier 3 if it is adjacent to an impaired water body, or is covered by a TMDL implementation plan.

In areas with an approved Local Agency Management Plan, new and replacement OWTS that conform to the requirements of the Tier 2 Local Agency Management Plan will remain in Tier 2 as long as they continue to meet those requirements. A new or replacement OWTS will temporarily move from Tier 2 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 2 once the corrective action is completed. A new or replacement OWTS will move from Tier 2 to Tier 3 if it is adjacent to an impaired water body, or is covered by a TMDL implementation plan, or is covered by special provisions for impaired water bodies contained in a Local Agency Management Program.

Existing, new, and replacement OWTS in specified areas adjacent to water bodies that are identified by the State Water Board as impaired for pathogens or nitrogen and listed in Attachment 2 are in Tier 3. Existing, new, and replacement OWTS covered by a TMDL implementation plan, or covered by special provisions for impaired water bodies contained in a Local Agency Management Program are also in Tier 3. These OWTS will temporarily move from Tier 3 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 3 once the corrective action is completed.

Existing, new, and replacement OWTS that do not conform with the requirements to receive coverage under any of the Tiers (e.g., existing OWTS with a projected flow of more than 10,000 gpd) do not qualify for this Policy's conditional waiver of waste discharge requirements, and will be regulated separately by the applicable Regional Water Board.

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Definitions

3/20/2012

1.0 Definitions. The following definitions apply to this Policy:

"303 (d) list" means the same as **"Impaired Water Bodies."**

"At-grade system" means an OWTS dispersal system with a discharge point located at the preconstruction grade (ground surface elevation). The discharge from an at-grade system is always subsurface.

"Basin Plan" means the same as "water quality control plan" as defined in Division 7 (commencing with Section 13000) of the Water Code. Basin Plans are adopted by each Regional Water Board, approved by the State Water Board and the Office of Administrative Law, and identify surface water and groundwater bodies within each Region's boundaries and establish, for each, its respective beneficial uses and water quality objectives. Copies are available from the Regional Water Boards, electronically at each Regional Water Boards website, or at the State Water Board's *Plans and Policies* web page (http://www.waterboards.ca.gov/plans_policies/).

"Bedrock" means the rock, usually solid, that underlies soil or other unconsolidated, surficial material.

"CEDEN" means California Environmental Data Exchange Network and information about it is available at the State Water Boards website or http://www.ceden.org/index.shtml.

"Cesspool" means an excavation in the ground receiving domestic wastewater, designed to retain the organic matter and solids, while allowing the liquids to seep into the soil. Cesspools differ from seepage pits because cesspool systems do not have septic tanks and are not authorized under this Policy. The term cesspool does not include pit-privies and out-houses which are not regulated under this Policy.

"Clay" means a soil particle; the term also refers to a type of soil texture. As a soil particle, clay consists of individual rock or mineral particles in soils having diameters <0.002 mm. As a soil texture, clay is the soil material that is comprised of 40 percent or more clay particles, not more than 45 percent sand and not more than 40 percent silt particles using the USDA soil classification system.

"Cobbles" means rock fragments 76 mm or larger using the USDA soil classification systems.

"Dispersal system" means a leachfield, seepage pit, mound, at-grade, subsurface drip field, evapotranspiration and infiltration bed, or other type of system for final wastewater treatment and subsurface discharge.

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"Domestic wastewater" means wastewater with a measured strength less then high-strength wastewater and is the type of wastewater normally discharged from, or similar to, that discharged from plumbing fixtures, appliances and other household devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater may include wastewater from commercial buildings such as office buildings, retail stores, and some restaurants, or from industrial facilities where the domestic wastewater is segregated from the industrial wastewater. Domestic wastewater does not include wastewater from industrial processes or RV dump stations.

"Dump Station" means a facility intended to receive the discharge of wastewater from a holding tank installed on a recreational vehicle. A dump station does not include a full hook-up sewer connection similar to those used at a recreational vehicle park.

"Domestic well" means a groundwater well that provides water for human consumption and is not regulated by the California Department of Public Health.

"Earthen material" means a substance composed of the earth's crust (i.e. soil and rock).

"EDF" see "electronic deliverable format."

"Effluent" means sewage, water, or other liquid, partially or completely treated or in its natural state, flowing out of a septic tank, aerobic treatment unit, dispersal system, or other OWTS component.

"Electronic deliverable format" or **"EDF"** means the data standard adopted by the State Water Board for submittal of groundwater quality monitoring data to the State Water Board's internet-accessible database system Geotracker (http://geotracker.waterboards.ca.gov/).

"Escherichia coli" means a group of bacteria predominantly inhabiting the intestines of humans or other warm-blooded animals, but also occasionally found elsewhere. Used as an indicator of human fecal contamination.

"Existing OWTS" means an OWTS that was constructed and operating prior to the effective date of this Policy, and OWTS for which a construction permit has been issued prior to the effective date of the Policy.

"Gravel-less chamber" system means a buried structure used to create an aggregate-free absorption area for infiltration and treatment of wastewater.

"Grease interceptor" means a passive interceptor that has a rate of flow exceeding 50 gallons-per-minute and that is located outside a building. Grease interceptors are used for separating and collecting grease from wastewater.

"Groundwater" means water below the land surface that is at or above atmospheric pressure.

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Definitions

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"High-strength wastewater" means wastewater having a 30-day average concentration of biochemical oxygen demand (BOD) greater than 300 milligrams-per-liter (mg/L) or of total suspended solids (TSS) greater than 330 mg/L or a fats, oil, and grease (FOG) concentration greater than 100 mg/L prior to the septic tank or other OWTS treatment component.

"IAPMO" means the International Association of Plumbing and Mechanical Officials.

"Impaired Water Bodies" means those surface water bodies or segments thereof that are identified on a list approved first by the State Water Board and then approved by US EPA pursuant to Section 303(d) of the federal Clean Water Act.

"Local agency" means any subdivision of state government that has responsibility for permitting the installation of and regulating OWTS within its jurisdictional boundaries; typically a county, city, or special district.

"Major repair" means either: (1) for a dispersal system, repairs required for an OWTS dispersal system due to surfacing wastewater effluent from the dispersal field and/or wastewater backed up into plumbing fixtures because the dispersal system is not able to percolate the design flow of wastewater associated with the structure served, or (2) for a septic tank, repairs required to the tank for a compartment baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating.

"Mottling" means a soil condition that results from oxidizing or reducing minerals due to soil moisture changes from saturated to unsaturated over time. Mottling is characterized by spots or blotches of different colors or shades of color (grays and reds) interspersed within the dominant color as described by the USDA soil classification system. This soil condition can be indicative of historic seasonal high groundwater level, but the lack of this condition may not demonstrate the absence of groundwater.

"Mound system" means an aboveground dispersal system (covered sand bed with effluent leachfield elevated above original ground surface inside) used to enhance soil treatment, dispersal, and absorption of effluent discharged from an OWTS treatment unit such as a septic tank. Mound systems have a subsurface discharge.

"New OWTS" means an OWTS permitted after the effective date of this Policy.

"NSF" means NSF International (a.k.a. National Sanitation Foundation), a not for profit, non-governmental organization that develops health and safety standards and performs product certification.

"Onsite wastewater treatment system(s)" (OWTS) means individual disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface disposal. The short form of the term may be singular or plural. OWTS do not include "graywater" systems pursuant to Health and Safety Code Section 17922.12.

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"Percolation test" means a method of testing water absorption of the soil. The test is conducted with clean water and test results can be used to establish the dispersal system design.

"Permit" means a document issued by a local agency that allows the installation and use of an OWTS, or waste discharge requirements or a waiver of waste discharge requirements that authorizes discharges from an OWTS.

"Person" means any individual, firm, association, organization, partnership, business trust, corporation, company, State agency or department, or unit of local government who is, or that is, subject to this Policy.

"Pit-privy" (a.k.a. outhouse, pit-toilet) means self-contained waterless toilet used for disposal of non-water carried human waste; consists of a shelter built above a pit in the ground into which human waste falls.

"Policy" means this Policy for Siting, Design, Operation and Management of OWTS.

"Pollutant" means any substance that alters water quality of the waters of the State to a degree that it may potentially affect the beneficial uses of water, as listed in a Basin Plan.

"Projected flows" means wastewater flows into the OWTS determined in accordance with any of the applicable methods for determining average daily flow in the *USEPA Onsite Wastewater Treatment System Manual, 2002,* or for Tier 2 in accordance with an approved Local Agency Management Program.

"Public Water System" is a water system regulated by the California Department of Public Health or a Local Primacy Agency pursuant to Chapter 12, Part 4, California Safe Drinking Water Act, Section 116275 (h) of the California Health and Safety Code.

"Public Water Well" is a ground water well serving a public water system. A spring which is not subject to the California Surface Water Treatment Rule (SWTR), CCR, Title 22, sections 64650 through 64666 is a public well.

"Qualified professional" means an individual licensed or certified by a State of California agency to design OWTS and practice as professionals for other associated reports, as allowed under their license or registration. Depending on the work to be performed and various licensing and registration requirements, this may include an individual who possesses a registered environmental health specialist certificate or is currently licensed as a professional engineer or professional geologist. For the purposes of performing site evaluations, Soil Scientists certified by the Soil Science Society of America are considered qualified professionals. A local agency may modify this definition as part of its Local Agency Management Program.

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"Regional Water Board" is any of the Regional Water Quality Control Boards designated by Water Code Section 13200. Any reference to an action of the Regional Water Board in this Policy also refers to an action of its Executive Officer, including the conducting of public hearings, pursuant to any general or specific delegation under Water Code Section 13223.

"Replaced OWTS" means an OWTS that has its treatment capacity expanded, or its dispersal system replaced or added onto, after the effective date of this Policy.

"Sand" means a soil particle; this term also refers to a type of soil texture. As a soil particle, sand consists of individual rock or mineral particles in soils having diameters ranging from 0.05 to 2.0 millimeters. As a soil texture, sand is soil that is comprised of 85 percent or more sand particles, with the percentage of silt plus 1.5 times the percentage of clay particles comprising less than 15 percent.

"Seepage pit" means a drilled or dug excavation, three to six feet in diameter, either lined or gravel filled, that receives the effluent discharge from a septic tank or other OWTS treatment unit for dispersal.

"Septic tank" means a watertight, covered receptacle designed for primary treatment of wastewater and constructed to:

1. Receive wastewater discharged from a building;
2. Separate settleable and floating solids from the liquid;
3. Digest organic matter by anaerobic bacterial action;
4. Store digested solids; and
5. Clarify wastewater for further treatment with final subsurface discharge.

"Service provider" means a person capable of operating, monitoring, and maintaining an OWTS in accordance to this Policy.

"Silt" means a soil particle; this term also refers to a type of soil texture. As a soil particle, silt consists of individual rock or mineral particles in soils having diameters ranging from between 0.05 and 0.002 mm. As a soil texture, silt is soil that is comprised as approximately 80 percent or more silt particles and not more than 12 percent clay particles using the USDA soil classification system.

"Site" means the location of the OWTS and, where applicable, a reserve dispersal area capable of disposing 100 percent of the design flow from all sources the OWTS is intended to serve.

"Site Evaluation" means an assessment of the characteristics of the site sufficient to determine its suitability for an OWTS to meet the requirements of this Policy.

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Definitions

3/20/2012

"Soil" means the naturally occurring body of porous mineral and organic materials on the land surface, which is composed of unconsolidated materials, including sand-sized, silt-sized, and clay-sized particles mixed with varying amounts of larger fragments and organic material. The various combinations of particles differentiate specific soil textures identified in the soil textural triangle developed by the United States Department of Agriculture (USDA) as found in Soil Survey Staff, USDA; *Soil Survey Manual, Handbook 18,* U.S. Government Printing Office, Washington, DC, 1993, p. 138. For the purposes of this Policy, soil shall contain earthen material of particles smaller than 0.08 inches (2 mm) in size.

"Soil Structure" means the arrangement of primary soil particles into compound particles, peds, or clusters that are separated by natural planes of weakness from adjoining aggregates.

"Soil texture" means the soil class that describes the relative amount of sand, clay, silt and combinations thereof as defined by the classes of the soil textural triangle developed by the USDA (referenced above).

"State Water Board" is the State Water Resources Control Board

"Supplemental treatment" means any OWTS or component of an OWTS, except a septic tank or dosing tank, that performs additional wastewater treatment so that the effluent meets the performance requirements prior to discharge of effluent into the dispersal field.

"SWAMP" means Surface Water Ambient Monitoring Program and more information is available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/

"Telemetric" means the ability to automatically measure and transmit OWTS data by wire, radio, or other means.

"TMDL" is the acronym for "total maximum daily load." Section 303(d)(1) of the Clean Water Act requires each State to establish a TMDL for each impaired water body to address the pollutant(s) causing the impairment. In California, TMDLs are usually adopted as Basin Plan amendments and contain implementation plans detailing how water quality standards will be attained.

"Total coliform" means a group of bacteria consisting of several *genera* belonging to the family *Enterobacteriaceae*, which includes Escherichia coli bacteria.

"USDA" means the U.S. Department of Agriculture.

"Waste discharge requirement" or **"WDR"** means an operation and discharge permit issued for the discharge of waste pursuant to Section 13260 of the California Water Code.

Final Draft

Responsibilities and Duties

3/20/2012

Responsibilities and Duties

2.0 OWTS Owners Responsibilities and Duties

2.1 All new, replaced, or existing OWTS within an area that is subject to a Basin Plan prohibition of discharges from OWTS, must comply with the prohibition. If the prohibition authorizes discharges under specified conditions, the discharge must comply with those conditions and the applicable provisions of this Policy.

2.2 Owners of OWTS shall adhere to the requirements prescribed in local codes and ordinances. Owners of new and replaced OWTS shall also meet the minimum standards contained in Tier 1, or an alternate standard provided by a Local Agency Management Program per Tier 2, or shall comply with the requirements of Tier 3 if near an impaired water body and subject to Tier 3, or shall provide corrective action for their OWTS if their system meets conditions that place it in Tier 4.

2.3 Owners of OWTS shall comply with any and all permitting conditions imposed by a local agency implementing its approved Local Agency Management Program per Section 9 of this Policy, including if those conditions are more stringent than required by this Policy.

2.4 To receive coverage under this Policy and the included waiver of waste discharges, OWTS shall only accept and treat flows of domestic wastewater. In addition, OWTS that accept high-strength wastewater from commercial food service buildings are covered under this Policy and the waiver of waste discharge requirements if the wastewater does not exceed 900 mg/L BOD and there is a properly sized and functioning oil/grease interceptor (a.k.a grease trap).

2.5 Owners of OWTS shall maintain their OWTS in good working condition including inspections and pumping of solids as necessary, or as required by local ordinances, to maintain proper function and assure adequate treatment.

2.6 The following owners of OWTS shall notify the Regional Water Board by submitting a Report of Waste Discharge for the following:

2.6.1 a new or replaced OWTS that does not meet the conditions and requirements set forth in this Policy;

2.6.2 a new or replacement OWTS with the projected flow of over 3,500 gallons-per-day where the local permitting authority does not have an approved Local Agency Management Program that includes regulations of flows greater than or equal to the projected flow of the OWTS;

2.6.3 an existing OWTS, not currently under individual waste discharge requirements or a waiver of individual waste discharge requirements issued by a Regional Water Board, with the projected flow of over 10,000 gallons-per-day;

2.6.4 an existing OWTS that will be receiving or has received after the effective date of this Policy a change in the nature of the waste stream from domestic wastewater to high-strength wastewater, unless the waste stream is from a commercial food service building;

2.6.5 a new or replaced OWTS that receives high-strength wastewater, unless the wastewater is from a commercial food service building;

2.6.6 a new, replacement, or existing OWTS that will be or already is receiving high-strength wastewater with: (1) a BOD higher than 900 mg/L from a commercial food service building, or (2) does not have a properly sized and functioning oil/grease interceptor, after the effective date of this Policy.

2.7 All Reports of Waste Discharge shall be accompanied by the required application fee pursuant to California Code of Regulations, title 23, section 2200.

3.0 Local Agency Requirements and Responsibilities

3.1 Local agencies, in addition to implementing their own local codes and ordinances, shall determine whether the requirements within their local jurisdiction will be limited to the water quality protection afforded by the statewide minimum standards in Tier 0, Tier 1, Tier 3, and Tier 4, which this Policy authorizes them to implement, or whether the local agency will implement a Local Agency Management Program in accordance with Tier 2 that provides protection to water quality and public health using standards differing from Tier 1. Except for Tier 3, local agencies may continue to implement their existing OWTS permitting programs in compliance with the Basin Plan in place at the effective date of the Policy and Tier 3 until 60 months after the effective date of this Policy, or approval of a Local Agency Management Program, whichever comes first, and may make minor adjustments as necessary that are in compliance with the applicable Basin Plan and this Policy. Tier 3 requirements take effect on the effective date of this Policy. In the absence of a Tier 2 Local Agency Management Program, to the extent that there is a direct conflict between the applicable minimum standards and the local codes or ordinances (such that it is impossible to comply with both the applicable minimum standards and the local ordinances or codes), the more restrictive standards shall govern.

3.2 If preferred, the local agency may at any time provide the State Water Board and all affected Regional Water Board(s) written notice of its intent to regulate OWTS using a Local Agency Management Program with alternative standards as authorized in Tier 2 of this Policy. A proposed Local Agency Management Program that conforms to the requirements of that Section shall be included with the notice. A local agency shall not implement a program different than the minimum standards contained in Tier 1 and 3 of this Policy after 60 months from the effective date of this Policy until approval of the proposed Local Agency Management Program is granted by either the Regional Water Board or State Water Board. All initial program submittals desiring approval prior to the 60 month limit shall be received no later than 36 months from the effective date of this Policy. Once approved, the local agency shall adhere to the Local Agency Management Program, including all requirements, monitoring, and reporting. If at any time a local agency wishes to modify its Local Agency Management Program, it shall provide the State Water Board and all affected Regional Water Board(s) written notice of its intended modifications and will continue to implement its existing Local Agency Management Program until the modifications are approved.

3.3 All local agencies permitting OWTS shall report annually to the Regional Water Board(s). If a local agency's jurisdictional area is within the boundary of multiple Regional Water Boards, the local agency shall send a copy of the annual report to each Regional Water Board. The annual report shall include the following information (organized in a tabular spreadsheet format) and summarize whether any further actions are warranted to protect water quality or public health:

3.3.1 number and location of complaints pertaining to OWTS operation and maintenance, and identification of those which were investigated and how they were resolved;

3.3.2 shall provide the applications and registrations issued as part of the local septic tank cleaning registration program pursuant to Section 117400 et seq. of the California Health and Safety Code;

3.3.3 number, location, and description of permits issued for new and repaired OWTS and which Tier the permit is issued.

3.4 All local agencies permitting OWTS shall retain permanent records of their permitting actions and will make those records available within 10 working days upon written request for review by a Regional Water Board. The records for each permit shall reference the Tier under which the permit was issued.

3.5 A local agency shall notify the owner of a public well or water intake and the California Department of Public Health as soon as practicable, but not later than 72 hours, upon its discovery of a failing OWTS as described in sections 11.1 and 11.2 within the setbacks described in sections 7.5.6 through 7.5.10.

3.6 A local agency may implement this Policy, or a portion thereof, using its local authority to enforce the policy, as authorized by an approval from the State Water Board or by the appropriate Regional Water Board.

3.7 Nothing in the Policy shall preclude a local agency from adopting or retaining standards for OWTS in an approved Local Agency Management Program that are more protective of the public health or the environment than are contained in this Policy.

3.8 If at any time a local agency wishes to withdraw its previously submitted and approved Tier 2 Local Agency Management Program, it may do so upon 60 days written notice. The notice of withdrawal shall specify the reason for withdrawing its Tier 2 program, the effective date for cessation of the program and resumption of permitting of OWTS only under Tiers 1, 3, and 4.

4.0 Regional Water Board Functions and Duties

4.1 The Regional Water Boards have the principal responsibility for overseeing the implementation of this Policy.

4.2 Regional Water Boards shall incorporate the requirements established in this Policy by amending their Basin Plans within 12 months of the effective date of this Policy, pursuant to Water Code Section 13291(e). The Regional Water Boards may also consider whether it is necessary and appropriate to retain or adopt any more protective standards. To the extent that a Regional Water Board determines that it is necessary and appropriate to retain or adopt any more protective standards, it shall reconcile those region-specific standards with this Policy to the extent feasible, and shall provide a detailed basis for its determination that each of the more protective standards is necessary and appropriate.

4.2.1 Notwithstanding 4.2 above, the North Coast Regional Water Board will continue to implement its existing Basin Plan requirements pertaining to OWTS within the Russian River watershed until it adopts the Russian River TMDL, at which time it will comply with section 4.2 for the Russian River watershed.

4.3 The Regional Water Board designated in Attachment 3 shall review, and if appropriate, approve a Local Agency Management Program submitted by the local agency pursuant to Tier 2 in this Policy. Upon receipt of a proposed Local Agency Management Program, the Regional Water Board designated in Attachment 3 shall have 90 days to notify the local agency whether the submittal contains all the elements of a Tier 2 program, but may request additional information based on review of the proposed program. Approval must follow a noticed hearing with opportunity for public comment. If a Local Agency Management Program is disapproved, the Regional Water Board designated in Attachment 3 shall provide a written explanation of the reasons for the

disapproval. A Regional Water Board may approve a Local Agency Management Program while disapproving any proposed special provisions for impaired water bodies contained in the Local Agency Management Program. If no action is taken by the respective Regional Water Board within 12 months of the submission date of a complete Local Agency Management Program, the program shall be forwarded to the State Water Board for review and approval pursuant to Section 5 of this Policy.

4.3.1 Where the local agency's jurisdiction lies within more than one Regional Water Board, staff from the affected Regional Water Boards shall work cooperatively to assure that water quality protection in each region is adequately protected. If the Regional Water Board designated in Attachment 3 approves the Local Agency Management Program over the written objection of an affected Regional Water Board, that Regional Water Board may submit the dispute to the State Water Board under Section 5.3.

4.3.2 Within 30 days of receipt of a proposed Local Agency Management Program, a Regional Water Board will forward a copy to and solicit comments from the California Department of Public Health regarding a Local Agency Management Programs' proposed procedures for notifying local water purveyors prior to OWTS permitting.

4.4 Once a Local Agency Management Program has been approved, any affected Regional Water Board may require modifications or revoke authorization of a local agency to implement a Tier 2 program, in accordance with the following:

4.4.1 The Regional Water Board shall consult with any other Regional Water Board(s) having jurisdiction over the local agency before providing the notice described in section 4.4.2.

4.4.2 Written notice shall be provided to the local agency detailing the Regional Water Board's action, the cause for such action, remedies to prevent the action from continuing to completion, and appeal process and rights. The local agency shall have 90 days from the date of the written notice to respond with a corrective action plan to address the areas of non-compliance, or to request the Regional Water Board to reconsider its findings.

4.4.3 The Regional Water Board shall approve, approve conditionally, or deny a corrective action plan within 90 days of receipt. The local agency will have 90 days to begin implementation of a corrective action plan from the date of approval or 60 days to request reconsideration from the date of denial. If the local agency fails to submit an acceptable corrective action plan, fails to implement an approved corrective action plan, or request reconsideration, the Regional Water Board may require modifications to the Local Agency Management Program, or may revoke the local agency's authorization to implement a Tier 2 program.

4.4.4 Requests for reconsideration by the local agency shall be decided by the Regional Water Board within 90 days and the previously approved Local Agency Management Program shall remain in effect while the reconsideration is pending.

4.4.5 If the request for reconsideration is denied, the local agency may appeal to the State Water Board and the previously approved Local Agency Management Program shall remain in effect while the appeal is under consideration. The State Water Board shall decide the appeal within 90 days. All decisions of the State Water Board are final.

4.5 The appropriate Regional Water Board shall accept and consider any requests for modification or revocation of a Local Agency Management Program submitted by any person. The Regional Water Board will notify the person making the request and the local agency implementing the Local Agency Management Program at issue by letter within 90 days whether it intends to proceed with the modification or revocation process per Section 4.4 above, or is dismissing the request. The Regional Water Board will post the request and its response letter on its website.

4.6 A Regional Water Board may issue or deny waste discharge requirements or waivers of waste discharge requirements for any new or replaced OWTS within a jurisdiction of a local agency without an approved Local Agency Management Program if that OWTS does not meet the minimum standards contained in Tier 1.

4.7 The Regional Water Boards will implement any notifications and enforcement requirements for OWTS determined to be in Tier 3 of this Policy.

4.8 Regional Water Boards may adopt waste discharge requirements, or conditional waivers of waste discharge requirements, that exempt individual OWTS from requirements contained in this Policy.

5.0 State Water Board Functions and Duties

5.1 As the state agency charged with the development and adoption of this Policy, the State Water Board shall periodically review, amend and/or update this Policy as required.

5.2 The State Water Board may take any action assigned to the Regional Water Boards in this Policy.

5.3 The State Water Board shall resolve disputes between Regional Water Boards and local agencies as needed within 12 months of receiving such a request by a Regional Water Board or local agency, and may take action on its own motion in furtherance of this Policy. As part of this function, the State Water Board shall review and, if appropriate, approve Local Agency Management Programs in cases where the respective Regional Water Board has failed to

consider for approval a Local Agency Management Program. The State Water Board shall approve Local Agency Management Programs at a regularly noticed board hearing and shall provide for public participation, including notice and opportunity for public comment. Once taken up by the State Water Board, Local Agency Management Programs shall be approved or denied within 180 days.

5.4 A member of the public may request the State Water Board to resolve any dispute regarding the Regional Water Board's approval of a Local Agency Management Program if the member of the public timely raised the disputed issue before the Regional Water Board. Such requests shall be submitted within 30 days after the Regional Water Board's approval of the Local Agency Management Program. The State Water Board shall notify the member of the public, the local agency, and the Regional Water Board within 90 days whether it intends to proceed with dispute resolution.

5.5 The State Water Board shall accept and consider any requests for modification or revocation of a Local Agency Management Program submitted by any person, where that person has previously submitted said request to the Regional Water Board and has received notice from the Regional Water Board of its dismissal of the request. The State Water Board will notify the person making the request and the local agency implementing the Local Agency Management Program at issue by letter within 90 days whether it intends to proceed with the modification or revocation process per Section 4.4 above, or is dismissing the request. The State Water Board will post the request and its response letter on its website.

5.6 The State Water Board, at the time of approving any Impaired Water Bodies [303 (d)] List, and for the purpose of implementing Tier 3 of this Policy, shall identify in Attachment 2 those water bodies where: (1) it is likely that operating OWTS will subsequently be determined to be a contributing source of pathogens or nitrogen and therefore it is anticipated that OWTS would receive a loading reduction, and (2) it is likely that new OWTS installations discharging within 600 feet of the water body would contribute to the impairment. This identification shall be based on information available at the time of 303 (d) listing and may be updated based on new information.

5.7 The State Water Board will make available to local agencies funds from its Clean Water State Revolving Fund loan program for mini-loan programs to be operated by the local agencies for the making of low interest loans to assist private property owners with complying with this Policy.

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Tier 0 – Existing OWTS

3/20/2012

Tier 0 – Existing OWTS

Existing OWTS that are properly functioning and do not meet the conditions of failing systems or otherwise require corrective action (for example, to prevent groundwater impairment) as specifically described in Tier 4, and are not determined to be contributing to an impairment of surface water as specifically described in Tier 3, are automatically included in Tier 0.

6.0 Coverage for Properly Operating Existing OWTS

6.1 Existing OWTS are automatically covered by Tier 0 and the herein included waiver of waste discharge requirements if they meet the following requirements:

6.1.1 have a projected flow of 10,000 gallons-per-day or less;

6.1.2 receive only domestic wastewater from residential or commercial buildings, or high-strength wastewater from commercial food service buildings that does not exceed 900 mg/L BOD and has a properly sized and functioning oil/grease interceptor (a.k.a. grease trap);

6.1.3 do not require supplemental treatment under Tier 3;

6.1.4 do not require corrective action under Tier 4; and

6.1.5 do not consist of a cesspool as a means of wastewater disposal.

6.2 A Regional Water Board or local agency may deny coverage under this Policy to any OWTS that is:

6.2.1 Not in compliance with Section 6.1;

6.2.2 In the opinion of the Regional Water Board not able to adequately protect the water quality of the waters of the State and should therefore submit a report of waste discharge to receive Region specific waste discharge requirements or waiver of waste discharge requirements so as to be protective.

6.3 Existing OWTS currently under waste discharge requirements or individual waiver of waste discharge requirements will remain under those orders until notified in writing by the appropriate Regional Water Board that they are covered under this Policy.

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Tier 1 – Low Risk New or Replacement OWTS

3/20/2012

Tier 1 – Low Risk New or Replacement OWTS

New or replacement OWTS meet low risk siting and design requirements as specified in Tier 1, where there is not an approved Local Agency Management Program per Tier 2.

7.0 Minimum Site Evaluation and Siting Standards

7.1 A qualified professional shall perform all necessary soil and site evaluations for all new OWTS and for existing OWTS where the treatment or dispersal system will be replaced or expanded.

7.2 A site evaluation shall determine that adequate soil depth is present in the dispersal area. Soil depth is measured vertically to the point where bedrock, hardpan, impermeable soils, or saturated soils are encountered or an adequate depth has been determined. Soil depth shall be determined through the use of soil profile(s) in the dispersal area and the designated dispersal system replacement area, as viewed in excavations exposing the soil profiles in representative areas, unless the local agency has determined through historical or regional information that a specific site soil profile evaluation is unwarranted.

7.3 A site evaluation shall determine the anticipated highest level of groundwater within the dispersal field and its required minimum dispersal zone by estimation using one or a combination of the following methods:

7.3.1 Direct observation of the highest extent of soil mottling observed in the examination of soil profiles, recognizing that soil mottling is not always an indicator of the uppermost extent of high groundwater; or

7.3.2 Direct observation of groundwater levels during the anticipated period of high groundwater. Methods for groundwater monitoring and determinations shall be decided by the local agency; or

7.3.3 Other methods, such as historical records, acceptable to the local agency.

7.3.4 Where a conflict in the above methods of examination exists, the direct observation method indicating the highest level shall govern.

7.4 Percolation test results in the effluent disposal area shall not be faster than one minute per inch (1 MPI) or slower than ninety minutes per inch (90 MPI). Other percolation rates may be used under a Tier 2 Local Agency Management Program. All percolation rates shall be based on actual or simulated wet weather conditions by performing the test during the wet weather period as determined by the local agency or by presoaking of percolation test holes and shall be a stabilized rate.

7.5 Minimum horizontal setbacks shall be as follows:

7.5.1 5 feet from parcel property lines;

7.5.2 100 feet from water wells and monitoring wells, unless regulatory or legitimate data requirements necessitate that monitoring wells be located closer;

7.5.3 100 feet from any unstable land mass or any areas subject to earth slides identified by a registered engineer or registered geologist; other setback distance are allowed, if recommended by a geotechnical report prepared by a qualified professional.

7.5.4 100 feet from springs and flowing surface water bodies where the edge of that water body is the natural or levied bank for creeks and rivers, or may be less where site conditions prevent migration of wastewater to the water body;

7.5.5 200 feet from vernal pools, wetlands, lakes, ponds, or other surface water bodies where the edge of that water body is the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies;

7.5.6 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet;

7.5.7 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth;

7.5.8 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth and the separation from the bottom of the system and ground water is less than five feet, the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

7.5.9 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

7.5.10 Where the effluent dispersal system is located more than 1,200 but less than 2,500 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

7.6 Prior to issuing a permit to install an OWTS the permitting agency shall determine if the OWTS is within 1,200 feet of an intake for a surface water treatment plant for drinking water and is in the drainage catchment in which the intake is located. If the OWTS is within 1,200 feet of an intake for a surface

water treatment plant for drinking water and is in the drainage catchment in which the intake is located:

7.6.1 The permitting agency shall provide a copy of the permit application to the owner of the water system of their proposal to install an OWTS within 1,200 of an intake for a surface water treatment. If the owner of the water system cannot be identified, then the permitting agency will notify California Department of Public Health Drinking Water Program.

7.6.2 The permit application shall include a topographical plot plan for the parcel showing the OWTS components, the property boundaries, proposed structures, physical address, and name of property owner.

7.6.3 The permitting agency shall provide the estimated wastewater flows, intended use of proposed structure generating the wastewater, soil data, and estimated depth to seasonally saturated soils.

7.6.4 The public water system owner shall have 5 days from receipt of the permit application to provide recommendations and comments to the permitting agency.

7.7 Natural ground slope in all areas used for effluent disposal shall not be greater than 25 percent.

7.8 The average density for any subdivision of property occurring after the effective date of this Policy and implemented under Tier 1 shall not exceed one single-family dwelling unit, or its equivalent, per 2.5 acres for those units that rely on OWTS.

8.0 Minimum OWTS Design and Construction Standards

8.1 OWTS Design Requirements

8.1.1 A qualified professional shall design all new OWTS and modifications to existing OWTS where the treatment or dispersal system will be replaced or expanded. A qualified professional employed by a local agency, while acting in that capacity may design or review and approve a design for a proposed OWTS.

8.1.2 OWTS shall be located, designed, and constructed in a manner to ensure that effluent does not surface at any time, and that percolation of effluent will not adversely affect beneficial uses of waters of the State.

8.1.3 The design of new and replaced OWTS shall be based on the expected influent wastewater quality with a projected flow not to exceed 3,500 gallons per day, the peak wastewater quantity for purposes of hydraulic sizing, the characteristics of the site, and the required level of treatment for protection of water quality and public health.

8.1.4 All dispersal systems shall have at least twelve (12) inches of soil cover.

8.1.5 The minimum depth to the anticipated highest level of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than prescribed in Table 1.

Table 1: Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System

Percolation Rate	Depth to groundwater
Percolation Rate ≤1 MPI	Only as authorized in a Tier 2 Local Agency Management Program
1 MPI< Percolation Rate ≤ 5 MPI	Twenty (20) feet
5 MPI< Percolation Rate ≤ 30 MPI	Eight (8) feet
30 MPI< Percolation Rate ≤ 90 MPI	Five (5) feet
Percolation Rate > 90 MPI	Only as authorized in a Tier 2 Local Agency Management Program

MPI = minutes per inch

8.1.6 Dispersal systems shall be a leachfield, designed using not more than 4 square-feet of infiltrative area per linear foot of trench as the infiltrative surface, and with trench width no wider than 3 feet. Seepage pits and other dispersal systems may only be authorized for repairs where siting limitations require a variance. Maximum application rates shall be determined from stabilized percolation rate as provided in Table 2, or from soil texture and structure determination as provided in Table 3.

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Tier 1 – Low Risk New or Replacement OWTS

3/20/2012

Table 2: Application rates as determined from stabilized percolation rate

Percolation Rate (minutes per inch)	Application Rate (gallons per day per square foot)	Percolation Rate (minutes per inch)	Application Rate (gallons per day per square foot)	Percolation Rate (minutes per inch)	Application Rate (gallons per day per square foot)
<1	Requires Local Manage-ment Program	31	0.522	61	0.197
1	0.8	32	0.511	62	0.194
2	0.8	33	0.5	63	0.19
3	0.8	34	0.489	64	0.187
4	0.8	35	0.478	65	0.184
5	0.8	36	0.467	66	0.18
6	0.8	37	0.456	67	0.177
7	0.8	38	0.445	68	0.174
8	0.8	39	0.434	69	0.17
9	0.8	40	0.422	70	0.167
10	0.8	41	0.411	71	0.164
11	0.786	42	0.4	72	0.16
12	0.771	43	0.389	73	0.157
13	0.757	44	0.378	74	0.154
14	0.743	45	0.367	75	0.15
15	0.729	46	0.356	76	0.147
16	0.714	47	0.345	77	0.144
17	0.7	48	0.334	78	0.14
18	0.686	49	0.323	79	0.137
19	0.671	50	0.311	80	0.133
20	0.657	51	0.3	81	0.13
21	0.643	52	0.289	82	0.127
22	0.629	53	0.278	83	0.123
23	0.614	54	0.267	84	0.12
24	0.6	55	0.256	85	0.117
25	0.589	56	0.245	86	0.113
26	0.578	57	0.234	87	0.11
27	0.567	58	0.223	88	0.107
28	0.556	59	0.212	89	0.103
29	0.545	60	0.2	90	0.1
30	0.533			>90	Requires Local Agency Management Program

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Tier 1 – Low Risk New or Replacement OWTS

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Table 3: Design Soil Application Rates

(Source: USEPA Onsite Wastewater Treatment Systems Manual, February 2002)

Soil Texture (per the USDA soil classification system)	Soil Structure Shape	Grade	Maximum Soil Application Rate(gallons per day per square foot) [1]
Coarse Sand, Sand, Loamy Coarse Sand, Loamy Sand	Single grain	Structureless	0.8
Fine Sand, Very Fine Sand, Loamy Fine Sand, Loamy Very Fine Sand	Single grain	Structureless	0.4
Coarse Sandy Loam, Sandy Loam	Massive	Structureless	0.2
	Platy	Weak	0.2
		Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Fine Sandy Loam, very fine Sandy Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Silt Loam	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Sandy Clay Loam, Clay Loam, Silty Clay Loam	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Sandy Clay, Clay, or Silty Clay	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	Prohibited
		Moderate, Strong	0.2

[1] Soils listed as prohibited may be allowed under the authority of the Regional Water Board ,or as allowed under an approved Local Agency Management Program per Tier 2.

8.1.7 Dispersal systems shall not exceed a maximum depth of 10 feet as measured from the ground surface to the bottom of the trench.

8.1.8 All new dispersal systems shall have 100 percent replacement area that is equivalent and separate, and available for future use.

8.1.9 No dispersal systems or replacement areas shall be covered by an impermeable surface, such as paving, building foundation slabs, plastic sheeting, or any other material that prevents oxygen transfer to the soil.

8.1.10 Rock fragment content of native soil surrounding the dispersal system shall not exceed 50 percent by volume for rock fragments sized as cobbles or larger and shall be estimated using either the point-count or line-intercept methods.

8.1.11 Increased allowance for gravel-less chamber systems is only allowed under a Tier 2 Local Agency Management Program.

8.2 Septic Tank Construction and Installation

8.2.1 All new or replaced septic tanks and new or replaced grease interceptor tanks shall comply with the standards contained in Sections K5(b), K5(c), K5(d), K5(e), K5(k), K5(m)(1), and K5(m)(3)(ii) of Appendix K, of Part 5, Title 24 of the 2007 California Code of Regulations.

8.2.2 All new septic tanks shall comply with the following requirements:

8.2.2.1 Access openings shall have watertight risers, the tops of which shall be set within 6 inches of finished grade; and

8.2.2.2 Access openings shall be secured to prevent unauthorized access.

8.2.3 New and replaced OWTS septic tanks shall be limited to those approved by the International Association of Plumbing and Mechanical Officials (IAPMO) or stamped and certified by a California registered civil engineer as meeting the industry standards, and their installation shall be according to the manufacturer's instructions.

8.2.4 New and replaced OWTS septic tanks shall be designed to prevent solids in excess of three-sixteenths (3/16) of an inch in diameter from passing to the dispersal system. Septic tanks that use a National Sanitation Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed in compliance with this requirement.

8.2.5 A Licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C-42), or Plumbing Contractor (Specialty Class C-36) shall install all new OWTS and replaced OWTS in accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations. A property owner may also install his/her own OWTS if the as-built diagram and the installation are inspected and approved by the Regional Water Board or local agency at a time when the OWTS is in an open condition (not covered by soil and exposed for inspection).

Tier 2 – Local Agency OWTS Management Program

Local agencies may submit management programs for approval, and upon approval then manage the installation of new and replacement OWTS under that program. Local Agency Management Programs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health. In order to address local conditions, Local Agency Management Programs may include standards that differ from the Tier 1 requirements for new and replacement OWTS contained in Sections 7 and 8. As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. Once the Local Agency Management Program is approved, new and replacement OWTS that are included within the Local Agency Management Program may be approved by the Local Agency. A Local Agency, at its discretion, may include Tier 1 standards within its Tier 2 Local Agency Management Program for some or all of its jurisdiction. However, once a Local Agency Management Program is approved, it shall supersede Tier 1 and all future OWTS decisions will be governed by the Tier 2 Local Agency Management Program until it is modified, withdrawn, or revoked.

9.0 Local Agency Management Program for Minimum OWTS Standards

The Local Agency Management Program for minimum OWTS Standards is a management program where local agencies can establish minimum standards that are differing requirements from those specified in Tier 1 (Section 7 and Section 8), including the areas that cannot meet those minimum standards and still achieve this Policy's purpose, which is to protect water quality and public health. Local Agency Management Programs may include any one or combination of the following to achieve this purpose:

- Differing system design requirements;
- Differing siting controls such as system density and setback requirements;
- Requirements for owners to enter monitoring and maintenance agreements; and/or
- Creation of an onsite management district.

9.1 Where different and/or additional requirements are needed to protect water quality the local agency may consider any of the following, as well as any other conditions deemed appropriate, when developing Local Agency Management Program requirements:

9.1.1 Degree of vulnerability to pollution from OWTS due to hydrogeological conditions.

9.1.2 High Quality waters or other environmental conditions requiring enhanced protection from the effects of OWTS.

9.1.3 Shallow soils requiring a dispersal system installation that is closer to ground surface than is standard.

9.1.4 OWTS is located in area with high domestic well usage.

9.1.5 Dispersal system is located in an area with fractured bedrock.

9.1.6 Dispersal system is located in an area with poorly drained soils.

9.1.7 Surface water is vulnerable to pollution from OWTS.

9.1.8 Surface water within the watershed is listed as impaired for nitrogen or pathogens.

9.1.9 OWTS is located within an area of high OWTS density.

9.2 The Local Agency Management Program shall detail the scope of its coverage, such as the maximum authorized projected flows for OWTS, as well as a clear delineation of those types of OWTS included within and to be permitted by the program, and provide the local site evaluation, siting, design, and construction requirements, and in addition each of the following:

9.2.1 Any local agency requirements for onsite wastewater system inspection, monitoring, maintenance, and repairs, including procedures to ensure that replacements or repairs to failing systems are done under permit from the local governing jurisdiction.

9.2.2 Any special provisions applicable to OWTS within specified geographic area near specific impaired water bodies listed for pathogens or nitrogen. The special provisions may be substantive and/or procedural, and may include, as examples: consultation with the Regional Water Board prior to issuing permits, supplemental treatment, development of a management district, special siting requirements, additional inspection and monitoring.

9.2.3 Local Agency Management Program variances, for new installations and repairs in substantial conformance, to the greatest extent practicable. Variances are not allowed for the requirements stated in sections 9.4.1 through 9.4.9.

9.2.4 Any educational, training, certification, and/or licensing requirements that will be required of OWTS service providers, site evaluators, designers, installers, pumpers, maintenance contractors, and any other person relating to OWTS activities.

9.2.5 Education and/or outreach program including informational materials to inform OWTS owners about how to locate, operate, and maintain their OWTS as well as any Water Board order (e.g., Basin Plan prohibitions) regarding OWTS restrictions within its jurisdiction. The education and/or outreach program shall also include procedures to ensure that alternative onsite system owners are provided an informational maintenance or replacement document by the system designer or installer. This document

shall cite homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure.

9.2.6 An analysis of existing and proposed disposal locations for septage, the volume of septage anticipated, and whether adequate capacity is available.

9.2.7 Any consideration given to onsite maintenance districts.

9.2.8 Any consideration given to the development and implementation of, or coordination with, Regional Salt and Nutrient Management Plans.

9.2.9 Any consideration given to coordination with watershed management groups.

9.2.10 Procedures for evaluating the proximity of sewer systems to new or replacement OWTS installations.

9.2.11 Procedures for notifying the owner of a public water system prior to issuing an installation or repair permit for an OWTS, if the OWTS is within 1,200 feet of an intake for a surface water treatment plant for drinking water and is in the drainage area catchment in which the intake is located, or if the OWTS is within a horizontal sanitary setback from a public well.

9.2.12 Policies and procedures that will be followed when a proposed OWTS dispersal area is within the horizontal sanitary setback of a public well or a surface water intake. These policies and procedures shall either indicate that supplemental treatment as specified in 10.9 and 10.10 of this policy are required for OWTS that are within a horizontal sanitary setback of a public well or surface water intake, or will establish alternate siting and operational criteria for the proposed OWTS that would similarly mitigate the potential adverse impact to the public water source.

9.3 The minimum responsibilities of the local agency for management of the Local Agency Management Program include:

9.3.1 Maintain records of the number, location, and description of permits issued for OWTS where a variance is granted.

9.3.2 Maintain a water quality assessment program to evaluate the impact of OWTS discharges and assess the extent to which groundwater and local surface water quality may be adversely impacted. The focus of the assessment should be areas with characteristics listed under section 9.1. The assessment program will include monitoring and analysis of water quality data, review of complaints, variances, failures, and any information resulting from inspections. The assessment may use existing water quality data from other monitoring programs and/or establish the terms, conditions, and timing for monitoring done by the local agency. At a minimum this assessment will include monitoring data for nitrates and pathogens, and may include data for other constituents which are needed

to adequately characterize the impacts of OWTS on water quality. Other monitoring programs for which data may be used include but are not limited to any of the following:

9.3.2.1. Random well samples from a domestic well sampling program.

9.3.2.2. Routine real estate transfer samples if those are performed and reported.

9.3.2.3. Review of public system sampling reports done by the local agency or another municipality responsible for the public system.

9.3.2.4. Water quality testing reports done at the time of new well development if those are reported.

9.3.2.5. Beach water quality testing data performed as part of Health and Safety Code Section 115885.

9.3.2.6. Receiving water sampling performed as a part of a NPDES permit.

9.3.2.7. Data contained in the California Water Quality Assessment Database.

9.3.2.8. Groundwater sampling performed as part of Waste Discharge Requirements.

9.3.2.9. Groundwater data collected as part of the Groundwater Ambient Monitoring and Assessment Program and available in the Geotracker Database.

9.3.3 Submit an annual report by February 1 to the applicable Regional Water Board summarizing the status of items 9.3.1 through 9.3.2 above. Every fifth year, submit an evaluation of the monitoring program and an assessment of whether water quality is being impacted by OWTS, identifying any changes in the Local Agency Management Program that will be undertaken to address impacts from OWTS. The first report will commence one year after approval of the local agency's Local Agency Management Program. In addition to summarizing monitoring data collected per 9.3.8 above, all groundwater monitoring data generated by the local agency shall be submitted in EDF format for inclusion into Geotracker, and surface water monitoring shall be submitted to CEDEN in a SWAMP comparable format.

9.4 The following are not allowed to be included in a Local Agency Management Program:

9.4.1 Cesspools of any kind or size.

9.4.2 OWTS receiving a projected flow over 10,000 gallons per day.

9.4.3 OWTS that utilize any form of effluent disposal that discharges on or above the post installation ground surface such as sprinklers, exposed drip lines, free-surface wetlands, or a pond.

9.4.4 Slopes greater than 30 percent without a slope stability report approved by a registered professional.

9.4.5 Decreased leaching area for IAPMO-approved dispersal systems using a multiplier less than 0.70.

9.4.6 Supplemental OWTS without requirements for periodic monitoring or inspections.

9.4.7 OWTS dedicated to receiving wastes from RV dumps.

9.4.8 Separation of the bottom of dispersal system to groundwater less than two (2) feet.

9.4.9 Installation of OWTS where public sewer is available. The public sewer may be considered as not available when such public sewer or any building or exterior drainage facility connected thereto is located more than 200 feet from any proposed building or exterior drainage facility on any lot or premises that abuts and is served by such public sewer.

9.4.10 Except as provided for in sections 9.4.11 and 9.4.12, new or repaired onsite systems with minimum horizontal setbacks less than any of the following:

9.4.10.1 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet in depth.

9.4.10.2 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth.

9.4.10.3 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth and the separation from the bottom of the system and ground water is less than five feet the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

9.4.10.4 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

9.4.10.5 Where the effluent dispersal system is located more than 1,200 but less than 2,500 feet from a public water systems' surface water intake and within the catchment area of the drainage, the dispersal

system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

9.4.11 For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures, unless the permitting authority finds that there is no indication that the existing system is adversely affecting the public water source, and there is limited potential that the system could impact the water source based on topography, soil depth, soil texture, and groundwater separation.

9.4.12 For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens as specified in section 10.8 and any other mitigation measures prescribed by the permitting authority.

9.5 A Local Agency Management Program for OWTS must include adequate technical detail to support how all the criteria in their program work together to protect water quality and public health.

9.6 A Regional Water Board reviewing a Local Agency Management Program shall consider, among other things, the past performance of the local program to adequately protect water quality, and where this has been achieved with criteria differing from Tier 1, shall not unnecessarily require modifications to the program for purposes of uniformity, as long as the Local Agency Management Program meets the requirements of Tier 2.

Final Draft

Tier 3 – Impaired Areas

3/20/2012

Tier 3 – Impaired Areas

OWTS that are near impaired water bodes may be addressed by a TMDL and its implementation program, or special provisions contained in a Local Agency Management Program. If there is no TMDL or special provisions, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 must meet the specific requirements of Tier 3.

10.0 Advanced Protection Management Program

The Advanced Protection Management Program is the minimum required management program for all local agencies where an OWTS is located near a water body that has been listed as an impaired water body due to nitrogen or pathogen indicators pursuant to Section 303(d) of the Clean Water Act. This Tier 3 contains the OWTS requirements within the Advanced Protection Management Program. Local agencies are authorized to implement Advanced Protection Management Programs in conjunction with an approved Local Agency Management Program or, if there is no approved Local Agency Management Program, Tier 1. Local agencies are encouraged to collaborate with the Regional Water Boards by sharing any information pertaining to the impairment, provide advice on potential remedies, and regulate OWTS to the extent that their authority allows for the improvement of the impairment.

10.1 The geographic area for each water body's Advanced Protection Management Program is defined by the applicable TMDL, if one has been approved. If there is not an approved TMDL, it is defined by an approved Local Agency Management Program, if it contains special provisions for that water body. If it is not defined in an approved TMDL or Local Agency Management Program, it shall be 600 linear feet [in the horizontal (map) direction] of a water body listed in Attachment 2 where the edge of that water body is the natural or levied bank for creeks and rivers, the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies, as appropriate. OWTS near impaired water bodies that are not listed on Attachment 2, and do not have a TMDL and are not covered by a Local Agency Management Program with special provisions, are not addressed by Tier 3.

10.2 The requirements of an Advanced Protection Management Program for all OWTS will be in accordance with an adopted TMDL, and its implementation program, if one has been adopted to address the impairment. An adopted TMDL supersedes all requirements in Tier 3, except that, for TMDL implementation plans adopted after the effective date of this Policy, all required OWTS implementation actions shall commence within 5 years after the TMDL's effective date. The TMDL may use some or all of the Tier 3 requirements and shall establish the applicable area of implementation for OWTS requirements within the watershed. For those impaired water bodies that do have an adopted TMDL addressing the impairment, but the TMDL does not assign a

load allocation to OWTS, no further action is required unless the TMDL is modified at some point in the future to include actions for OWTS.

10.3 If no TMDL has been adopted, the requirements of an Advanced Protection Management Program for all OWTS will be in accordance with the Local Agency Management Program, if any special provisions for the water body have been approved.

10.4 The Regional Water Boards shall adopt TMDLs for impaired water bodies identified in Attachment 2, in accordance with the specified dates.

10.4.1 If a Regional Water Board does not complete a TMDL within two years of the time period specified in Attachment 2, coverage under this Policy's waiver of waste discharge requirements shall expire for any OWTS that has any part of its dispersal system discharging within the geographic area of an Advanced Protection Management Program. The Regional Water Board shall issue waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, or require corrective action for such OWTS. The Regional Water Board will consider the following when establishing the waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, or requirement for corrective action:

10.4.1.1 Whether supplemental treatment should be required.

10.4.1.2 Whether routine inspection of the OWTS should be required.

10.4.1.3 Whether monitoring of surface and groundwater should be performed.

10.4.1.4 The collection of a fee for those OWTS covered by the order.

10.4.1.5 Whether owners of previously-constructed OWTS should file a report by a qualified professional in accordance with section 10.5.

10.4.1.6 Whether owners of new or replaced OWTS should file a report of waste discharge with additional supporting technical information as required by the Regional Water Board.

10.5 If the Regional Water Board requires owners of OWTS to submit a qualified professional's report, the report may include a determination of whether the OWTS is functioning properly and as designed or requires corrective actions per Tier 4, and regardless of its state of function, whether it is contributing to impairment of the water body.

10.5.1 The qualified professional's report may also include, but is not limited to:

10.5.1.1 A general description of system components, their physical layout, and horizontal setback distances from property lines, buildings, wells, and surface waters.

10.5.1.2 A description of the type of wastewater discharged to the OWTS such as domestic, commercial, or industrial and classification of it as domestic wastewater or high-strength waste.

10.5.1.3 A determination of the systems design flow and the volume of wastewater discharged daily derived from water use, either estimated or actual if metered.

10.5.1.4 A description of the septic tank, including age, size, material of construction, internal and external condition, water level, scum layer thickness, depth of solids, and the results of a one-hour hydrostatic test.

10.5.1.5 A description of the distribution box, dosing siphon, or distribution pump, and if flow is being equally distributed throughout the dispersal system, as well as any evidence of solids carryover, clear water infiltration, or evidence of system backup.

10.5.1.6 A description of the dispersal system including signs of hydraulic failure, condition of surface vegetation over the dispersal system, level of ponding above the infiltrative surface within the dispersal system, other possible sources of hydraulic loading to the dispersal area, and depth of the seasonally high groundwater level.

10.5.1.7 A determination of whether the OWTS is discharging to the ground's surface.

10.5.1.8 For a water body listed as an impaired water body for pathogens, a determination of the OWTS dispersal system's separation from its deepest most infiltrative surface to the highest seasonal groundwater level or fractured bedrock.

10.5.1.9 For a water body listed as an impaired water body for nitrogen, a determination of whether the groundwater under the dispersal field is reaching the water body, and a description of the method used to make the determination.

10.6 For new, replaced, and existing OWTS in an Advanced Protection Management Program, the following are not covered by this Policy's waiver but may be authorized by a separate Regional Water Board order:

10.6.1 Cesspools of any kind or size.

10.6.2 OWTS receiving a projected flow over 10,000 gallons per day.

10.6.3 OWTS that utilize any form of effluent disposal on or above the ground surface.

10.6.4 Slopes greater than 30 percent without a slope stability report approved by a registered professional.

10.6.5 Decreased leaching area for IAPMO-approved dispersal systems using a multiplier less than 0.70.

10.6.6 OWTS utilizing supplemental treatment without requirements for periodic monitoring.

10.6.7 OWTS dedicated to receiving wastes from RV dumps.

10.6.8 Separation of the bottom of dispersal system to groundwater less than two (2) feet.

10.6.9 Minimum horizontal setbacks less than any of the following:

10.6.9.1 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet in depth;

10.6.9.2 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth:

10.6.9.3 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth and the separation from the bottom of the system and ground water is less than five feet the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

10.6.9.4 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

10.6.9.5 Where the effluent dispersal system is located more than 1,200 but less than 2,500 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

10.6.9.6 For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures.

10.6.9.7 For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens as specified in section

10.8 and any other mitigation measures as prescribed by the permitting authority.

10.7 The requirements contained in Section 10 shall not apply to owners of OWTS that are constructed and operating, or permitted, on or prior to the date that the nearby water body is added to Attachment 2 who commit by way of a legally binding document to connect to a centralized wastewater collection and treatment system regulated through WDRs as specified within the following timeframes:

10.7.1 The owner must sign the document within forty-eight months of the date that the nearby water body is initially listed on Attachment 2.

10.7.2 The specified date for the connection to the centralized community wastewater collection and treatment system shall not extend beyond nine years following the date that the nearby water body is added to Attachment 2.

10.8 In the absence of an adopted TMDL or Local Agency Management Program containing special provisions for the water body, all new or replaced OWTS permitted after the date that the water body is initially listed in Attachment 2 that have any discharge within the geographic area of an Advanced Protection Management Program shall meet the following requirements:

10.8.1 Utilize supplemental treatment and meet performance requirements in 10.9 if impaired for nitrogen and 10.10 if impaired for pathogens,

10.8.2 Comply with the setback requirements of Section 7.5.1 to 7.5.5, and

10.8.3 Comply with any applicable Local Agency Management Program requirements.

10.9 Supplemental treatment requirements for nitrogen

10.9.1 Effluent from the supplemental treatment components designed to reduce nitrogen shall be certified by NSF, or other approved third party tester, to meet a 50 percent reduction in total nitrogen when comparing the 30-day average influent to the 30-day average effluent.

10.9.2 Where a drip-line dispersal system is used to enhance vegetative nitrogen uptake, the dispersal system shall have at least six (6) inches of soil cover.

10.10 Supplemental treatment requirements for pathogens

10.10.1 Supplemental treatment components designed to perform disinfection shall provide sufficient pretreatment of the wastewater so that effluent from the supplemental treatment components does not exceed a 30-day average TSS of 30 mg/L and shall further achieve an effluent fecal coliform bacteria concentration less than or equal to 200 Most Probable Number (MPN) per 100 milliliters.

10.10.2 The minimum soil depth and the minimum depth to the anticipated highest level of groundwater below the bottom of the dispersal system shall not be less than three (3) feet. All dispersal systems shall have at least twelve (12) inches of soil cover.

10.11 OWTS in an Advanced Protection Management Program with supplemental treatment shall be designed to meet the applicable performance requirements above and shall be stamped or approved by a Qualified Professional.

10.12 Prior to the installation of any proprietary treatment OWTS in an Advanced Protection Management Program, all such treatment components shall be tested by an independent third party testing laboratory.

10.13 The ongoing monitoring of OWTS in an Advanced Protection Management Program with supplemental treatment components designed to meet the performance requirements in Sections 10.9 and 10.10 shall be monitored in accordance with the operation and maintenance manual for the OWTS or more frequently as required by the local agency or Regional Water Board.

10.14 OWTS in an Advanced Protection Management Program with supplemental treatment components shall be equipped with a visual or audible alarm as well as a telemetric alarm that alerts the owner and service provider in the event of system malfunction. OWTS using supplemental treatment shall, at a minimum, provide for 24-hour wastewater storage based on design flow as a means to minimize pollution from overflow discharge after a system malfunction or power outage. Where telemetry is not possible, the owner shall inspect the system at least monthly as directed and instructed by a service provider and notify the service provider not less than quarterly of the observed operating parameters of the OWTS.

10.15 OWTS in an Advanced Protection Management Program designed to meet the disinfection requirements in Section 10.10 shall be inspected for proper operation quarterly by a service provider unless a telemetric monitoring system is capable of continuously assessing the operation of the disinfection system. Testing of the wastewater flowing from supplemental treatment components that perform disinfection shall be sampled at a point in the system after the treatment components and prior to the dispersal system and shall be conducted quarterly based on analysis of total coliform with a minimum detection limit of 2.2 MPN. All effluent samples must include the

geographic coordinates of the sample's location. Effluent samples shall be taken by a service provider and analyzed by a California Department of Public Health certified laboratory.

10.16 The minimum responsibilities of the local agency administering an Advanced Protection Management Program include those prescribed for the Local Agency Management Programs in Section 9.3 of this policy, as well as monitoring owner compliance with Sections 10.13, 10.14,and 10.15.

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Tier 4 – OWTS Requiring Corrective Action

3/20/2012

Tier 4 – OWTS Requiring Corrective Action

OWTS that require corrective action or are either presently failing or fail at any time while this Policy is in effect are automatically included in Tier 4 and must follow the requirements as specified. OWTS included in Tier 4 must continue to meet applicable requirements of Tier 0, 1, 2 or 3 pending completion of corrective action.

11.0 Corrective Action for OWTS

11.1 Any OWTS that has pooling effluent, discharges wastewater to the surface, or has wastewater backed up into plumbing fixtures, because its dispersal system is no longer adequately percolating the wastewater is deemed to be failing, no longer meeting its primary purpose to protect public health, and requires major repair, and as such the dispersal system must be replaced, repaired, or modified so as to return to proper function and comply with Tier 1, 2, or 3 as appropriate.

11.2 Any OWTS septic tank failure, such as a baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating is deemed to be failing, no longer meeting its primary purpose to protect public health, and requires major repair, and as such shall require the septic tank to be brought into compliance with the requirements of Section 8 in Tier 1 or a Local Agency Management Program per Tier 2.

11.3 Any OWTS that has a failure of one of its components other than those covered by 11.1 and 11.2 above, such as a distribution box or broken piping connection, shall have that component repaired so as to return the OWTS to a proper functioning condition and return to Tier 0, 1, 2, or 3.

11.4 Any OWTS that has affected, or will affect, groundwater or surface water to a degree that makes it unfit for drinking or other uses, or is causing a human health or other public nuisance condition shall be modified or upgraded so as to abate its impact.

11.5 If the owner of the OWTS is not able to comply with corrective action requirements of this section, the Regional Water Board may authorize repairs that are in substantial conformance, to the greatest extent practicable, with Tiers 1 or 3, or may require the owner of the OWTS to submit a report of waste discharge for evaluation on a case-by-case basis. Regional Water Board response to such reports of waste discharge may include, but is not limited to, enrollment in general waste discharge requirements, issuance of individual waste discharge requirements, or issuance of waiver of waste discharge requirements. A local agency may authorize repairs that are in substantial conformance, to the greatest extent practicable, with Tier 2 in accordance with section 9.2.3 if there is an approved Local Agency Management Program, or with an existing program if a Local Agency

Management Program has not been approved and it is less than 5 years from the effective date of the Policy.

11.6 Owners of OWTS will address any corrective action requirement of Tier 4 as soon as is reasonably possible, and must comply with the time schedule of any corrective action notice received from a local agency or Regional Water Board, to retain coverage under this Policy. In no case shall the time schedule be allowed to extend beyond three months for a corrective action, with the exception of seasonal high groundwater or snow conditions.

11.7 Failure to meet the requirements of Tier 4 constitute a failure to meet the conditions of the waiver of waste discharge requirements contained in this Policy, and is subject to further enforcement action.

Final Draft

Waiver – Effective Date – Financial Assistance

3/20/2012

Conditional Waiver of Waste Discharge Requirements

12.0 In accordance with Water Code section 13269, the State Water Board hereby waives the requirements to submit a report of waste discharge, obtain waste discharge requirements, and pay fees for discharges from OWTS covered by this Policy. Owners of OWTS covered by this Policy shall comply with the following conditions:

12.0.1 The OWTS shall function as designed with no surfacing effluent.

12.0.2 The OWTS shall not utilize a dispersal system that is in soil saturated with groundwater.

12.0.3 The OWTS shall not be operated while inundated by a storm or flood event.

12.0.4 The OWTS shall not cause or contribute to a nuisance or pollution.

12.0.5 The OWTS shall comply with all applicable local agency codes, ordinances, and requirements.

12.0.6 The OWTS shall comply with and meet any applicable TMDL implementation requirements, special provisions for impaired water bodies, or supplemental treatment requirements imposed by Tier 3.

12.0.7 The OWTS shall comply with any corrective action requirements of Tier 4.

12.1 This waiver may be revoked by the State Water Board or the applicable Regional Water Board for any discharge from an OWTS, or from a category of OWTS.

Effective Date

13.0 This Policy becomes effective six months after its approval by the Office of Administrative Law, and all deadlines and compliance dates stated herein start at such time.

Final Draft

Waiver – Effective Date – Financial Assistance

3/20/2012

Financial Assistance

14.0 Local Agencies may apply to the State Water Board for funds from the Clean Water State Revolving Fund for use in mini-loan programs that provide low interest loan assistance to private property owners with costs associated with complying with this Policy.

14.1 Loan interest rates for loans to local agencies will be set by the State Water Board using its policies, procedures, and strategies for implementing the Clean Water State Revolving Fund program, but will typically be one-half of the States most recent General Obligation bond sale. Historically interest rates have ranged between 2.0 and 3.0 percent.

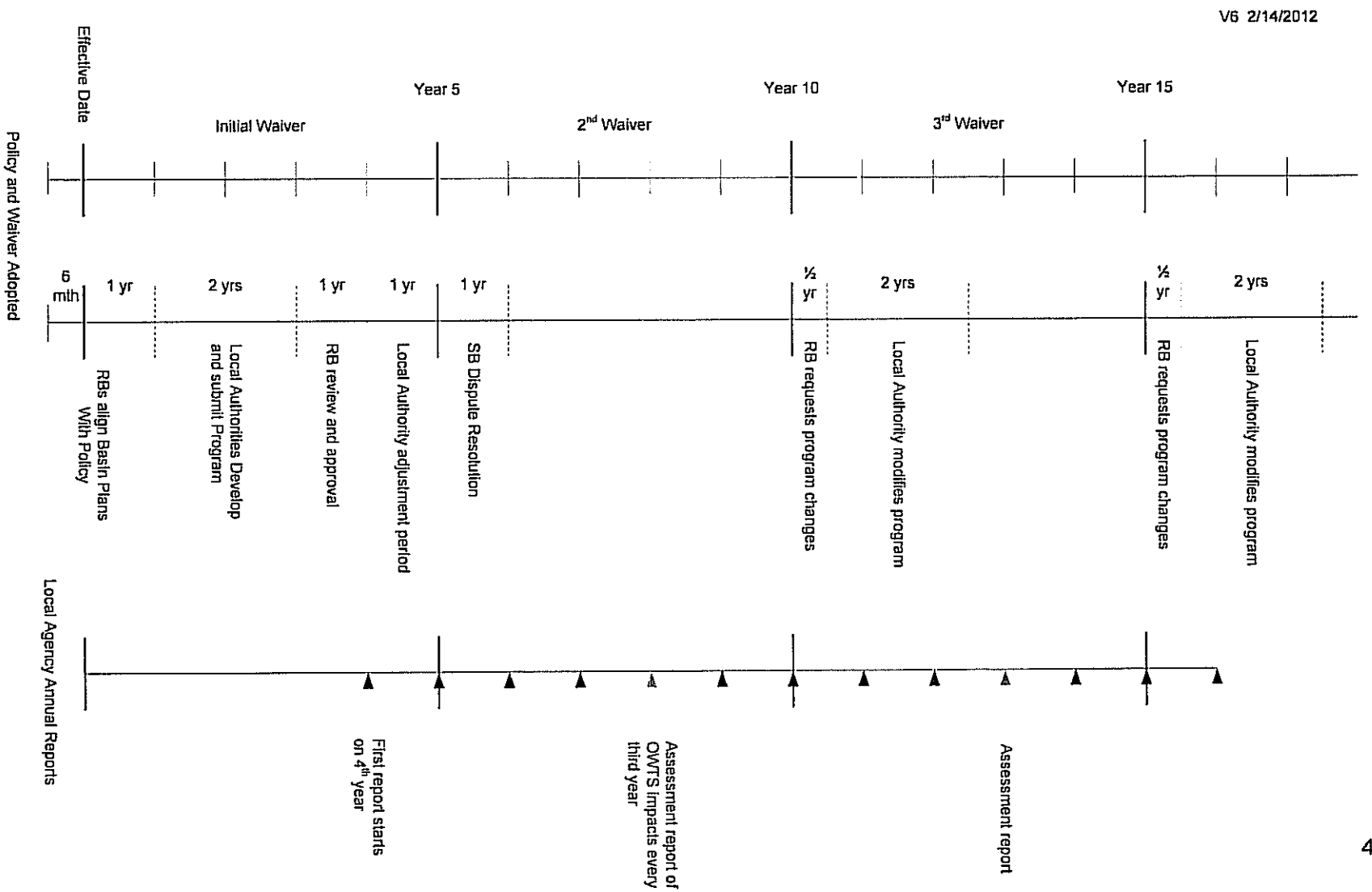
14.2 Local agencies may add additional interest points to their loans made to private entities to cover their costs of administering the mini-loan program.

14.3 Local agencies may submit their suggested loan eligibility criteria for the min-loan program they wish to establish to the State Water Board for approval, but should consider the legislative intent stated in Water Code Section 13291.5 is that assistance is encouraged for private property owners whose cost of complying with the requirements of this policy exceeds one-half of one percent of the current assessed value of the property on which the OWTS is located.

Attachment 1 – Final Draft

3/20/2012

AB 885 Regulatory Program Time Lines



Attachment 2 – Final Draft

3/20/2012

The tables below specifically identify those impaired water bodies where: (1) it is likely that operating OWTS will subsequently be determined to be a contributing source of pathogens or nitrogen and therefore it is anticipated that OWTS would receive a loading reduction, and (2) it is likely that new OWTS installations discharging within 600 feet of the water body would contribute to the impairment. Per this Policy (Tier 3, Section 10) the Regional Water Boards must adopt a TMDL by the date specified in the table. The State Water Board, at the time of approving future 303 (d) Lists, will specifically identify those impaired water bodies that are to be added or removed from the tables below.

Table 4. Water Bodies impaired for pathogens that are subject to Tier 3 as of 2012.

REGION NO	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
1	North Coast	Clam Beach	Humboldt	2020
1	North Coast	Luffenholtz Beach	Humboldt	2020
1	North Coast	Moonstone County Park	Humboldt	2020
1	North Coast	Russian River HU, Lower Russian River HA, Guerneville HSA, mainstem Russian River from Fife Creek to Dutch Bill Creek	Sonoma	2016
1	North Coast	Russian River HU, Lower Russian River HA, Guerneville HSA, Green Valley Creek watershed	Sonoma	2016
1	North Coast	Russian River HU, Middle Russian River HA, Geyserville HSA, mainstem Russian River at Healdsburg Memorial Beach and unnamed tributary at Fitch Mountain	Sonoma	2016
1	North Coast	Russian River HU, Middle Russian River HA, mainstem Laguna de Santa Rosa	Sonoma	2016
1	North Coast	Russian River HU, Middle Russian River HA, mainstem Santa Rosa Creek	Sonoma	2016
1	North Coast	Trinidad State Beach	Humboldt	2020
2	San Francisco Bay	China Camp Beach	Marin	2014
2	San Francisco Bay	Lawsons Landing	Marin	2015
2	San Francisco Bay	Pacific Ocean at Bolinas Beach	Marin	2014

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REGION NO.	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
2	San Francisco Bay	Pacific Ocean at Fitzgerald Marine Reserve	San Mateo	2016
2	San Francisco Bay	Pacific Ocean at Muir Beach	Marin	2015
2	San Francisco Bay	Pacific Ocean at Pillar Point Beach	San Mateo	2016
2	San Francisco Bay	Petaluma River	Marin, Sonoma	2017
2	San Francisco Bay	Petaluma River (tidal portion)	Marin, Sonoma	2017
2	San Francisco Bay	San Gregorio Creek	San Mateo	2019
3	Central Coast	Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)	Santa Barbara	2015
3	Central Coast	Rincon Creek	Santa Barbara, Ventura	2015
4	Los Angeles	Canada Larga (Ventura River Watershed)	Ventura	2017
4	Los Angeles	Coyote Creek	Los Angeles, Orange	2015
4	Los Angeles	Rincon Beach	Ventura	2017
4	Los Angeles	San Antonio Creek (Tributary to Ventura River Reach 4)	Ventura	2017
4	Los Angeles	San Gabriel River Reach 1 (Estuary to Firestone)	Los Angeles	2015
4	Los Angeles	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam	Los Angeles	2015
4	Los Angeles	San Gabriel River Reach 3 (Whittier Narrows to Ramona)	Los Angeles	2015
4	Los Angeles	San Jose Creek Reach 1 (SG Confluence to Temple St.)	Los Angeles	2015
4	Los Angeles	San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	Los Angeles	2015
4	Los Angeles	Sawpit Creek	Los Angeles	2015
4	Los Angeles	Ventura River Reach 3 (Weldon Canyon to Confl. w/ Coyote Cr)	Ventura	2017
4	Los Angeles	Walnut Creek Wash (Drains from Puddingstone Res)	Los Angeles	2015
5	Central Valley	Wolf Creek (Nevada County)	Nevada, Placer	2020
5	Central Valley	Woods Creek (Tuolumne County)	Tuolumne	2020

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REGION NO	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
7	Colorado River	Alamo River	Imperial	2017
7	Colorado River	Palo Verde Outfall Drain and Lagoon	Imperial, Riverside	2017
8	Santa Ana	Canyon Lake (Railroad Canyon Reservoir)	Riverside	2019
8	Santa Ana	Fulmor, Lake	Riverside	2019
8	Santa Ana	Goldenstar Creek	Riverside	2019
8	Santa Ana	Los Trancos Creek (Crystal Cove Creek)	Orange	2017
8	Santa Ana	Lytle Creek	San Bernardino	2019
8	Santa Ana	Mill Creek Reach 1	San Bernardino	2015
8	Santa Ana	Mill Creek Reach 2	San Bernardino	2015
8	Santa Ana	Morning Canyon Creek	Orange	2017
8	Santa Ana	Mountain Home Creek	San Bernardino	2019
8	Santa Ana	Mountain Home Creek, East Fork	San Bernardino	2019
8	Santa Ana	Silverado Creek	Orange	2017
8	Santa Ana	Peters Canyon Channel	Orange	2017
8	Santa Ana	Santa Ana River, Reach 2	Orange, Riverside	2019
8	Santa Ana	Temescal Creek, Reach 6 (Elsinore Groundwater sub basin boundary to Lake Elsinore Outlet)	Riverside	2019
8	Santa Ana	Seal Beach	Orange	2017
8	Santa Ana	Serrano Creek	Orange	2017
8	Santa Ana	Huntington Harbour	Orange	2017

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3/20/2012

Table 5. Water Bodies impaired for nitrogen that are subject to Tier 3.

REGION NO.	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
1	North Coast	Russian River HU, Middle Russian River HA, mainstem Laguna de Santa Rosa	Sonoma	2015
2	San Francisco Bay	Lagunitas Creek	Marin	2016
2	San Francisco Bay	Napa River	Napa, Solano	2014
2	San Francisco Bay	Petaluma River	Marin, Sonoma	2017
2	San Francisco Bay	Petaluma River (tidal portion)	Marin, Sonoma	2017
2	San Francisco Bay	Sonoma Creek	Sonoma	2014
2	San Francisco Bay	Tomales Bay	Marin	2019
2	San Francisco Bay	Walker Creek	Marin	2016
4	Los Angeles	Lake Calabasas	Los Angeles	2012
4	Los Angeles	Legg Lake	Los Angeles	2012
4	Los Angeles	San Antonio Creek (Tributary to Ventura River Reach 4)	Ventura	2013
8	Santa Ana	East Garden Grove Wintersburg Channel	Orange	2017
8	Santa Ana	Grout Creek	San Bernardino	2015
8	Santa Ana	Rathbone (Rathbun) Creek	San Bernardino	2015
8	Santa Ana	Summit Creek	San Bernardino	2015
8	Santa Ana	Serrano Creek	Orange	2017

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3/20/2012

Regional Water Boards, upon mutual agreement, may designate one Regional Water Board to regulate a person or entity that is under the jurisdiction of both (Water Code Section 13228). The following table identifies the designated Regional Water Board for all counties within the State for purposes of reviewing and, if appropriate, approving new Local Agency Management Plans.

Table 6. Regional Water Board designations by County.

County	Regions with Jurisdiction	Designated Region
Alameda	2,5	2
Alpine	5,6	6
Amador	5	5
Butte	5	5
Calaveras	5	5
Colusa	5	5
Contra Costa	2,5	2
Del Norte	1	1
El Dorado	5,6	5
Fresno	5	5
Glenn	5,1	5
Humboldt	1	1
Imperial	7	7
Inyo	6	6
Kern	5,6	5
Kings	5	5
Lake	5,1	5
Lassen	5,6	6
Los Angeles	4,6	4
Madera	5	5
Marin	2,1	2
Mariposa	5	5
Mendocino	1	1
Merced	5	5
Modoc	1,5,6	5
Mono	6	6
Monterey	3	3
Napa	2,5	2
Nevada	5,6	5
Orange	8,9	8
Placer	5,6	5
Plumas	5	5
Riverside	7,8,9	7
Sacramento	5	5
San Benito	3,5	3
San Bernardino	6,7,8	6
San Diego	9,7	9
San Francisco	2	2
San Joaquin	5	5
San Luis Obispo	3,5	3
San Mateo	2,3	2
Santa Barbara	3	3
Santa Clara	2,3	2
Santa Cruz	3	3
Shasta	5	5
Sierra	5,6	5
Siskiyou	1,5	1
Solano	2,5	5
Sonoma	1,2	1
Stanislaus	5	5
Sutter	5	5
Tehama	5	5
Trinity	1	1
Tulare	5	5
Tuolumne	5	5
Ventura	4,3	4
Yolo	5	5
Yuba	5	5

BIGHORN DESERT VIEW WATER AGENCY
AGENDA ITEM SUBMITTAL

Meeting Date: April 24, 2012

To: Board of Directors

Budgeted: N/A
Budgeted Amount: N/A
Cost: Increased future costs to conduct business with the RWQCB)

From: *Marina D. West*

General Counsel Approval: *Under Review*
CEQA Compliance: N/A

Subject: **Resolution No. 12R-XX, Regarding the Elimination of the California Regional Water Quality Control Board – Colorado River Region**

SUMMARY

Staff has recently discovered that on April 11, 2012 the California State Assembly Budget Subcommittee approved the Governor's proposal to eliminate the and to reduce the number of board members on all state regional boards from nine (9) to seven (7). The primary concern is how this change will impact our ability to effectively work to represent local community interests with a Board located in the Lake Tahoe region. In addition, the travel distance will increase costs to appear before the Board. In addition, it is unclear if the region will be operated remotely or if the staff offices will remain at the Palm Desert location.

The Planning/Legislative/Engineering/Grant/Security Committee was briefed on this matter at their April 19th meeting and the Committee opposes the dissolution of the Regional Water Quality Control Board – Colorado River Region.

Staff recommends the Board adopting a resolution, Resolution No. 12R-XX, in opposition of the elimination of the Colorado Regional Board.

RECOMMENDATION

The Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Opposing the Elimination of the California Regional Water Quality Control Board – Colorado River Region.

BACKGROUND/ANALYSIS

See attached information from Hi Desert Water District.

PRIOR RELEVANT BOARD ACTION(S)

None

RESOLUTION NO. 12R-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF THE BIGHORN-DESERT VIEW WATER AGENCY OPPOSING THE ELIMINATION OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER REGION #7

WHEREAS, the Bighorn-Desert View Water Agency (Agency) is a retail water provider and special district serving the communities of Flamingo Heights, Johnson Valley and portions of Landers, CA, approximately 40 miles north of Palm Springs; and

WHEREAS, the Agency is within the State Water Resources Board, Regional Water Quality Control Board – Colorado River Region 7, which encompasses a large and unique geographic region including the Salton Sea, Imperial Valley, Coachella Valley, Morongo Basin, Twentynine Palms Marine Base and whose mission it is to protect water quality, preserving water resources and preventing pollution nuisance, contamination, and degradation of the quality of water; and

WHEREAS, the Governor's proposal to is to eliminate the Regional Board 7 and combine the Morongo Basin with the Lahontan Region; thereby requiring the Agency to travel further for local representation (by as much as 9 hours), thereby, increasing local costs; and

WHEREAS, there is not sufficient evidence to warrant this increase of burden and costs to the local agencies and community members; and

WHEREAS, the Agency believes it necessary to retain adequate representation on regulatory matters affecting water quality both within the Agency's service area and the entire Morongo Basin region;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Bighorn-Desert View Water Agency:

1. To oppose the elimination of the California Regional Water Quality Control Board – Colorado River Region 7.

PASSED, APPROVED, AND ADOPTED by the Board of Directors to Bighorn-Desert View Water Agency this 24th day of April 2012.

By _____
Michael McBride, President of the Board

ATTEST:

_____
David Larson, Secretary of the Board

HI-DESERT WATER DISTRICT

April 16, 2012

Subject: Elimination of the California Regional Water Quality Control Board – Colorado River Region

Dear Community Leaders,

On April 11, 2012, the California State Assembly Budget Subcommittee (No. 3 on Resources and Transportation) approved by a 4-0-1 vote the Governor's proposal to eliminate the California Regional Water Quality Control Board – Colorado River Region and reduce the number of board members on all state regional boards from nine to seven (see attached "Item to be heard"). While we support the reduction of the number of board members on all boards, as this will make it easier for each to have a quorum; we are not in support of the elimination of the Colorado Regional Board. The State Senate Budget Subcommittee will meet on April 25, 2012 to consider this item.

The proposal calls for the elimination of the Colorado Regional Board. It claims it merges two of the smaller regional water boards. The proposal is to split Region 7 by placing the Imperial Valley and the Coachella Valley in the San Diego Board area and place the Morongo Basin and Lucerne Valley in the Lahontan Board area. This will reduce our ability to effectively work with this regulatory agency, negatively impact our ability to represent community interests and increase the distance of travel to meetings (by up to nine-hours).

There are no specific details as to how the cost savings will be achieved and whether the cost-benefit of these savings has been evaluated against other options for State reorganization. There are other regions that encompass smaller geographic regions.

The Colorado region is one of the larger geographic regions representing significant issues such as the Salton Sea, Coachella Valley, Morongo Basin, Yucca Valley's septic issue, Lucerne Valley, etc (see attached map).

As Yucca Valley faces a tremendous challenge protecting groundwater supplies and complying with recently adopted septic discharge prohibitions, it is a critical time to maintain adequate representation. We also believe that as a rural region, the area will also experience increased

need to communicate with the Regional Board on issues arising from water resource protection and new development.

It is for these reasons the Hi-Desert Water District is considering adoption of the attached resolution opposing the elimination of the Colorado Regional Board.

Sincerely yours,

Sarann Graham
President of the Board of Directors

Enclosure

CALIFORNIA
Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

P.O. Box 100, Sacramento, CA 95812-0100
www.waterboards.ca.gov

Office of Public Affairs: (916) 341-5254
Office of Legislative Affairs: (916) 341-5251
Office of the Ombudsman (916) 341-5254

Water Quality Information: (916) 341-5455
Water Rights Information: (916) 341-5300
Financial Assistance Information: (916) 341-5700

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

NORTH COAST REGION (1)
www.waterboards.ca.gov/northcoast
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
E-mail: info1@waterboards.ca.gov
(707) 576-2220 TEL • (707) 523-0135 FAX

SAN FRANCISCO BAY REGION (2)
www.waterboards.ca.gov/sanfranciscobay
1515 Clay Street, Suite 1400
Oakland, CA 94612
E-mail: info2@waterboards.ca.gov
(510) 622-2300 TEL • (510) 622-2460 FAX

CENTRAL COAST REGION (3)
www.waterboards.ca.gov/centralcoast
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
E-mail: info3@waterboards.ca.gov
(805) 549-3147 TEL • (805) 543-0397 FAX

LOS ANGELES REGION (4)
www.waterboards.ca.gov/losangeles
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
E-mail: info4@waterboards.ca.gov
(213) 576-6600 TEL • (213) 576-6640 FAX

CENTRAL VALLEY REGION (5)
www.waterboards.ca.gov/centralvalley
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
E-mail: info5@waterboards.ca.gov
(916) 464-3291 TEL • (916) 464-4645 FAX

Fresno branch office
1685 E Street, Suite 200
Fresno, CA 93706
(559) 445-5116 TEL • (559) 445-5910 FAX

Redding branch office
415 Knollcrest Drive
Redding, CA 96002
(530) 224-4845 TEL • (530) 224-4857 FAX

LAHONTAN REGION (6)
www.waterboards.ca.gov/lahontan
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
E-mail: info6@waterboards.ca.gov
(530) 542-5400 TEL • (530) 544-2271 FAX

Victorville branch office
14440 Civic Drive, Suite 200
Victorville, CA 92392
(760) 241-6583 TEL • (760) 241-7308 FAX

COLORADO RIVER BASIN REGION (7)
www.waterboards.ca.gov/coloradoriver
73-720 Fred Waring Dr., Suite 100
Palm Desert, CA 92260
E-mail: info7@waterboards.ca.gov
(760) 346-7491 TEL • (760) 341-6820 FAX

SANTA ANA REGION (8)
www.waterboards.ca.gov/santaana
3737 Main Street, Suite 500
Riverside, CA 92501-3339
E-mail: info8@waterboards.ca.gov
(951) 782-4130 TEL • (951) 781-6288 FAX

SAN DIEGO REGION (9)
www.waterboards.ca.gov/sandiego
9174 Sky Park Court, Suite 100
San Diego, CA 92123
E-mail: info9@waterboards.ca.gov
(858) 467-2952 TEL • (858) 571-6972 FAX

★ State Water Resources Control Board (Headquarters)
1001 I Street, Sacramento, CA 95814

State of California
Edmund G. Brown Jr., Governor

California Environmental Protection Agency
Linda S. Adams, Acting Secretary

State Water Resources Control Board
Charles R. Hoppin, Chair

Updated 1/19/2011

Marina West

From: [redacted]
Sent: Thursday, April 19, 2012 7:50 AM
To: Jim Ventura; alan.rasmussen@sbcounty.gov
Subject: Fwd: Fw: A message from the Hi-Desert Water District Board President

jim and alan.

dissolving the colorado region water board does not seem to make sense when you look at water supply in the state. with the colorado river aqueduct one of the two major water suppliers for southern california, this board should be at the top of the "must-save" list in water priority.

eliminating this board and consolidating the governance of this board with a board more than 600 miles that does not share our interests or needs. this decision dismantles the level playing field that protects our region and undermines the water representation/self-govenance of the last amercian frontier, the great california desert, as well as the largest land county in the nation. despite the excuse of being a "smaller" water board, we are not small. this then undescores that we are considered dispensible despite the resources outlined of land area and water suppliers. with this attitude, we cannot feel confident that eliminating the colorado region water board as a cost cutting measure is the correct decision, but it is a political decision. clearly that decision puts our wellbeing and future at risk.

i urge mwa, awac, and the county to rally their political support in sacramento and also join hdwd in staunchly opposing this move by the governor.

c
Claudia Sall

----- Original Message -----
From: Jennifer Cusack
Sent: Tuesday, April 17, 2012 10:44 AM
Subject: A message from the Hi-Desert Water District Board President

Dear Community Leader,

Please see the attached letter for our Board President.

Please call if you have any questions.

Sincerely yours,

Resolution Approved by HDWD
April 18, 2012

Resolution No. 12-08

Resolution of the Board of Directors of the Hi-Desert Water District Opposing the Elimination of the California Regional Water Quality Control Board Colorado River Region #7

Whereas, the Board Hi-Desert Water District (District) is a retail water provider and special district serving the community of 24,000 residents in Yucca Valley, Yucca Mesa and a portion of Joshua Tree, less than 30 miles north of Palm Springs; and

Whereas, the District is within the State Water Resources Board, Regional Water Quality Control Board – Colorado River Region 7, which encompasses a large and unique geographic region including the Salton Sea, Imperial Valley, Coachella Valley, Morongo Basin, Twentynine Palms Marine Base and whose mission it is to protect water quality, preserving water resources and preventing pollution nuisance, contamination, and degradation of the quality of water; and

Whereas, the Governor's proposal to is to eliminate the Regional Board 7 and combine the Morongo Basin with the Lahontan Region; thereby requiring the District to travel further for local representation (by as much as 9 hours), thereby, increasing local costs; and

Whereas, there is not sufficient evidence to warrant this increase of burden and costs to the local agencies and community members; and

Whereas, the District believes it necessary to retain adequate representation on regulatory matters affecting water quality within the District service area;

Now and therefore be it resolved by the Board of Directors of the Hi-Desert Water District, to oppose the elimination of the California Regional Water Quality Control Board – Colorado River Region 7; and

Effective upon adoption.

Adopted by the Board of Directors of the Hi-Desert Water District on April 18, 2012 by the following vote

Ayes:
Noes:
Absent:

Abstain:

Sarann Graham, President of the Board of Directors

ATTEST:

(SEAL)

Ed Muzik, Secretary of the Board of Directors

ITEMS TO BE HEARD

0555 ENVIRONMENTAL PROTECTION AGENCY

California Environmental Protection Agency programs restore and protect environmental quality, and protect public health. The Secretary coordinates the state's environmental regulatory programs and ensures fair and consistent enforcement of environmental law, which safeguards the state's residents and promotes the state's economic vitality. The Budget proposes total funding of $1.54 billion ($43.1 million GF and $1.5 billion other funds) and 4,294 positions for all programs included in this Agency. Total proposed state funds, excluding federal funds, certain non-governmental cost funds, and reimbursements equals $1.3 billion. This represents approximately 1 percent of the State budget.

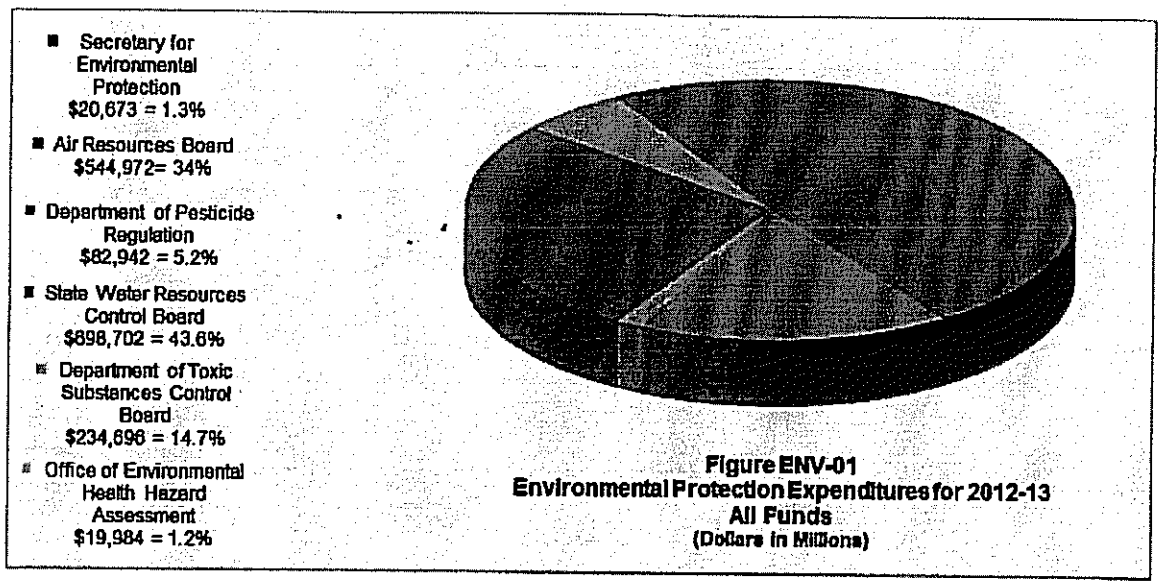


Figure ENV-01
Environmental Protection Expenditures for 2012-13
All Funds
(Dollars in Millions)

Presentation by Secretary Matt Rodriguez

Items Proposed for Discussion. The Governor's Budget proposes trailer bill language to eliminate or consolidate the following agencies under the Secretary for Cal/EPA:

1. **Elimination of Various Underutilized Programs within the Department of Toxic Substances Control.** The Governor's Budget proposes to eliminate the following programs because they have outlived their purposes, are underutilized, or have been superseded by other programs: Expedited Remedial Action Program, Private Site Management Program, California Land Environmental Restoration and Reuse Act Program, Hazardous Waste and Border Zone Property Designations, Abandoned Site Assessment Program, Registered Environmental Assessor Program.

2. **Reduction of the Number of Regional Water Boards.** The Budget proposes to reduce the number of Regional Water Boards by merging two of the smaller existing regional water boards. The proposal also reduces the number of members on the boards from nine to seven.

STAFF COMMENTS

Staff has reviewed the proposals and concur with the Administration's proposals to eliminate or consolidate activities. The Secretary should outline his vision for the Agency and how these eliminations and consolidations fit into the overall Cal/EPA structure and functions.

Staff Recommendation: Approve Governor's Proposals 1-3

BIGHORN DESERT VIEW WATER AGENCY
AGENDA ITEM SUBMITTAL

Meeting Date: April 24, 2012

To: Board of Directors

Budgeted: Yes
Budgeted Amount: est. $93K + EPA share
Cost: On budget

From: Marina D. West

General Counsel Approval: N/A
CEQA Compliance: *June 29, 2010*

Subject: Receive and File Johnson Valley Hydrologic Investigation Report and Authorize Change Order No. 1 to Daniel B. Stephens & Assoc. for time extension until April 24, 2012 at no cost.

SUMMARY

The Johnson Valley Hydrologic Investigation is complete and all findings are summarized in the attached report titled, "Johnson Valley Hydrologic Investigation", April 16, 2012. The Board should receive and file the report to complete the Professional Service Agreement (PSA).

Change Order No. 1 is to extend the PSA completion date from March 31, 2012 to the April 24th Receive and File date, at no cost to the Agency.

RECOMMENDATION

The Board considers taking the following action(s):

1. Receive and file Johnson Valley Hydrologic Investigation Report dated April 16, 2012; and
2. Authorize Change Order No. 1 to Daniel B. Stephens & Assoc. for a time extension until the April 24, 2012 Receive and File date, at no cost to the Agency.

BACKGROUND/ANALYSIS

The existing EPA State Tribal Assistance Grant approved Work Plan Task 10 calls for completion of the *Johnson Valley Hydrologic Investigation*. The Work Plan dates back to 2006 and states the following:

> "Regarding the Johnson Valley Groundwater Basin Hydrologic Investigation, a Conceptual Model and Assessment of Water Supply for the Johnson Valley Area completed in 2007 suggests there are 900 acre feet of unused water in that groundwater basin. Previous studies indicate that there is adequate ground water storage and available groundwater storage capacity for another conjunctive use project. Before planning a groundwater storage project additional studies are needed to better define the characteristics of the basin for the benefit of the region. It will be necessary to conduct geophysical resistivity surveys across the area in order to understand the subsurface geometry, and to install monitoring wells as needed. It also includes ground borings, sampling and analysis activities".

This project was developed to investigate the feasibility of groundwater resources and recharge potential of the Johnson Valley Groundwater Basin. Property for the well site was chosen based upon data analysis provided by Todd Engineers, a need to stay within the boundaries of the Agency and finding a willing seller.

Water level information nearest to the purchased property came from a well drilled in 1980 located approx. 2,000 feet northeast and 60 feet lower in elevation, Well No. 9K1 as depicted on the attached Figures 2 and 3 from the report. Geologic information came from a variety of nearby well logs and generally consists of desert alluvial sediments characterized by interbedded sands, silts, clays and gravels. Water level at 9K1 was 260 feet below ground surface. This well was drilled using the air rotary drilling method which in most cases can provide uncontaminated drill cuttings and hence an indication of the depth of saturated conditions during drilling. No historical production, water level or water quality records or their trends surfaced during 2007 when the Conceptual Model was being developed or during the time this project was being discussed by the Board. While staff never approached the property owner to request access to measure water levels, production or quality, staff remains confident that the property owner would never have provided access to their well to obtain such information for the benefit of this project for the community.

From the available data, the water table at the JVTW1 site was estimated to be 380 (60 ft. higher elevation than 9K1). An additional 60 feet of drilling was expected to achieve at least the same depth as 9K1. Clay was encountered during drilling at 320 ft. and continued to a depth of 460 ft. Clay zones are generally non-producible so perforations were placed above the clay in anticipation that the water level would be close to the historical data obtained from 9K1. Further scrutiny of the 9K1 well log reveals that a sand zone was encountered in the lower 75 feet of that well and that is where perforations were located. JVTW1 produced such little water that operations were halted before water quality analysis could be obtained.

Since Managed Aquifer Recharge projects are not generally located in hydrogeologic settings that lack an existing, pumpable and demonstrated saturated aquifer system. It is not recommended at this site due to the low hydraulic conductivity and the aquifer is thin. However, the total amount of data collected is small and the report makes several recommendations for further assessment of production and recharge potential of the vicinity.

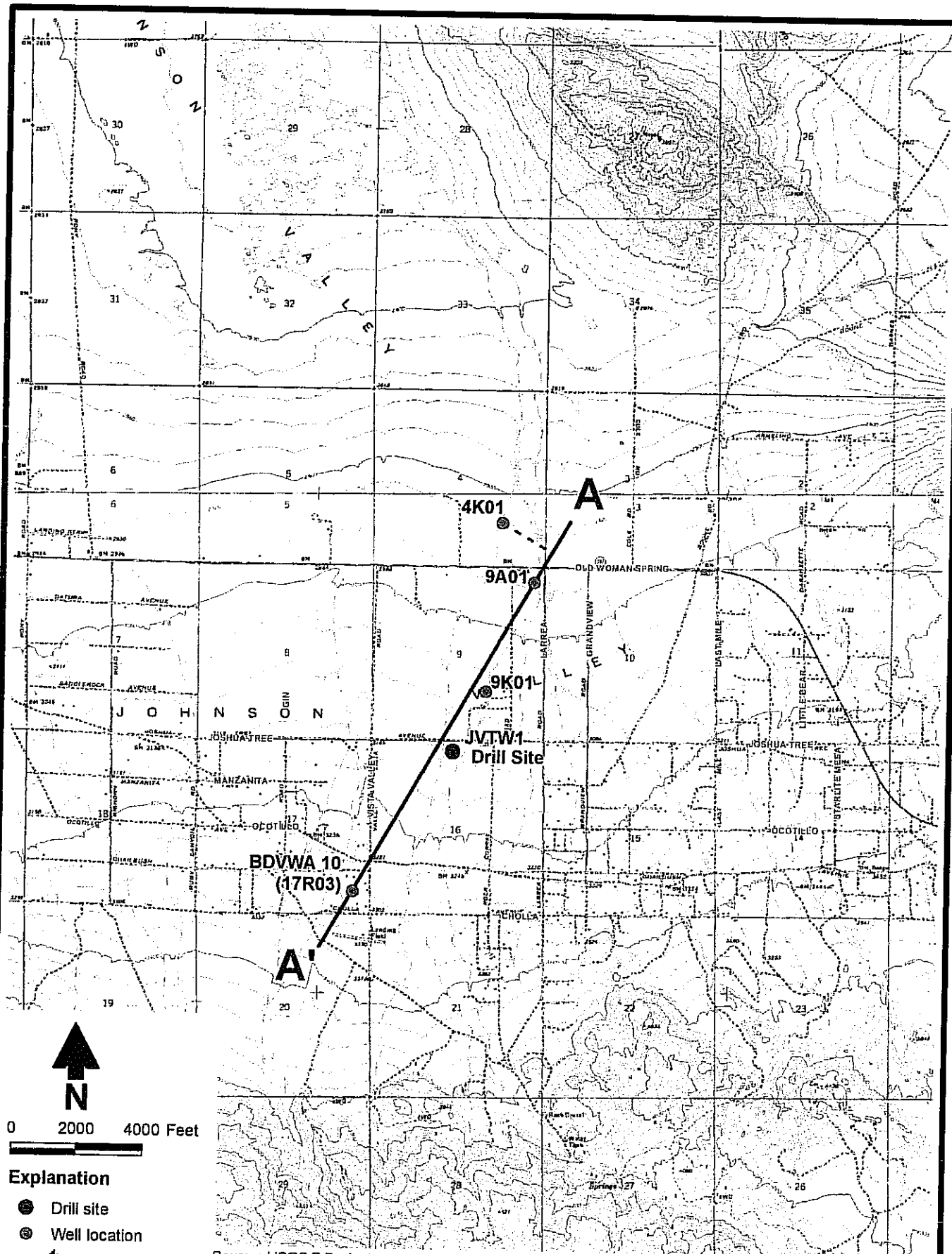
PRIOR RELEVANT BOARD ACTION(S)

11/30/2011 Motion 11-062 Authorize General Manager to execute a Professional Services Agreement with Daniel B. Stephens & Associates, Inc. in the amount of $171,372 for completion of the Johnson Valley Hydrologic Investigation in accordance with the Agency's proposal dated August 11, 2011 and the proposal received from Daniel B. Stephens & Associates, Inc. dated September 9, 2011 and revised cost estimate dated November 16, 2011; and authorize a budget of $93,611 to cover the Agency's projected cost share.

7/22/2011 Motion 11-037 Accept an offer of $4900.00 plus all closing costs estimated at $1,592 to acquire real property, parcel #454-181-06, for the Johnson Valley Hydrologic Investigation monitoring (test) well; and ratify Use of "Office of Real Estate Appraisers", for this property as a Substitute for MAI "Member of Appraisal Institute" appraisal; and authorize the General Manager to execute a sale and purchase agreement approved "As to Form" by the Agency's Legal Counsel

4/26/2011 Motion 11-019: Authorize the General Manager to begin process of acquiring real property for the Johnson Valley Hydrologic Investigation, authorize the General Manager to

execute a MAI (Member of the Appraisal Institute) appraisal, and authorize the General Manager to make an offer, including negotiate price and terms, subject to Board approval.
4/21/2011 Planning/Legislative/Engineering/Grant & Security (PLEGS) Johnson Valley Hydrologic Investigation: Property Acquisition options for construction of a monitoring well in Johnson Valley. Committee recognized it may be in the best interest of the Agency to acquire land for the monitoring well and recommended moving the issue to the full Board for further consideration
10/25/2010 Motion 10-070: Approved staff recommendation to proceed with EPA State and Tribal Assistance Grant (STAG) project: Johnson Valley Hydrologic Investigation.
10/20/2010 Planning/Legislative/Engineering/Grant & Security (PLEGS) Committee *directed staff to bring the status report on the EPA STAG grant to the full board for further* consideration including financial participation in order to proceed with the Johnson Valley Hydrologic Investigation.
6/29/2010 Resolution No. 10R-04 Adopt California Environmental Quality Act (CEQA) Mitigated Negative Declaration (MND) for the Water Infrastructure Restoration Program: Ames/Reche Groundwater Storage and Recovery Program and Pipeline Installation/Replacement Program CEQA MND.
3/23/2010 Motion 10-016: Approved estimated costs of $1,700 for "Johnson Valley Area" Questionnaire regarding property owner interest in pressurized water system.
9/18/2007 Board Workshop to discuss the results of the Basin Conceptual Model and Assessment of Water Supply and Demand for the Ames Valley, Johnson Valley, and Means Valley Groundwater Basins by Kennedy/Jenks/Todd, LLC.
4/24/2007 Motion to accept the Basin Conceptual Model and Assessment of Water Supply and Demand for the Ames Valley, Johnson Valley, and Means Valley Groundwater Basins by Kennedy/Jenks/Todd, LLC.
4/24/2007 Motion to accept Water Master Plan Report by Don Howard Engineering.
12/20/2006 06R-18 Resolution of the Board of Directors of the Bighorn-Desert View Water Agency declaring its intention to draft a Groundwater Management Plan for the Ames/Means/Johnson Valley Groundwater Basins.
3/28/2006 06R-04 Resolution authorizing General Manager to enter Grant Agreement of $477,000 (EPA STAG).



Source: USGS 7.5 minute quads Bighorn Canyon and Old Woman Springs

BIGHORN-DESERT VIEW WATER AGENCY

Site Location Map

Daniel B. Stephens & Associates, Inc.

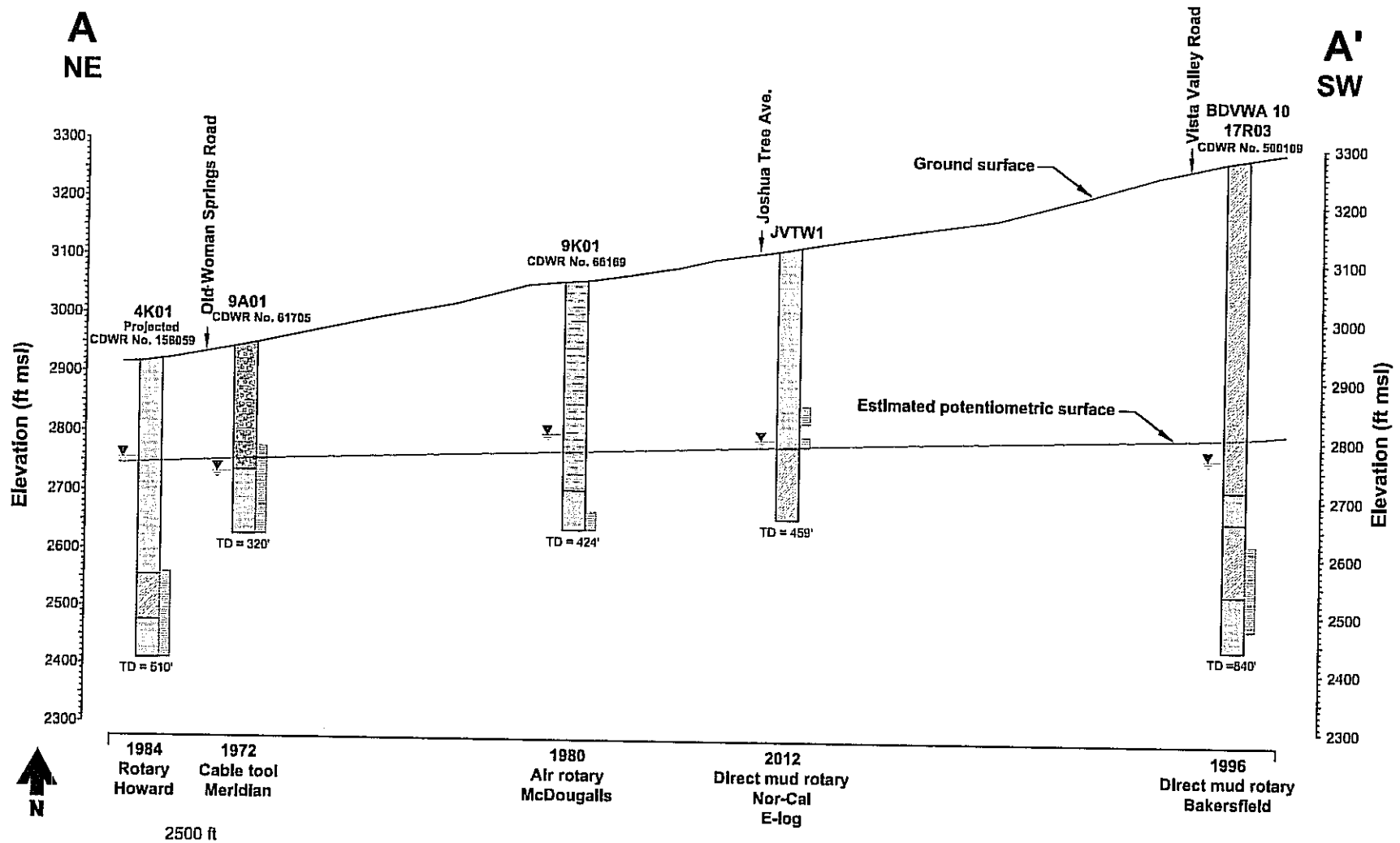
03/26/2012

JN WR11.0186

Figure 2

S:\PROJECTS\WR11.0186_JOHNSON_VALLEY_HYDROLOGIC_INVESTIGATION\GIS\MXDS\FIGURE_02_SITE_LOCATION_MAP.MXD

K:\Projects\Water Resource Services\Public\WR11.0186_Bighorn\VR_Drawings\WR11_0186_03W_BDVWA_cross_sec.dwg



Explanation

- Static water level at time of installation
- Well screen

Lithology

- Clay
- Sand and Gravel
- Sand
- Silt

Well completion notes:

Drilled date	1972
Method	Cable tool
Driller	Meridian

Notes: 1. CDWR = California Department of Water Resources
2. TD = Total Depth

Daniel B. Stephens & Associates, Inc.
3/26/2012
JN WR11.0186

BIGHORN-DESERT VIEW WATER AGENCY
Cross Section

Figure 3

Well Installation Report
Johnson Valley Test Well 1
Johnson Valley, California

Prepared for **Bighorn-Desert View Water Agency**
Yucca Valley, California

April 16, 2012

Daniel B. Stephens & Associates, Inc.
260 Newport Center Drive • Newport Beach, California 92660

Well Installation Report
Johnson Valley Test Well 1
Johnson Valley, California

Prepared for
Bighorn-Desert View Water Agency
Yucca Valley, California

April 16, 2012

Certification
The material and data in this report were prepared under the supervision and direction of the California state licensed professionals listed below, consistent with generally accepted practices of the environmental industry.

David W. Abbott, P.G., C.Hg.
Daniel B. Stephens & Associates, Inc.

PROFESSIONAL GEOLOGIST JOHN J. DODGE No. 6495 STATE OF CALIFORNIA

John J. Dodge, P.G.
Daniel B. Stephens & Associates, Inc.

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Appendix

Well Installation Report
Johnson Valley Test Well 1
Johnson Valley, California

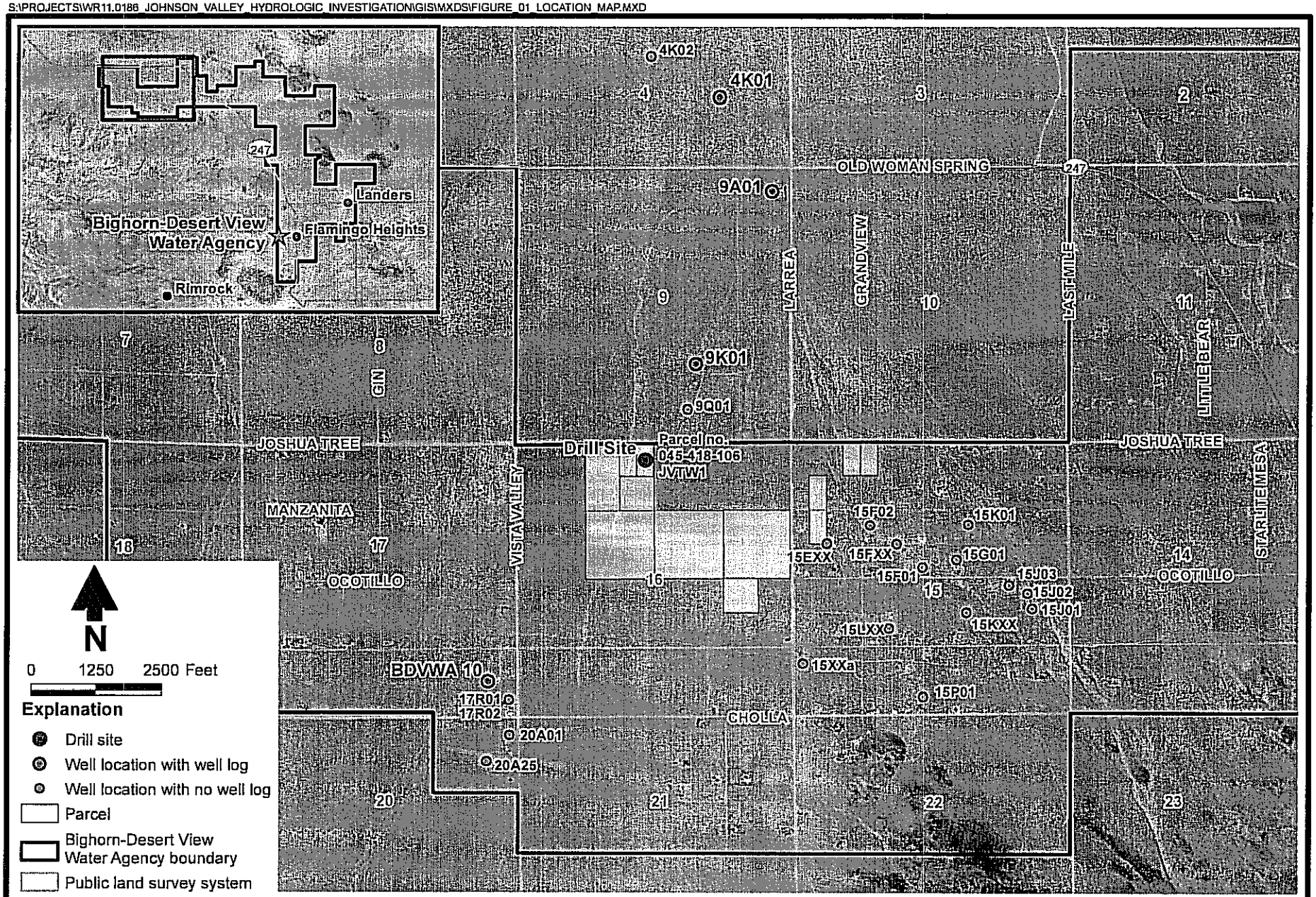
1. Introduction

On August 11, 2011, Bighorn-Desert View Water Agency (BDVWA) circulated a Request for Proposal (RFP) for the Johnson Valley Groundwater Basin Hydrologic Investigation. Proposals were submitted on September 12, 2011. The scope of work specified in the BDVWA RFP included (1) the installation of one permanent 6- to 8-inch-diameter test well to a depth of 400 feet below ground surface on property owned by BDVWA in Johnson Valley, (2) characterization of the vadose zone and saturated zone to a depth of 400 feet beneath the BDVWA-selected site to evaluate a possible managed aquifer recharge (MAR) project in the area, and (3) installation of a security fence around the site. In addition, BDVWA is exploring for a reliable 200-gallon per minute (gpm) potable water supply well to supplement their current water demands in Johnson Valley.

The goal of this project was to determine the potential yield and feasibility of a properly designed and reliable production well at this site that can yield 100 gpm. BDVWA specified and estimated the total depth of drilling at 400 feet but revised that estimate to 450 feet and selected 8-inch-diameter casing during final RFP negotiations in November 2011. Daniel B. Stephens & Associates, Inc. (DBS&A) was awarded the contract on December 1, 2011.

The test well site is located about 24 miles north-northwest of Yucca Valley, California in San Bernardino County in Section 16C of Township 3 North, Range 4 East (3N/4E-16C) of the San Bernardino base and meridian. It is about 15 miles northwest of the BDVWA office, in the northern and western portion of the BDVWA service area (Figure 1). The site (Assessor Parcel Number 045-418-106) is located in Johnson Valley with geographical coordinates of N34.354° and W116.571°. The rural parcel is on the south side of Joshua Tree Road and is halfway between the intersections of Larrea and Vista Valley Roads at an elevation of about 3,120 feet above mean sea level (ft msl).

S:\PROJECTS\WR11.0186_JOHNSON_VALLEY_HYDROLOGIC_INVESTIGATION\GIS\MXDS\FIGURE_01_LOCATION_MAP.MXD



Note: All sections are in Township 3 North Range 4 East of the San Bernardino Meridian and Base.

BIGHORN-DESERT VIEW WATER AGENCY

Location Map

Daniel B. Stephens & Associates, Inc.

03/26/2012 JN WR11.0186

Figure 1

Access to the site is from Highway 247 (Old Woman Highway), about 1 mile north of the test well site. Potable water (used to mix drilling fluid) was pumped from BDVWA well 10 (3N/4E-17R3), which is located about 1 mile southwest of the site near the intersection of Cholla and Vista Valley Roads and currently yields about 55 gpm.

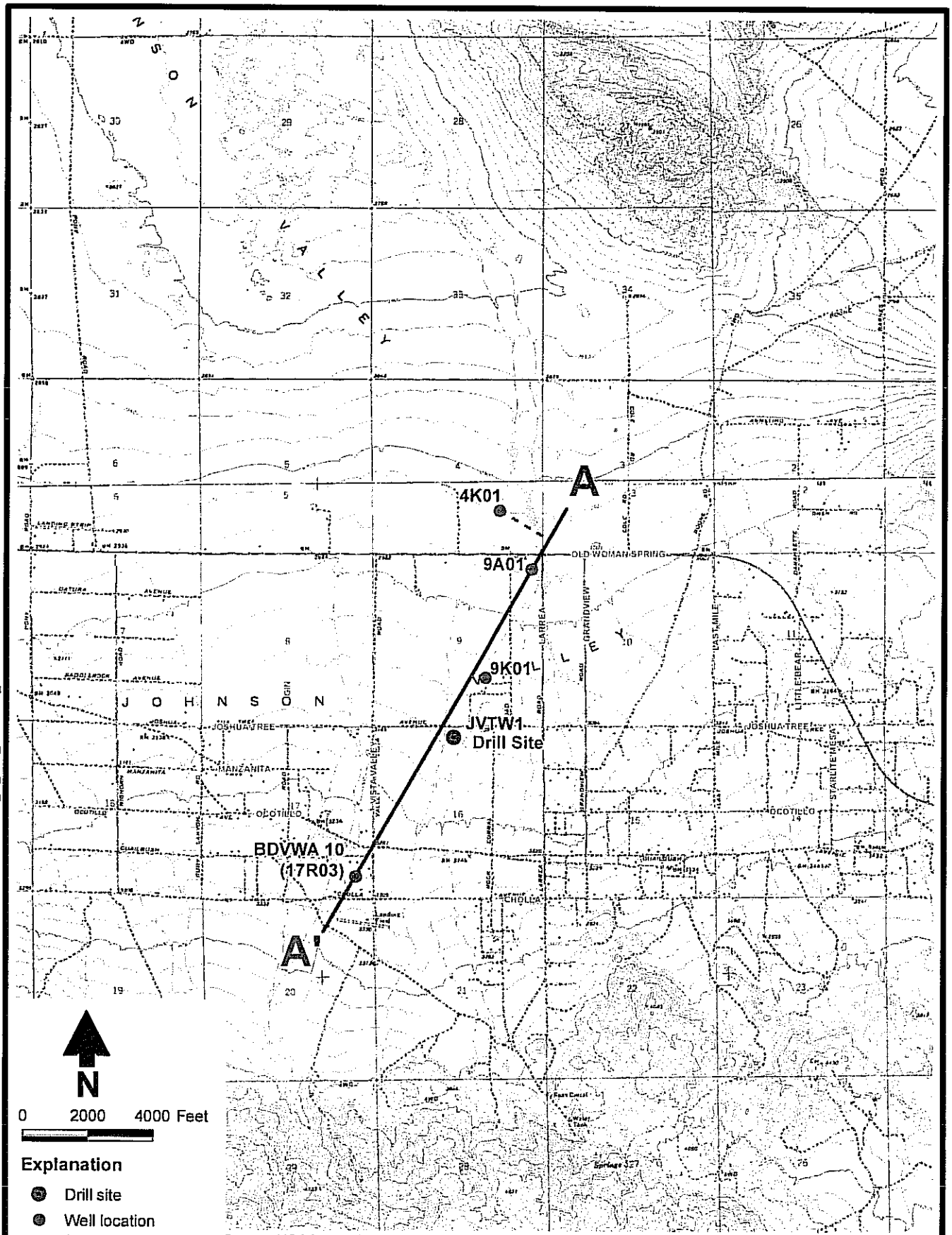
2. Purpose

The purpose of drilling the test well was to characterize the subsurface geology and hydrogeology beneath the site in the southern portion of the Johnson Valley Groundwater Basin, which is also known as the Soggy Lake Subbasin. The resulting characterization will be used to supplement and update hydrogeologic information summarized in the basin conceptual model and assessment report (Kennedy/Jenks/Todd LLC, 2007), to evaluate the potential for a permanent water supply well at this location, and to identify and evaluate the potential for MAR in this area.

An exploration hole was installed using direct mud rotary drilling methods to evaluate the subsurface geology. The exploration hole was to be completed as a permanent 8-inch-diameter test well and, if sufficiently productive, would serve BDVWA as a possible future water supply source. Pumping tests and water quality analyses were originally planned for this project, but were not conducted because following drilling, design and construction, the saturated thickness of the aquifer was thin, resulting in inadequate available drawdown.

3. Hydrogeology

The site is located on a gentle north-sloping alluvial fan composed of sediments transported from the San Bernardino and smaller Bighorn Mountains during infrequent rainfall events. The San Bernardino and Bighorn Mountains reach elevations of 7,512 to 5,894 ft msl, respectively (Figure 2). Annual rainfall is about 6 to 8 inches (Rantz, 1969) on the lower elevations of the alluvial fan. The valley floor ranges in elevation from 3,560 ft msl near the southern foothills to 2,710 ft msl at Melville Lake. A second closed depression (less than 2,760 ft msl) is located about 2 miles west of Means Mountain (3,601 ft msl) before reaching Melville Lake, about 6 miles north of the site.



Source: USGS 7.5 minute quads Bighorn Canyon and Old Woman Springs

BIGHORN-DESERT VIEW WATER AGENCY

Site Location Map

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Figure 2

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Small tributary watersheds and washes from the mountains and hills along the southern perimeter of Johnson Valley flow intermittently northward to Melville Lake in the Upper Johnson Valley area. The valley is filled with up to 1,000 feet (Kennedy/Jenks/Todd LLC, 2007) of unconsolidated alluvial materials derived from the underlying and surrounding bedrock of Mesozoic Granite and Precambrian metamorphic rocks (Jennings et al., 1977). The alluvial fan is a sequence of interbedded clays, silts, sands, and gravels. The alluvial thickness increases with the distance from the mountain front. The test well site is about 2 miles from the foothills of the San Bernardino Mountains.

Alluvial fans are divided into three depositional areas (Reading, 1978; Walker, 1981). The proximal portion of the fan is near the apex or source area near the mountain fronts where sediment textures are generally coarse-grained (Hogan et al., 2004). The distal portion of the fan is located in the downslope direction (near the closed depressions) and contains fine-grained textured sediments. The mid-portion of the fan, where the drilling site is located, contains a mixture of coarse- and fine-grained sediments. The geologic, stratigraphic, and facies sequence of alluvial fans is usually coarsening upwards as the alluvial fan builds out or progrades.

Five anastomosing, interlacing, and bifurcating intermittent washes flow northward (Figure 2). The test well site is located between the two westernmost washes. The southeast termination trace of the concealed and hidden northwest-trending Johnson Valley Fault (not shown on Figure 2), which may affect subsurface hydrogeology, is located about 2 miles northwest of the site (Kennedy/Jenks/Todd LLC, 2007).

Figure 3 shows the northeast-southwest hydrogeologic cross section (A-A') (location shown on Figure 2) that includes four existing wells and the new test well (Johnson Valley Test Well 1 [JVTW1]). The well logs for existing wells 4K1, 9A1, 9K1, and 7R3 are included in Appendix A. Table 1 summarizes the dimensions, designs, and relevant information for these wells. The ground surface of the cross section ranges from about 2,920 to 3,280 ft msl. The topographic map (Figure 2) was used to estimate the surface elevation for the wells. The wells range in depth from 320 (well 9A1) to 840 feet (well 7R3). Screen elevations range from about 2,400 to 2,800 ft msl, and screen lengths range from 40 feet to 150 feet.

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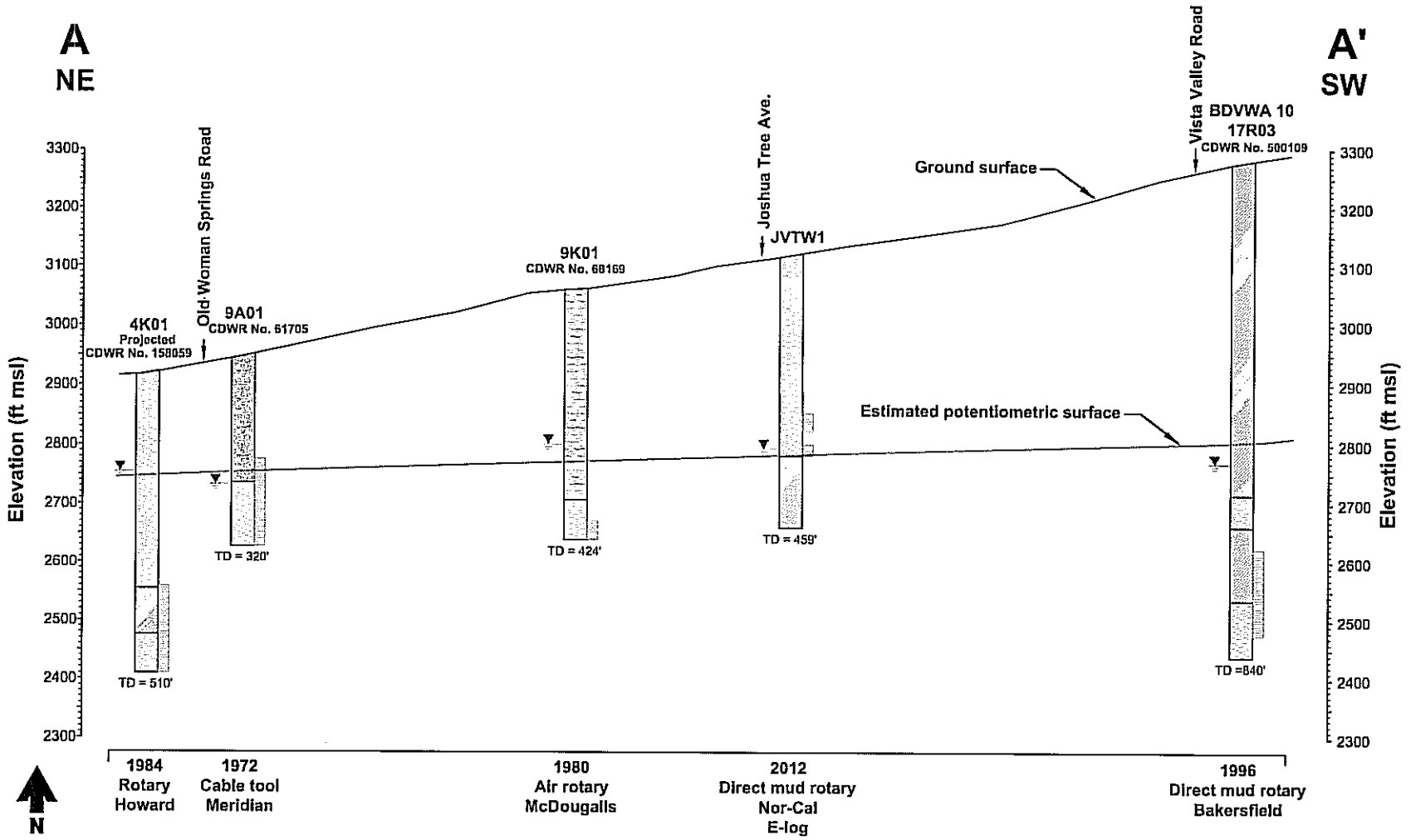

Explanation

- Static water level at time of installation
- Well screen

Lithology

- Clay
- Sand
- Sand and Gravel
- Silt

Well completion notes:

Drilled date	1972
Method	Cable tool
Driller	Meridian

Notes: 1. CDWR = California Department of Water Resources
2. TD = Total Depth

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Cross Section

Figure 3

Table 1. Summary of Well Logs Shown on Cross Section A-A'

CDWR No.	3N/4E [a]	Elevation (ft msl)	Drilling Date	Total Depth (feet)	Completed Depth (feet)	Casing Diameter (inches)	Screen				Static Water Level [b] (ft btoc)	Drilling Type	Driller	Use	Comments
							Interval (ft btoc)		Length (feet)	Type					
							Top	Bottom							
158059	4K1	2,920	Jul-84	510	510	4	360	510	150	Unknown	165	Rotary	Howard	Test well	
61705	9A1	2,950	Jul-72	320	320	8	220	320	100	Perforated	215	Cable	Meridian	Domestic	
68169	9K1	3,060	Nov-80	424	424	6	384	424	40	Slots	260	Air rotary	McDougall	Domestic	
e0145517 [c]	16C1	3,120	Jan-12	459	340	8	260	330	50	Screen	321	Mud rotary	Nor-Cal	Test well	JVTW1
500109	7R3	3,280	Apr-96	840	840	12	650	800	150	Louver	503	Mud rotary	Bakersfield	Domestic	BDVWA Well 10

Note: Well logs shown on cross section A-A' (Figure 3)
[a] Locations shown on Figure 2
[b] On date of installation
[c] Geophysical logs and this report

CDWR = California Department of Water Resources
3N/4E = Township/Range and Section
ft msl = Feet above mean sea level
ft bgs = Feet below ground surface
ft btoc = Feet below top of casing

The non-pumping water levels measured at the time of well construction range from 165 (4K1) to 503 (7R3) feet reflecting the differences in ground surface elevations of the wells. Although these water levels were measured in different years and different seasons, the water table elevation appears to be relatively flat along the cross section and ranges from 2,750 ft msl at 4K1 to 2,810 ft msl at 7R3. The groundwater gradient between 4K1 and 7R3 is about 0.0052 (60-foot difference between water levels ÷ 11,500 feet [the distance between the two wells]) and slopes gently toward the northeast.

4. Test Well Installation

On January 9, 2012, the Department of Public Health, Environmental Health Services of San Bernardino County approved the drilling permit (permit number 201210023 record ID WP7803) for the installation of the test well. The drilling and National Pollutant Discharge Elimination System (NPDES) permits are included in Appendix B. All drilling, well construction, and well development operations were performed by subcontractor Nor-Cal Pump and Well Services, Inc. (Nor-Cal), with Mr. Nar Heer serving as the drilling supervisor. The security fence (400 feet by 6 feet high) was installed by McCullah Fence Company under a subcontract to Nor-Cal.

To provide site-specific data and to determine the thickness and physical characteristics of the underlying sediments, Nor-Cal used a direct circulation mud rotary TH-60 Ingersol Rand rig to drill an uncased mud rotary exploration boring to a depth of 459 feet on January 24, 2012. Data collected from the exploration boring, including a descriptive lithologic log by the field geologist, a driller's log, and geophysical logs, were used to design the test well. The pilot borehole was drilled with a 7.875-inch-diameter drag bit to a depth of 315 feet. The formation became "harder" at 315 feet, so the drilling contractor replaced the drag bit with a tricone roller bit (7.875-inch-diameter) and drilled from 320 to 459 feet; total boring depth was reached after almost 10 hours of drilling.

The boring was drilled using a bentonite-based freshwater fluid system that was mixed sparingly with polymeric additives for filtrate control. Drilling fluid properties (viscosity and weight) were measured to ensure that they remained within the specifications. Viscosity, measured using a marsh funnel, ranged between 32 and 40 seconds, while mud weight, measured using a mud scale, ranged between 70 and 85 pounds per cubic foot. Drilling penetration rates were about

60 feet per hour. After total depth was reached, the drilling fluid was circulated for 2 hours, to allow the removal of all drill cuttings from the boring, to ensure that the full depth of the boring could by logged, and to prepare the exploration hole for geophysical logging.

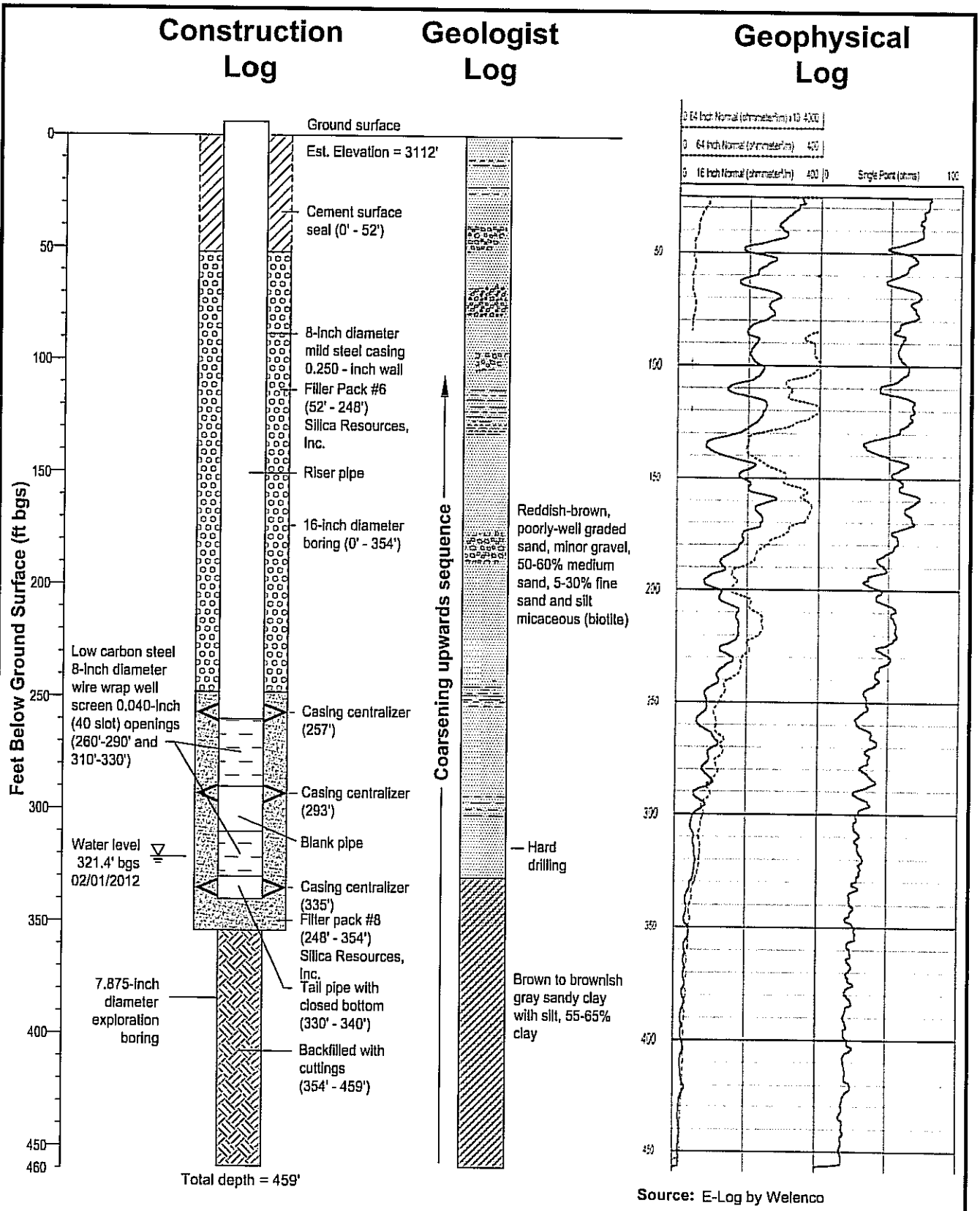
Drill cuttings were collected at 5-foot intervals from 0 to 40 feet and at 10-foot intervals from 40 to 459 feet. Samples of the drill cuttings were collected and stored in plastic compartmentalized containers and described by the on-site geologist. The geologist's log and pictures of the samples are included in Appendix C. The driller's log is in Appendix B. Figure 4 summarizes the geologist's log. Laboratory soil analysis of the samples for vertical and horizontal hydraulic conductivity was not conducted because the drilling method (direct mud rotary) results in poor sample integrity; instead, geophysical logging techniques were used to evaluate the relative permeability of the geologic formations. The observed sediments included reddish brown, poorly graded to well graded sand and some gravel from ground surface to about 330 feet. A thick sequence of brown to brownish gray sandy and silty clay underlies the sand and gravel unit.

5. Geophysical Logging

Welenco of Bakersfield, California conducted the geophysical logging over an elapsed time of 3 hours on January 24 and 25, 2012. Two separate sondes were used for logging: the standard suite of geophysical logs (Electric log [E-Log], including spontaneous potential [SP], 16-inch, 64-inch, and point resistivity, and natural gamma radiation log) and the induction log. Appendix D includes all the geophysical logs, and Figure 4 shows selected E-logs. All geophysical logs correlate well with the field geologist's log.

The SP log determines changes in lithology by measuring the naturally occurring electrical potentials that exist at contacts between different types of geologic materials. These changes result from chemical and physical changes that occur between a clay layer and a sand layer (Poehls and Smith, 2009). Excursions of the log to the right (less negative) indicate fine-grained and clay-textured sediments.

The 16-inch, 64-inch, and single point E-logs measure the resistivity of the geologic materials at various horizontal distances from the sonde. The low resistivity measurements (below 350 feet)



Source: E-Log by Welenco

Notes: 1. Drilled direct mud rotary with bentonite.
Nor-Cal Pump and Well Drilling Inc., Yuba City, CA.
2. Not drawn to scale.

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Johnson Valley Test Well 1

Figure 4

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indicate clay textures and sediments; this is called the clay baseline and ranges from about 30 to 40 ohm-meter^2 per meter. Resistivity log excursions or peaks to the right of the clay baseline indicate silt to coarse-grained sediments. Excessively high and persistent resistivity values indicate unsaturated materials (occurring between ground surface and at least 200 feet for this exploration hole). High resistivity values (which occurred between 200 and 330 feet) may indicate silt to coarse-grained saturated sediments.

The natural gamma radiation log measures the radiation decay of daughter products emitted by potassium-40 and the uranium- and thorium-decay series. In most unconsolidated formations, high gamma radiation emissions (excursions to the right) suggest fine-grained materials (i.e., clay) while low radiation emissions (excursions to the left) indicate coarse-grained materials. Descriptions provided on the geologic log for JVTW1 suggest significant amounts of muscovite (and biotite) in the sand and gravel units. High biotite concentrations in sands and gravels can produce high gamma radiation emissions, which can affect the customary interpretation of the log.

These geophysical logs consistently indicate a stratigraphy that is comprised of a thick unsaturated unit from ground surface to about 250 to 300 feet, a low-permeability and thin saturated zone from 300 to 330 feet, and a thick clay layer below 330 feet.

The induction log evaluates the stratigraphic sequence in the unsaturated zone (Asquith and Gibson, 1982; Keys, 1989; Welenco, 1994) and helps to identify thin clay layers that could impede vertical percolation or migration of water recharged at the surface. It is an electromagnetic technique that measures resistivity or conductivity to induce eddy currents in the rock or sediments around a borehole (Keys, 1989). The induction log for JVTW1 (Appendix D) suggests that no significant or thick clay layers exist that would impede vertical percolation of groundwater to the water table. Also note that the induction and resistivity logs suggest an upward coarsening stratigraphic sequence.

6. Well Design and Construction

Because no water level data were available from other nearby wells, the static water level was unknown at this site. In addition, the water level in the well could not be measured during mud

rotary drilling, and in general, the geophysical logs were unable to identify the depth of the water table. BDVWA estimated that the depth to water at this site would range between 200 and 250 feet. Because of the unknown water level depth, a flexible well design was used so that the test well could be modified later if the water level was at shallower depths.

Based on the BDVWA water level estimate and information from the geologist's, driller's, and geophysical logs, two potential water bearing zones were identified for screen settings:

- The interval from 310 to 330 feet was selected because (1) the underlying thick clay layer would impede vertical percolation of water and would tend to pond groundwater on top of the clay, and (2) the small E-log resistivity "kick" to the right indicated a silty-sand layer. Experience suggests that this zone would be limited to low well yields and potentially poor water quality.

- The interval from 260 to 290 feet was selected because (1) BDVWA indicated that the water level could range between 200 and 250 feet, and (2) the apparent "kick" of the E-log to the right suggested that these sediments would be more permeable than those from 310 to 330 feet.

The interval from 200 to 240 feet was also considered but was not selected because of the uncertainty in the depth to the static water level. However, the well design specifically incorporates a coarser filter pack in this interval that would allow for potential future design modifications (downhole perforations) if the static water level is found to be above 200 feet or shallower. The test well design specified the installation of blank casing between the two screens so that the lower zone (310 to 330 feet) could be isolated and separated from the upper zone (260 to 290 feet) if the water yield or quality was poor in the deeper screen.

DBS&A provided the preliminary well design to the drilling contractor on January 25, 2012 and instructed the driller to ream the boring to 354 feet with a 16-inch-diameter drilling bit. Exploration borehole reaming began on January 26, 2012 and was completed the following day. The 16-inch-diameter bit allowed for the installation of 8-inch-diameter mild steel casing, low-carbon steel wirewrap screen, and the associated filter pack.

Well construction began on the morning of January 27, 2012. JVTW1 was constructed with 8-inch-diameter 0.250-inch-wall mild steel casing. Two low-carbon steel 0.040-inch (40-slot) wirewrap screens were placed at the selected intervals and separated with a 20-foot blank pipe. Appendix B includes the well screen specifications. A 10-foot tailpipe with a closed bottom was installed on the screen assembly. Three centralizers were used to center the casing and screen assembly in the borehole. The well screen assembly was lowered down the reamed boring with 260 feet of mild steel riser pipe.

On January 27, 2012, installation of the filter pack envelope began using a tremie pipe. Chlorine was added to the filter pack for disinfection. Two filter packs were used so that if the static water level was higher than expected, the 200- to 240-foot zone could be perforated and developed to evaluate that zone. Silica Resources Inc. (SRI) Number 6 filter pack was used from 50 to 280 feet and SRI Number 8 was used from 280 to 340 feet. Appendix B includes the filter pack specifications. The Number 8 filter pack allows about 10 percent passing through a 40-slot screen. The Number 6 filter pack is coarser than the Number 8 and should minimize filter pack entering the well if downhole perforations between 200 and 240 feet are recommended. On January 28, 2012, the cement seal was installed between the 16-inch-diameter borehole and the 8-inch-diameter casing from ground surface to 50 feet. No additional work was conducted on the well for 48 hours.

7. Well Development

Well development is conducted to remove residual drilling fluids from the well casing, borehole annulus, filter pack, and surrounding aquifer materials (Driscoll, 1986). During filter pack installation, water is circulated within both the filter pack and the test well to dilute and remove the drilling fluid. Well development procedures are designed to repair drilling- and construction-induced damages to the borehole/filter pack/well screen interface and are aimed mainly at removing drilling fluids and cakes from the interface and improving the permeability of the near-well materials to restore well performance (Detay, 1992). Well development also improves the flow of water to the well by removing fine-grained material in the formation and the filter pack surrounding the well, increasing the natural porosity and permeability of the formation in the vicinity of the borehole and removing the filter cake or drilling fluid film that may have invaded the formation (Poehls and Smith, 2009).

Well development was conducted on JVTW1 using a combination of methods, including bailing, airlifting, and swabbing. Development began on January 30, 2012 using a 10-gallon bailer lowered down on the sand line to remove drilling fluids. All fluid and water levels are measured from the top of the casing. Initially the fluid level in the test well was about 52 feet. After 3.5 hours of bailing at an average rate of 3 gpm, the fluid level dropped to 175 feet and appeared to stabilize at that depth.

Development with airlift equipment was used next to continue the process and evaluate potential well yields. The airlift system consisted of the following components: 250 feet of airline, 4-inch-diameter eductor, and 300-pound per square inch compressor. Airlifting was conducted for about 1 hour and resulted in pumping rates of less than 0.5 gpm. The fluid level in the well had dropped to about 320 feet. Because insufficient water was available in the well to allow additional well development, a volume of water (about 800 gallons) from BDVWA well 10 was introduced into JVTW1. Water levels were measured after the water was added, and the water level dropped from an initial depth of 21 to 90 feet in about 12 hours, suggesting that a low-permeability formation is present at the well screens. This drop in water level indicates that the formation and/or filter pack accepted about 180 gallons in 12 hours or about 0.25 gpm.

On January 31, 2012, development activities continued with swabbing, which loosens sand and mud from the borehole and filter pack. The swab block was composed of two 6-inch-diameter steel plates and one 8-inch-diameter, 1-inch-thick rubber disk sandwiched between the two steel plates. About 3.5 inches of fine-grained sediment settled to the bottom of the well after about 1.25 hours of swabbing. The screen sections were swabbed for 2.7 hours, after which time the depth to water was 94.5 feet.

Airlifting resumed for about 1 hour. The well yield was estimated at about 0.5 gpm and the water level depth was 244.5 feet. The airlift tool was lowered to 300 feet and air-lifting resumed at that depth, but no water was pumped from the well. The water level was re-measured at 281.6 feet. Work stopped on the well to allow the water level to recover for about 20 hours; the water level had dropped to 285.7 feet on February 1, 2012.

On February 1, 2012, a 1.5-horsepower Centipro submersible pump was installed in JVTW1 to continue well development. The pump was set at 326.5 feet near the bottom of the test well. Water levels and discharge were measured during the pump development process. Flow was measured using a 5-gallon bucket and watch.

Initially, the water level was measured at 285.67 feet. The pump was turned on, and the well became "dry" after about 30 minutes of pumping. The pumping rate ranged between 1 and 5 gpm, while the water level dropped from 285.67 to 325.83 feet. The pump was turned off and water level recovery was measured for about 2 hours, at which time the water level had recovered to 325.08 feet, a net recovery of less than 1 foot. The total volume of water removed from the well during development and pumping was approximately 600 gallons, about 200 gallons less than the volume of water placed in the well.

Because the well yield was small (less than 1 gpm), the saturated thickness of the aquifer was small (3 feet), the volume of water removed was less than the volume recharged, and the water had elevated turbidity, it was decided that no water quality samples would be collected from the test well as originally planned. The drilling contractor was instructed to remove the pump, demobilize all equipment and materials from the site, and secure the site.

8. Managed Aquifer Recharge

Artificial recharge or MAR is a groundwater management strategy to recharge an aquifer during times of surplus water for later beneficial use during times of shortage. Surface water is purposely transferred into the groundwater system at rates greater than natural recharge (Poehls and Smith, 2009). Two methods are used to achieve artificial recharge of groundwater: (1) spreading basins, which allow the water to percolate to the water table beneath the footprint of the basin, and (2) recharge wells, which inject water at a specific depth interval and location in an aquifer. Both spreading basins and wells can be used to recharge unconfined aquifers; wells must be used to recharge confined aquifers. Aquifer storage and recovery (ASR) wells are a special type of recharge well that is used for the storage of water in suitable aquifers during times when water is available and recovery of the water from the same well during times when it is needed (Pyne, 1995, 2005).

The feasibility and success of a MAR project depends on answering questions related to regional, site-specific, policy- and regulatory-oriented, institutional, and project-specific characteristics and objectives:

- Can the source, accessibility, amount, and quality of water to be recharged meet project objectives, regulatory policy goals, and institutional agreements?
- Is a convenient and economical source of acceptable water quality available to recharge?
- Is the regional hydrogeology favorable for storage and recovery?
- Is the site hydrogeology favorable for percolation of water through the vadose zone using spreading basins or for injection of water using recharge wells?
- Can the water be stored, contained, and recovered economically from the aquifer?
- Can the water be recovered in acceptable quantities and quality to meet project goals?

JVTW1 was installed in part to provide a preliminary evaluation of the subsurface geology and hydraulic characteristics of the underlying vadose zone and aquifer system for consideration of MAR. Although many of the questions posed above and their associated components cannot be answered without additional and focused investigations, the preliminary findings and information derived from the JVTW1 exploration program can help to design future investigations and move the feasibility process forward. Among the more important findings from this investigation are the following:

- A sequence of upward coarsening sands and gravels was encountered from ground surface to about 330 feet. The induction log did not identify any significant clay layers beneath the JVTW1 site to a depth of 330 feet. However, depending on the borehole and fluid conditions and the instrument sensitivity, the induction log cannot detect clay layers that are thinner than 1 to 4 feet. Interpretation of the induction log and observation of drill cuttings indicate that these sediments have lithologic characteristics

and hydraulic properties that are likely to be favorable for percolation of water through the vadose zone, although no data exist to quantify the vertical and horizontal hydraulic conductivity.

- The relatively thick vadose zone (300 feet) provides opportunity for groundwater storage.

- A relatively thick, low-permeability clay layer encountered in JVTW1 at a relatively shallow depth (330 feet) would impede leakage and vertical downward escape of the recharge water.

- The static water level was deeper (326.8 feet below ground surface as of March 9, 2012) than expected. The original estimate of the static water level ranged between 200 and 250 feet below ground surface.

- The estimated saturated thickness of the aquifer is about 3 feet (depth to the top of the clay [330 feet] minus the static water level [326.8 feet]).

- The estimated long term-yield of JVTW1 is less than 1 gpm.

To summarize, this investigation determined that the thick vadose zone provides plenty of storage volume at this site and that the lithology and stratigraphy are favorable for percolation and MAR. Some of the answers to many of the questions listed above about the feasibility of MAR are provided in the conceptual model report (Kennedy/Jenks/Todd LLC, 2007). However, many questions still remain unanswered for a Johnson Valley MAR project. For example, the lateral groundwater containment features are largely unknown from the existing data. Existing well drillers' logs available for review for this investigation provide some initial data to characterize the area but detailed hydrogeologic data from the drillers' logs are lacking.

The basin conceptual model (Kennedy/Jenks/Todd LLC, 2007) provides an initial understanding of the regional and local hydrogeology for Johnson Valley. However, data gaps still exist relating to the understanding of Johnson Valley hydrogeology for MAR projects. Additional valley-wide and site-specific hydrogeologic investigations (including exploration drilling) are needed to evaluate the lateral extent of the aquifers and underlying clay, the regional

groundwater containment features, and the vertical and horizontal variations of the unsaturated/saturated hydraulic conductivities of the underlying sediments. In addition, water quality studies are needed to evaluate the geochemical compatibility between potential recharge water with local groundwater and lithology.

In addition to adequate percolation rates and sufficient storage space for the recharge water, project-specific groundwater recovery rates are also required to meet MAR project goals. MAR projects are typically not constructed in hydrogeologic settings that lack an existing, pumpable, and demonstrated saturated aquifer system. At this site, the relatively deep water level optimizes the available storage volume; but the 3-foot-thick saturated zone overlying the relatively shallow clay layer restricts the volume of water that can be efficiently removed by a recovery well. Water recharged by a spreading basin would percolate to the existing water table to form a recharge mound beneath the basin and then spread outward radially. The recharged water would flow away from the mound, forming a thin ("pancake") aquifer, and would likely escape the influence of an ASR well. Well yields and groundwater recovery rates would depend on a relative combination of values for hydraulic conductivity and saturated thickness.

During MAR, the thickness of the saturated zone beneath the spreading facility or near the recharge well will increase and provide more available drawdown for operating the recovery wells. However, groundwater within this engineered saturated zone or dead storage zone (similar to what occurs at surface water reservoirs) is not fully recoverable. Dead storage is the volume of water in a reservoir below the lowest controllable level (Wilson and Moore, 1998) and represents permanent loss of recoverable water. Additional water losses occur from groundwater escaping the influence of pumping wells. Also, the amount of recoverable water will be reduced by specific retention (which can range from 4 percent for boulders to 32 percent for fine sand [Johnson, 1967]). For example, if 2 inches of water is required to saturate a foot of silty sand with an assumed porosity of 50 percent and the specific yield (porosity less the specific retention) is assumed to be 25 percent, then only 1 inch of the originally percolated water would be recoverable.

The basin conceptual model report (Kennedy/Jenks/Todd LLC, 2007) summarizes three high desert groundwater basins (Ames Valley, Means Valley, and Johnson Valley) and points out the paucity of data in Johnson Valley. Additional site- and basin-specific investigations are needed

to characterize and evaluate the hydrogeology of the Soggy Lake Subbasin as a potential MAR site using spreading basins, recharge wells tapping the water table, or ASR wells installed in the deeper aquifer system.

The development of MAR projects is usually divided into three or more phases that each build upon the previous phase. For evaluation of a MAR project in the Soggy Lake Subbasin at least three phases are suggested:

- The Phase 1 investigation would (1) incorporate the conceptual model (Kennedy/Jenks/ Todd LLC, 2007), (2) identify a scope of work to address data gaps, (3) assemble and evaluate all existing hydrogeologic information specifically for the Soggy Lake Subbasin, (4) review and update regulatory and institutional controls, and (5) evaluate engineering options and community issues related to the proposed project.

- The Phase 2 investigation would include installation of a network of basin- or subbasin-specific exploration/monitoring wells to better define the regional and local shallow and deep hydrogeology of the Soggy Lake Subbasin and address data gaps identified in Phase 1. Phase 2 data would include improved definitions of the subsurface geology on a local scale, basin and stratigraphic dimensions, hydraulic and physical parameters of the unsaturated and saturated sediments, and groundwater and recharge water quality data. Phase 2 would also provide recommendations for Phase 3.

- The Phase 3 investigation would include the installation of pilot-scale projects to demonstrate the feasibility of MAR in a selected area.

Development of a MAR facility using the water table aquifer underlying the JVTW1 site poses hydrogeological and technical challenges. However, JVTW1 could be deepened and drilled to bedrock as a first step in evaluating the feasibility of planning a MAR project in the deeper aquifer system that is pumped by BDVWA well 10. The deeper exploration boring would help to determine the thickness and characteristics of the unconsolidated sediments overlying the basement rock.

9. Recommendations

Based on the results obtained from the drilling of well JVTW1, DBS&A offers the following recommendations and ideas:

- Water levels should be measured periodically to evaluate and determine whether the static water level changes over the next few months.

- The geologic and hydrogeologic data from JVTW1 should be incorporated into the regional conceptual model (Kennedy/Jenks/Todd LLC, 2007) and used as a reference during future supply well drilling projects.

- BDVWA should consider the cost/benefits of deepening JVTW1. The test well could be deepened to tap the aquifer pumped by BDVWA well 10 (Well 17R03 on Figure 3). The cap on the bottom of the casing would be drilled out and drilling would be continued to bedrock, at an elevation of about 2,400 ft msl or a depth of about 800 feet (about 340 feet of additional drilling). Downhole geophysical logging would be conducted in the deepened borehole below 459 feet. Additional casing (maximum 4-inch-diameter) would be installed within the existing casing (8-inch-diameter) to extend JVTW1 to the interval that is screened by BDVWA well 10.

- Additional well development using other techniques could be conducted on JVTW1 to determine if sufficient water is available to convert the test well into a low-yield domestic water supply. However, due to the relatively small saturated interval overlying the low-permeability clay unit, additional development is not recommended unless the water level rises, as it would be unlikely to yield significantly different results.

- A more focused Phase 1 investigation should be conducted to evaluate MAR feasibility if BDVWA plans to pursue artificial recharge and groundwater recovery in the Soggy Lake Subbasin. The subbasin-specific Phase 1 investigation may include reconnaissance-level geophysical surveys to supplement the conceptual model report (Kennedy/Jenks/ Todd LLC, 2007).

- If BDVWA plans to pursue MAR in the Soggy Lake Subbasin, DBS&A recommends deepening JVTW1, which could serve as an initial project to explore and evaluate the aquifer that is pumped by BDVWA well 10. Planning an MAR project at this site in the water table aquifer may be challenging and is not recommended because the hydraulic conductivity is low and the aquifer is thin.

References

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Appendix A

Well Completion Reports for Existing Nearby Wells

Johnson Valley #4

MOJAVE WATER AGENCY
16849 D ST., VICTORVILLE, CA 92392
(619) 245-7717

N O T I C E O F I N T E N T
to extract or divert water

1. This report must be filed with the Agency at least 15 days prior to commencement of drilling any new well or diverting water within the Agency Boundary. In emergency cases the Agency may be notified by telephone prior to drilling.

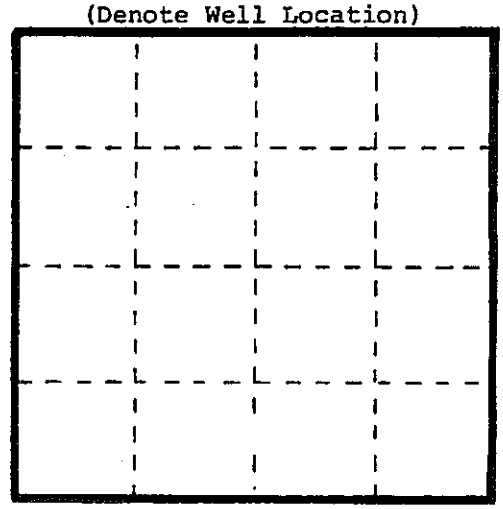
PROPERTY OWNER Southern California Edison ADDRESS P.O. Box 800, Rosemead, CA 91770
DRILLER Howard Pump, Inc. ADDRESS 28753 W. Hwy 58, Barstow, CA 92311
DRILLER LICENSE# 281814 DATE July 1984 CLASS C-57, SC-34, SC-61

2. LOCATION OF WELL OR DIVERSION:

Township 3N Range 4E

Section 4 Parcel# 454-271-02

SECTION DIAGRAM
(Denote Well Location)



3. TYPE OF WELL CONSTRUCTION:
   Rotary drill (x)
   Cable tool ( )
   Other ( )

4. PROPOSED USE OF EXTRACTED WATER:
   (If for irrigation, note the number of acres irrigated.)
   test

5. PROPOSED DATE OF DRILLING: _____ PROJECTED DATE OF COMPLETION: _____

6. FAILURE TO FILE THIS NOTICE IS PUNISHABLE BY A CIVIL FINE OF NOT EXCEEDING FIVE HUNDRED DOLLARS ($500). Both the person owning the land or an interest therein and the person constructing the well or diversion facility shall be assessed under this subdivision. (Section 1 or Section 39, Mojave Water Agency Law, Chaper 2146 of the Statutes of 1959)

7. VERIFICATION:

This report is true to the best of my knowledge and belief.

OWNER _____ DATE _____

This report is true to the best of my knowledge and belief. This well (or diversion) will be drilled or constructed under my jurisdiction.

Howard Pump, Inc. 9-17-84
DRILLER DATE

( ) CHECK HERE FOR ADDITIONAL FORMS

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

RECEIVED
SEP 17 1984
MOJAVE WATER AGENCY

Do not fill in
No. 158059

Notice of Intent No. 200682
Local Permit No. or Date 06258404
State Well No. 3N/4E-4K1
Other Well No.

(1) OWNER: Name Southern California Edison
Address P.O. Box 800
City Rosemead, CA Zip 91770

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number 4
Well address if different from above
Township 3N Range 4E Section 4
Distance from cities, roads, railroads, fences, etc.

454-271-02

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size Silica Sand
Diameter of bore 7 7/8"
Packed from 20 to 520 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☒

From ft.	To ft.	Dia. In.	Gage or Wall
0	510	4	1/4

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
360	510	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing mud

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth ft. Depth of completed well ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	10	Sand.
10	20	Sand, gravel, and pebbles.
20	30	Pebbles, sand, & gravel.
30	40	Course sand, pebbles, sand.
40	60	course sand, pebbles.
60	80	Med. sand.
80	90	Med. sand.
90	100	Med. to course sand.
100	110	White silty clay, course sand.
110	120	Med to course sand, some gravel, pebbles.
120	160	Med. sand.
160	170	165' water level.
170	180	Med. sand.
180	190	Course to med sand, brown clay, silty.
190	200	Course sand, silty, gravel.
200	210	Sandy silt, gravel, course sand.
210	230	Med sand.
230	240	Silty sand,
240	280	Silty sand.
280	290	Fine to med sand.
290	300	Fine to med sand.
300	320	Med sand, some silt.
320	340	Silty sand, gravel.
340	370	Sandy clay, silt.
370	390	80% brown clay, 20% med sand.
390	398	95% brown clay, 5% med sand.
398	410	50% brown clay, 50% med to course sand.
410	430	Silty clay to med sand.
430	440	Silty clay to sand.
440	450	Silt, med sand, some clay.
450	465	Silty med to course sand & silt.
465	500	Silty med sand.
500	520	gravel, silt, and sand.

Work started 19 Completed 19

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Gregg Brown (Well Driller)
NAME Howard Pump, Inc. (Person, firm, or corporation) (Typed or printed)
Address 28753 W. Hwy 58
City Barstow, CA Zip 92311
License No. 281814 Date of this report 7-17-84

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

11/6/92, Rec

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

State Well No. 3N/4E-4K-1 B&M

WELL INDEX

Location No. .....
Serial or Ventura No. .....
Local or Riv. No. .....
Bulletin 39-J No. .....
Other No. .....
.....

Data Available	*Filed Under*
Log	↘
Water Analyses	
Water Levels	—
Prod. Records	

Well Use Test Well
Well Type New

DWR 1058 (Rev. 6/70)

County San Bernardino
Areal Designation .....
Areal Code No. .....

Well Condition .....
Ref. Pt. Elev. ..... ft.
Effective date .....
Ground Elev. ..... ft.

Original Well Depth 510 ft.
Well Soundings .....
Casing: Dia. 4 in., Length 510 ft.
Perf. .....
360'-510'
Aquifer(s) .....
Record: Begins ....., Ends .....

Agency Code No. .....
Pump Serial No. .....
Motor Serial No. .....
Electric Meter No. .....

Data Program .....

Well Location Map No. .....
Name .....

Well Location .....
.....
.....
.....

Plotted: By ..... Date 1985

Owner's Name Southern California Edison
.....
Address P.O. Box 800
Rosemead

Tenant .....

Driller's Name Howard Pump Inc.
Address 28753 W. Hwy 58
Barstow
Date Well Completed 1984

Remarks .....
.....
.....
.....
.....
.....

454 283 20

3N/4E - A

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do Not Fill In

Nº 61705

State Well No. [illegible]

Other Well No.

ORIGINAL
File with DWR

JUL 31 1972

(1) OWNER:

Name S.D. Rosenburg
Address 3313 - Fircraft
Covina, Ca. 91723

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any

Township, Range, and Section T.P. 3N, R 4E, N E¼, N E ¼, N E¼

Distance from cities, roads, railroads, etc. S ½, 5 acres
454 - 283 - 20

(3) TYPE OF WORK (check):

New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [X] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [ ]
Cable [XX]
Other [ ]

(6) CASING INSTALLED:

STEEL: OTHER:
SINGLE [X] DOUBLE [ ]

From ft.	To ft.	Diam.	Gage or Wall
0	320	8 5/8	10

If gravel packed

Diameter of Bore	From ft.	To ft.

Size of shoe or well ring: 8 x 8 x 5/8 Size of gravel:

Describe joint But weld

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
220	320	8	8	1/8 X 6

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [X] No [ ] To what depth ft.

Were any strata sealed against pollution? Yes [ ] No [X] If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing Back fibl with drilling fluid

(9) WATER LEVELS:

Depth at which water was first found, if known 215 ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing 215 ft.

(10) WELL TESTS:

Was pump test made? Yes [ ] No [X] If yes, by whom?

gal./min. with ft. drawdown after hrs.

Temperature of water Was a chemical analysis made? Yes [ ] No [X]

Was electric log made of well? Yes [ ] No [X] If yes, attach copy

(11) WELL LOG:

Total depth 320 ft. Depth of completed well 320 ft.

Formation: Describe by color, character, size of material, and structure

0 ft. to 215 ft.
Sand, gravel and brown clay.
215 feet to 320 feet (water)
Coarse sand & gravel laminated in brown clay.

CONFIDENTIAL - NOT FOR PUBLIC RELEASE

Work started 7/7 1972, Completed 7/21 1972

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Meridian Drilling & Well Supply
(Person, firm, or corporation) (Typed or printed)

Address Box 489
Yucca Valley, Ca. 92284

[SIGNED] [signature]
(Well Driller)

License No. 242028 Dated 7/22, 1972

SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-68)

11-6-92. CDW

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

State Well No. 3N/4E-9A-1 B&M

WELL INDEX

Location No. .....
Serial or Ventura No. .....
Local or Riv. No. .....
Bulletin 39-J No. .....
Other No. .....
.....

Data Available	*Filed Under*
Log	~~N~~ .....
Water Analyses	.....
Water Levels	~~N~~ .....
Prod. Records	.....

Well Use Domestic
Well Type New

DWR 1058 (Rev. 6/70)

County San Bernardino
Areal Designation .....
Areal Code No. .....

Well Condition .....
Ref. Pt. Elev. ..... ft.
Effective date .....
Ground Elev. ..... ft.

Original Well Depth 320 ft.
Well Soundings .....
Casing: Dia. 8 5/8 in., Length 320 ft.
Perf. .....
.....
Aquifer(s) .....
Record: Begins ....., Ends .....

Agency Code No. .....

Pump Serial No. .....
Motor Serial No. .....
Electric Meter No. .....

Data Program .....

Well Location Map No. .....
Name .....

Well Location .....
NE¼ NE¼ NE¼ S½ Sec 9
5 acres
.....
Parcel 454 283 20
Plotted: By ..... Date 1985

Owner's Name S.D. Rosenburg
.....
Address 3313 Fircraft
Covina

Tenant .....

Driller's Name Meridian Drilling + Well
Address Box 489
Yucca Valley
Date Well Completed 21 July 1972

Remarks .....
.....
.....
.....
.....
.....

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 068169
State Well No. 03N/04E09K01
Other Well No.

Notice of Intent No.
Permit No. or Date

(1) OWNER: Name Dor othy J. Dosch
Address 50220 Saddle Rock Rd. Box 788A
City Yucca Valley, Ca. Zip 92284

(2) LOCATION OF WELL (See instructions):
County SB Owner's Well Number
Well address if different from above
Township 3N Range 4E Section 9
Distance from cities, roads, railroads, fences, etc.
459-592.cc

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☒
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from to ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	424	6	.188	384	424	hawk slots 3&5 rows

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known approx. 260 ft.
Standing level after well completion " 260 ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 424 ft. Depth of completed well 424 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	210	firm silty clayey sand with a few roc
210	350	soft clayey sand
350	415	cemented fine grained D G carrying considerable water
415	424	silty san d
		shoe

Work started 11-4 1980 Completed 11-7 1980

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Bill McDougall by Gert (Well Driller)
NAME McDougalls Well Drilling, Inc. (Person, firm, or corporation) (Typed or printed)
Address P.O.Box 351
City Lucerne Valley, Ca. 92356 Zip
License No. 332221 Date of this report 11-7-80

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

11/10/92

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

State Well No. 03N/04E-09 K01 B&M

WELL INDEX

Location No. .....
Serial or Ventura No. .....
Local or Riv. No. .....
Bulletin 39-J No. .....
Other No. WDL 068169
.....

Data Available — *Filed Under*

Log ....
Water Analyses ....
Water Levels ....
Prod. Records ....

Well Use Domestic
Well Type New

DWR 1058 (Rev. 6/70)

County 36
Areal Designation .....
Areal Code No. .....

Well Condition .....
Ref. Pt. Elev. ..... ft.
Effective date .....
Ground Elev. 3020 ft.

Original Well Depth 424 ft.
Well Soundings .....
Casing: Dia. 6 in., Length 424 ft.
Perf. 188 → 384
.....
Aquifer(s) .....
Record: Begins ..... , Ends .....

Agency Code No. .....
Pump Serial No. .....
Motor Serial No. .....
Electric Meter No. .....

Data Program .....

Well Location Map No. .....
Name Big Horn

Well Location .....
.....
.....
.....
.....
Plotted: By ..... Date .....

Owner's Name Dorothy J. Dosch
.....
Address 5022.0 Saddle Rock Rd.
Box 788A Yucca Valley, CA 92284

Tenant .....

Driller's Name M.C. Dougall's Well Drilling
Address .....
.....
Date Well Completed 11-7-80

Remarks APN 454-542-04
.....
.....
.....
.....
.....

TRIPLICATE
Owner's Copy
Page 1 of 3

STATE OF CALIFORNIA
WELL COMPLETION REPO
Refer to Instruction Pamphlet

No. 500109

DWR USE ONLY — DO NOT FILL IN
03N/04E/17R03
STATE WELL NO./STATION NO.
LATITUDE / LONGITUDE
APN/TRS/OTHER

Owner's Well No. Johnson Valley Well 10
Date Work Began 2-1-96, Ended 4-20-96
Local Permit Agency San Bernadino Dept. of Environmental Health Services
Permit No. 01319650V Permit Date 1-31-96

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (FT.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	10	black clay
10	20	black clay
20	30	black clay
30	40	black clay
40	50	black clay
50	60	black clay
60	70	black clay
70	80	black clay
80	90	black clay
90	100	black clay
100	110	black clay
110	120	black clay
120	130	black clay
130	140	black and gray clay
140	150	black clay
150	160	black and gray clay
160	170	black grayish clay
170	180	black clay
180	190	black clay
190	200	black clay
200	210	black clay
210	220	black clay
220	230	black clay
230	240	black clay
240	250	black clay and a little sand
250	260	black clay and a little sand
260	270	gritty black clay
270	280	gritty black clay (started sample on gad)
280	290	gritty black clay
290	300	gritty black clay

TOTAL DEPTH OF BORING ___ (Feet)
TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name Bigelorn-Desert View Water Agency
Mailing Address P.O. Box 3838
Landers CA 92285-0838
CITY STATE ZIP

WELL LOCATION

Address Airport Rd. & Quail Bush Rd.
City Johnson Valley CA 92285
County San Bernadino
APN Book 454 Page 301 Parcel 35 73
or Township 3W Range 4E Section 17
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
Old Woman Springs Rd.
Valley Vista Rd.
WEST
EAST
Quail Bush Rd.
Cholla Rd.
SOUTH
Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

RECEIVED
APR – 6 1996

ACTIVITY (✓)

X NEW WELL
___ MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
X Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Direct Rotary FLUID Ben Gel.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 503' (FT.) & DATE MEASURED 45-96
ESTIMATED YIELD* 2.3 (GPM) & TEST TYPE constant
TEST LENGTH 12 (Hrs.) TOTAL DRAWDOWN 47 (Ft.)
110 GPM
** May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
+5'	650'	20"	X					12"	1/4"	N/A
650'	800'	20"		X			fullflo	12"	1/4"	.070
800'	840'	20"	X					12"	1/4"	N/A

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE SIZE)
0	50	X			
50	840				6 x 12

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
1600 E. California Ave. Bakersfield, CA 93307
ADDRESS CITY STATE ZIP
Signed ___ DATE SIGNED 4405376
WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

DWR 188 REV. 7-90 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy
Page 2 of 3

STATE OF CALIFORNIA
WELL COMPLETION REPO
Refer to Instruction Pamphlet

No. 500110

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. Johnson Valley Well 10
Date Work Began 2-1-96 Ended 4-20-96
Local Permit Agency San Bernadino Dept. of Environmental Health Services
Permit No. 013196501V Permit Date 1-31-96

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
300 310	gritty gray clay
310 320	gritty gray clay
320 330	gritty gray clay
330 340	gray clay
340 350	gray clay
350 360	gray chanky clay
360 370	gray clay
370 380	gray clay
380 390	grey clay
390 400	gray little chunky clay
400 410	gray clay
810 420	thin gray clay
420 430	gray clay
430 440	gray clay
440 450	thin gray clay
450 460	gray clay
460 470	gray clay
470 480	gray milky clay
480 490	thick gray clay
490 500	gray clay
500 510	gray clay
510 520	grayish clay
520 530	gray clay
530 540	gray clay
540 550	gray clay
550 560	gray clay/little silty sand
560 570	gray bluish sand
570 580	gray bluish sand
580 590	gray bluish sand
590 600	gray bluish sand

TOTAL DEPTH OF BORING ___ (Feet)
TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name Big Horn-Desert View Water Agency
Mailing Address
CITY STATE ZIP

WELL LOCATION

Address Airport Rd. & Quail Run Rd.
City
County San Bernadino
APN Book 454 Page 301 Parcel 35 73
or Township 3N Range 4E Section 17
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
WEST EAST
SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY (Describe Procedures and Material Under "GEOLOGIC LOG")
PLANNED USE(S) (✓)
___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD ___ FLUID ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___
ESTIMATED YIELD* ___ (GPM) & TEST TYPE ___
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE SIZE)

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

1600 E. California Ave. Bakersfield, CA 93307
ADDRESS CITY STATE ZIP

Signed ___ DATE SIGNED ___
(WELL DRILLER/AUTHORIZED REPRESENTATIVE)

440537
C-57 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy
Page 3 of 3

STATE OF CALIFORNIA
WELL COMPLETION REPO
Refer to Instruction Pamphlet

No. 500111

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. Johnson WELL 10
Date Work Began 1-1-96 Ended 4-20-96
Local Permit Agency San Bernadino Dept. of Environmental Health services
Permit No. 01319650V Permit Date 1-31-96

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (FT.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
600	610	gray bluish clay
610	620	gray clay
620	630	gray clay
630	640	gray clay
640	650	gray clay
650	660	gray clay
660	670	gray clay
670	680	gray clay
680	690	gray clay
690	700	gray clay
700	710	gray clay
710	720	gray slushy clay
720	730	gray slushy clay
730	740	gray clay
740	750	gray clay/little sand
750	760	gray clay/ little sand
760	770	gray clay/alot of sand
770	780	gray clay/alot of sand
780	790	gray clay/alot of sand
790	800	gray clay/alot of sand
800	810	gray clay/alot of sand
810	820	gray clay/alot of sand
820	830	gray clay lots of sand
830	840	

TOTAL DEPTH OF BORING ___ (Feet)
TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name Big Horn-Desert View Water Agency
Mailing Address
CITY STATE ZIP

WELL LOCATION

Address Airpoet Rd. & Quail Bush Rd.
City
County San Bernadino
APN Bk 454 Pg 301 Pcl 35 73
or Township 3W Range 4E Section 17
or Latitude ___ DEG ___ MIN ___ SEC NORTH Longitude ___ DEG ___ MIN ___ SEC WEST

LOCATION SKETCH

NORTH / WEST / EAST / SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)
___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD ___ FLUID ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___
ESTIMATED YIELD* ___ (GPM) & TEST TYPE ___
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 1600 E. California Ave. CITY Bakersfield, STATE CA ZIP 93307
Signed ___ DATE SIGNED ___
WELL DRILLER/AUTHORIZED REPRESENTATIVE
C-57 LICENSE NUMBER 440537

DWR 188 REV 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Appendix B

JVTW1 Well Completion Report and Construction Information

The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0145517

Page 1 of 1

Owner's Well Number 1

Date Work Began 01-23-2012 Date Work Ended 02-02-2012

Local Permit Agency SAN BERNARDINO CO. ENVIRONMENTAL HEALTH DEPT.

Permit Number 20120100023 Permit Date 01-09-2012

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method ROTARY Drilling Fluid MUD

Depth from Surface Feet	to Feet	Description: Describe material, grain size, color, etc
0	2	SAND
2	337	SAND - SILTY BROWN
337	467	CLAY W/ SILT-GRAYISH

Total Depth of Boring 467' Feet

Total Depth of Completed Well 350' Feet

Well Owner

Name BIG HORN DESERT VIEW WATER AGENCY

Mailing Address 622 S. Jemez Trail

City YUCCA VALLEY State CA Zip 92284

Well Location

Address Joshua Tree & Larrea Roads

City Yucca Valley County San Bernardino

Latitude 34 Deg. 21 Min. 08.95 Sec. N Longitude 116 Deg. 34 Min. 17.44 Sec. W

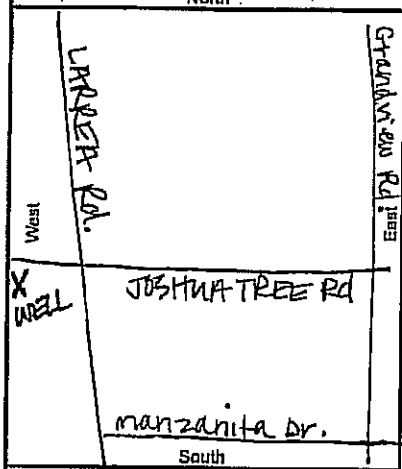
Datum Decimal Lat. Decimal Long.

APN Book Page Parcel 0454181D5

Township 03 Range W 04 Section E 16

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete. See attached

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
◉ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield* 0-1/2 (GPM) Test Type Constant rate

Test Length 4 1/2 (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size If Any (Inches)
-1	260	16"	Blank	Low Carbon Steel		8"	—	—
260	290	16"	Screen	Low Carbon Steel	.250	8"	Wire Wrap	0.040
290	310	16"	Blank	Low Carbon Steel		8"	—	—
310	330	16"	Screen	Low Carbon Steel	.250	8"	Wire Wrap	0.040
330	340	16"	Blank	Low Carbon Steel		8"	—	—

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	53	Cement	10.3 sac
53	247	Filter Pack	SRI #6
247	350	Filter Pack	SRI #8

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name NOR-CAL PUMP & WELL DRILLING, INC.
Person, Firm or Corporation

1325 BARRY ROAD YUBA CITY CA 95993
Address City State Zip

Signed
C-57 Licensed Water Well Contractor

02/08/2012 908591
Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Roscoe Moss Company

We Make Water Work Worldwide

4360 Worth St.
Los Angeles, CA 90063, U.S.A.
Phone: (323)263-4111 Fax: (323)263-4497

January 25, 2012

Norcal Pump and Well Drilling, Inc.
1325 Barry Road
Yuba City, CA 95993

Attn: Harri Heer

Re: Yucca Valley Test Well

Casing Submittals

Please accept this letter as our Submittal for the Casing Materials required for the above referenced job. Roscoe Moss Company will supply the following:

1. 8 5/8" OD X .188" Low Carbon Steel, Blank Casing. Well casing shall be manufactured in accordance with applicable parts of ASTM A 139-B. Welding shall be by the automatic submerged-arc process using at least one pass on the inside and one pass on the outside. Steel from which the casing is manufactured shall be low carbon steel. Casing shall be 8 5/8 inches outside diameter and .188 inches in wall thickness.

2. 8.625" OD Low Carbon Steel Continuous Wire Wrap Screen. Well screen shall be manufactured in accordance with the aforementioned casing requirements:

Screen Details	
Nominal Diameter (in.)	8.63
Screen length	10' or 20'
Slot size (in.)	0.040
Wire width (in.)	0.146
Wire altitude (in.)	0.215
Wire base (in.)	0.040
Rod diameter (in.)	0.177
Rod count (ea)	44
Weight (lb/ft)	13.84
Length of weld ring (in)	14.00
Collapse strength (psi)	414
Safe hanging weight (lbs)	11,362
Transmitting capacity @0.1 (gpm/ft)	21.79
Transmitting capacity @1.5 (gpm/ft)	326.92
Open area (%)	21.51
Open area (sq. in.)	70

Actual mill certifications can be supplied with the delivery of your order, by request. Roscoe Moss certifies that the products listed meet all manufacturing requirements as set forth in the project specifications. If you have any questions please don't hesitate to call.

Best Regards,

Walter Genie
Inside Sales Manager

SRI SUPREME

DATE:

OPENING MICRON	OPENING INCHES	STANDARD SIEVE	% RET. 3/4"	% RET. 5/8"	% RET. 1/2"	% RET. 3/8"	% RET. 1/4"	% RET. #8
37500	1.5	1 1/2"						
25000	1	1"	0.0%					
19000	0.75	3/4"	13.6%					
16000	0.625	5/8"	52.4%	0.0%				
12500	0.5	1/2"	83.0%	3.4%	0.9%	0.0%		
9500	0.375	3/8"	99.0%	75.4%	34.7%	28.0%		
6300	0.25	1/4"		99.6%	99.6%	89.0%	0.1%	
4750	0.187	#4		99.8%		100.0%	26.0%	0.0%
4000	0.157	#5					46.0%	2.7%
3350	0.132	#6					65.0%	22.4%
2800	0.11	#7					85.0%	67.5%
2360	0.0937	#8					90.0%	87.3%
2000	0.0787	#10					100.0%	97.7%
1700	0.0661	#12						99.4%
1400	0.0555	#14						
1180	0.0469	#16						
1000	0.0394	#18						
850	0.0331	#20						
710	0.0278	#25						
600	0.0234	#30						
500	0.0197	#35						
425	0.0165	#40						
355	0.0139	#45						
300	0.0117	#50						
250	0.0098	#60						
212	0.0083	#70						
180	0.007	#80						
150	0.0059	#100						
106	0.0041	#140						
75	0.0029	#200						
PAN	PAN	PAN						

COMMENTS:

[redacted]

SRI SUPREME

DATE:

OPENING MICRON	OPENING INCHES	STANDARD SIEVE	% RET. #8	% RET. #12	% RET. #16	% RET. #20	% RET. #30	% RET. #50
37500	1.5	1 1/2"						
25000	1	1"						
19000	0.75	3/4"						
16000	0.625	5/8"						
12500	0.5	1/2"						
9500	0.375	3/8"						
6300	0.25	1/4"						
4750	0.187	#4						
4000	0.157	#5						
3350	0.132	#6	0.2%					
2800	0.11	#7	1.5%					
2360	0.0937	#8	15.6%					
2000	0.0787	#10	51.5%					
1700	0.0661	#12	80.0%	0.1%	0.0%			
1400	0.0555	#14	98.8%	9.6%	3.3%			
1180	0.0469	#16	99.9%	38.6%	13.6%			
1000	0.0394	#18		88.0%	28.5%	0.5%		
850	0.0331	#20		95.2%	46.3%	7.8%		
710	0.0278	#25		100.0%	75.8%	37.3%	0.0%	
600	0.0234	#30			88.7%	58.6%	0.2%	
500	0.0197	#35			97.9%	81.3%	15.2%	
425	0.0165	#40			99.5%	90.1%	50.3%	0.7%
355	0.0139	#45				96.6%	71.8%	3.2%
300	0.0117	#50				99.7%	88.6%	20.6%
250	0.0098	#60					94.7%	47.3%
212	0.0083	#70					99.4%	63.4%
180	0.007	#80						79.9%
150	0.0059	#100						88.8%
106	0.0041	#140						98.0%
75	0.0029	#200						
PAN	PAN	PAN						

COMMENTS:

ONTARIO VICTORVILLE SAN BERNARDINO

County of San Bernardino
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SERVICES

RECEIPT FOR SERVICES

RECEIPT # 96627

DATE 1/9/2012 SUPERVISORIAL DISTRICT (circle one) 1 2 3 4 5

RECEIVED BY Amanda Stringer

RECEIVED FROM Daniel Stephens & Associates INC

ADDRESS 6020 Academy Rd NE Ste 100

CITY ST ZIP Albuquerque NM 87109

PAID BY

CASH $ _____

CHECK (# 9248) $ 269.00

TOTAL $ 269.00

DESCRIPTION Well APN 045418105

FACILITY NO	CITY CODE	QTY	P/E	SR#	PROGRAM	REVENUE	AMOUNT
045418105		1	4520	54046	5500	9800	269.00

510123 Receipt for Services.INDD

TOTAL $ 269.00

01-16858-611 Rev. 9/05
5100.008.H62

DISTRIBUTION: White - Customer Canary - FAS Green - FAS Pink - Office

SR 540446

DO NOT FILL IN	
Permit Number	2012010023
Record ID	WP 7803
Expiration	07-10-12
FF	
FA	
SN	

County of San Bernardino
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SERVICES
385 N. Arrowhead Ave., 2nd Floor
San Bernardino, CA 92415-0160
(909) 884-4056
www.sbcounty.gov/dehs

WELL PERMIT
(Please Print)

DO NOT FILL IN	
Date	01-09-12
Amount $	269-
Check #	91248
Receipt Number	96627
Paid by	DANIEL STEPHENS & ASSO
City Code	48

1. OWNER: Name Bighorn Desert View Water Agency
   Site Address S/O JOSHUA TREE RD
   City Yucca Valley Zip 92284-1440
   Mailing Address 622 S Jemez Trail
   City Yucca Valley Zip 92284-1440
   Telephone Number (760) 364-2315

2. WELL DRILLER: Nor-Cal Pump & Well Drilling, INC.
   Business Name
   01/16/2012 *Start Date* 02/03/2012 *Completion Date*

3. INTENDED WELL USE (check):
   ☐ Agricultural ☐ Horizontal ☒ Test
   ☐ Cathodic ☐ Monitoring/Observation ☐ Dairy
   ☐ Ind/Domestic ☐ Community/PWS/City ☐ Other

4. TYPE OF WORK (*check*):
   ☒ New ☐ Reconstruction ☐ Destruction

Items 6 through 9 to be estimated for new wells, exact for all other wells

5. ANNULAR SEAL: Seal Depth 50 ft.
   Furnished by: ☐ Owner ☒ Contractor
   ☐ Driven Comductor Dia. _____ in., Wall (Gage)_____
   ☒ Sealing Material Cement/Grout, Thickness 2 in.

6. DEPTH OF WELL (feet):
   Proposed 450 Existing _____
   DIAMETER OF BORE (in.): 12 3/4"

7. CASING INSTALLED:
   ☒ Steel ☐ Plastic ☐ Other

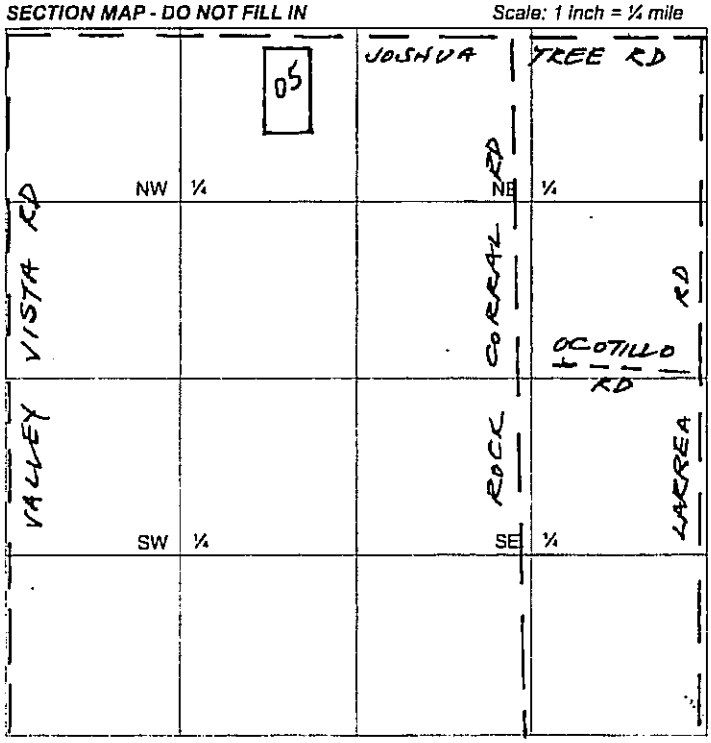
From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	450	8"	.250

   Gravel Pack: ☒ Yes ☐ No
   From 50 to 450 ft.

8. PERFORATIONS (*if applicable*):
   From 380 to 450 ft.
   Pumping rate (gpm) _____

9. SEALED ZONES (*if applicable*):
   From _____ to _____ ft.

SECTION MAP - DO NOT FILL IN *Scale: 1 inch = ¼ mile*



10. LOCATION INFORMATION 4484(4575)
   (a) TOWNSHIP:
   Tier 03 (N)S Range 04 (E)W Section 16
   (b) **Assessor's Parcel No.** 045418105-0000
   (c) Latitude and Longitude
   Lat: 34 °, 21 ', 08.95 "(N)S
   Long: 116 °, 34 ', 17.44 " N/S
   (d) Solid or Liquid Disposal Site within Two Miles
   ☐ Yes ☒ No
   Location _____

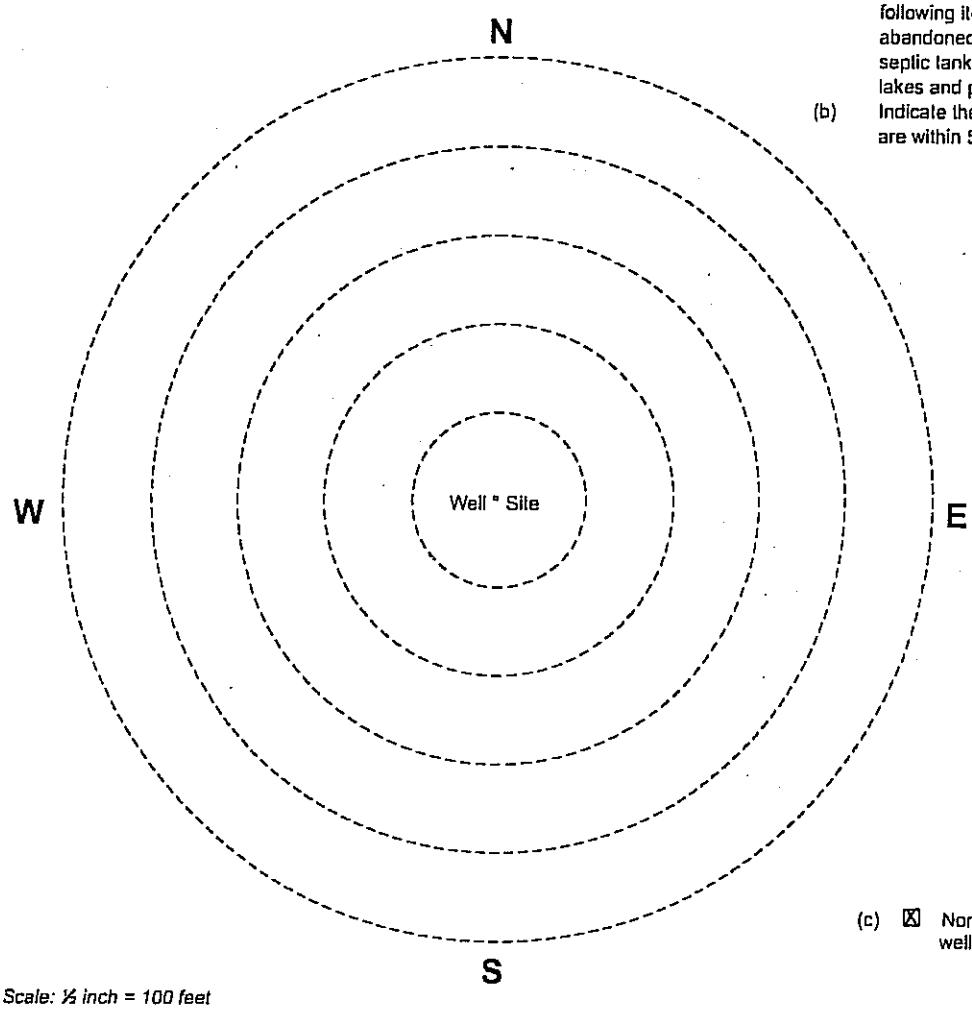
DO NOT FILL IN	
Seal	
Cap	
Check Valve	
Electricals	
Stab	
Tag	
Building & Safety Notified	

Assessor's Parcel No. 045418105 - 0000

11. PLOT PLAN:

(a) In perspective to the well site, sketch and label the following items: well lot property lines, other wells (include abandoned wells), sewage disposal systems (sewers, septic tanks, leaching fields, seepage pits, cesspools), lakes and ponds, watercourses and animals or fowl kept.

(b) Indicate the distance, in **feet**, of any of the following which are within 500 ft. of the well site:



Other _____

Sewers _____

Septic tanks _____

Leaching fields _____

Seepage pits _____

Cesspools _____

Lakes and ponds _____

Watercourses _____

Animal or fowl kept _____

(c) ☒ None of the above are within 500 feet of the well site.

Scale: ½ inch = 100 feet

12. I have read this application and agree to comply with all laws regulating the type of work being performed

C-57 Contractor's Signature _____ NAR HEER, CED Date 1-3-2012

342

County Registration No. _____ California License No. #908591 C57, C61, D21

DISPOSITION OF PERMIT

(For Department Use Only)

☐ Sent to Water Agency for review.

☐ Water Agency conditions or recommendations attached.

☐ Denied

☑ Approved subject to the following:

A.☑ Notify the Department, Safe Drinking Water Program, (909) 387-4666, twenty-four (24) hours in advance to make an inspection of the following operations:

☐ Prior to sealing of the annular space or filling of the conductor casing.

☒ After installation of the surface protective slab ~~and pumping equipment.~~

☐ During destruction of wells, prior to pouring the sealing material.

B.☑ Submit to the Department, within thirty (30) days after completion of work, a copy of:

☑ Water Well Driller's Report ☐ Bacterial Analysis ☐ Inorganic Chemical Analysis

☐ Radiological Analysis ☐ General Mineral ☐ Organic Chemical analysis ☐ General Physical

Comments WELL NOT APPROVED FOR USE WITH SOLAR PANELS OR SOLAR PANEL PROJECTS.

California Regional Water Quality Control Board
Colorado River Basin Region

73-720 Fred Waring Drive, Suite 100, Palm Desert, California 92260
(760) 346-7491 • FAX (760) 341-6820
http://www.waterboards.ca.gov/coloradoriver

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

September 19, 2011

Marina Dee West, General Manager
Bighorn Desert View Water Agency
622 S. Jemez Trail
Yucca Valley, CA 92284

Dear Ms. West:

SUBJECT: NOTICE OF APPLICABILITY FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY, BOARD ORDER NO. 2003- 0003-DWQ(25)

Regional Water Board staff has reviewed your Notice of Intent (NOI) requesting enrollment under State Board General Waste Discharge Requirements Order No. 2003-0003-DWQ for discharges from test well drilling and development. The project, described as a monitoring and production test well, is located at Larrera Road and Joshua Tree Lane, Johnson Valley, San Bernardino County, T3N, R4E, Section 16 SBB&M, Assessor's Parcel Number 454-181-06. The land owner is identified as Bighorn Desert View Water Agency.

The Water Quality Control Plan for the Colorado River Basin (Basin Plan) designates Beneficial Uses, establishes Water Quality Objectives and contains implementation programs to achieve those objectives. Board Order 2003-0003-DWQ designates prohibitions, discharge specifications and provisions to ensure compliance with those objectives.

The Regional Water Board finds that your project meets the requirements for enrollment under the subject Order. This letter constitutes your Notice of Applicability.

Sincerely,

Robert C. Perdue

Robert Perdue
Executive Officer
Colorado River Basin
Regional Water Quality Control Board

JC/tab

File: WDID 7A 36 0121 001, Bighorn Desert View Water Agency, 03-03-DWQ(25)

Bighorn-Desert View Water Agency

Board of Directors
Terry Burkhart, President
Michael McBride, Vice President
David Larson, Director
Judy Corl-Lorono, Director
J. Dennis Staley, Director

Marina D West, P.G., General Manager

Agency Office
622 S. Jemez Trail
Yucca Valley, CA 92284-1440

760/364-2315 Phone
760/364-3412 Fax

www.bdvwa.org

A Public Agency

March 29, 2012

Ms. Maribel Rodriguez
Colorado Regional Water Quality Control Board
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

RE: 2012 1st Quarter Monitoring Report
Bighorn-Desert View Water Agency APN 454-181-06
Board Order No. 0303DWQ25
WDID 7A 36 0121 001

Dear Ms. Rodriguez:

During the 1st Quarter of 2012 the Agency did complete the drilling and construction of a test well at the location of the permitted facility. Unfortunately, the completed well yield was extremely low (< 1 gpm) and the project was halted. Therefore, there were no discharges from the permitted facility.

This is the final report for this permitted facility. Please let me know if you require any further information.

Sincerely,

Marina D. West, PG
General Manager

Appendix C

JVTW1 Geologist Log

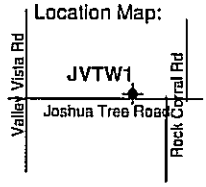
Graphic Log	Penetration Rate (min/ft)	Sampling Device	Sample Interval (ft bgs)	ASTM Symbol	Comments and Lithology
		Cuttings	0-5	SW	Well graded sand (SW). Weak red 2.5 YR 5/2. 5% coarse sand; 50% medium sand; 37% fine sand; 5% silt; 3% biotite. Subrounded, poorly sorted, loose, weak HCl reaction. Wet* (*All cuttings are wet - drilled with mud rotary).
		Cuttings	5-10		
		Cuttings	10-15		
		Cuttings	15-20	SP-SM	Poorly graded sand with silt (SP-SM). Reddish brown 2.5 YR 5/3. 10% coarse sand; 65% medium sand; 15% fine sand; 10% silt; trace Biotite. Subrounded, well sorted, loose, weak HCl reaction. Wet*
	5/20	Cuttings	20-25	SW	Well graded sand (SW). Reddish brown 2.5 YR 5/3. 60% coarse sand; 25% medium sand; 15% fine sand; trace fines and biotite. Subangular to subrounded, poorly sorted, loose, weak HCl reaction. Wet*
		Cuttings	25-30		
		Cuttings	30-35	SW-SM	Well graded sand with silt (SW-SM). Reddish brown 2.5 YR 5/3. 15% coarse sand; 50% medium sand; 25% fine sand; 10% silt. Subangular to subrounded, poorly sorted, loose, weak HCl reaction. Wet*
		Cuttings	35-40	SP	Poorly graded sand (SP). Reddish brown 2.5 YR 5/3. 10% coarse sand; 85% medium sand; 5% fine sand; trace silt. Subrounded, well sorted, loose, weak HCl reaction. Wet*
	5/20	Cuttings	40-50	SP	Poorly graded sand (SP). Reddish brown 2.5 YR 5/3. 5% coarse sand; 90% medium sand; 5% gravel - gneiss max diameter 21 mm; trace fine sand and biotite. Subangular to subrounded, well sorted, loose, weak HCl reaction. Wet*
		Cuttings	50-60	SP	Poorly graded sand (SP). Reddish brown 2.5 YR 5/3. 10% coarse sand; 80%medium sand; 5% fine sand; 5% biotite. Subrounded to subangular, well sorted, loose, weak HCl reaction. Wet*
	5/20	Cuttings	60-70	SW	Well graded sand (SW). Reddish brown 2.5 YR 5/3. 5% gravel max diameter 12mm, 20% coarse sand; 65% medium sand; 5% fine sand; 5% biotite; trace fines. Subangular to subrounded, poorly sorted, loose, weak HCl reaction. Wet*
		Cuttings	70-80		

Well Construction: Cement surface seal; Filter pack #6

Geologist: Diana Medina
Driller: Nor-Cal Pump and Well Drilling
Date completed: 01-28-12
Bit diameter: 7 7/8"Tricone cone bit, reamed with 16" Tricone bit to 354' bgs

Drilling method: Direct Mud Rotary
Drill Rig: TH 60 IR

Location Map:

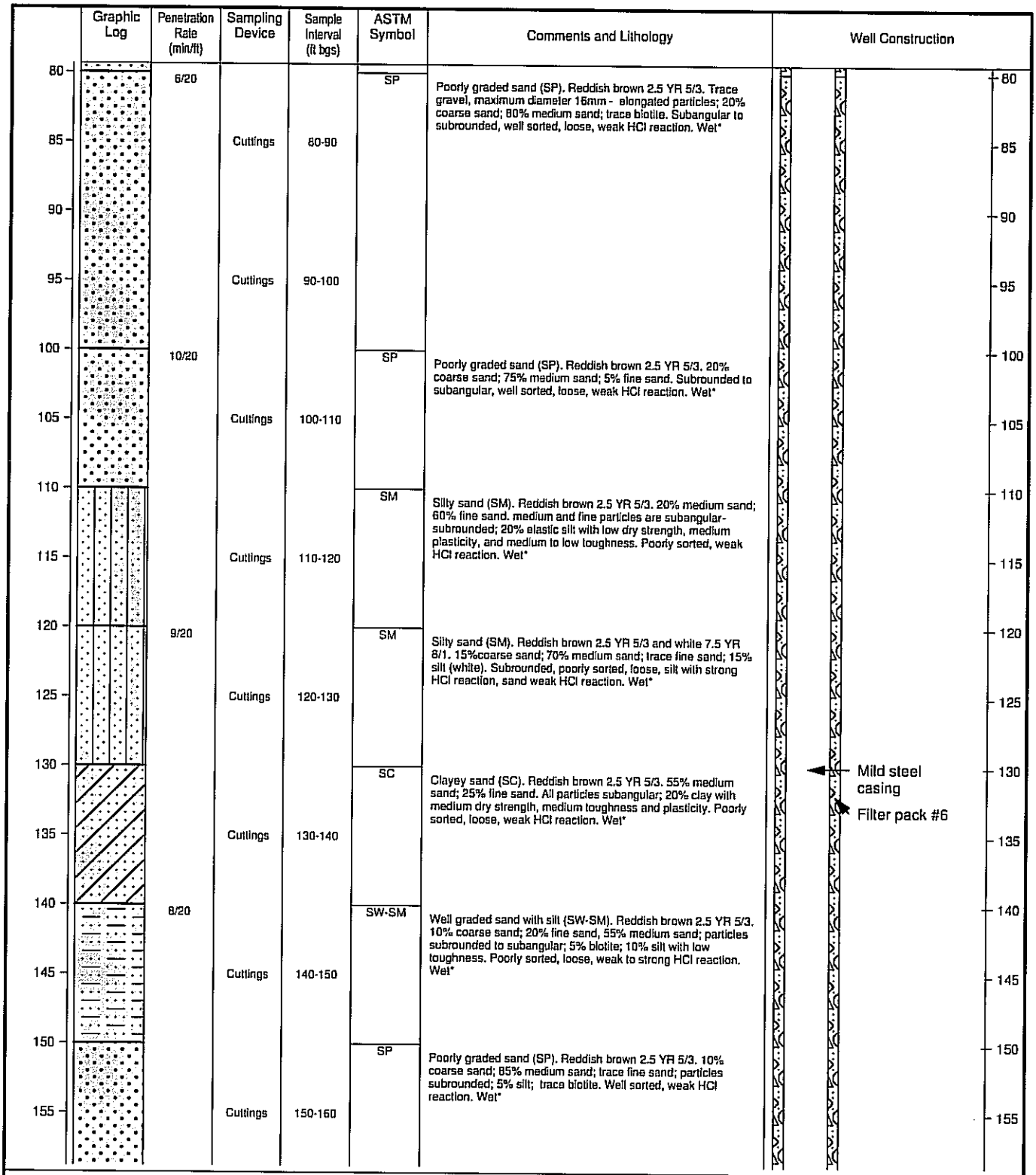


Latitude: 34°21'14.6" N
Longitude: 116°34'14.5" W

Johnson Valley Test Well 1

Daniel B. Stephens & Associates, Inc.
3/27/2012 JN WR11.0186.00

J:\Projects\WR11.0186_Bighorn\Field Docs\



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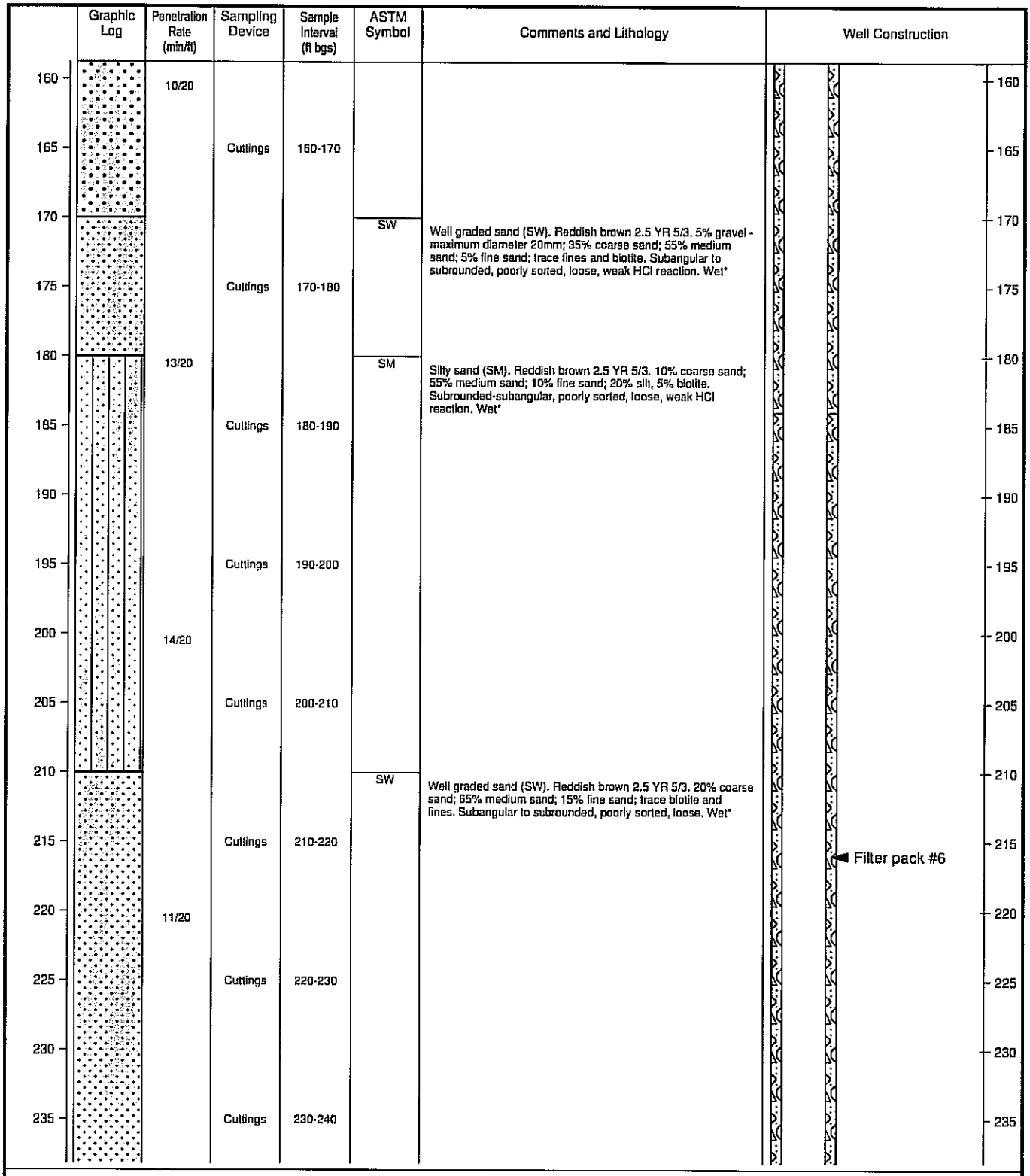
Johnson Valley Test Well 1

Daniel B. Stephens & Associates, Inc.

3/27/2012

JN WR11.0186.00



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Johnson Valley Test Well 1

Daniel B. Stephens & Associates, Inc.

3/27/2012 JN WR11.0186.00

Graphic Log	Penetration Rate (min/ft)	Sampling Device	Sample Interval (ft bgs)	ASTM Symbol	Comments and Lithology	Well Construction
	14/20	Cuttings	240-250	SC	Clayey sand (SC). Reddish brown 2.5 YR 5/3. 15% coarse sand; 60% medium sand; 10% fine sand; 15% clay with medium plasticity, medium toughness; trace biotite. Sand particles are subangular to subrounded, loose, poorly sorted, weak HCl reaction. Wet*	
		Cuttings	250-260	SC	Clayey sand (SC). Reddish brown 2.5 YR 5/3. 20% coarse sand; 50% medium sand; 10% fine sand; 20% clay with medium plasticity and toughness, trace biotite. Sand particles are subrounded to subangular, poorly sorted, loose, weak HCl reaction. Wet*	
	16/20	Cuttings	260-270	SW	Well graded sand (SW). Reddish brown 2.5 YR 5/3. 25% coarse sand; 55% medium sand; 20% fine sand; trace biotite and silt. Subrounded, poorly sorted, loose, weak HCl reaction. Wet*	
		Cuttings	270-280			Low carbon steel wire wrap well screen (40 slot)
	16/20	Cuttings	280-290			
		Cuttings	290-300	SM	Silty sand (SM). Reddish brown 2.5 YR 5/3. 10% coarse sand; 60% medium sand; 15% fine sand; 15% silt. Subrounded to subangular, poorly sorted, loose, weak HCl reaction. Wet*	Filter pack #8
	13/20	Cuttings	300-310			Mild steel casing
		Cuttings	310-320		Hard drilling	

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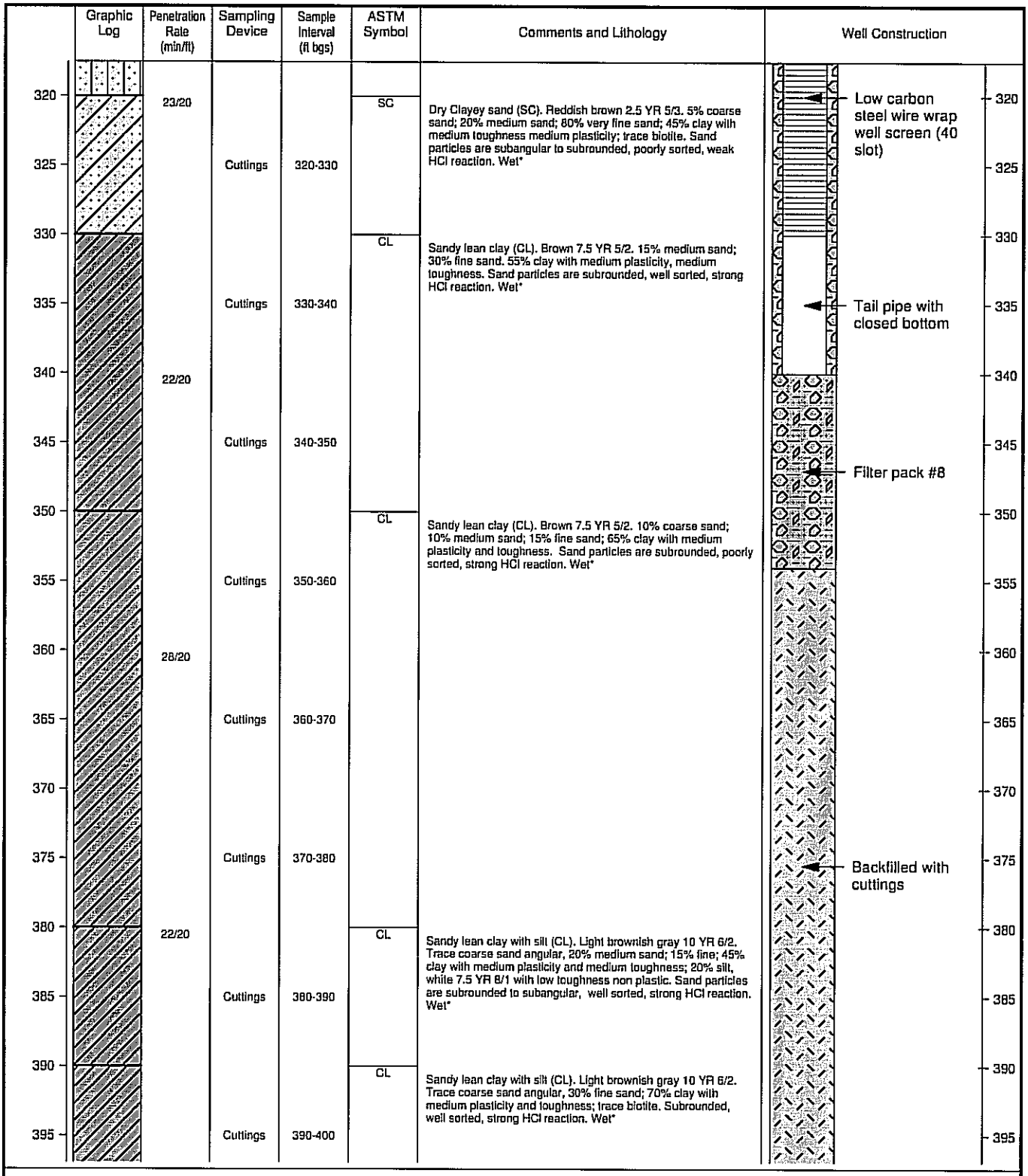
Johnson Valley Test Well 1



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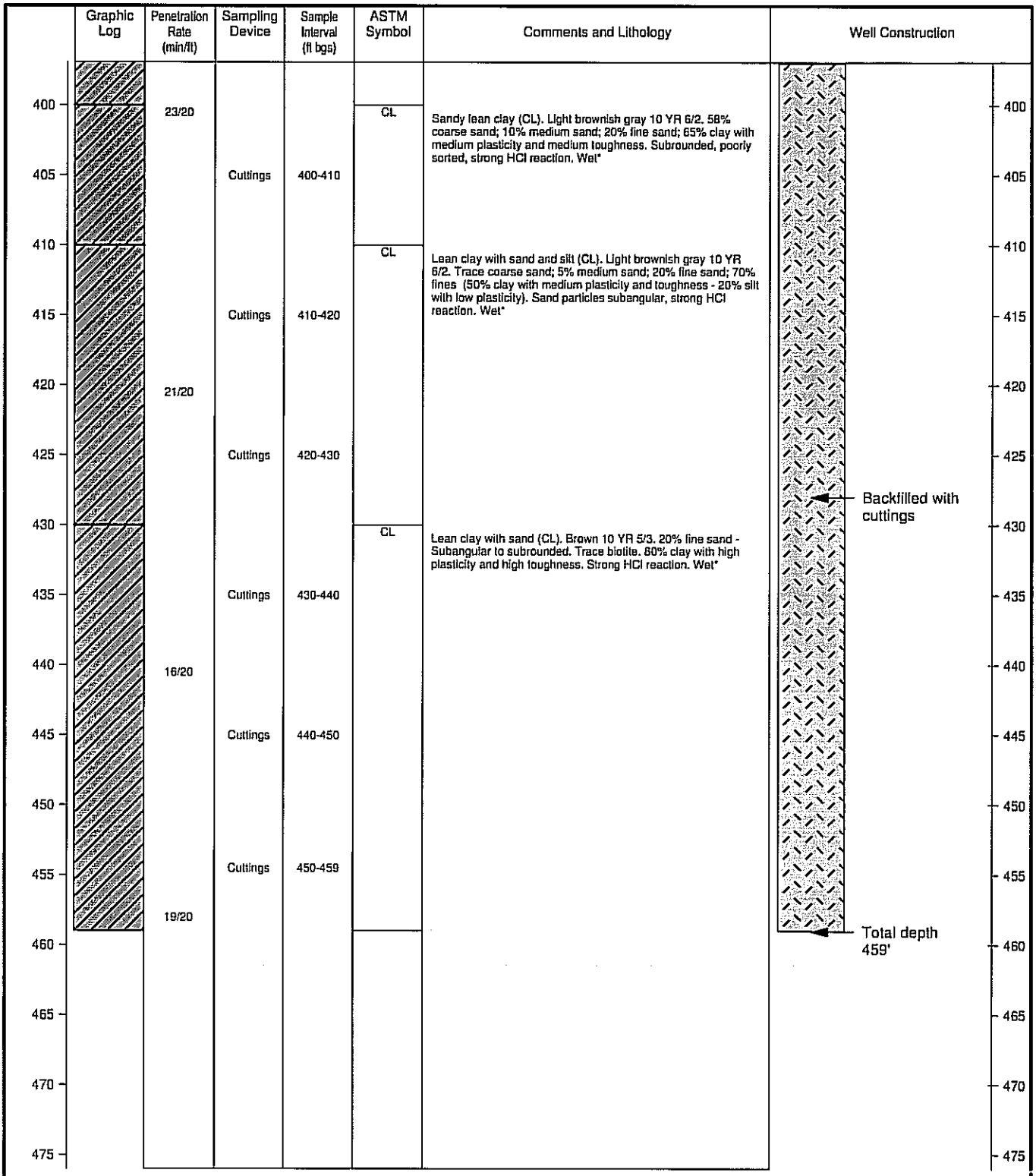
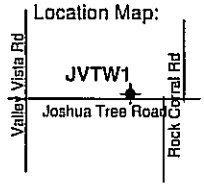
Johnson Valley Test Well 1



Geologist: Diana Medina
Driller: Nor-Cal Pump and Well Drilling
Date completed: 01-28-12
Bit diameter: 7 7/8"Tricone cone bit, reamed with 16" Tricone bit to 354' bgs

Drilling method: Direct Mud Rotary
Drill Rig: TH 60 IR

Location Map:



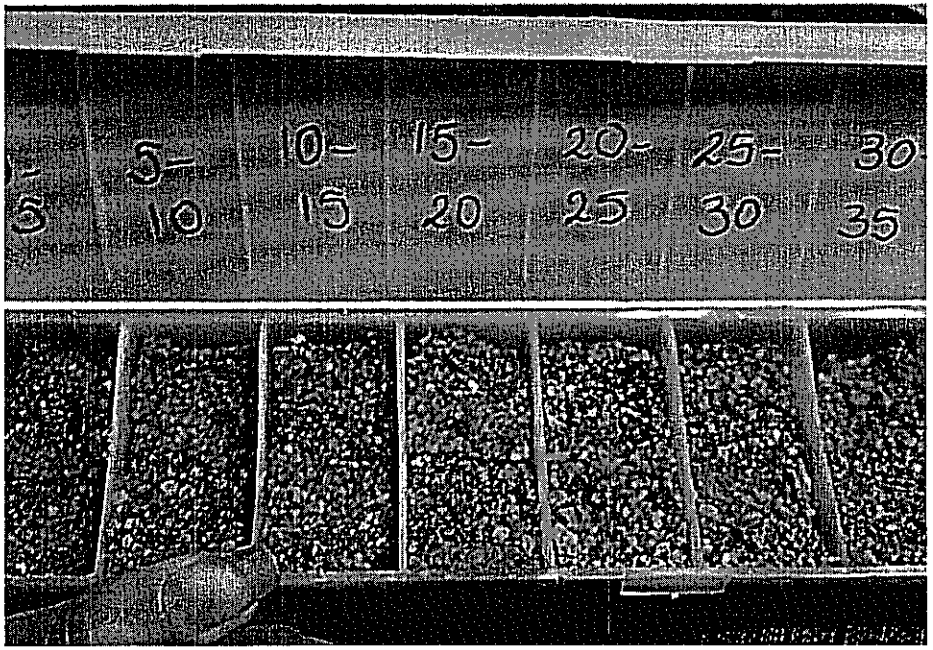
Latitude: 34°21'14.6" N
Longitude: 116°34'14.5" W

Johnson Valley Test Well 1

Daniel B. Stephens & Associates, Inc.

3/27/2012 JN WR11.0186.00

J:\Projects\WR11.0186_Bighorn\Field Docs\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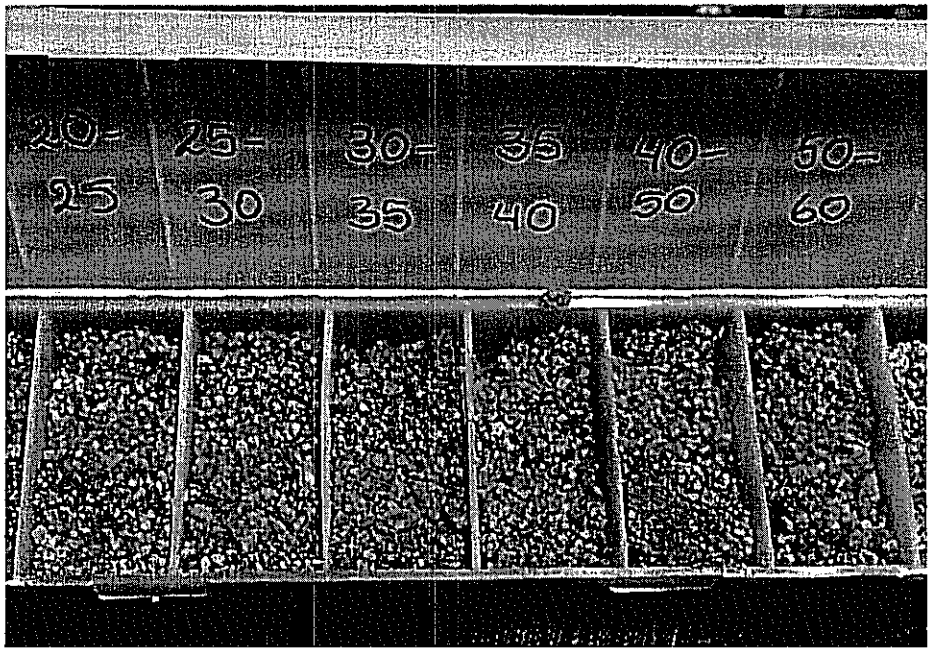
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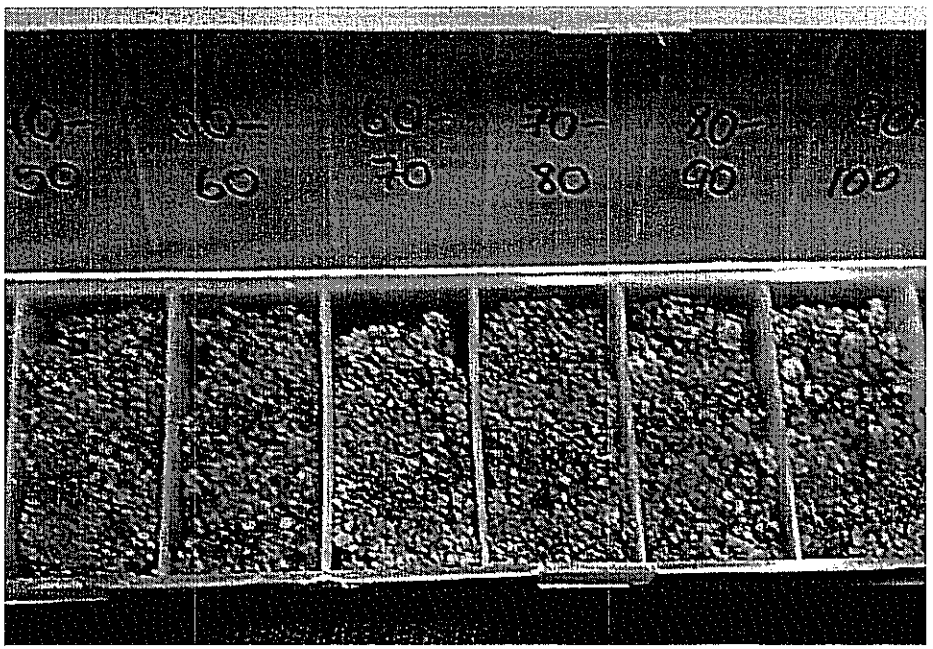
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80
90
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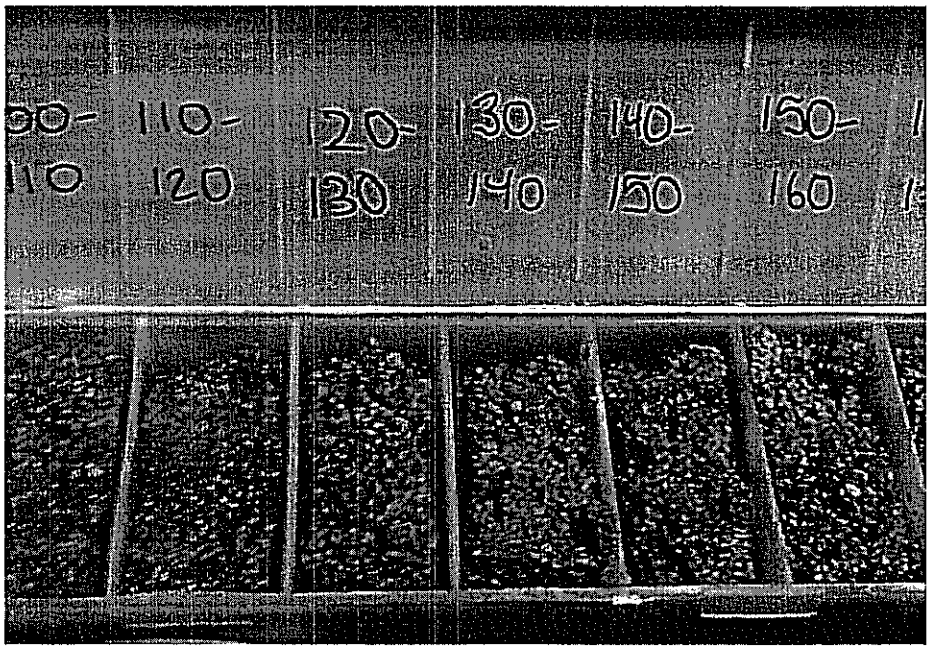
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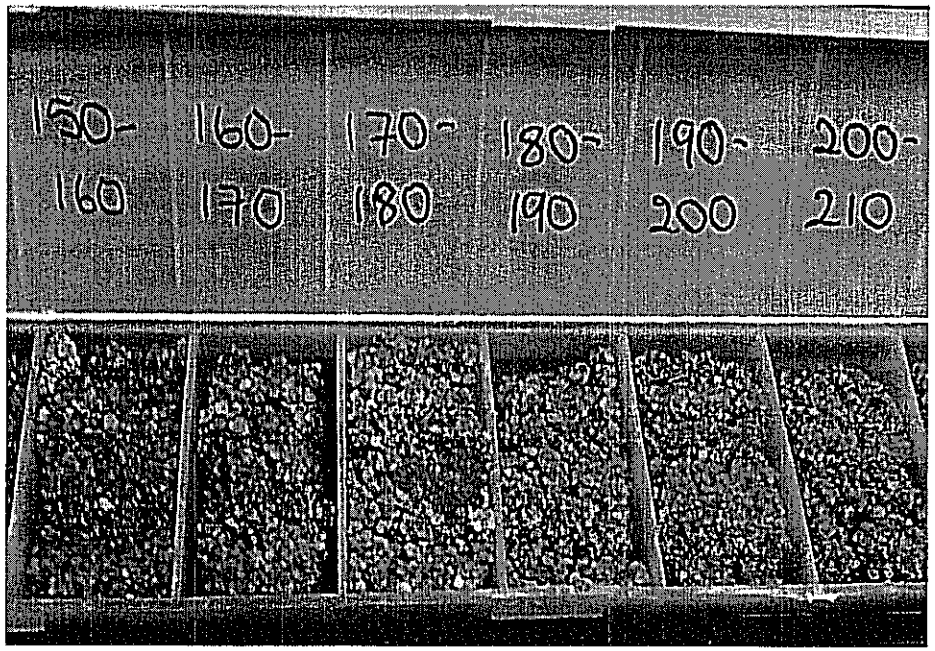
150
160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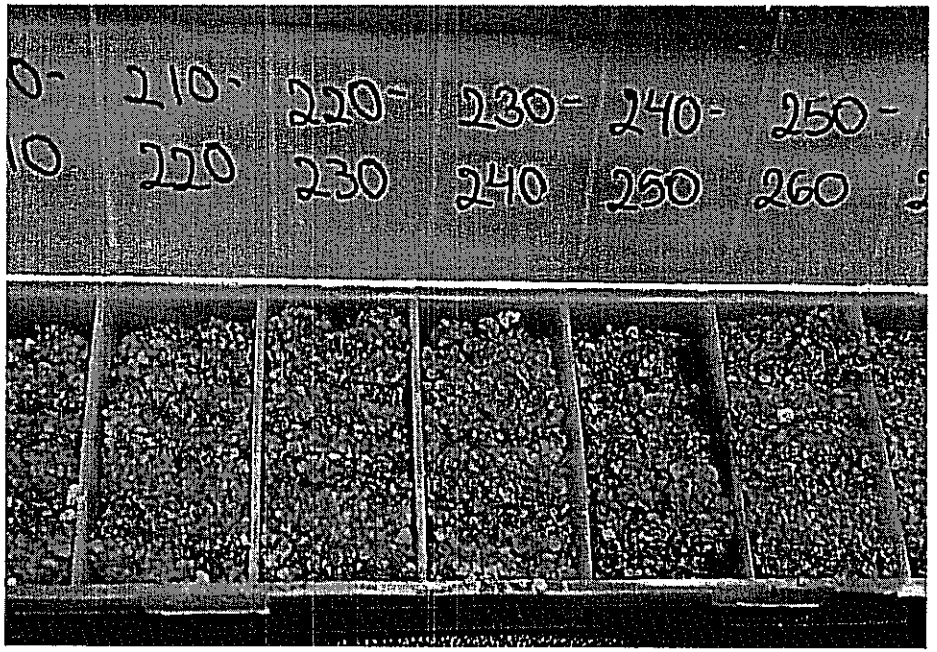
160 170 180 190 200 210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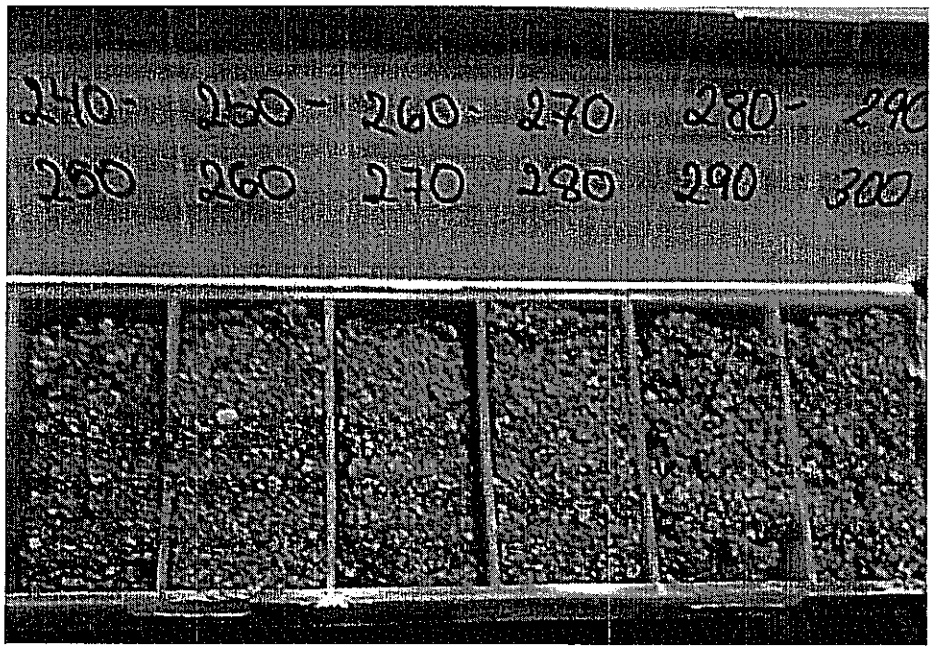
10 220 230 240 250 260


240- 250- 260- 270 280- 290
250 260 270 280 290 300


300- 310- 320- 330 340- 350-
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350 360 370 380 390
350 360 370 380 390 400

200 210 220 230 240 250

Appendix D

JVTW1 Geophysical Logs

welenco

5201 Woodmere Drive, Bakersfield, CA 93313-- www.welenco.com--(800) 445-9914
California Contractor's License No. 722373

ELECTRIC - GAMMA RAY

FILING NO.

COMPANY Daniel B Stevens and Associates

WELL Johnson Valley Test Well No 1

FIELD Landers

STATE California COUNTY San Bernardino

LOCATION:
50083 Joshua Tree Road

OTHER SERVICES:
Induction Log

JOB NO.
15321

SEC: 16 TWP: 3N RGE: 4E LAT.: 34° 21' 15.0" LONG.: 116° 34' 14.9" MERIDIAN.: San Bernardino

Permanent Datum: Ground Level , Elev. 3112 Ft. Elev.: K.B. ____ Ft.
Log Measured From: Ground Level , 0 Ft. Above Perm. Datum D.F. ____ Ft.
Drilling Measured From: Ground Level G.L. 3112 Ft.

Run	One				
Date	Jan. 24, 2012				
Depth-Driller	460 Ft	Ft	Ft	Ft	
Depth-Logger	459 Ft	Ft	Ft	Ft	
Top Logged Interval	30 Ft	Ft	Ft	Ft	
Btm. Logged Interval	458 Ft	Ft	Ft	Ft	
Casing-Driller	NA In @ Ft	In @ Ft	In @ Ft	In @ Ft	
Casing-Logger	In @ Ft	In @ Ft	In @ Ft	In @ Ft	
Bit Size	7.875 In	In	In	In	
Time On Bottom	1120 pm				
Type Fluid In Hole	Bentonite				
Density / Viscosity					
pH / Fluid Loss	ml	ml	ml	ml	
Source of Sample	Pit				
Rm @ Measured Temp.	12.70 @ 75 °F	@ °F	@ °F	@ °F	
Rmf @ Measured Temp.	11.30 @ 75 °F	@ °F	@ °F	@ °F	
Rmc @ Measured Temp.	@ °F	@ °F	@ °F	@ °F	
Source Rmf / Rmc	Meas				
Rm @ BHT	@ °F	@ °F	@ °F	@ °F	
Time Since Circulation	.25 Hr	Hr	Hr	Hr	
Max. Rec. Temp.	NA °F	°F	°F	°F	
Van No. / Location	LV3 / L.A.				
Recorded By	Ozman Trad				
Witnessed By	Diana Medina				

Miscellaneous Information

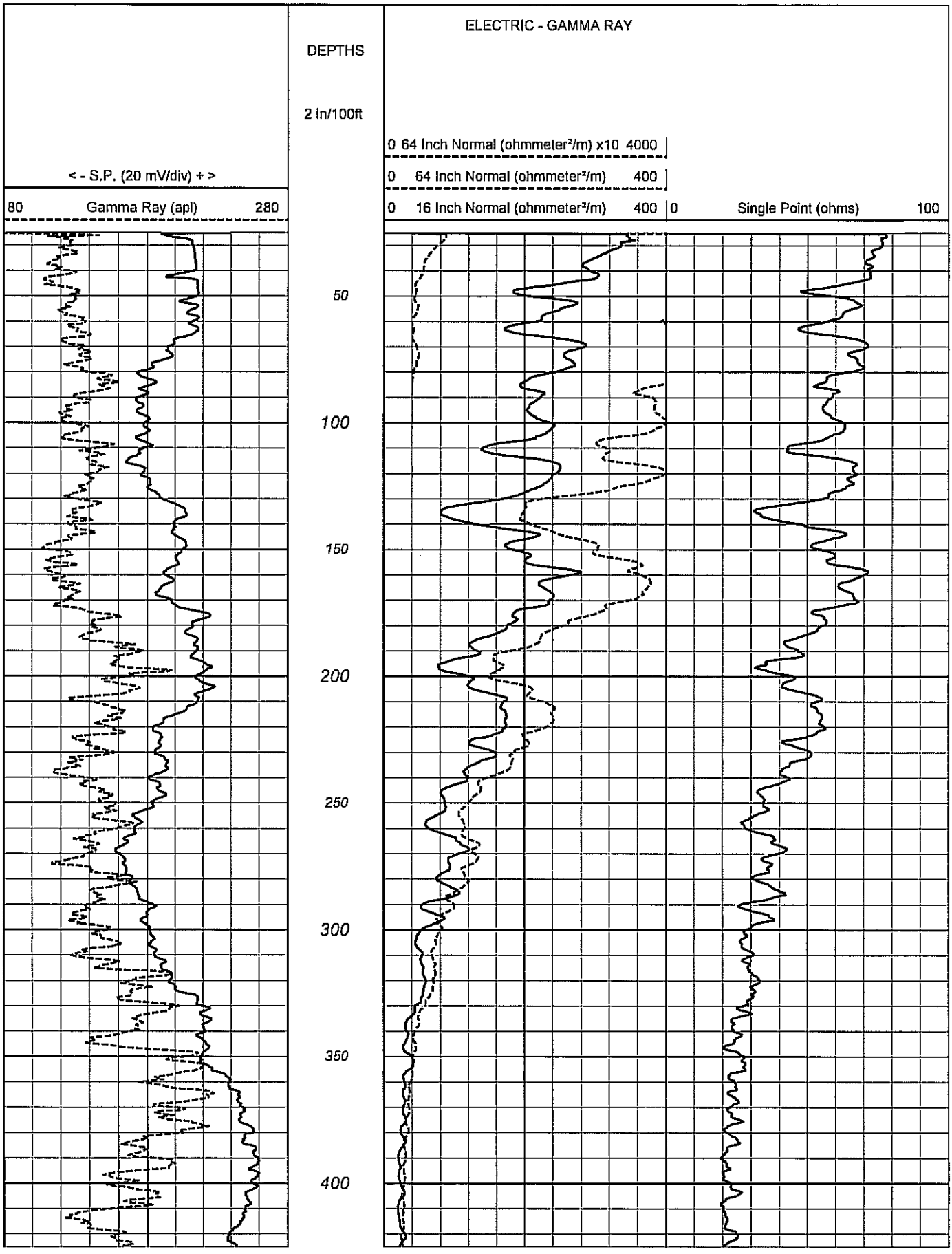
A recreational GPS accurate to +/- 45 feet set for Datum NAD27 was used to calculate Latitude, Longitude & Elevation values. The Section, Township, and Range then determined using the TRS program (TRS accuracy is not guaranteed). The TRS program converts Latitude and Longitude to Section, Township, and Range. The NOTICE at the bottom of this heading also applies.

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

welenco, inc. January 25, 2012

Daniel B Stevens and Associates Johnson Valley Test Well No 1 Jan 24, 2012



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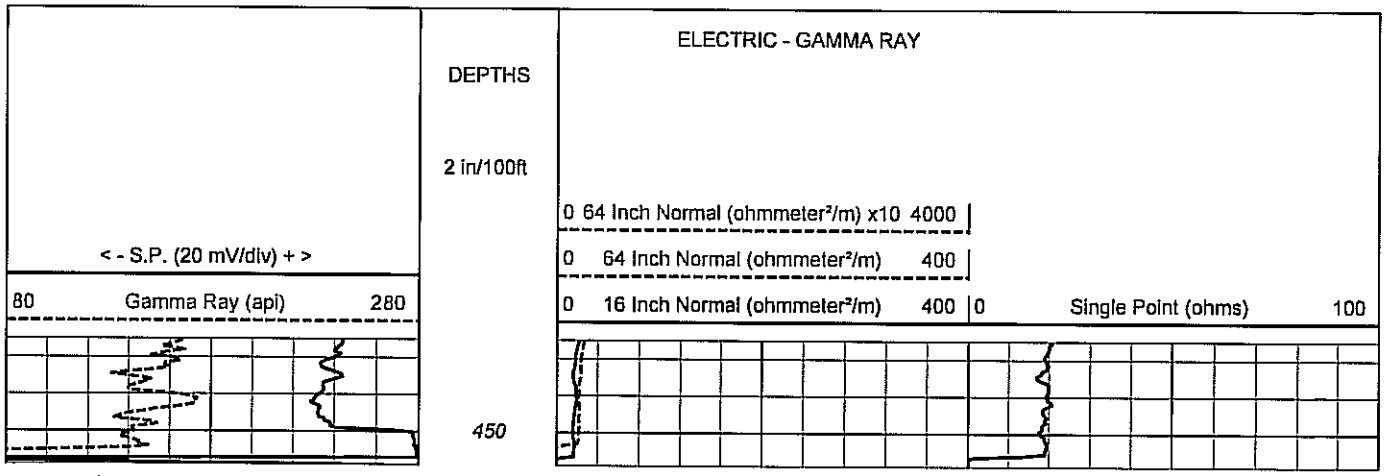
Daniel B Stevens and Associates Johnson Valley Test Well No 1 Jan 24, 2012



Log Page No. 2 of 2 Pages

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welenco

5201 Woodmere Drive, Bakersfield, CA 93313-- www.welenco.com--(800) 445-9914
California Contractor's License No. 722373

INDUCTION LOG

FILING NO.

COMPANY Daniel B Stevens and Associates

WELL Johnson Valley Test Well No 1

FIELD Landers

STATE California COUNTY San Bernardino

LOCATION:
50083 Joshua Tree Road

OTHER SERVICES:
Elog

JOB NO.
15321

SEC: 16 TWP: 3N RGE: 4E LAT.: 34° 21' 15.0" LONG.: 116° 34' 14.9" MERIDIAN.: San Bernardino

Permanent Datum: Ground Level , Elev. 3112 Ft. Elev.: K.B. Ft.
Log Measured From: Ground Level , 0 Ft. Above Perm. Datum D.F. Ft.
Drilling Measured From: Ground Level G.L. 3112 Ft.

Run	One				
Date	Jan. 24, 2012				
Depth-Driller	460 Ft	Ft	Ft	Ft	Ft
Depth-Logger	459 Ft	Ft	Ft	Ft	Ft
Top Logged Interval	30 Ft	Ft	Ft	Ft	Ft
Btm. Logged Interval	458 Ft	Ft	Ft	Ft	Ft
Casing-Driller	NA In @ Ft	In @ Ft	In @ Ft	In @ Ft	In @ Ft
Casing-Logger	In @ Ft	In @ Ft	In @ Ft	In @ Ft	In @ Ft
Bit Size	7.875 In	In	In	In	In
Time On Bottom	1200 am				
Type Fluid In Hole	Bentonite				
Density / Viscosity					
pH / Fluid Loss	ml	ml	ml	ml	ml
Source of Sample	Pit				
Rm @ Measured Temp.	12.70 @ 75 °F	@ °F	@ °F	@ °F	@ °F
Rmf @ Measured Temp.	11.30 @ 75 °F	@ °F	@ °F	@ °F	@ °F
Rmc @ Measured Temp.	@ °F	@ °F	@ °F	@ °F	@ °F
Source Rmf / Rmc	Meas				
Rm @ BHT	@ °F	@ °F	@ °F	@ °F	@ °F
Time Since Circulation	.25 Hr	Hr	Hr	Hr	Hr
Max. Rec. Temp.	NA °F	°F	°F	°F	°F
Van No. / Location	LV3 L.A.				
Recorded By	Ozman Trad				
Witnessed By	Diana Medina				

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A recreational GPS accurate to +/- 45 feet set for Datum NAD27 was used to calculate Latitude, Longitude & Elevation values. The Section, Township, and Range then determined using the TRS program (TRS accuracy is not guaranteed). The TRS program converts Latitude and Longitude to Section, Township, and Range. The NOTICE at the bottom of this heading also applies.

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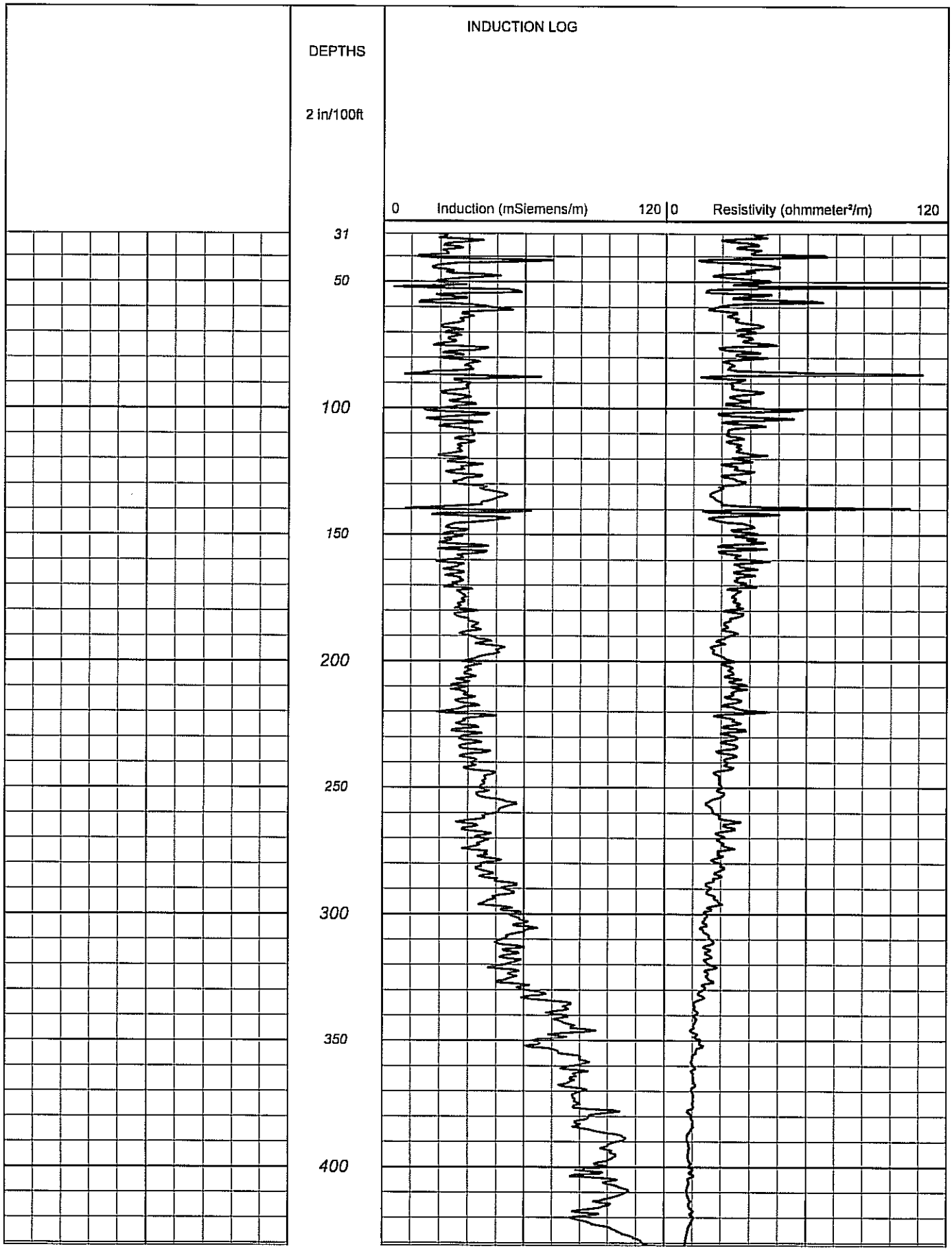
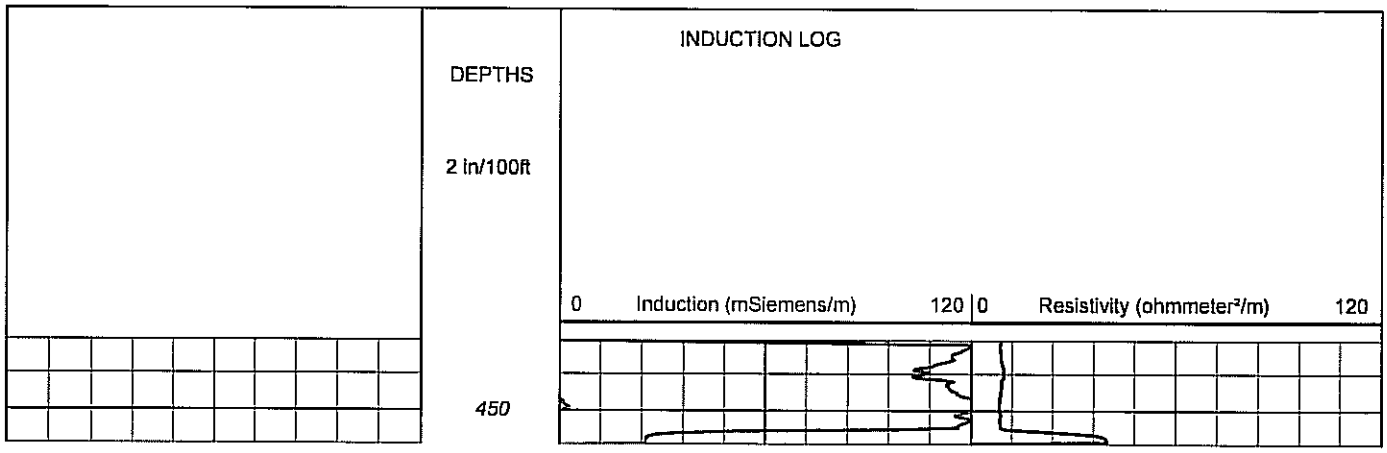
welenco, inc. January 25, 2012


INDUCTION LOG
DEPTHS
2 in/100ft
0 Induction (mSiemens/m) 120
0 Resistivity (ohmmeter²/m) 120
31
50
100
150
200
250
300
350
400



Log Page No. 2 of 2 Pages

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BIGHORN-DESERT VIEW WTR AGENCY
CHECK REGISTER
MARCH 31, 2012

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
10765	03/15/12	ERBY L MC FALL	
		UNCASHED CHECK - VOID	-103.07
11982	03/08/12	BDVWA	
		BALANCE RFND ACCT# 8007203	14.26
11983	03/08/12	MARGARET SHAFFNER	
		BALANCE RFND ACCT# 07-0380-7	65.41
11997	03/15/12	* VOID *	
11998	03/16/12	CYBERSPIKE	
		WEBSITE MAINTENANCE	612.50
11999	03/16/12	DANIEL B STEPHENS & ASSOC, INC	
		JVHI 12/01/12-01/28/12	17,768.08
12000	03/16/12	ERBY L MC FALL	
		REISSUE BALANCE REFUND	103.07
12001	03/16/12	GOODSPEED DISTRIBUTING INC	
		UNLEADED FUEL	1,953.88
12002	03/16/12	GOVT FINANCE OFFICERS ASSOC	
		GFOA REVIEW FEE BALANCE	580.00
12003	03/16/12	THE HOME DEPOT #6971	
		MTG OFFICE MAINTENANCE	38.92
12004	03/16/12	INLAND WATER WORKS	
		INVENTORY	95.36
12005	03/16/12	MAID TO ORDER	
		SVC JEMEZ	
		SVC JEMEZ & MTG RM 2	
		SVC JEMEZ	
		SVC JEMEZ & MTG RM 2	442.00
12006	03/16/12	McCALL'S METERS, INC	
		TEST TAMPERED METER, BILLED TO	
		CUSTOMER	40.53
12007	03/16/12	PITNEY BOWES PURCHASE POWER	
		MAILING FOR W1	500.00
12008	03/16/12	PROTECTION ONE ALARM MONITORNG	
		OFFICE 2ND QTR	
		SHOP 03/26/12-04/25/12	184.52
12009	03/16/12	QUILL	
		OFFICE SUPPLIES	75.41
12010	03/16/12	SDRMA	
		SDRMA MEDICAL BENEFITS	
		APR-JUN WORKERS COMP	7,882.10
12023	03/29/12	BDVWA	
		PAY TOWARD BALANCE 11-0229-7	20.73
12024	03/29/12	CRAIG SCOTT HURD	
		BALANCE RFND ACCT# 0707715	14.64
12025	03/29/12	DONNA SMITH	
		BALANCE RFND ACCT# 1003174	117.58
12026	03/29/12	ETHAN WICHITA	
		BALANCE RFND ACCT# 0406807	8.44
12027	03/29/12	JOYCE V SURVIVOR TRUST WOHLER	
		BALANCE RFND ACCT# 1003108	30.72
12028	03/29/12	LANCE JONES	

BIGHORN-DESERT VIEW WTR AGENCY
CHECK REGISTER
MARCH 31, 2012

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
		BALANCE RFND ACCT# 1102298	17.71
12029	03/29/12	LAURA HARRIS	
		BALANCE RFND ACCT# 0206815	7.98
12030	03/29/12	LIZA DIGALIZA	
		BALANCE RFND ACCT# 0409307	57.79
12031	03/29/12	BARR LUMBER CO INC	
		FIELD MATERIAL	
		WATER SYSTEM REPAIR	56.24
12032	03/29/12	CA SPECIAL DISTRICTS ASSN	
		WEBINAR 700, PRES MCBRIDE	69.00
12033	03/29/12	CLINICAL LABORATORY OF	
		GEN PHYSICAL, PLATE CT,	
		BACT TEST	
		PLATE CT, BACT TEST	
		URANIUM, GROSS ALPHA, PLATE CT	
		BACT TEST, GEN PHYSICAL	673.00
12034	03/29/12	DATASTREAM BUSINESS SOLUTIONS	
		SOFTWARE MAINT 4/01/12-6/30/12	645.00
12035	03/29/12	DEPT OF PUBLIC HEALTH	
		WATER SYS FEE 070111-123111	1,134.00
12036	03/29/12	DISCOUNT TIRE CENTERS	
		'10' RANGER 39128 OIL CHG,	
		BRAKES, FUEL SYSTEM & ALIGNMT	
		'10' RANGER 39127 OIL CHANGE,	
		BRAKES & SHOCKS	1,341.02
12037	03/29/12	FIRST NATIONAL BANK OMAHA	
		MULTIPLE REG FEES-EDUCATION	
		WATER ED FOUNDATION SEMINAR,	
		MISC MAILING, OFFICE SUPPLIES	
		LAFCO MTG LUNCH,PROP 218 LNCH	
		DATASTREAM PRINTER	2,435.71
12038	03/29/12	THE HOME DEPOT #6971	
		SMALL TOOLS	
		FIELD MATERIALS	164.31
12039	03/29/12	INLAND WATER WORKS	
		WATER SYSTEM-GAUGES PRV#14	
		INVENTORY	
		PRV STATION PARTS	
		PRV STATION PARTS	757.77
12040	03/29/12	OFFICE DEPOT	
		OFFICE SUPPLIES	360.90
12041	03/29/12	QUILL	
		OFFICE SUPPLIES	60.33
12042	03/29/12	SOUTHERN CALIFORNIA EDISON	
		POWER EXP BEF 2012	5,289.33
12043	03/29/12	STATE WATER RES CONTROL BOARD	
		FILING FEE - NOTICE OF GROUND-	
		WATER EXTRACTION	400.00
12044	03/29/12	VERIZON CALIFORNIA	
		OFFICE PHONES & AUTO CONTROLS	43.60
12045	03/30/12	JOHN BLUCKER	
		REFUND BLUCKER ANNEXATION	7,388.48
12046	03/30/12	E & J LOCKSMITH	
		LOCKS	42.67

BIGHORN-DESERT VIEW WTR AGENCY
CHECK REGISTER
MARCH 31, 2012

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
12047	03/30/12	HERCULES INDUSTRIES, INC.	
		WATER SYSTEM - LOCKS	313.96
12048	03/30/12	THE HOME DEPOT #6971	
		FRONT OFFICE REPAIR	3.01
12049	03/30/12	J&G ELECTRIC	
		EXIT SIGNS OFFICE SAFETY SDRMA RECOMMENDATION	585.59
12050	03/30/12	MAID TO ORDER	
		SVC JEMEZ	68.00
12051	03/30/12	VERIZON CALIFORNIA	
		OFFICE PHONES & AUTO CONTROLS	543.99
		TOTAL	52,904.47

Prepared By AB
Date 4/16/12
Reviewed By MWest

GENERAL FUND

ASSETS			
CASH & CASH EQUIVALENTS			
01 13120	CASH UNION BANK OF CA		34,770.33
01 13130	CASH CASH DRAWERS BASE FUND		750.00
01 13400	CASH PETTY CASH FUND		800.00
TOTAL CASH & CASH EQUIVALENTS			36,320.33
INVESTMENTS			
01 13303	CASH LAIF-UNRESTRICTED		898,068.98
01 13307	LAIF-CUSTOMER DEPOSITS		50,000.00
TOTAL INVESTMENTS			948,068.98
ACCOUNTS RECEIVABLE, WATER			
01 13710	A/R WATER		131,753.31
01 13950	2009-2010 LIEN RECEIVABLE		23,798.91
01 13951	2010-2011 LIEN RECEIVABLE		26,356.69
TOTAL ACCTS RECEIVABLE, WATER			181,908.91
ACCOUNTS RECEIVABLE, OTHER			
01 13901	CUSTOMER UPGRADE 629-342-47	(	845.76)
TOTAL ACCTS RECEIVABLE, OTHER		(	845.76)
INVENTORIES			
01 14301	INVENTORY-WATER SYSTEM PARTS		61,620.28
TOTAL INVENTORY			61,620.28
PREPAID EXPENSES			
01 14401	PREPAYMENTS WORKERS COMP INSUR		1,608.00
01 14402	PREPAYMENTS PL & PD LIAB INS		7,120.12
TOTAL PREPAID EXPENSES			8,728.12
FIXED ASSETS			
01 11130	FA ORGANIZATION		336,271.36
01 11131	ACCUMMULATED DEP ORGANIZATION	(	66,344.01)
01 11135	FA LAND		12,507.94
01 11140	FA LAND & BUILDINGS		294,654.63
01 11150	FA YARDS		52,957.71
01 11160	FA FUELS TANKS		16,604.30
01 11170	FA WATER SYSTEM		7,533,872.86
01 11180	FA SHOP EQUIPMENT		43,075.46
01 11181	FA MOBILE EQUIPMENT		444,498.62
01 11190	FA OFFICE EQUIPMENT		129,713.10
01 11400	ACCUMULATED DEPRECIATION	(	5,381,728.16)

GENERAL FUND

	TOTAL FIXED ASSETS	3,416,083.81	
WORK IN PROGRESS (FOR OTHERS)			
	TOTAL WORK IN PROGRESS(OTHERS)	0.00	
WORK IN PROGRESS (AGENCY)			
01 12005	WIP EPA GRANT	792,937.97	
01 12043	WIP - JVHI WELL	22,813.92	
01 12044	PRV 13 REREFURBISH	73.27	
	TOTAL WORK IN PROGRESS(AGENCY)	815,825.16	
DEBT ISSUANCE COST			
	TOTAL DEBT ISSUANCE COST	0.00	
	TOTAL ASSETS		5,467,709.83
LIABILITIES			
ACCOUNTS PAYABLE			
	TOTAL ACCOUNTS PAYABLE	0.00	
ACCRUED PAYROLL			
	TOTAL ACCRUED PAYROLL	0.00	
CUSTOMER DEPOSITS			
01 22550	CUSTOMER DEPOSITS PENDING	1,145.73	
01 22600	CUSTOMER DEPOSITS	56,570.19	
	TOTAL CUSTOMER DEPOSITS	57,715.92	
WORK IN PROGRESS DEPOSIT			
	TOTAL WORK IN PROGRESS DEPOSIT	0.00	
LIAB PYBL FRM RESTRICTD ASSETS			
01 22951	ACCRUED BONDS PAYABLE DV ID	2,000.00	
	TOTAL LIAB PYBL FRM REST ASSET	2,000.00	
LONG TERM DEBT			
01 21101	REVENUE BONDS PAYABLE - DV	260,977.05	
01 22300	REVENUE BONDS PAYABLE - BH	702,000.00	
	TOTAL LONG TERM DEBT	962,977.05	

GENERAL FUND

TOTAL LIABILITIES				1,022,692.97
EQUITY				
01	30109	CONTRIBUTED CAPITAL/HUD	291,035.88	
01	30111	FMHA GRANTS	758,297.76	
01	31000	FUND BALANCE	2,796,093.48	
01	31001	FUND BALANCE FEMA & OES	427,895.00	
01	31111	CURR YEAR NET REVENUE/EXPENSE	171,694.74	
TOTAL EQUITY				4,445,016.86
TOTAL LIABILITIES & EQUITY				5,467,709.83

Prepared By GB
Date 4/16/12
Reviewed By mwest

PERIOD ENDING 03/31/12

GENERAL FUND

		BUDGET	REV OR EXP THIS MONTH	REV OR EXP YEAR TO DATE	AVAILABLE	YTD % OF BUDGET
REVENUE						
OPERATING REVENUE						
01 41000	SERVICE LINE INSTALLATION FEES	1,255.00	0.00	0.00	1,255.00	0.00%
01 41001	BASIC FACILITIES CHARGE	4,098.00	0.00	0.00	4,098.00	0.00%
01 41100	INCOME METERED WATER	439,848.00	20,704.80	289,811.88	150,036.12	65.89%
01 41300	BASIC SERVICE CHARGE	594,000.00	49,957.44	446,929.25	147,070.75	75.24%
01 41400	INCOME METERED BULK WATER	0.00	4,979.95	37,396.96	0.00	0.00%
01 41600	INCOME REVENUE BONDS DV FMHA	49,662.00	4.99	33,319.44	16,342.56	67.09%
01 41700	INCOME OTHER (OPERATING)	34,480.00	2,691.93	28,041.27	6,438.73	81.33%
TOTAL OPERATING REVENUE		1,123,343.00	78,339.11	835,498.80	287,844.20	74.38%
NON-OPERATING REVENUE						
01 49100	INCOME GEN TAX ID A 1% BH GA02	52,100.00	4,140.97	28,393.58	23,706.42	54.50%
01 49101	INCOME BOND DEBT BH FMHA DA01	175,900.00	21,506.81	105,608.59	70,291.41	60.04%
01 49102	INCOME GENERAL TAX 1% DV GA01	52,100.00	3,411.09	27,526.30	24,573.70	52.83%
01 49200	INTEREST INCOME	3,600.00	0.00	1,461.46	2,138.54	40.60%
01 49999	FEDERAL/STATE GRANTS FEMA/OES	0.00	0.00	9,923.60	0.00	0.00%
TOTAL NON-OPERATING REVENUE		283,700.00	29,058.87	172,913.53	110,786.47	60.95%
TOTAL REVENUE		1,407,043.00	107,397.98	1,008,412.33	398,630.67	71.67%
EXPENSE						
OPERATIONS EXPENSE						
01 54102	OPERATIONS COMPENSATION	147,640.00	11,231.51	101,386.68	46,253.32	68.67%
01 54103	UNIFORMS	2,525.00	98.14	1,463.99	1,061.01	57.98%
01 54105	AUTO CONTROLS	0.00	211.46	1,944.23	0.00	0.00%
01 54106	VEHICLE/TRACTOR/EQUIP EXPENSE	9,000.00	1,558.99	3,401.27	5,598.73	37.79%
01 54107	VEHICLE EXPENSE - FUEL	18,000.00	1,983.88	12,990.45	5,009.55	72.17%
01 54109	FIELD MATERIALS & SUPPLIES	25,000.00	1,055.52	12,142.42	12,857.58	48.57%
01 54111	WATER TESTING	5,000.00	737.00	4,769.71	230.29	95.39%
01 54112	CONTRACTUAL SERV- ENGINEERING	52,000.00	11,201.32	53,761.52	-1,761.52	103.39%
01 54114	WATER SYSTEM REPAIRS	25,000.00	268.91	1,056.80	23,943.20	4.23%
01 54115	BUILDING MAINTENANCE/REPAIR	11,680.00	1,685.64	10,202.43	1,477.57	87.35%
01 54117	AMES BASIN MONITORING	0.00	0.00	1,510.00	0.00	0.00%
01 54119	COMMUNICATIONS EXPENSE	1,680.00	98.22	1,381.41	298.59	82.23%
01 54121	DISINFECTION EXPENSE	4,000.00	0.00	2,533.60	1,466.40	63.34%
01 54125	POWER WELLS & PUMPS	59,570.00	4,471.18	39,716.43	19,853.57	66.67%
01 54130	OTHER OPERATIONS EXPENSES	17,000.00	1,835.87	17,507.76	-507.76	102.99%
01 54150	PAYROLL LABOR TO PROJECTS	0.00	0.00	-2,224.99	0.00	0.00%
01 54160	VEH & EQUIP EXPENSE TO PROJECT	0.00	0.00	-309.06	0.00	0.00%
01 54170	INVENTORY EXP TO WIP PROJECTS	0.00	0.00	-574.37	0.00	0.00%

GENERAL FUND

		BUDGET	REV OR EXP THIS MONTH	REV OR EXP YEAR TO DATE	AVAILABLE	YTD % OF BUDGET
TOTAL OPERATIONS EXPENSE		378,095.00	36,437.64	262,660.28	115,434.72	69.47%
BULK SYSTEM EXPENSE						
01 55001	PUMPING PLANT EXPENSE	8,935.00	603.45	4,507.16	4,427.84	50.44%
01 55002	BULK OPERATIONS & MAINTENANCE	5,000.00	0.00	278.96	4,721.04	5.58%
TOTAL BULK SYSTEM EXPENSE		13,935.00	603.45	4,786.12	9,148.88	34.35%
ADMINISTRATIVE EXPENSE						
01 56001	DIRECTOR FEES	20,000.00	800.00	11,600.00	8,400.00	58.00%
01 56002	DIRECTOR MEETING EXPENSES	11,000.00	2,841.13	3,953.94	7,046.06	35.94%
01 56003	ADMINISTRATIVE COMPENSATION	260,000.00	20,554.10	155,517.49	104,482.51	59.81%
01 56005	ADMINISTRATIVE MEETING EXPENSE	1,000.00	65.63	170.63	829.37	17.06%
01 56006	CONTRACTUAL SERV-AUDITOR	29,418.00	0.00	26,472.00	2,946.00	89.99%
01 56007	CONTRACTUAL SERV-LEGAL	80,000.00	4,001.25	14,970.28	65,029.72	18.71%
01 56008	PERS CONTRIBUTION	40,450.00	4,665.67	26,939.81	13,510.19	66.60%
01 56009	PAYROLL TAXES	9,375.00	822.95	2,774.42	6,600.58	29.59%
01 56011	TELEPHONE/FAX/INTERNET/WEB	7,420.00	1,077.09	6,103.95	1,316.05	82.26%
01 56012	MAILING EXPENSES	7,550.00	1,070.98	4,490.33	3,059.67	59.47%
01 56014	CONTRACTUAL SERV-OTHER	38,660.00	819.88	14,167.20	24,492.80	36.65%
01 56016	PROPERTY/LIABILITY EXPENSE	30,000.00	2,356.71	19,464.39	10,535.61	64.88%
01 56017	WORKERS COMP INSURANCE	14,500.00	344.14	1,458.42	13,041.58	10.06%
01 56018	DUES & SUBSCRIPTIONS	7,725.00	568.50	9,433.91	-1,708.91	122.12%
01 56020	POWER OFFICES & YARDS	5,200.00	313.24	3,135.30	2,064.70	60.29%
01 56022	BAD DEBT EXPENSE	43,000.00	-1,783.41	-2,086.96	45,086.96	-4.85%
01 56025	PROPANE	1,800.00	0.00	1,328.76	471.24	73.82%
01 56030	OFFICE SUPPLIES	5,000.00	394.76	7,075.80	-2,075.80	141.52%
01 56100	EMPLOYEE BENEFITS INSURANCE	70,850.00	6,019.82	53,422.44	17,427.56	75.40%
01 56101	FLEXIBLE SPENDING ACCOUNT	0.00	-403.83	-358.97	0.00	0.00%
01 56103	PLAN PARTICIPATION FEE	0.00	-28.41	-25.29	0.00	0.00%
01 56104	SUPPLEMENTAL LIFE	0.00	-143.64	-127.66	0.00	0.00%
01 56105	DISABILITY INS	0.00	-232.91	-204.15	0.00	0.00%
01 56110	EMPLOYEE EDUCATION	3,300.00	279.58	2,999.31	300.69	90.89%
01 56150	PAYROLL FRINGE EXP TO PROJECTS	0.00	-1,006.02	-1,840.24	0.00	0.00%
01 56160	OVERHEAD TO PROJECTS	0.00	-1,340.14	-1,896.45	0.00	0.00%
TOTAL ADMINISTRATIVE EXPENSE		686,248.00	42,057.07	358,938.66	327,309.34	52.30%
TOTAL OPERATING EXPENSE		1,078,278.00	79,098.16	626,385.06	451,892.94	58.09%
NON-OPERATING EXPENSE						
01 56200	OFFICE EQUIPMENT EXPENSE	4,950.00	686.00	3,045.36	1,904.64	61.52%
01 56300	CUSTOMER RELATIONS	3,000.00	475.34	1,383.25	1,616.75	46.11%
01 56400	OTHER ADMINISTRATIVE EXPENSES	3,000.00	643.75	2,779.10	220.90	92.64%
01 57000	INTEREST EXPENSE - BH BONDS	0.00	0.00	-2,925.00	0.00	0.00%
01 57100	DEPRECIATION EXPENSE	0.00	19,246.74	175,621.23	0.00	0.00%
01 58100	ELECTION COSTS	12,000.00	0.00	0.00	12,000.00	0.00%

GENERAL FUND

		BUDGET	REV OR EXP THIS MONTH	REV OR EXP YEAR TO DATE	AVAILABLE	YTD % OF BUDGET
01 59100	INTEREST EXPENSE - DV BONDS	0.00	0.00	29,396.59	0.00	0.00%
01 59400	GAIN (LOSS) ASSET DISPOSAL	0.00	1,032.00	1,032.00	0.00	0.00%
TOTAL NON-OPERATING EXPENSE		22,950.00	22,083.83	210,332.53	-187,382.53	916.48%
TOTAL EXPENSE		1,101,228.00	101,181.99	836,717.59	264,510.41	75.98%
NET REV/EXP GENERAL FUND		305,815.00	6,215.99	171,694.74	134,120.26	56.14%

Prepared By GB
Date 4/16/12
Reviewed By MWest

SOURCES & USES OF FUNDS STATEMENT
GENERAL ACCOUNT (UNION BANK)
Mar-12

SOURCES OF FUNDS:

SERVICE LINE INSTALLATION FEES		
BAD DEBT ADJUSTMENT	1,899.96	
A/R - WATER	90,686.74	
UPGRADE	845.76	
MISCELLANEOUS REVENUE	780.67	
1% GENERAL TAX	7,552.06	
BIGHORN AD VALOREM TAX	21,506.81	
CUSTOMER DEPOSITS	2,200.00	
COMMUNICATIONS	7.00	
EPA GRANT REIMBURSEMENT		
TOTAL		**125,479.00**

USE OF FUNDS:

A/R WATER & OTHER	530.14	
CAPITAL PURCHASES (EPA GRANT)	35.11	
CAPITAL PURCHASES (JVHI WELL)	17,768.08	
CAPITAL PURCHASES (PRV 13)	73.27	
INVENTORY PURCHASES	560.85	
WORKS COMP INS	1,608.00	
REVENUE BONDS PAYABLE		
REFUND	7,388.48	
PAYMENTS FOR SALARIES & WAGES	52,383.04	
OPERATIONS EXPENSES	12,854.75	
ADMINISTRATIVE EXPENSE	12,260.67	
CUSTOMER DEPOSITS PENDING		
TRANSFER TO LAIF	25,000.00	
TOTAL		**130,462.39**

Prepared By SB
Date 4/16/12
Reviewed By YMWest

UNION BANK OF CALIFORNIA
DISBURSEMENTS MAR 2012

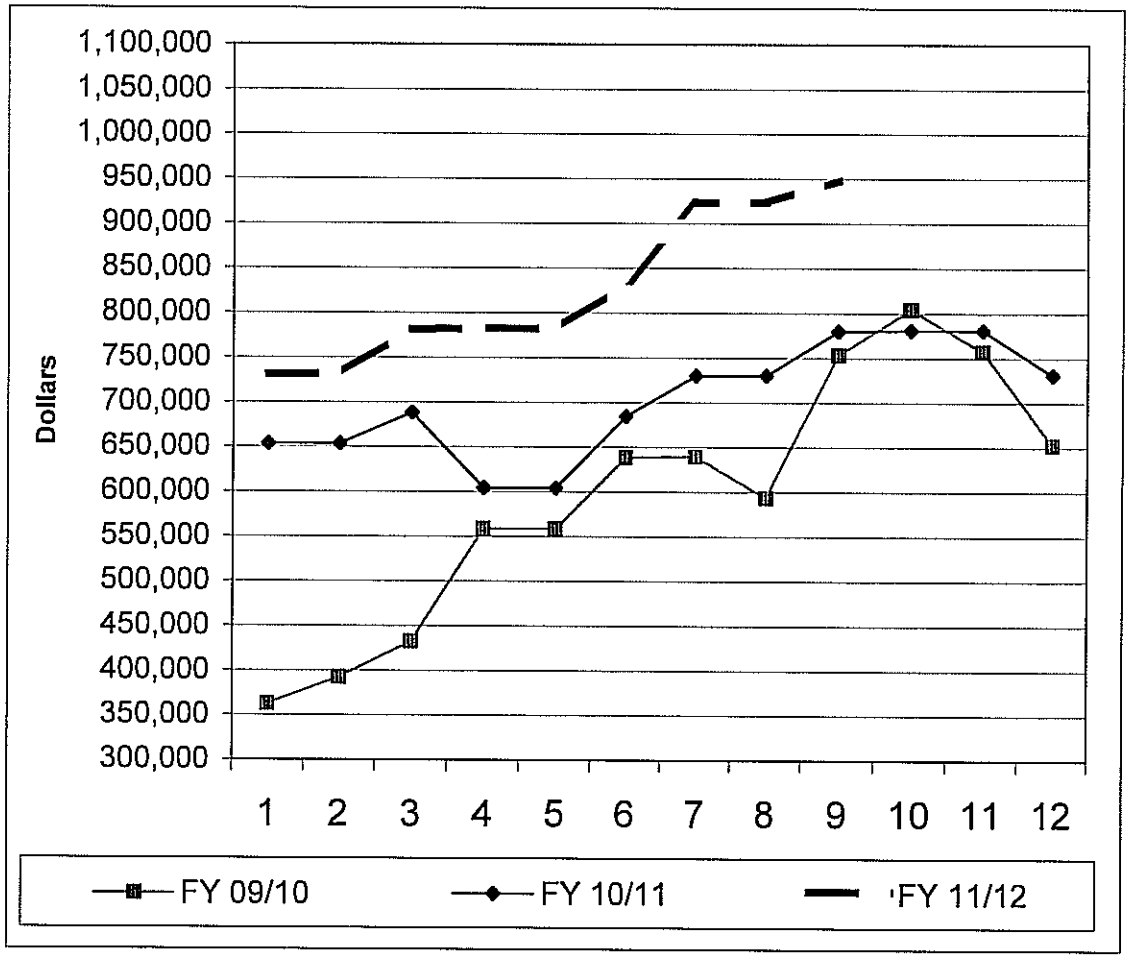
Datastream Check Register	52,904.47		
		52,904.47	
EFT for Vendor Services			
Bank Fees	174.88		
Total EFT for Vendor Services		174.88	
Wages for Paydate 03/01/2012			
State & Fed Taxes plus PERS Paid	5,588.85		
Payroll checks #11948-11954 & 11960 &11961	10,547.14		
Director Per Diem cks #11955 & 11959	1,414.64		
		17,550.63	
Wages for Paydate 03/15/2012			
State & Fed Taxes plus PERS Paid	7,068.36		
Payroll checks #11984-11992 & 11995 & 11996	13,218.55		
Director Per Diem cks #11993 & 11994	188.70		
		20,475.61	
Wages for Paydate 03/29/2012			
State & Fed Taxes plus PERS Paid	4,625.42		
Payroll cks #12011 & 12016 & 12021 & 12022	9,259.63		
Director Per Diem cks #12017 & 12020	471.75		
		14,356.80	
Transfers to LAIF	25,000.00		
		25,000.00	
Total Disbursements			130,462.39

Prepared By GB
Date 4/16/12
Reviewed By vmwest

Local Agency Investment Fund Balance Timeline

Balance as of

	FY 09/10	FY 10/11	FY 11/12
July	362,520	653,168	730,685
August	392,520	653,168	731,593
September	432,520	688,168	781,593
October	558,397	604,025	782,302
November	558,397	604,025	782,302
December	638,397	684,025	832,302
January	639,258	729,762	923,069
February	593,258	729,762	923,069
March	753,258	779,762	948,069
April	804,136	780,685	
May	757,136	780,685	
June	652,136	730,685	



Prepared By GB

Date 4/16/12

Reviewed By MWH

Z:\A-Month End Reports\LAIF Graph

DATE: April 1, 2012
TO: Marina West
FROM: Michelle Corbin
RE: Consumption & Billing Comparison March 2012

Consumption

Residential- North- Bighorn

	Meters	Usage (c.f.)
Book 1	148	113,037
Book 2	183	142,939
Book 3	161	133,330
Book 4	152	109,310
Book 5	128	99,183
Book 6	137	93,750
Total	**909**	**578,512**

Residential- South- Desert View

	Meters	Usage (c.f.)
Book 7	164	0
Book 8	176	0
Book 9	188	0
Book 10	178	39
Book 11	191	22
Total	**897**	**61**

Bulk -Kickapoo, Well 4, Cherokee

	Meters	Usage (c.f.)
Book 30	41	9,059
Book 31	6	3,474
Book 32	4	8,600
Total	**51**	**21,133**

Construction Meters

	Meters	Usage (c.f.)
Book 40	0	0
Total	**0**	**0**

Bulk - Well 10

	Meters	Usage (c.f.)
Book 33	48	37,454
Total	**48**	**37,454**

Billed Consumption	750,197
Non Billed Usage	11,486
Total Consumption	**761,683**
Active Residential Meters	1,806
Active Bulk Meters	98
Total Active Meters	**1,904**

Billing Comparison

	This Year MAR 2012	Last Year MAR 2011	Difference More (Less)
Statistics			
Total Customer Accounts	995	1006	(11)
Usage in Cubic Feet	750,197	731,571	18,626
Percentage Increase/(Decrease)			3%
Revenues			
Water Revenues	25,684.75	24,261.98	1,422.77
Basic Service Charge	49,957.44	50,094.00	(136.56)
Miscellaneous	415.55	190.00	225.55
Delinquent Charges	1,455.00	1,385.15	69.85
Total Operating Revenues	**77,512.74**	**75,931.13**	**1,581.61**
Debt Service Revenues (pass through)			
FMHA **	4.99	29.80	(24.81)
Total Debt Service Revenues	**4.99**	**29.80**	**(24.81)**

Additional Information Regarding Pass Through Revenues

*** FMHA annual debt service of $41,150 divided over 6 months equals $6,858*

Total Charges (Proof)	**77,517.73**	**75,960.93**

Date: 4/1/12
To: Marina West
From: Michelle Corbin
Subject: Service Order Report July 2011 through June 2012
Update for March 2012

	J	A	S	O	N	D	J	F	M	A	M	J	YTD
After Hours Call	1	4	3	1	2	2	3	1	0				17
Close Account	29	31	21	39	13	26	16	21	22				218
Customer Service	8	12	9	6	8	2	2	6	6				59
Customer Leak	1	0	1	0	0	0	1	1	0				4
Destroy Service Line	0	1	0	1	0	0	0	0	0				2
Exchange Meter	2	0	0	0	5	0	3	1	1				12
Fire Flow Test	0	0	0	0	1	0	0	0	0				1
Flush Deadend/Blowoffs	0	0	0	1	0	0	0	0	0				1
Hangtag (not 48 hour)	0	0	0	0	0	7	5	5	7				24
Install New Service	0	0	0	0	0	0	0	0	0				0
Leak Response	4	9	7	2	4	6	2	4	3				41
Lock-Off Service	13	8	16	24	9	23	20	20	20				153
Repair Mainline	0	0	0	0	0	0	2	0	0				2
Miscellaneous	26	7	18	10	7	9	12	12	16				117
Office Repairs	0	0	0	1	2	1	0	1	3				8
Open New Service	30	31	21	39	13	26	16	21	22				219
Pressure Complaint	1	0	0	0	0	1	0	0	0				2
Pull Meter	2	0	0	0	1	0	1	0	0				4
Read Meter	4	0	0	0	0	2	3	3	1				13
Repair Service Line	9	14	7	3	3	2	4	1	6				49
Replace Service Line	3	0	0	0	0	0	0	0	0				3
Reread Meter	35	55	28	20	4	3	10	6	2				163
Tamper	3	0	0	0	1	0	1	0	0				5
Unlock Service	4	7	10	11	10	14	20	10	22				108
Valve Maintenance	0	0	0	0	0	0	0	1	0				1
Verify Meter Locked	10	2	6	7	7	11	10	11	1				65
Well Repairs	0	0	1	0	0	0	0	0	0				1
Water Issues **	0	0	0	0	1	0	0	0	0				1
TOTAL	185	181	148	165	91	135	131	125	132				1293

Fire Hydrant Maintenance and Overhaul activities began in November 2010

*** Includes Water Quality (taste, odor, color) as well as high or low pressure concerns.*

DATE: 4/2/2012

TO: Board of Directors

FROM: Kit Boyd

RE: MAR.2012

	Cubic Feet Pumped	Total Gallons Pumped	Average GPM	Total Running Time	acre feet
Well 2	0	0	#DIV/0!	0	0.00
Well 3	138,650	1,037,102	382	45.3	3.18
Well 4	0	0	#DIV/0!	0	0.00
Well 6	109,690	820,481	425	32.2	2.52
Well 7	73,330	548,508	356	25.7	1.68
Well 8	282,700	2,114,596	950	37.1	6.49
Well 9	598,900	4,479,772	674	110.7	13.75
Well 10	10,280	76,894	56	23	0.24
Total	1,213,550	9,077,354			27.86

Well 2 Bac T sample only

Well 4 is in "inactive" status with the Department of Public Health

over flowed B tanks appox.60,000 00 gal. Mar.14

A Boosters	58,330	436,308	76	95.7
C Boosters	266,800	1,995,664	283	117.5
Total	325,130	2,431,972		

Bighorn-Desert View Water Agency

Board of Directors
Michael McBride, President
Judy Corl-Lorono, Vice President
David Larson, Director
Terry Burkhart, Director
J. Dennis Staley, Director

Marina D West, P.G., General Manager
Lyni Tompkins, Board/Exec. Secretary

A Public Agency

Agency Office
622 S. Jemez Trail
Yucca Valley, CA 92284-1440

760/364-2315 Phone
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www.bdvwa.org

PLANNING/LEGISLATIVE/ENGINEERING GRANT & SECURITY COMMITTEE REGULAR MEETING REPORT

BOARD MEETING OFFICE
1720 N. Cherokee Trail, Landers, CA 92285
Thursday, February 16, 2012 - 8:45 a.m.

COMMITTEE MEMBERS: Director Burkhart & Director Larson

CALL TO ORDER
Director Burkhart called the meeting to order at 8:53 a.m.

PLEDGE OF ALLEGIANCE
Led by Lary Callandar

ROLL CALL
Directors: Director Larson
Director Burkhart

Staff: Marina West
Lyni Tompkins

APPROVAL OF THE AGENDA
Director Larson and Director Burkhart approved the agenda as presented.

CONFERENCE CALL WITH MOJAVE WATER AGENCY'S LEGAL/LEGISLATIVE AND PUBLIC INFORMATION COMMITTEE
Bighorn-Desert View Water Agency Committee participated via teleconference to Mojave Water Agency's agendized meeting to receive an update by their State Advocate, Ed Manning and Carolyn Jensen of KP Public Affairs. The Federal Advocate, Heather Hennessey of Innovative Federal Strategies spoke about the President's new budget proposal.

Adjourned for a break at 9:45 am – Reconvened from break after approximately 10 minutes.

UPDATE ON JOHNSON VALLEY PRESSURIZED WATER SYSTEM

Chief Engineer Chuck Krieger introduced various layouts for a pressurized water system for Johnson Valley. The map layouts provided options with increasing pipeline densities within the Johnson Valley service area. The data used to produce the maps came from the GIS information provided by the Mojave Water Agency. Items discussed were property easements, the various pressure zones and population density.

GM West introduced three other options that had not been previously considered.

The first would be to construct several individual wells that could each serve a limited number of parcels. The second would be to begin the process by connecting parcels to well 10. The last idea is to bring together the property owners that definitely want water service and perhaps the Agency could develop a project that resulted in the construction of private wells on each property with the repayment made through a tax assessment.

Public Comment:

An anonymous person asked if we were to install several wells, could it affect the water supply.

An anonymous person asked if we would be held responsible for wells "that go bad", referring to wells that the Agency would fund.

An anonymous person suggested that we send out a postcard to let the public know these thoughts.

UPDATE ON JOHNSON VALLEY HYDROGEOLOGIC INVESTIGATION

General Manager West gave the staff report.

The EPA work plan originally had the Johnson Valley Hydrogeologic Investigation and it was to build on the then recently completed Conceptual Model Report. The EPA approved Work Plan (Task 10) stating the groundwater basin hydrogeologic investigation is to further assess the water supply of the Johnson Valley basin. The Conceptual Model Report suggests that there are approximately 900 acre feet of unused water in that basin annually. Previous studies indicate that there is adequate groundwater storage and available groundwater storage capacity for a conjunctive use project such as a recharge project as well.

Because the resources are limited, the Agency decided to do single well project designed for maximum impact. Based on the Conceptual Model Report, the parcel was identified and purchased. Daniel B. Stevens was awarded the contract to conduct the investigation. The Agency anticipated water would be found at 250 feet. They drilled to 460 feet. Using the mud rotary method there is no way to know the actual depth to water so the well was designed based on both field conditions and the Conceptual

Model Report. Unfortunately, at this location the well could not sustain a reasonable production rate, and not wanting to go over budget, the project was halted before water quality samples could be obtained.

GM West's indicated that without the support of property owners expressing desire to have a pressurized system the BOD needs to look at how much more they should be willing to commit to this project.

Public comment:

An anonymous person asked about the 800 gallons introduced into the well system and what was the opinion of the well driller. He also asked about perforations.

An anonymous person asked how arsenic would be dealt with.

An anonymous person stated that if we used the Morongo Basin Pipeline (State Water Project) we would then be creating a surface recharge (project).

An anonymous person asked about the various channels/drainages located on a map displayed at the meeting.

An anonymous person asked about the water in the Ames (Groundwater Basin) and could we pump it to Johnson Valley.

An anonymous person stated that it looks to her that an in-depth marketing project would need to be done.

The Committee directed staff to bring back the complete report in April.

CONSENT ITEMS

a. Regular PLEGS Meeting Report, December 15, 2011

Public comment: None

Director Burkhart and Director Larson approved the report.

PUBLIC PARTICIPATION

No public comment.

VERBAL REPORTS

COMMITTEE MEMBERS' COMMENTS/REPORTS

Director Larson - No Report

Director Burkhart reported that she was present when the test well was being drilled. She expressed her disappointment of the results.

GENERAL MANAGER'S REPORT

General Manager West reported that she wanted to put on record a few of the comments noted at the recent LAFCO hearing on January 18, 2012.

Mr. Prittie of Johnson Valley and a board member of the Johnson Valley Improvement Association (JVIA) questioned the Agency survey which resulted in the knowledge that "many people in Johnson Valley wanted pressurized water". Mr. Prittie stated that he "does not know anyone that said yes to that survey".

Furthermore, GM West wants it to be known that Mr. Prittie had attended prior Committee meeting(s) and had the engineer how he would plumb the houses in that area. He reported to LAFCO that we were using data from a 1966 map. The Agency Engineer did not provide information based on a 1966 map, he worked with the data provided to you today. The 1966 map was only a reference map that Mr. Prittie had requested a copy. She feels like he mis-informed LAFCO about our progress on a pressurized system in Johnson Valley.

The second comment was by Mr. Harvey. Mr. Harvey stated "that it is his feeling, that of the Homestead Valley Community Council and direction of the Council that the LAFCO Commission considers defining the community by the four communities contained within the Homestead Valley Community Plan, as defined by the San Bernardino County including the area of Yucca Mesa". West went on to say the she has two comments about this statement. The first is Yucca Mesa is never going to be in our sphere of influence. Its water is served by an adjoining district but the Homestead Valley Plan does include the area we know as W-1 in Landers. This is important because we are going to need to stand by the Homestead Valley Community Council's letter because we agree to our sphere of influence being expanded over W-1.

Lastly GM West read a portion of a comment made by Ms. Munson, President of the JVIA. She said "that after a grant was secured for the Association (for their water well), Marina West insisted that the money for the well go to the Agency".
GM West stated that the Agency had suggested a joint project (combining funds from all sources).

On January 18, 2012 Ms. Munson quoted from page 44 of the LAFCO staff report that "BDVWA informally attempted to assist the JVIA in finding an acceptable resolution such as reverse osmoses". Munson went on to state "that her board was not notified of any attempt to assist and her board would not have accepted it because they have no faith in the Agency".

GM West continued by stating this response is also untrue. The Agency did provide assistance to the County and gave them relevant information from the Conceptual Model Report. Also, Mr. Burkhart who was on the JVIA Board at the time suggested to the JVIA Board, that they come and talk to the Agency and he received a resounding "no". Also the Agency received a letter from the JVIA telling the Agency to "cease and desist and leave us alone". GM West continued stating that the Agency did attempt to help because the Agency that has the expertise.

ITEMS FOR NEXT AGENDA
Capital projects cost estimates

ADJOURNMENT - Director Burkhart adjourned the meeting at 11:30 a.m.

Bighorn-Desert View Water Agency

Board of Directors
Michael McBride, President
Judy Corl-Lorono, Vice President
David Larson, Director
Terry Burkhart, Director
J. Dennis Staley, Director

Marina D West, PG, General Manager

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BOARD OF DIRECTORS' SPECIAL MEETING MINUTES

BOARD MEETING OFFICE
1720 N. Cherokee Trail, Landers, CA 92285
Tuesday, April 3, 2012 - 6:00 p.m.

CALL TO ORDER
Meeting convened by Board President Michael McBride at 6:00 p.m.

PLEDGE OF ALLEGIANCE
Led by Jim Hanley.

ROLL CALL
Directors Present:
Michael McBride
Judy Corl-Lorono
David Larson
Terry Burkhart
J. Dennis Staley

Staff Present:
Marina West
Michelle Corbin

APPROVAL OF AGENDA
Motion to approve the agenda.
MSC[1] (Larson/Corl-Lorono) unanimously approved.

CLOSED SESSION
LIABILITY CLAIM (Gov. Code Section 54956.95)
Claimant: Martha Oswalt
Claim Against: Bighorn-Desert View Water Agency

An anonymous person asked how long the closed session would be.

Adjourned to closed session at 6:02 p.m. - Reconvened from closed session at 6:13 p.m.

CLOSED SESSION REPORT
President McBride reported the Board has declined the claim from Martha Oswald.

AD HOC COMMITTEE REPORT AND RESOLUTION NO. 12R-15 SUPPORTING THE EXPANSION OF THE AGENCY SPHERE OF INFLUENCE
General Manager West gave the staff report.
GM West spoke about the recent letter the Agency had sent out to all W-1 property owners and had received many phone calls in favor of the expansion.

Vice President Corl-Lorono stated that she hopes to get a lot of feedback via the cards sent out with the Agency letter. People within W-1 have called her at home with concern about the tax/bond costs. She reminded the Board of the purpose of LAFCO and why the expansion should happen.

Director Staley stated said that it's good that the image of the Agency is improving. He also commented on the LAFCO meeting held for the community recently. He does not understand why the County Special Districts was allowed to campaign at that meeting.

No public comment.

Director Larson agreed that the Agency letter looked good and was very informative.

President McBride spoke about the definition of the sphere of influence.

MOTION NO. 12-026
(After brief Board discussion), Vice President Corl-Lorono made a motion that we approve Resolution 12R-XX.. The motion was seconded Director Larson.

MSC[1] (Corl-Lorono/Larson) unanimously approved.

SPECIAL DISTRICTS SELECTION ELECTION FOR THE REGULAR LOCAL AREA FORMATION COMMISSION (LAFCO) MEMBER
General Manager West gave the staff report.

No Public Comment

MOTION NO. 12-027
(After brief Board discussion), Director Larson made a motion to select Terry Burkhart for the vote of the Regular Local Area Formation Commission (LAFCO) member. Director Staley seconded the motion.

Roll Call Vote:

Ayes:	McBride, Corl-Lorono, Larson, Staley
Nays:	None
Abstain:	Burkhart
Absent:	None

MSC[1] (Larson/Staley) motion carried. Director Burkhart abstained do to perceived conflict of interest.

CONSIDER APPROVING 3.6% COST OF LIVING ADJUSTMENT FOR ALL AGENCY EMPLOYEES AND AUTHORIZING INCLUSION IN THE FISCAL YEAR 2012/13 BUDGET

General Manager West gave the staff report.

GM West spoke about the various formulas' used to decide on the amount of a cost-of-living adjustment. She said that the FPREP Committee has recommended that the Agency use the Social Security Index to determine the COLA.

Anonymous person asked how this would affect his bill.

Director Larson stated that the FPREP Committee leaned towards the SS Index because it is nationally recognized and that the Committee realized that there had not been a COLA since 2008.

Director McBride stated that the Agency is under no obligation to do this every year.

Director Staley asked if anything was in place to reward employees that work above and beyond.

MOTION NO. 12-028

(After brief Board discussion), Director Larson made a motion for items 1-4 to authorize inclusion of a cost-of-living adjustment of 3.6%; to direct staff to revise the Employee Handbook to define the methodology for determining the cost-of-living to be the Social Security Administration Cost-Of-Living Adjustment publication in the future; to direct staff to revise the Employee Handbook to define the implementation period for any future cost-of-living adjustment to be the first payroll following July 1 and lastly to bring the revised Employee Handbook Resolution to the Board or formal adoption to a future regularly scheduled BOD meeting. Director Burkhart seconded the motion.

MSC[1] (Larson/Burkhart) unanimously approved.

REVIEW OPTIONS FOR DESIGNATING FUND SUB-ACCOUNTS FOR MONIES RETAINED IN THE LOCAL AGENCY INVESTMENT FUND

General Manager West gave the staff report.

Director Larson stated that they thought it would be more transparent to have these sub-accounts. He would like to see $50K populated right away in the emergency fund.

Director McBride agreed about the transparency.

The Board directed staff to speak to the auditor, create sub-accounts and draft a policy.

Public comments:

An anonymous person stated that due to his past work experience; he see's this as a good idea for making financial decisions.

Lary Callandar of Yucca Valley stated this is a good idea but the execution is the wrong time unless a CPA words it so that we still show profit in the audit.

MOTION NO. 12-029

(After brief Board discussion), Director Larson made a motion that the Agency designate the fund sub accounts and draft a policy as to how it will work. The motion was seconded by Director Burkhart.

MSC[1] (Larson/Burkhart) unanimously approved.

Adjourned for a Break at 7:00 p.m. - Reconvened from Break at 7:12 p.m.

CONSIDER ATTENDANCE TO THE CALIFORNIA SPECIAL DISTRICTS ASSOCIATION LEGISLATIVE DAYS, MAY 16-17, 2012 AT AN ESTIMATED COST OF $1,533 PER DIRECTOR

General Manager West gave the staff report.

No public comment.

MOTION NO. 12-030

(After brief Board discussion), Director Larson made a motion to approve the Board's attendance at The California Special Districts Association Legislative Days to be held on May 16-17, 2012, costing a maximum of $1,533 per Director. Director Burkhart seconded the motion.

MSC[1] (Larson/Bukhart) unanimously approved.

DISBURSEMENTS FEBRUARY 2012

No Public Comment

MOTION NO. 12-031

Director Burkhart made a motion to approve the Disbursements (Check Register - Payment of Bills) for February 2012. Vice President Corl-Lorono seconded the motion.

MSC[1] (Bukhart/Corl-Lorono) unanimously approved.

CONSENT ITEMS

a. Financial Statements February 2012
   1. Balance Sheet
   2. Statement of Revenue and Expense
   3. General Account (Union Bank)
   4. Disbursements
   5. Local Agency Investment Fund Balance Timeline

b. Consumption & Billing Comparison Report, February 2012

c. Service Order Report, February 2012

d. Production Report, February 2012

e. Special Board Meeting Workshop Minutes, February 10, 2012

f. Agency's Appropriation Limit for Fiscal Year 2011/2012 (First reading February 28, 2012)

g. Request from Morongo Basin Conservation Association for Partnership and Financial Support ($900) for the 2012 Desert-Wise Living Program Landscape Tour April 22, 2012 (Recommended by FPREP Committee)

h. Approve Completion of the Ames Valley Water Basin Monitoring Report.

i. Consider purchase of a 2012 Dodge Ram (four wheel drive) Vehicle and Accessories for the Operations and Maintenance Staff at a Total Estimated Cost of $28,150. (Recommended by FPREP Committee)

j. Board to consider a Policy to Mandate Sexual Harassment Training for Directors as is Prescribed by AB 1825 (Recommended by FPREP Committee).

k. LAIF Signatories for Authorizing Investment of Monies into the Local Agency Investment Fund (Administrative Process)

No Public comment.

MOTION NO. 12-032

Director Larson made a motion to approve consent items a - k with the exception of i. The motion was seconded by director Burkhart.

MSC[1] (Larson/Burkhart) unanimously approved.

MATTERS REMOVED FROM CONSENT ITEMS

Item i, Consider purchase of a 2012 Dodge Ram (four wheel drive) Vehicle and Accessories for the Operations and Maintenance Staff at a Total Estimated Cost of $28,150. (Recommended by FPREP Committee)

GM West gave the staff report.

No Public Comment

MOTION NO. 12-033

Vice President Corl-Lorono made a motion to approve item i. The motion was seconded by Director Larson.

MSC[1] (Corl-Lorono/Larson) unanimously approved.

PUBLIC COMMENT PERIOD

No Public Comment

VERBAL REPORTS

GENERAL MANAGER'S REPORT

GM West stated that she wanted the Board to know that the Morongo Basin Conservation Association will be pleased that we have approved their request and that two Board members and two staff members are participating as volunteer docents for the event.

DIRECTORS' REPORT

Director Staley stated that he is concerned with the Board's image and when the opportunity comes, we should participate in outreach. He mentioned the new Landers sign at the post office and thought it would be a good idea to plant some cactus near that sign.

Director Larson stated that he had chaired the FPREP Committee and that it was an honor and privilege to be part of it.

Vice President Corl-Lorono reported that she had recently attended a webinar on upcoming legislated issues. One issue being a state tax for Agencies that purchase from out of the area (SB 1125) and AB 1543 which will prohibited internet purchases outside the country for parts. She also reported that she had attended a webinar from the Water Education Foundation. In that webinar they discussed infrastructure and the importance of maintaining it. Lastly she mentioned that the directors all have assignments and the importance of attending meetings that they commit to.

PRESIDENT'S REPORT- None

FUTURE AGENDA ITEMS

No future agenda items.

ADJOURNMENT - President McBride adjourned the meeting at 7:42 p.m.

Approved by:

David Larson, Secretary of the Board

MSC[1] – Motion made, seconded, and carried.

BIGHORN DESERT VIEW WATER AGENCY
AGENDA ITEM SUBMITTAL

Meeting Date: April 24, 2012

To: Board of Directors

Budgeted: N/A
Budgeted Amount: N/A
Cost: N/A

From: Marina D. West

General Counsel Approval: N/A
CEQA Compliance: *N/A*

Subject: Adopt Resolution No. 12R-XX Consenting to Join the Health Benefits Program of the Association of California Water Agencies (ACWA) Joint Powers Insurance Authority (JPIA), Ratifying the Action of the Health Benefits Authority (HBA) Board of Directors to Terminate the HBA Joint Powers Agreement

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SUMMARY

RECOMMENDATION

The Board considers taking the following action(s):

1. Adopt Resolution No. 12R-XX Consenting to Join the Health Benefits Program of the Association of California Water Agencies (ACWA) Joint Powers Insurance Authority (JPIA), Ratifying the Action of the Health Benefits Authority (HBA) Board of Directors to Terminate the HBA Joint Powers Agreement.

BACKGROUND/ANALYSIS

The Agency currently provides dental, vision and life insurance benefits via the ACWA Health Benefits Authority (HBA). The HBA has proposed transitioning its operations and health benefits programs into the ACWA Joint Powers Authority (ACWA-JPA). The HBA will be dissolved and all existing programs will remain unchanged.

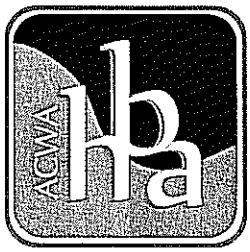
The HBA and ACWA-JPIA share many of the same goals and serve many of the same members, with more than 2/3 of the combined membership participating in both programs. The combination of the programs will reduce overall costs and improve operations. Costs will be monitored and the most effective way to pass any savings along to the members will be determined over time.

The HBA bylaws require that 75% of the HBA members must agree to the change within 90 days. The attached resolution has been provided by HBA. The signed resolution is requested by April 30 and no later than May 31. Failure to adopt the resolution may result in loss of coverage.

For further information, a Frequently Asked Questions list prepared by ACWA is attached.

PRIOR RELEVANT BOARD ACTION(S)

None



ACWA Health Benefits Authority

April 1, 2012

Mr. Micheal McBride
President
Bighorn-Desert View WA
622 S Jemez Trail
Yucca Valley, CA 92284

RE: Urgent Action Needed to Retain Health Benefits

Dear Mr. McBride,

On March 7 you received a notice announcing the impending transition of the ACWA Health Benefits Authority (HBA) into the ACWA/Joint Powers Insurance Authority (ACWA/JPIA). On March 28, the HBA Board voted to dissolve the HBA and transfer the health benefits program to ACWA/JPIA.

We need your immediate assistance to secure the needed concurrence within the mandated 90-day window. The following steps must be taken to ensure a seamless transition and to retain the employee benefits currently provided by HBA:

1. **Your board will need to pass the enclosed resolution.** The resolution consents to join the Employee Benefits Program of the ACWA/Joint Powers Insurance Authority and ratifies the action of the ACWA Health Benefits Authority Board of Directors to terminate the Health Benefits Authority Joint Powers Agreement. **Please place the resolution on your next available agency agenda for action.**

2. **Return the signed resolution:** HBA is requesting the signed resolution by April 30, 2012 (or sooner), if possible, and no later than May 31, 2012. Please mail to:

   ACWA HBA
   4600 Northgate Blvd, Suite #100
   Sacramento, CA 95834

Failure to return the signed resolution by June 29, 2012, may result in loss of coverage for your district employees.

ACWA
Health Benefits
Authority

A dedicated website is available to assist you with the process. It includes a list of Frequently Asked Questions (FAQs), model resolutions, a timeline and other information. Please go to www.hba-transition.com.

An informational webinar is scheduled for Wednesday, April 18, at 10 a.m. Registration details will be provided in the near future.

If you have any further questions, please contact Nancy Stangel, JPIA Director of Administration (800-231-5742, ext. 3133, nstangel@acwajpia.com) or Cynthia Harding, HBA Operations Manager (800-736-2292, ext. 5, cynthiah@acwa.com)

Thank you for your help.

Sincerely,

Rick Gilmore
Board President
ACWA HBA

Attachment: Sample resolution

RESOLUTION NO. 12R-

RESOLUTION APPROVING MEMBERSHIP IN THE ACWA JOINT POWERS INSURANCE AUTHORITY, CONSENTING TO JOIN THE HEALTH BENEFITS PROGRAM OF THE ACWA JOINT POWERS INSURANCE AUTHORITY, RATIFYING THE ACTION OF THE ACWA HEALTH BENEFITS AUTHORITY BOARD OF DIRECTORS TO TERMINATE THE HEALTH BENEFITS AUTHORITY JOINT POWERS AGREEMENT, AND AUTHORIZING AND DIRECTING THE BIGHORN-DESERT VIEW WA TO EXECUTE ALL NECESSARY DOCUMENTS

WHEREAS, this Agency entered into a joint exercise of powers agreement ("HBA Agreement") with the Association of California Water Agencies Health Benefits Authority ("HBA") in order to pool its purchasing needs with other public agencies desiring to provide their employees with comprehensive and economical health and welfare benefits; and

WHEREAS, this Agency entered into a Health Benefits Memorandum of Understanding ("MOU") to enroll in specific health programs and ancillary programs ("Existing Employee Benefits Coverage") offered by HBA and agreed to abide by: (1) the HBA Agreement; (2) all rules and procedures established by HBA in the administration of the Agency's Existing Employee Benefits Coverage; and (3) all underwriting, eligibility, and contribution requirements in Appendix A to the MOU; and

WHEREAS, certain public agencies have entered into a joint exercise of powers agreement ("JPIA Agreement") with the Association of California Water Agencies Joint Powers Insurance Authority ("JPIA") in order to pool their purchasing needs with other public agencies desiring to obtain comprehensive and economical public liability, workers' compensation, unemployment, health, accident and/or dental, or property coverage; and

WHEREAS, JPIA is both qualified and authorized by the laws of the State of California to administer the Existing Employee Benefits Coverage to this Agency through JPIA's Employee Benefits Program; and

WHEREAS, during a noticed special meeting held on February 6, 2012, the HBA Board of Directors unanimously voted to transfer all HBA operations and administrative functions to JPIA on or about July 1, 2012, and to pursue a merger of the two public agencies after which the HBA Agreement would be terminated; and

WHEREAS, pursuant to Article 22 of the HBA Agreement, the HBA Agreement may be terminated by the HBA Board of Directors subject to ratification by the written consent of three-fourths of the HBA Member agencies within 90 days of the HBA Board's action, provided, however, that HBA and the HBA Agreement shall continue to exist for the purpose of concluding all functions necessary to wind up HBA's affairs; and

WHEREAS, during a noticed regular meeting held on March 28, 2012, the HBA Board of Directors approved HBA Resolution 12-03-02: (1) electing to terminate the HBA Agreement pursuant to Article 22 of the HBA Agreement and, except as provided in clause 2 below, said termination shall become effective upon ratification by the written consent of three-fourths of the HBA member districts and agencies; (2) recognizing that pursuant to Article 22 of the HBA Agreement, HBA and the HBA Agreement shall continue to exist for the purpose of winding up and dissolving the business affairs of HBA, and acknowledge that the HBA Board of Directors is vested with all powers of HBA for doing the same; and (3) declaring that Resolution 12-03-02 shall take effect on April 1, 2012, thereby beginning the 90-day ratification period.

NOW, THEREFORE, BE IT RESOLVED that the Directors of Bighorn-Desert View WA hereby:

1. Agree that the JPIA Agreement and the HBA Memorandum of Understanding referred to in the recitals above are incorporated in this resolution by reference.

2. Approve this Agency's membership in the Association of California Water Agencies Joint Powers Insurance Authority.

3. Consent to join JPIA's Employee Benefits Program and acknowledge, represent, and agree that all terms and conditions of the HBA Memorandum of Understanding apply to the provision of this Agency's Existing Employee Benefits Coverage through JPIA.

4. Authorize and direct this Agency's _____ to cooperate fully with HBA and JPIA in the execution of any other documents and in the completion of any additional actions that may be necessary or appropriate for the purpose of ensuring that this Agency's Existing Employee Benefits Coverage continues without lapse through JPIA.

5. Ratify the action of the HBA Board of Directors to terminate the HBA Agreement, to be effective as provided in Article 22 of the HBA Agreement.

6. Direct the Secretary of the Board of this Agency to immediately send a certified copy of this resolution to: Association of California Water Agencies Health Benefits Authority, 4600 Northgate Blvd, Suite 100, Sacramento, California, 95834.

PASSED AND ADOPTED by the Directors of Bighorn-Desert View WA this ____ day of _____, 2012, by the following vote:

President	Attest by:
Michael McBride	David Larson

Marina West

From: HBA HBA [HBA@acwa.com]

Sent: Friday, April 06, 2012 9:25 AM

Cc: Allison Hartill; Angela Cassity; Cynthia Harding; HBA Tmp; Susan Schnider; Veronica Cobian

Subject: HBA Alert - PLEASE DO NOT REPLY

Good Morning,

This is a follow-up to the notice your agency received on Wednesday, March 7, 2012 regarding the impending transition of the ACWA Health Benefits Authority (HBA) into the ACWA/Joint Powers Insurance Authority (ACWA/JPIA). On Wednesday, March 28, 2012 the HBA Board voted to dissolve HBA and transfer the health benefits program to ACWA/JPIA. In order to proceed with this transition, HBA must secure the concurrence of 75% of HBA members within a 90 day window specified in the bylaws of the Health Benefits Authority.

The deadline to receive the signed resolution is Friday, June 29, 2012.

To ensure HBA meets this 90 day concurrence deadline and to avoid a potential negative impact on our member's benefits, we are asking for your assistance. A "kit" that outlines our next steps and contains your agency's resolution was mailed on Monday, April 2, 2012 to your agency's President and/or General Manager. Please be sure to contact your agency's President and/or General Manager to ensure the resolution makes it onto your next Board Meeting agenda. Your help and assistance with this transition would be appreciated.

The information contained in the "kit" and FAQs can be found on the HBA transition website at http://www.hba-transition.com/.

If you have any questions about the documents, accessing the webpage, or have not received your "kit", please contact Emeline Abadie at hbatmp@acwa.com or via phone 800.736.2292. We will be following up with you directly in the next couple of weeks to briefly chat about our next steps.

Again, thank you for your assistance.

HBA – ACWA/JPIA Transition

Frequently Asked Questions

What is being proposed?

The ACWA Health Benefits Authority (HBA) has proposed transitioning its operations and health benefits programs into the ACWA/Joint Powers Insurance Authority (ACWA/JPIA). HBA would be dissolved and all of the assets and liabilities would be transferred to ACWA/JPIA. All of HBA's existing programs and offerings would remain unchanged.

What are the benefits of this transition?

HBA and ACWA/JPIA share many of the same goals, including member service, promoting employee health, keeping costs downs and creating value for members. Transitioning HBA into ACWA/JPIA will allow the two organizations to combine resources, reduce overall costs and improve operations. Potential cost savings would be passed on to all agencies that participate in programs offered by HBA and ACWA/JPIA. With more than two-thirds of the combined membership participating in both programs, the transition will also help eliminate confusion regarding the responsibilities of each.

What steps are needed to make the transition happen?

In order to proceed with the transition, HBA must secure the concurrence of 75% of HBA members within the 90-day window specified in HBA's bylaws. That must be achieved by July 1, 2012. The following steps must be taken to ensure a seamless transition and to retain the employee benefits currently provided by HBA:

1. Adopt a resolution. The board of directors of each HBA member agency must adopt a resolution consenting to join the Employee Benefits Program of the ACWA / Joint Powers Insurance Authority and ratifying the action by the HBA Board of Directors to terminate the Health Benefits Authority Joint Powers Agreement. The resolution should be placed on agencies' agendas as soon as possible.

2. Return the signed resolution. HBA is requesting the signed resolution by April 30, 2012, (or sooner) and no later than May 31, 2012. Resolutions should be mailed to:

ACWA HBA
4600 Northgate Blvd., Suite #100
Sacramento, CA 95834

What is the timeline for the transition?

- **April 1**: Start of the 90-day period in which at least 75% of the HBA membership provides written consent to dissolve
- **First week of April**: Information kit with required resolutions mailed to HBA members; HBA staff to follow-up with HBA members
- **April 18**: ACWA/JPIA and HBA staff will conduct a webinar at 10 a.m. for members to review information and ask questions
- **May 8**: ACWA/JPIA and HBA staff will conduct a seminar at 10 a.m. at the ACWA Spring Conference in Monterey
- **May-June**: Staff to follow-up with HBA members to send required resolutions to HBA
- **July 1**: Target date to complete transition

If approved, when will the change become effective?

If 75% of HBA membership approves, the transition becomes effective July 1, 2012.

What specific steps do the board of directors for each current HBA member need to take?

The governing board of each member agency needs to adopt the provided resolution and return to HBA by May 31, 2012. Sample resolutions are available on the transition website, www.hba-transition.com.

What if my district doesn't return the resolution?

Failure to return the signed resolution by June 29, 2012, may result in loss of coverage for district employees.

How will the potential cost savings for members be distributed among participating members?

While cost savings are expected, it is too early to say with specificity how the savings will be distributed to the membership. ACWA/JPIA will be monitoring all costs and potential savings and will determine the most effective way to pass them on to participating members. Information will be shared with members as it becomes available.

Will this change result in a cost or risk increase for ACWA/JPIA members?

No. Each program in the ACWA/JPIA is maintained and funded separately from the other programs. The Employee Benefits Program will operate as in the past and be a separate program.

Will this transition require a change to the current ACWA/JPIA structure, board composition or policies?

The only change to the ACWA/JPIA structure will be an increase in the number of board members to accommodate HBA members that are not currently ACWA/JPIA members. The Employee Benefits Program will be added to ACWA/JPIA's governing documents, and an Employee Benefits Committee will be added.

Why wasn't this option considered as part of the recent restructuring of HBA?

The economic environment combined with the unknown impact of the proposed national health care program has changed the business model. Many of the desired goals for future services and long-term savings are already being developed at ACWA/JPIA and, as such, can now be implemented simultaneously. Recent opportunities and immediate needs have developed at both organizations which, when combined, will make both organizations stronger.

Will HBA members have access to all ACWA/JPIA programs?

Yes, but they will have to apply for and be approved by the Executive Committee. Each program requires a separate application.

Does an agency still have to be an ACWA member to receive health benefits through this new arrangement with ACWA/JPIA?

Yes. An agency must be a member of ACWA to be eligible for all ACWA/JPIA programs and services, including health benefits.

How does this transition impact ACWA?

There will be no immediate impact on ACWA on July 1, 2012. ACWA will continue to work with both HBA and ACWA/JPIA to transition the services it now provides to HBA. For the longer-term, any financial issues arising from the merger between HBA and ACWA/JPIA will be incorporated into the process to develop ACWA's 2013 budget.

What happens to the HBA board of directors?

The HBA board of directors will cease to exist when the transition is complete.

If the change is not approved, what will be the course of action?

If written concurrence of at least 75% of the HBA membership has not been received by July 1, 2012, HBA will enter into an agreement for administrative services provided by ACWA/JPIA. The 90-day process to get 75% concurrence for the transition would begin again.