

TULE SUBBASIN COORDINATION AGREEMENT – REVISED FINAL

- At each RMS well, determine the dominant beneficial use for that monitoring well based on the classification of wells within one mile of the RMS well.
 - If the majority of the beneficial use (greater than 50% the wells within a determined area) is agricultural and there are no public water systems (including schools) the minimum threshold would be a host of agricultural water quality constituents.
 - If an RMS well is located within an urban area, within one mile of a public water system, which includes schools, or the dominant beneficial use (greater than 50% of the wells within the determined area) is drinking water, then the minimum threshold would be set at the MCL for drinking water.
 - In cases where both of the above criteria are found to be true, the minimum thresholds would be established for both drinking water MCLs and Ag WQO's and minimum thresholds would be set at the most stringent of the two when considering common constituents.
 - If drinking water MCLs or Ag WQOs were historically exceeded at an RMS well or found not be a result of implementation of a GSP, the GSA will coordinate with the responsible regulatory agency to prevent GSA SGMA activities from further degrading groundwater quality.

4.4.3.2 Relationship to Other Sustainability Indicators (§354.28(b)(2))

Groundwater quality is directly related to the sustainability indicator for change in groundwater storage and lowering of groundwater levels.

4.4.3.3 Relationship to Adjacent Basins (§354.28(b)(3))

The Minimum Thresholds for groundwater quality are based upon MCL and WQO established by the State for the beneficial uses and user within the Central Valley of California. Implementation of the projects and management actions within the GSA that may impact degraded groundwater quality will be consistent with the requirements established by the State and therefore would not adversely impact adjacent basins.

4.4.3.4 Potential Effects (§354.28(b)(4))

The Minimum Thresholds for the degrading of groundwater quality is not anticipated to produce undesirable results for agricultural, municipal, and industrial beneficial uses. If beneficial uses and users of groundwater have their groundwater quality impacted by GSA actions, each GSA will adopt a Mitigation Program or Programs consistent with the Framework attached hereto as Attachment 7.

4.4.3.5 Relationship with Federal, State, and Local Standards (§354.28(b)(5))

The minimum thresholds established are based on the Federal, State and Local Standards for groundwater quality maximum contaminant level (MCL) for drinking water or Agricultural Water

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Quality Objective (WQO) based on the beneficial use or user of the groundwater. Each groundwater quality RMS has been designated as representative of drinking water beneficial use, agricultural beneficial use, or both using the criteria defined in Section 4.4.3.1.

4.4.3.6 Measurement of Groundwater Quality Relative to Minimum Thresholds (§354.28(b)(6))

Groundwater quality will be measured at the representative monitoring sites and according to the monitoring schedule described in **Attachment 1**. The status of groundwater quality relative to the Minimum Thresholds will be reported in Annual Reports and Five-Year Reports.

4.4.4 Land Subsidence Minimum Thresholds

4.4.4.1 Criteria Used to Establish Minimum Thresholds (§354.28(b)(1))

Minimum Thresholds for land subsidence were established throughout the Tule Subbasin based on the best available data collected to date and groundwater model analysis, as described in Section 4.3.4.2.

Groundwater flow model analysis forecast as much as three feet of additional land subsidence at some locations of the FKC during the transition period from 2020 to 2040 (see Attachment 3; Figure 44). Through coordination with the Friant Water Authority staff and consultants, this value became the basis for engineering design modifications to restore canal flow capacity to its original condition. Land subsidence along the canal exceeding three feet was determined to be an undesirable result because it would be beyond what the engineering design could accommodate to restore the flow capacity to its original condition and what the parties to the FWA/ETGSA/Pixley GSA settlement agreement agreed to mitigate. Accordingly, the minimum threshold for land subsidence along the FKC was established at three feet of additional land subsidence after January 2020.

In other areas of the Tule Subbasin, apart from the FKC, the rate and extent of land subsidence forecast by the groundwater flow model for the 2020 to 2040 transition period was the basis for establishing minimum thresholds (see Attachment 6). In most areas of the Tule Subbasin, the GSAs determined that the forecasted land subsidence during the transition period, which was of a similar magnitude to what had been historically measured, was not anticipated to result in undesirable results to land uses or critical infrastructure because no undesirable results had previously been reported as a result of historical land subsidence in those areas. Thus, the maximum amount of land subsidence forecast during the transition period from 2020 to 2040 using the calibrated groundwater flow model is the basis for the land subsidence minimum thresholds throughout the Subbasin.

4.4.4.2 Relationship to Other Sustainability Indicators (§354.28(b)(2))

Land subsidence is directly related to the sustainability indicators for lowered groundwater levels and reductions in groundwater in storage. By maintaining groundwater levels above the Minimum Thresholds, undesirable results associated with land subsidence should be minimized.

4.4.4.3 Relationship to Adjacent Basins (§354.28(b)(3))

The Minimum Thresholds described in each GSA’s GSP have been informed through an analysis of potential future land subsidence in the Subbasin using a numerical groundwater flow model that incorporates future planned projects and management actions of each of the GSAs. Implementation of the projects and management actions, including the mitigation program by participating GSAs, are predicted to stabilize groundwater levels at the Tule Subbasin boundaries and areas immediately adjacent to the Subbasin, as long as the neighboring basins are successful in implementing their respective projects and management actions. Stabilizing groundwater levels will have the effect of minimizing land subsidence.

4.4.4.4 Potential Effects (§354.28(b)(4))

Regional land subsidence could result in impacts to gravity-driven water conveyance and other infrastructure. Land uses vulnerable to regional land subsidence are considered high priority and include:

- Gravity-Driven Water Conveyance
 - Canals
 - Turnouts
 - Stream Channels
 - Water Delivery Pipelines
 - Basins
- Wells
- Flood Control

The Tule Subbasin GSAs have developed a mitigation framework for each GSA to utilize to address claims of impact that can be attributed to land subsidence (see Attachment 7). The ETGSA and Pixley GSA have entered into a settlement agreement with the FWA to mitigate the cost to repair sections of the FKC within ETGSA associated with land subsidence that occurs during the transition period from 2020 to 2040 (see ETGSA and Pixley GSA GSPs).

Differential land subsidence and associated damage to infrastructure has not been reported in the Tule Subbasin and is not anticipated to result in adverse impacts to infrastructure or land uses. These land uses are considered low priority, as it relates to land subsidence impacts, and include:

- Highways and Bridges
- Railroads
- Other Pipelines
- Wastewater Collection
- Utilities
- Buildings

Claims of impact related to land subsidence for these categories are more likely to come from public utilities, municipalities, or state agencies whereas each GSA will adopt a Mitigation Program or Programs consistent with the Framework attached hereto as Attachment 7.

4.4.4.5 Relationship with Federal, State, and Local Standards (§354.28(b)(5))

There are no Federal, State or local standards specific to addressing land subsidence in the Tule Subbasin.

4.4.4.6 Measurement of Land Subsidence Relative to Minimum Thresholds (§354.28(b)(6))

Land elevations will be measured at the representative monitoring sites and according to the monitoring schedule described in **Attachment 1**. Additional monitoring, above and beyond that specified in Attachment 1, will be implemented for the ETGSA Land Subsidence Management Area along the FKC. The status of land subsidence relative to the Minimum Thresholds will be reported in Annual Reports and Five-Year Reports.

4.5 Measurable Objectives (Reg. § 354.30)

Measurable Objectives, including interim milestones in increments of five years, will be quantified at each RMS for each applicable sustainability indicator, defined as the numeric value in 2040, to achieve the sustainability goal in 20-year of plan implementation. Each measurable objective and interim milestones will be defined and described separately by each GSA in the GSP.

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V. MONITORING PROTOCOLS, NETWORKS, AND IDENTIFICATION OF DATA GAPS (§§352.2, 354.32.)

5.1 Monitoring Network and Representative Monitoring (§§354.34-354.36)

The minimum monitoring network to be used to collect data in the Tule Subbasin is described in the Tule Subbasin Monitoring Plan (see **Attachment 1**). The types of data to be collected as part of the plan include:

- Surface water flow
- Surface water quality
- Groundwater levels
- Groundwater quality
- Land surface elevation from Global Positioning System (GPS) stations
- Land surface elevation changes from satellite data
- Land subsidence data from extensometers

The monitoring plan ensures that the data collected within the Subbasin is of sufficient quality, frequency and distribution to provide meaningful results for evaluating changing conditions within the Subbasin and informing the decision-making process.

The minimum monitoring network identified in the Tule Subbasin Monitoring Plan is both flexible and iterative, allowing for the addition or subtraction of monitoring features, as necessary, and to accommodate changes in monitoring frequency and alternative methodologies, as appropriate. Any changes to the minimum monitoring network or monitoring protocols identified in **Attachment 1** shall be approved by the Tule Subbasin TAC.

Individual GSAs may include additional monitoring features, not specifically identified in the Tule Subbasin Monitoring Plan, for collecting data to include in their respective GSPs and Annual Reports. Any monitoring features utilized for the collection of data to be included in GSPs and Annual Reports that are not identified in the Tule Subbasin Monitoring Plan must meet the minimum design and construction requirements specified in Section 3 of this Coordination Agreement and the Tule Subbasin Monitoring Plan. Any monitoring features not in the Tule Subbasin Monitoring Plan that are to be used by a GSA to collect data for incorporation into GSPs or Annual Reports will be shared with the Tule Subbasin TAC.

5.1.1 Procedures for Collecting the Data

The Tule Subbasin Monitoring Plan (**Attachment 1**) includes detailed procedures for the collection of surface water flow data, groundwater elevation data, and land surface elevation data. Groundwater quality data will be coordinated with and through the Irrigated Lands Regulatory Program and the existing coalitions. The data collection procedures will ensure that the data collected have the level of accuracy and precision necessary for evaluating conditions relative to minimum thresholds, estimating change in groundwater storage as required for Annual Reports, and measuring progress toward achieving sustainability. The data collection processes and procedures shall apply to monitoring features specifically identified in the Tule Subbasin Monitoring Plan as well as any additional monitoring features utilized for the collection of data by individual GSAs.

5.1.2 Entities Responsible for Data Collection

All data collection work, as specified in the Tule Subbasin Monitoring Plan (**Attachment 1**)

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will be performed by each GSA through individuals working under the direct supervision of a California Registered Professional Civil Engineer, Professional Geologist, or Certified Hydrogeologist and who meet the minimum qualifications and training requirements required by the Tule Subbasin TAC's technical consultant. The collection of groundwater quality data will be coordinated with and through the Irrigated Lands Regulatory Program and the existing coalitions. All data will be collected in accordance with the protocols specified in **Attachment 1**.

Nothing in this Agreement prevents multiple GSAs from using the same consultant. It is understood by and among the Parties that there will be individual GSA-specific data that can be collected either through the Tule Subbasin TAC's technical consultant or through the consultant/staff hired by that GSA. The goal is that the data collection be done following the same processes and procedures throughout the Tule Subbasin. If a GSA prefers to use the technical consultant hired by the Tule Subbasin TAC for the purposes of collecting information beyond what is required for Tule Subbasin Monitoring Plan, then that GSA shall pay for the consultant's fees and costs separately and above what the Tule Subbasin GSAs agree to cost share. In the event that a GSA hires its own consultant for site or GSA-specific data collection, such data shall be shared through the data sharing provisions of this Agreement.

All data collected by the GSAs shall be submitted to the Tule Subbasin TAC's technical consultant in accordance with the schedule described in Section 4.1.3 for QA/QC and entry into the Tule Subbasin Water Management Database (see Section 4.3).

5.1.3 How and When Data are Distributed to the GSAs

The complete Tule Subbasin Water Management Database will be available to authorized representatives as set forth by the GSAs of the Tule Subbasin GSAs at any time upon request.

The schedule to distribute data to the individual GSAs for preparation of Annual Reports has been prepared to enable the Tule Subbasin TAC to submit the compiled Annual Reports by the SGMA reporting deadline of April 1 following a water year. As per Groundwater Sustainability Plan Regulations Section 356.2, Annual Reports will include data and analyses for the preceding water year (October 1 through September 30). The distribution of data to the GSAs for the preparation of Annual Reports will be in accordance with the following schedule:

- The Tule Subbasin TAC's technical consultant will update the database between October 1 and January 30 following a subject water year.
- Individual GSAs will be required to submit groundwater extractions (i.e. pumpage) to the technical consultant by January 1 following a subject water year.
- Following Quality Assurance/Quality Control checks by the technical consultant, the previous water year's data will be submitted to each GSA by February 1 so the

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GSAs can prepare their respective Annual Reports. The data will be formatted for easy incorporation into Annual Reports and distributed electronically. □ Annual reports will be submitted to the Tule Subbasin TAC for compilation by March 1 following the preceding water year. □ All Annual Reports will be submitted to the California Department of Water Resources by April 1 following the preceding water year.

5.2 Assessment and Improvement of Monitoring Network and Identification of Data Gaps (§354.38.)

The Tule Subbasin TAC will periodically evaluate the monitoring network in **Attachment 1** to determine if there are data gaps that could affect the ability of the Subbasin to meet its sustainability goals. Current data gaps are identified in **Attachment 1**. Every five years, the Tule Subbasin TAC will provide an evaluation of data gaps in the five-year assessment, including steps to be taken to address data gaps before the next five-year assessment.

5.3 Data Management System (DMS) (§357.4(e))

Efficient data management will be a critical to ensure that each GSA can access the data needed to prepare their respective Annual Reports in a timely manner and to ensure that the Tule Subbasin TAC can meet deadlines for submittal of the coordinated reports. The Monitoring Plan, **Attachment 1**, describes the Tule Subbasin Water Management Database, the procedures for updating and maintaining the database, and protocols for database security, file access and reporting. Data to be managed will include:

- A. Historical data used as a basis for preliminary estimates of the Water Budget and Sustainable Yield of the Tule Subbasin.
- B. Data to be collected in accordance with the Tule Subbasin Monitoring Plan (**Attachment 1**).

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VI. IMPLEMENTATION OF GSPS (§357.4(c))

Pursuant to 23 Cal. Code Regs. §357.24(c), the coordination agreement shall explain how the GSPs when implemented together satisfy the requirements of SGMA and are in substantial compliance with its regulations. SGMA requires the development and implementation of GSPs by GSAs to achieve sustainable groundwater management by 2040.

Throughout this Coordination Agreement, the Tule Subbasin GSAs have agreed upon various data and methodologies critical to understanding the hydrogeology of the Subbasin, and addressing and understanding what remedies are available to avoid undesirable results.

The GSAs within the Tule Subbasin will work together to implement their respective GSPs within the Tule Subbasin. The Tule Subbasin TAC, the technical advisory committee composed of representatives from each GSA, has developed Subbasin-wide data and methodologies for each of the following items, and made them available to each GSA to adopt and utilize in the development of its respective GSP:

- . ○ Groundwater elevation data.
- . ○ Groundwater extraction data.
- . ○ Surface water supply.
- . ○ Total water use.
- . ○ Change in groundwater storage.
- . ○ Water budget.
- . ○ Sustainable yield.

The GSAs understand there is local, site-specific data particular to each GSA which each GSA may utilize in the development of its respective GSP in addition to the Subbasin-wide data. If an individual GSA has identified monitoring features for use in collecting data specific to its jurisdictional area and the features are not included in Section 3 or **Attachment 1** of this Coordination Agreement, then the GSA can incorporate the features and data into its GSP upon confirming that those particular monitoring features meet the minimum criteria specified in Section 3 and that the data has been collected in accordance with this Coordination Agreement.

Each GSA shall submit its respective GSP, and any updates thereto, to the Tule Subbasin TAC so that the other Tule Subbasin GSAs may review and comment prior to documents being submitted to DWR. Each GSA shall comply with 23 Cal. Code Regs. §354.10, regarding comments received on the GSP, and such GSP shall be made available on the GSA's website.

Each GSA acknowledges and agrees that it is responsible to ensure that its GSP complies with the statutory requirements of SGMA. The GSAs further acknowledge the obligation for each GSA to coordinate the implementation of their respective GSPs in order to, collectively, achieve the Sustainability Goal for the Subbasin, as required by SGMA.

Additionally, to better implement and refine the projects and management actions adopted in their respective GSPs, the GSAs are committed to work together on developing and maintaining a data management system and are implementing quality control and quality assurance measures to collect reliable GSA-specific and Subbasin-wide data to ensure Subbasin-wide Sustainability Goal is

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achieved.

The Tule Subbasin GSAs are committed to implementing their respective projects and management actions set forth in their respective GSPs for the purpose of reaching sustainability for the Subbasin by 2040. The GSAs are also committed to further refine and update their projects, management actions and GSPs in accordance with SGMA as more and better data becomes available.

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VII. TULE SUBBASIN ORGANIZATIONAL STRUCTURE

7.1 Tule Subbasin Technical Advisory Committee

The Tule Subbasin TAC was previously formed under a Memorandum of Agreement executed by all Tule Subbasin GSAs. The Parties agree to the continued existence of the Tule Subbasin TAC pursuant to the terms below. The Tule Subbasin TAC is an advisory committee only and has no authority or power to bind any individual GSA to any recommendation or action item taken by its members.

Nothing in this Agreement is intended to affect the statutory powers granted under SGMA, or any other applicable law, to the Tule Subbasin GSAs. Each Tule Subbasin GSA shall be solely responsible for the adoption and enforcement of any ordinances, bylaws, or other legally enforceable actions taken within their respective GSA boundaries to implement SGMA, including, but not limited to, the preparation of the GSP applicable within their GSA boundaries. Each GSA agrees that as required by this Coordination Agreement, they shall utilize the same data and methodologies contained in this Coordination Agreement. The Parties understand there will be basin-wide data, in addition to certain local site-specific data collected and/or utilized by each GSA.

7.1.1 Members and Voting

A Tule Subbasin TAC shall be formed with one (1) representative appointed from each GSA, as well as one (1) alternate from each GSA. The Subbasin TAC shall make technical recommendations regarding the Coordination Agreement and other Tule Subbasin related SGMA compliance issues to each GSA. The Tule Subbasin TAC shall meet as necessary. Each GSA shall be entitled to one (1) vote. Recommendations to each GSA shall only be made upon consensus of the Tule Subbasin TAC. Should consensus not be reached, the votes shall be reported to each GSA Board for further direction. A quorum shall exist when five of the seven GSAs have representatives in attendance. The chairperson and secretary will not hold any separate voting rights on the Tule Subbasin TAC.

7.1.2 Consultants

The Parties agree that the Tule Subbasin TAC should obtain the services of consultants to facilitate the collection of data and the submission of information to the Tule Subbasin GSAs. Prior to hiring consultants, or approving scopes of work, the TAC shall obtain approval from the Tule Subbasin GSAs.

7.1.3 Legal Services

The Tule Subbasin TAC shall not retain independent legal services, unless agreed upon by all Parties hereto. Each Party shall be responsible for any legal fees incurred by its own counsel in the course of performing any legal work related to Subbasin matters.

7.1.4 Chairman and Secretary

A Chairman and Secretary shall be appointed to serve the Tule Subbasin TAC. The Chairperson shall be responsible for managing all Tule Subbasin TAC meetings, preparing agenda

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materials, managing consultants hired by the Tule Subbasin TAC, and coordinating the delivery of information between GSAs and Tule Subbasin TAC consultants. The Secretary shall be responsible for distributing Tule Subbasin TAC agenda materials to all Tule Subbasin GSAs and to all interested parties that request to be notified of Tule Subbasin TAC meetings, as well as ensuring compliance with all applicable legal requirements, including, but not limited to, the Ralph M. Brown Act. The Secretary shall also be responsible for record keeping of the Tule Subbasin TAC group, maintaining minutes of Tule Subbasin TAC meetings, maintaining copies of all executed agreements, maintaining copies of documents produced by consultants, and providing such information to individual Tule Subbasin GSAs upon request. The appointed Chairperson or Secretary may meet with Tule Subbasin GSAs or GSA member agency employees as necessary.

7.1.5 Meetings

All meetings shall be subject to the Ralph M. Brown Act. The Chairman and Secretary shall be responsible for ensuring compliance. Interested parties shall be provided an opportunity to comment on Coordination Agreement issues. Parties acknowledge the Tule Subbasin TAC duties may include public outreach.

7.1.6 Cost Sharing and Governance

Parties shall share on an equitable basis the costs related to the preparation of the data required for the Coordination Agreement to be drafted. Costs shall be allocated between GSAs based on the number of acres within a GSA.

Each Party to this Agreement shall be responsible for their respective share of costs based on their proportionate acreage within the Tule Subbasin. Through a separate agreement, the Tule Subbasin GSAs have appointed a fiscal agent and that fiscal agent shall have authority to enter into any contract necessary to assist with the preparation of the Coordination Agreement, subject to the direction and authorization of the Tule Subbasin TAC. The fiscal agent shall be responsible for invoicing the respective GSAs and for providing an accounting of all funds received and spent on behalf of the GSAs. The fiscal agent shall attend all Tule Subbasin TAC meetings but has no separate voting rights on the Tule Subbasin TAC.

The Tule Subbasin TAC shall annually prepare a schedule, scope of work, and budget of items required for the Coordination Agreement, which shall identify the estimated expenses and the estimated portions each respective Tule Subbasin GSA will be expected to be responsible for payment. This information shall be submitted to the GSAs for review and approval. The Tule Subbasin TAC may request funds under the approved budget from the GSAs as needed to reimburse the GSA's fiscal agent and may also request budget amendments.

The Parties agree that if grant funds become available for the Coordination Agreement components, then the Parties shall utilize grant funds to pay for those costs. The Parties agree to coordinate specific grant application requests by separate agreement. The Parties agree that grant funds shall be utilized based on the grant application budget and that if any grant funds are available for distribution to the GSAs, then the remaining grant funds shall be distributed based on GSA acreage within the Tule Subbasin.

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7.1.7 Procedures for Timely Exchange of Information (§357.4(b)(2))

7.1.7.1 Exchange of Information

Pursuant to 23 Cal. Code Regs. §357.4(b)(2), the GSAs acknowledge and recognize that for this Coordination Agreement to be effective in the enhancement of the goals of basin-wide groundwater sustainability and compliance with the SGMA and the basin level coordinating and reporting regulations, the GSAs will have an affirmative obligation to exchange certain minimally necessary information among and between the other GSA Parties. Likewise, the GSA Parties acknowledge and recognize that individual GSA Parties, in providing certain information, and in particular certain raw data, may contend that limitations apply in the sharing and other dissemination of certain types of said information, which may subject the individual GSA Party to certain duties regarding non-disclosure and privacy restrictions and protections.

7.1.7.2 Procedure Governing the Exchange of Information

The GSAs may exchange information through collaboration and/or informal requests made at the Tule Subbasin TAC. To the extent it is necessary to make a written request for information to another GSA, each GSA shall designate a representative to respond to information requests and provide the name and contact information of the designee to the Tule Subbasin TAC. Requests may be communicated in writing and transmitted in person or by mail, facsimile machine or other electronic means to the appropriate representative as named in this Agreement.

Nothing in this Agreement shall be construed to prohibit any Party from voluntarily exchanging information with any other Party by any other mechanism separate from the Tule Subbasin TAC.

7.1.8 Procedures for Resolving Disputes Dispute Resolution (§§357.4(b)(2), 357.4(h))

The Parties agree that all disputes under this Coordination Agreement that concern the applicability and requirements of SGMA by or between GSAs within the Tule Subbasin, shall be handled under the terms of this Agreement. Any GSA may choose to initiate a dispute resolution process by serving written notice to the remaining GSAs of the following: (1) identification of the conflict; (2) description of how the conflict may negatively impact the sustainability of the Tule Subbasin; and (3) a proposal for one or more resolutions. The Parties agree to designate representatives to meet and confer with each other within thirty (30) days of the date such notice is given and said representatives shall then meet within a reasonable time to address all issues identified in the notice. Should the representatives be unable to reach a resolution within ninety (90) days of the written notice, the Parties shall enter into informal mediation in front of a mutually agreeable mediator. After attempting to settle or resolve a dispute or disagreement through informal resolution and mediation, as described above, nothing within this Agreement shall prevent the Parties from pursuing legal action. The resolution of any dispute or claim related to a water right alleged by a Party is outside the scope contemplated in this Section 7.1.8 and the Coordination Agreement.

7.2 Amendments to this Coordination Agreement

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This Coordination Agreement shall become effective on the dates executed by all Parties and shall remain in effect until revised or replaced by a subsequent agreement. This Agreement may be amended upon the mutual written agreement of all the Parties. Pursuant to 23 Cal. Code Regs. §357.4(i), this Coordination Agreement shall be reviewed as part of the five-year assessment, revised if necessary, and executed by all parties.

7.3 Construction

This Agreement is for the sole benefit of the Parties and shall not be construed as granting rights to or imposing obligations on any person other than the Parties.

7.4 Good Faith

Each Party shall use its best efforts and work in good faith for the expeditious completion of the purposes and goals of this Agreement and the satisfactory performance of its terms.

7.5 Execution

This Agreement may be executed in counterparts and the signed counterparts shall constitute a single instrument. The signatories to this Agreement represent that they have the authority to sign this agreement and to bind the Party for whom they are signing.

7.6 Third Party Beneficiaries

This Agreement shall not create any right of interest in any non-Party or in any member of the public as a third-party beneficiary.

7.7 Notices

All notices, requests, demands or other communications required or permitted under this Agreement shall be in writing unless provided otherwise in this Agreement, and shall be deemed to have been duly given and received on: (i) the date of service if personally served or served by electronic mail or facsimile transmission on the Party to whom notice is to be given at the address(es) below; (ii) on the first day after mailing, if mailed by Federal Express, U.S. Express Mail, or other similar overnight courier service; or (iii) on the third day after mailing if mailed to the Party to whom notice is to be given by first class mail, registered certified as follows:

Alpaugh Groundwater Sustainability Agency
Attn: Bruce Howarth
P.O. Box 129 Alpaugh, CA 93201

Delano-Earlimart Irrigation District Groundwater Sustainability Agency
Attn: Eric Quinley
14181 Avenue 24 Delano, CA 93215

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Eastern Tule Groundwater Sustainability Agency
Attn: Rogelio Caudillo
881 W. Morton Avenue, Suite D Porterville, CA 93257

Lower Tule River Irrigation District GSA
Attn: Eric Limas
357 E. Olive Avenue Tipton, CA 93272

Pixley Irrigation District GSA
Attn: Eric Limas
357 E. Olive Avenue Tipton, CA 93272

Tri-County Water Authority GSA
Attn: Deanna Jackson
944 Whitley Avenue Suite E Corcoran, CA 93212

County of Tulare
c/o Denise England
County Administration Building
2800 W. Burrel Avenue Visalia, California 93291

7.8 No Waiver; No Admission

Nothing in this Coordination Agreement is intended to modify the water rights of any Party or of any Person (as that term is defined under Section 19 of the Water Code). Nothing in this Coordination Agreement shall be construed as an admission by any Party regarding any subject matter of this Coordination Agreement, including without limitation any water right or priority of any water right that is claimed by a Party or any Person. Nor shall this Coordination Agreement in any way be construed to represent an admission by a Party with respect to the subject or sufficiency of another Party's claim to any water or water right or priority or defenses thereto, or to establish a standard for the purposes of the determining the respective liability of any Party or Person, except to the extent otherwise specified by law. Nothing in this Coordination Agreement shall be construed as a waiver by any Party of its election to at any time assert a legal claim or argument as to water, water right or any subject matter of this Coordination Agreement or defenses thereto. The Parties hereby agree that this Coordination Agreement, to the fullest extent permitted by law, preserves the water rights of each of the Parties as they may exist as of the effective date of this Coordination Agreement or at any time thereafter. Any dispute or claim arising out of or in any way related to a water right alleged by a Party shall be separately resolved before the appropriate judicial, administrative or enforcement body with proper jurisdiction and is specifically excluded from the dispute resolution procedures set forth under this Coordination Agreement, including without limitation under Section 7.1.8.

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7.9 It is understood and agreed that this Coordination Agreement supersedes that certain “Memorandum of Understanding to Develop and Implement a Coordination Agreement” and all oral agreements and negotiations between the Parties relating to the subject matter hereof.

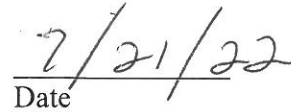
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement to be effective as of the date noted below.

Alpaugh Groundwater Sustainability Agency

Date



Delano Earlimart Irrigation District GSA



Date

Eastern Tule Groundwater Sustainability Agency

Date

Lower Tule River Irrigation District GSA

Date

Pixley Irrigation District GSA

Date

Tri-County Water Authority GSA

Date

Tulare County GSA

Date

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IN WITNESS WHEREOF, the Parties hereto have executed this Agreement to be effective as of the date noted below.

Alpaugh Groundwater Sustainability Agency

Date

Delano Earlimart Irrigation District GSA

Date



Eastern Tule Groundwater Sustainability Agency

7-18-22

Date

Lower Tule River Irrigation District GSA

Date

Pixley Irrigation District GSA

Date

Tri-County Water Authority GSA

Date

Tulare County GSA

Date

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IN WITNESS WHEREOF, the Parties hereto have executed this Agreement to be effective as of the date noted below.

Alpaugh Groundwater Sustainability Agency

Date

Delano Earlimart Irrigation District GSA

Date

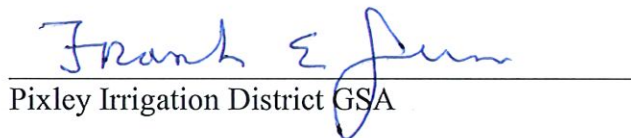
Eastern Tule Groundwater Sustainability Agency

Date



Lower Tule River Irrigation District GSA

7/19/2022
Date



Pixley Irrigation District GSA

7/21/2022
Date

Tri-County Water Authority GSA

Date

Tulare County GSA

Date

TULE SUBBASIN COORDINATION AGREEMENT – REVISED FINAL

7.9 It is understood and agreed that this Coordination Agreement supersedes that certain “Memorandum of Understanding to Develop and Implement a Coordination Agreement” and all oral agreements and negotiations between the Parties relating to the subject matter hereof.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement to be effective as of the date noted below.

Alpaugh Groundwater Sustainability Agency

Date

Delano Earlimart Irrigation District GSA

Date

Eastern Tule Groundwater Sustainability Agency

Date

Lower Tule River Irrigation District GSA

Date

Pixley Irrigation District GSA

Date



Tri-County Water Authority GSA

July 21, 2022

Date

Tulare County GSA

Date

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Delano Earlimart Irrigation District GSA

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Pixley Irrigation District GSA

Date

Tri-County Water Authority GSA

Date



Tulare County GSA

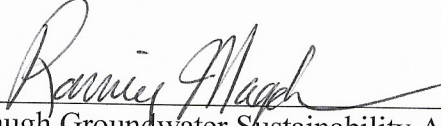
7/19/2022
Date

Approved as to Form
Tulare County Counsel
Isl Azharen
Matter No. 20151121

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Alpaugh Groundwater Sustainability Agency

07/25/22
Date

Delano Earlimart Irrigation District GSA

Date

Eastern Tule Groundwater Sustainability Agency

Date

Lower Tule River Irrigation District GSA

Date

Pixley Irrigation District GSA

Date

Tri-County Water Authority GSA

Date

Tulare County GSA

Date

TULE SUBBASIN COORDINATION AGREEMENT ATTACHMENT 1

Tule Subbasin Monitoring Plan

July 2022

**Prepared for
Tule Subbasin Technical Advisory Committee**

Prepared by

**Thomas Harder, PG, CHG
Principal Hydrogeologist**



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- F. Groundwater Sampling Form

Acronyms

GSP	Groundwater Sustainability Plan
SGMA	Sustainable Groundwater Management Act, California's framework for the recovery and ongoing management of groundwater basins. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California.
DWR	Department of Water Resources
GSA	Groundwater Sustainability Agency
TAC	Technical Advisory Committee
TSMP	Tule Subbasin Monitoring Plan
DO	Dissolved Oxygen
EC	Electrical Conductivity
TDS	Total Dissolved Solids
QAPP	Quality Assurance Project Plan
USGS	United States Geological Society
USBR	United States Bureau of Reclamation
GPS	Global Positioning System
NGS	National Geodetic Survey



TRA	Tule River Association
ACOE	Army Core of Engineers
ILRP	Irrigated Lands Regulatory Program
DMS	Data Management System, an application with a database back-end that will track and manage the data of the end users as well as provide administrative
SQL	structured query language
End User/User	Person who will use the product, but not a member of staff, administration, or development team.
UI	User Interface, the part of the application that end users and staff interact with.



1.0 Background

This monitoring plan has been prepared to describe the monitoring features and monitoring methodologies to be used to collect the data to be included in Tule Subbasin Groundwater Sustainability Plans (GSPs) and annual reports, as required by the Sustainable Groundwater Management Act (SGMA). This plan is for the Tule Subbasin (see Figure A1-1), as described in California Department of Water Resources (DWR) Bulletin 118.¹ The Tule Subbasin is subdivided into six Groundwater Sustainability Agencies (GSAs), each with their own GSP.

As required by Section 10727.2 of the Water Code, each GSP must include:

(d) Components relating to the following, as applicable to the basin:

- (1) The monitoring and management of groundwater levels within the basin.
- (2) The monitoring and management of groundwater quality, groundwater quality degradation, inelastic land surface subsidence, and changes in surface flow and surface water quality that directly affect groundwater levels or quality or are caused by groundwater extraction in the basin.
- (3) Mitigation of overdraft.
- (4) How recharge areas identified in the plan substantially contribute to the replenishment of the basin.
- (5) A description of surface water supply used or available for use for groundwater recharge or in-lieu use.

(e) A summary of the type of monitoring sites, type of measurements, and the frequency of monitoring for each location monitoring groundwater levels, groundwater quality, subsidence, streamflow, precipitation, evaporation, and tidal influence. The plan shall include a summary of monitoring information such as well depth, screened intervals, and aquifer zones monitored, and a summary of the type of well relied on for the information, including public, irrigation, domestic, industrial, and monitoring wells.

(f) Monitoring protocols that are designed to detect changes in groundwater levels, groundwater quality, inelastic surface subsidence, for basins for which subsidence has been identified as a potential problem, and flow and quality of surface water that directly affect

¹ DWR, 2016. Final 2016 Bulletin 118 Groundwater Basin Boundaries shapefile. http://www.water.ca.gov/groundwater/sgma/basin_boundaries.cfm



groundwater levels or quality or are caused by groundwater extraction in the basin. The monitoring protocols shall be designed to generate information that promotes efficient and effective groundwater management.

The Tule Subbasin Technical Advisory Committee (TAC) has determined that a single monitoring plan that includes the entire Tule Subbasin is necessary in order to identify the types of data to be collected throughout the subbasin, the minimum number of monitoring features from which to collect data, and the monitoring protocols to be followed by each GSA, in order to ensure that the same methodologies are followed as required by California Water Code Section 10727.6 of SGMA. This Tule Subbasin Monitoring Plan (TSMP) serves that purpose.

1.1 Plan Objectives 354.34 (b)

The TSMP has been prepared to meet the following subbasin-wide objectives:

- To ensure that the data collected within the basin are in sufficient quantities, areal distribution, frequency and accuracy to provide meaningful results for demonstrating progress toward achieving measurable objectives of each GSA and the sustainability goal of the subbasin as a whole.
- To monitor impacts to the beneficial uses and users of groundwater.
- To monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds.
- Enable the quantification of annual changes in water budget components.
- To identify data gaps and monitoring features to address the data gaps.
- To provide a standard methodology for the collection of surface water, groundwater, and land surface subsidence data within the Tule Subbasin.
- To provide for a central, secure monitoring database available to the GSAs for their use in preparing their respective groundwater sustainability plans and annual reports.

The TSMP is both flexible and iterative, allowing for the addition or subtraction of monitoring features, as necessary, and to accommodate changes in monitoring frequency and alternative methodologies, as appropriate.

1.2 Area Encompassed by the Monitoring Plan

The area addressed by this plan is the Tule Subbasin, as defined by the latest version of DWR Bulletin 118 as shown on Figure A1-1. The Tule Subbasin area is 744 square miles (475,895 acres). The Tule Subbasin has been subdivided into the following six GSAs (see Figure A1-1):

- Eastern Tule GSA



- Lower Tule River Irrigation District GSA
- Pixley Irrigation District GSA
- Delano-Earlimart GSA
- Tri-County Water Authority GSA
- Alpaugh GSA

1.3 Monitoring Plan Organization

The monitoring plan addresses the following types of data:

- Surface Water Data
- Groundwater Data
- Land Elevation and Subsidence Data

Each data type will be addressed in its own section that includes a description of the monitoring features for collecting data, the data collection protocols, and the monitoring frequency.

The final section of the monitoring plan describes the data management program that includes a description of the database management platform, criteria for data QA/QC, file storage, security and access, database maintenance and documentation.



2.0 Monitoring Networks 354.34

This monitoring plan presents the minimum groundwater monitoring network to be relied on by the Tule Subbasin GSAs to prepare their annual reports. Data to be collected from the monitoring network will include surface water flow, surface water quality, groundwater levels, groundwater quality and land elevation data. Groundwater levels and quality data will be collected from a network of monitoring wells spaced throughout the Tule Subbasin. The monitoring well network includes existing monitoring wells, existing domestic and agricultural wells, and new wells to be added. As some of the existing wells require further investigation prior to formal inclusion in the monitoring network, and the exact locations of new monitoring wells are yet to be determined, it will be necessary to modify the monitoring network over time to add/remove monitoring features and adjust locations.

2.1 Chronic Lowering of Groundwater Levels 354.34 (c) (1)

As there are significant differences in hydraulic head and aquifer characteristics with depth in the Tule Subbasin, monitoring wells have been identified to enable the collection of data from each of the significant subsurface hydrogeologic units in the area. These units include (in order from shallowest to deepest):

- The Upper Aquifer
- The Lower Aquifer
- The Santa Margarita Formation

The depths of each of these units follow the hydrogeological conceptual model of the Tule Subbasin outlined in the hydrogeological conceptual model and incorporated into the Tule Subbasin Groundwater Flow Model.² The Upper Aquifer is generally located above the Corcoran Clay in the western part of the subbasin and above other confining beds in the eastern part of the subbasin. The Upper Aquifer is generally unconfined to semi-confined. The Upper Aquifer varies in depth from approximately 400 ft below ground surface (ft bgs) in the western portion of the basin to less than 100 ft bgs in the northeastern portion. The Lower Aquifer is below the Corcoran Clay and extends to depths ranging from approximately 2,200 ft bgs in the western portion of the

² TH&Co, 2017a. Hydrogeological Conceptual Model and Water Budget for the Tule Subbasin. Prepared for the Tule Subbasin MOU Group. Dated August 1, 2017.

TH&Co, 2019. Groundwater Flow Model for the Tule Subbasin. Prepare for the Tule Subbasin MOU Group. In Progress.



Tule Subbasin to 400 ft bgs near State Route 99. The Santa Margarita Formation occurs at depths ranging from 700 to 2,000 ft bgs in the southeastern portion of the Tule Subbasin.

Monitoring wells are identified with perforations exclusively in the Upper Aquifer, Lower Aquifer, or Santa Margarita Formation. Individual wells perforated across multiple aquifer layers (i.e. “composite wells”) will not be allowed in the monitoring plan unless no other wells are available for monitoring in the area. Over time, wells in the monitoring network that are perforated across multiple aquifers will be replaced with nested or cluster wells with perforations specific to the Upper or Lower aquifers.

2.1.1 Monitoring Features

2.1.1.1 Upper Aquifer Monitoring Wells

Upper aquifer monitoring wells are shown on Figure A1-2. A total of 78 monitoring wells have been identified for monitoring the Upper Aquifer. Of these wells, 27 have been designated as RMS wells (see Table A1-A). The Upper Aquifer monitoring wells are further described below.

Existing Upper Aquifer Monitoring Wells with Historical Records

Of the 82 wells identified for monitoring the Upper Aquifer, 36 have historical groundwater level records and meet the minimum criteria specified in Section 3.2.1.1 of the Coordination Agreement. Groundwater level hydrographs for these wells are provided in Appendix A.

Existing Upper Aquifer Monitoring Wells – No Historical Records (to be Investigated)

There are numerous existing wells with documented total depth and perforation interval(s) within the Upper Aquifer that could be incorporated into the monitoring network but require further investigation. These wells have no historical groundwater level records and owner permission for access the wells has not been pursued. However, if access is approved by the owner and the wells are demonstrated to meet the minimum criteria for monitoring wells, they may be incorporated into the monitoring plan. Many of these existing Upper Aquifer wells, to be confirmed through further investigation, have been identified for consideration in the monitoring plan (see Figure A1-2; Table A1-1). In addition, 48 wells that are part of the water quality monitoring network are included in the groundwater level monitoring network. These wells have been selected to help fill aerial coverage data gaps for monitoring Upper Aquifer groundwater levels.

Potential existing Upper Aquifer wells for which access has been denied or, upon investigation, do not otherwise meet the minimum criteria specified in Section 3.2.1.1 of the Coordination Agreement, will be removed and replaced with an alternate existing well with documented total depth and perforation interval located in the same area. If no other wells exist in the area, a new Upper Aquifer monitoring well may be constructed in the area.



Proposed New Upper Aquifer Monitoring Wells

New monitoring wells will be drilled in areas where there are no existing wells for monitoring in order to fill the data gaps. General areas for future monitoring wells are identified on Figure A1-2.

The depths and perforation intervals of the new Upper Aquifer monitoring wells will vary depending on location within the subbasin. In general, Upper Aquifer monitoring wells will be perforated from approximately 10 ft below the then current static groundwater level to the bottom of the Upper Aquifer, as defined by the Tule Subbasin conceptual model³ (see Figure A1-2). New Upper Aquifer wells constructed on the west side of the subbasin will be the deepest and new Upper Aquifer wells constructed on the east side of the subbasin will be shallowest. It is noted that the depths presented herein are for planning purposes. The final well construction details will be refined in the field during drilling once site-specific data have been obtained and reviewed. As such, the final well depths and perforation intervals may be adjusted for site specific conditions.

A conceptual well design drawing for new Upper Aquifer monitoring wells is shown on Figure A1-3. In general, new monitoring wells shall be constructed of 5-inch diameter Schedule 80 PVC blank and slotted casing. A filter pack for the new wells will be placed in the annular borehole space opposite the perforations from the total borehole depth to at least 10 feet above the top of perforations. The upper portion of the annular space shall be backfilled with a seal consisting of bentonite or other approved sealing material. The surface completion for each new monitoring well will include a steel above-ground riser equipped with a protective locking cap for keeping the wellhead secure. The above-ground riser will be surrounded by cement-filled steel bollards for further protection.

At some locations, the well will be completed as a nested well with two 5-inch diameter casings within the same borehole. One casing will be constructed in the Upper Aquifer and the other casing will be constructed in the Lower Aquifer (see Figure A1-4). A bentonite seal will be placed in the annular space between the two perforation intervals to ensure that the data collected from each casing will be specific to the aquifer in which it is perforated.

A dedicated reference point shall be established and marked on the top of each monitoring well casing. All groundwater level measurements shall be obtained relative to the reference point. The elevation of the reference point shall be surveyed to an accuracy of 0.1 foot relative to mean sea

³ TH&Co, 2017a. Hydrogeological Conceptual Model and Water Budget for the Tule Subbasin. Prepared for the Tule Subbasin MOU Group. Dated August 1, 2017.



level (NAVD88) by a California licensed land surveyor. The location of each well will be surveyed to an accuracy of 1 foot.

2.1.1.2 Lower Aquifer Monitoring Wells

Lower Aquifer monitoring wells are shown on Figure A1-2. A total of 66 monitoring wells have been identified for monitoring the Lower Aquifer. For the purpose of this TSMP, an additional 15 composite wells and 4 Santa Margarita Aquifer wells are included with the Lower Aquifer wells. Of the Lower Aquifer, composite, and Santa Margarita Aquifer wells, 29 have been designated as RMS wells (see Table A1-2). These wells are further described below.

Existing Lower Aquifer Monitoring Wells with Historical Records

Of the 66 existing wells identified for monitoring the Lower Aquifer, nine are existing wells with historical groundwater level records and meet the minimum criteria specified in Section 3.2.1.1 of the Coordination Agreement. Groundwater level hydrographs for these wells are provided in Appendix B.

Existing Lower Aquifer Monitoring Wells – No Historical Records (to be Investigated)

There are numerous existing wells with documented total depth and perforation interval(s) within the Lower Aquifer that could be incorporated into the monitoring network but require further investigation. These wells have no historical groundwater level records and owner permission to access the wells has not been pursued. However, if access is approved by the owner and the wells are demonstrated to meet the minimum criteria for monitoring wells, they may be incorporated into the monitoring plan. Many of these existing Lower Aquifer wells, to be confirmed through further investigation, have been identified for consideration in the monitoring plan (see Figure A1-2; Table A1-2). In addition, 20 wells that are part of the water quality monitoring network are included in the groundwater level monitoring network. These wells have been selected to help fill aerial coverage data gaps for monitoring Lower Aquifer groundwater levels.

Potential existing Lower Aquifer wells for which access is denied or, upon investigation, do not otherwise meet the minimum criteria specified in Section 3.2.1.1 of the Coordination Agreement, will be removed and replaced with an alternate existing well with documented total depth and perforation interval located in the same area. If no other wells exist in the area, a new Lower Aquifer well will be constructed in the area.

Proposed New Lower Aquifer Monitoring Wells

New monitoring wells are planned to be constructed in the Lower Aquifer (see Figure A1-2). New Lower Aquifer monitoring wells will be drilled in areas where there are no existing wells for



monitoring in order to fill data gaps. General areas for future monitoring wells are identified on Figure A1-2.

The depths and perforation intervals of the new Lower Aquifer monitoring wells will vary depending on location within the subbasin. In general, Lower Aquifer monitoring wells will be perforated below the Corcoran Clay, where it has been mapped, or at depths where the aquifer is assumed to be confined, as defined by the Tule Subbasin conceptual model.⁴ New Lower Aquifer monitoring wells will be constructed with total depths ranging from 400 to 1,000 ft bgs, with the deepest wells in the western part of the subbasin and shallowest wells on the east side of the subbasin. It is noted that the depths presented herein are for planning purposes. The final well construction details will be refined in the field during drilling once site-specific data have been obtained and reviewed. As such, the final well depths and perforation intervals may be adjusted for site specific conditions.

A conceptual well design drawing for new Lower Aquifer monitoring wells is shown on Figure A1-5. In general, new monitoring wells shall be constructed of 4-inch diameter PVC blank and slotted casing. A dedicated reference point shall be established and marked on the top of each monitoring well casing. All groundwater level measurements shall be obtained relative to the reference point. The elevation of the reference point shall be surveyed to an accuracy of 0.1 foot relative to mean sea level (NAVD88) by a California licensed land surveyor. The location of each well will be surveyed to an accuracy of 1 foot.

2.1.2 Monitoring Procedure

Groundwater level measurements shall be collected from each well using either a steel tape, a calibrated well sounder, or a pressure transducer. Where possible, groundwater level measurements shall be collected with a steel tape or an electrical groundwater level sounder calibrated to the nearest 0.01 ft. For pre-existing wells with limited access, a calibrated steel tape and chalk may be used. All equipment must be in good working condition. No damaged or refurbished electrical sounding tape shall be used. All new monitoring wells shall be equipped with calibrated pressure transducers.

Groundwater level measurements must be representative of static (i.e. non-pumping) groundwater level conditions. To ensure measurement of static groundwater levels in active pumping wells, the field technician collecting the data must verify that the pump has been off for at least 24 hours prior to collecting the data.

⁴ TH&Co, 2017a. Hydrogeological Conceptual Model and Water Budget for the Tule Subbasin. Prepared for the Tule Subbasin MOU Group. Dated August 1, 2017.



2.1.2.1 Manual Groundwater Level Measurements

The following monitoring procedure shall be used to obtain manual groundwater level measurements in the field:

- Upon arrival at each site, the field technician shall note the well name, time of day, and date on the standard groundwater level data form (see Appendix C).
- All monitoring equipment shall be cleaned prior to lowering it into the well(s) using the following decontamination procedure:
 - Wash equipment with an Alconox solution which is followed by a deionized water rinse.
 - Triple rinse equipment with deionized water.
 - Place equipment on clean surface such as teflon or polyethylene sheet to air dry.
- To measure the depth to groundwater with a steel tape or an electrical sounder or meter, slowly lower the steel tape or water level electrical tape into the designated sounding port for production wells and into the main well for monitoring wells. Steel tapes and electrical tapes are lowered to the water surface, as determined by the audio signal, meter, or technician. Depths to groundwater are measured relative to the dedicated reference point at the top of the casing or sounding tube. Depth to groundwater shall be immediately recorded on the standard groundwater level data form (see Appendix C). Depths to groundwater shall be compared to previous measurements in the field and re-measured if significantly different.
- For wells with limited access (such as agricultural wells or domestic wells equipped with a pump), a steel tape and chalk may be used. For this method, chalk is applied to a 1- to 3-foot section of the steel tape prior to lowering in the well. The steel tape is lowered to a depth at least 1-ft below the static groundwater level and a whole number on the calibrated tape is matched to the reference point at the surface. Both the foot mark held at the reference point and the groundwater level observed on the chalk shall be recorded on the standard field forms (see Appendix D). The difference between the two is the depth to groundwater.
- When finished sounding the groundwater level, all downhole equipment shall be removed, and where existing, the well cap shall be replaced, and the riser locked.
- Prior to leaving the monitoring well site, the field representative shall note any physical changes in the concrete well pad and riser pipe, such as erosion, cracks or damage. All changes shall be recorded on the standard field forms provided in Appendices C, D, and E.



2.1.2.2 Automatic Groundwater Level Measurements Using Transducers

Transducers shall be installed in all new monitoring wells and existing monitoring wells identified as representative monitoring sites. Transducers shall be installed below the groundwater level with enough submergence to accommodate anticipated groundwater level fluctuations.

2.1.3 Frequency of Measurement

Groundwater level measurements from existing domestic and irrigation wells shown on Figure A1-2 will be collected semi-annually in the Spring (February/March) and in the Fall (October/November). To the extent possible, groundwater level monitoring events will be coordinated between GSAs so that measurements are taken at the time of greatest recovery and maximum depth.

Groundwater level measurements from all new monitoring wells and wells designated as representative monitoring sites will be collected using pressure transducers permanently installed in the wells and set to collect one measurement per day. Pressure transducers will be downloaded on a semi-annual basis. During each download session, the field technician will also obtain a manual groundwater level measurement in order to verify transducer readings and ensure that the instruments are working properly.

2.2 Reduction in Groundwater Storage § 354.34 (c) (2)

Changes in groundwater storage within the Tule Subbasin will be estimated using either of the methods identified in Section 3.6 of the Tule Subbasin Coordination Agreement. Groundwater level data to be relied on for the change in groundwater storage estimates will be collected as described in Section 2.1 of this TSMP.

2.3 Seawater Intrusion § 354.34 (c) (3)

Seawater intrusion cannot occur in the Tule Subbasin due to its location with respect to the Pacific Ocean. The Tule Subbasin is approximately 110 miles inland of the Pacific Ocean and is separated from the ocean by approximately 90 miles of sedimentary rocks that make up the Coast Ranges. These sedimentary rocks effectively separate the Pacific Ocean hydraulically from the aquifer system in the San Joaquin Valley. Further, the Coast Ranges are dissected by multiple northwest trending faults, the largest of which is the San Andreas Fault. These faults form groundwater flow barriers, which further act to separate the San Joaquin Valley aquifers from the Pacific Ocean. Accordingly, groundwater pumping in the Tule Subbasin cannot induce seawater intrusion. As such, monitoring for seawater intrusion is not necessary and is not included in this monitoring plan.



2.4 Degraded Water Quality § 354.34 (c) (4)

Groundwater samples shall be collected and analyzed annually, during summer months, from the wells shown on Figure A1-6 consistent with the Tule Basin Water Quality Coalition Groundwater Quality Trend Monitoring Program Workplan.⁵ The groundwater sampling protocols described herein will ensure that:

- Groundwater quality data are collected from the correct location
- Groundwater quality data are accurate and reproducible
- Groundwater quality data represent conditions that inform appropriate basin management decisions
- All salient information is recorded to normalize, if necessary, and compare data
- Data are handled in a way that ensures data integrity

2.4.1 Groundwater Quality Constituents to be Analyzed

Annual water quality monitoring of the wells shown on Figure A1-6 will include laboratory analysis for nitrate as N only (see Table A1-3). Prior to collecting the samples in the field, the field technician will collect measurements of temperature, pH, dissolved oxygen (DO) and electrical conductivity (EC) from the well discharge, as described in Section 2.4.2 herein.

Every five years, samples from the wells shown on Figure A1-6 will be analyzed for an expanded list of analytes. In addition to nitrate, samples will be analyzed for total dissolved solids (TDS) and major cations and anions (see Table A1-3). Prior to collecting the samples in the field, the field technician shall collect measurements of temperature, pH, DO and EC from the well discharge, as described in Section 2.4.2 herein.

2.4.2 Groundwater Quality Samples from Existing Domestic Water Supply or Irrigation Wells

Domestic water supply and irrigation wells shall be sampled after purging the well for a period of time adequate to remove at least three well volumes removed prior to sampling (see Appendix E). If the well is currently pumping, this step is not necessary.

During pumping and prior to sample collection, the field technician shall obtain measurements of temperature, pH, DO and EC from water collected from the sample port. Meters for measuring pH, DO and EC shall be field calibrated in accordance with manufacturer's specifications at the beginning of each sampling day. Samples will be collected when: (1) a minimum of four sets of

⁵ Tule Basin Water Quality Coalition, 2017. Groundwater Trend Monitoring Workplan. January 6, 2017.



parameter readings have been obtained; and (2) the temperature, pH, and EC reach relatively constant values.

All samples shall be collected from the discharge point nearest the well head and placed in laboratory-prepared sample containers. The technician collecting the sample shall wear new latex or neoprene gloves while collecting the sample. Sample containers shall be labeled before or immediately after sampling with self-adhesive tags having the following information written in waterproof ink:

- Project number
- Sample I.D. number
- Sample location
- Date and time sample was collected
- Initials of sample collector

2.4.3 Groundwater Quality Samples from Monitoring Wells

All groundwater samples from monitoring wells will be collected consistent with procedures described in the United States Environmental Protection Agency's (USEPA's) Low-flow (Minimal Drawdown) Groundwater Sampling Procedures.⁶ Low-flow purging can be conducted using either portable or dedicated (leave in well) pump systems. A submersible pump, diaphragm pump, or positive displacement pump, which may contain a bladder, may be used for evacuating (purging) the monitoring well casing and collecting the samples. The pump-intake should be set in the middle or slightly above the middle of the screened interval in the well. Other equipment necessary for collecting groundwater samples using the low-flow sampling method include:

- A water level measurement device, or water level sounder
- In-line flow through cell to monitor water quality parameters
- Field forms for documenting water quality parameters measured at each monitoring well
- Chain of custody forms
- Laboratory prepared sample containers from a State-certified laboratory with the appropriate labels for the analytes being measured
- Gloves
- Cleaning supplies for decontaminating
- Tubing for the pump

⁶ Puls, R.W., and Barcelona, M.J., 1996. Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures. EPA document 540/S-95-504.



All samples shall be collected from a discharge port at the wellhead and placed in laboratory-prepared sample containers. For dissolved trace metal analyses, samples will be collected in unpreserved bottles, then filtered through a 0.45-micron filter and acidified prior to analysis. The technician collecting the sample shall wear new latex or neoprene gloves while collecting the sample. Sample containers shall be labeled before or immediately after sampling with self-adhesive tags having the following information written in waterproof ink:

- Project number
- Sample I.D. number
- Sample location
- Date and time sample was collected
- Initials of sample collector

2.4.4 Well Sampling Records

Data collected during groundwater sampling will be recorded on the standard forms provided in Appendix F. Information and data to be recorded shall include:

- Sample I.D.
- Duplicate I.D., if applicable
- Date and time sampled
- Name of sample collector
- Well designation (State well numbering system for water supply wells)
- Owner's name, or other common designation
- Well diameter
- Depth to water on day sampled
- Casing volume on day sampled
- Method of purging (bailing, pumping, etc.)
- Extraordinary circumstances (if any)
- Field measurements temperature (0° C), pH, specific electrical conductivity (at 25° C μ s/cm), and dissolved oxygen (mg/l)
- Number and type of sample container(s)
- Times corresponding to water quality measurements
- Pumping rate at time of sampling

In addition to the standard forms for collecting data, the field technician shall keep a daily field record for each day of fieldwork. Following review by the project manager, the original records shall be kept in the project file.



2.4.5 Handling, Storage and Transportation of Samples

Upon collection and labeling, all samples shall be placed immediately into a clean chest/cooler with ice in order to keep samples cool. Exposure to dust, direct sunlight, high temperature, adverse weather conditions, and possible contamination shall be avoided.

All samples will be transported to a State-certified analytical laboratory within 24 hours of collection. Samples shall be transported under chain-of-custody procedures, which document the transfer of custody of samples from the field to the laboratory. Each sample sent to the laboratory for analysis shall be recorded on a Chain-of-Custody Record, which includes instructions to the laboratory for analytical services.

Information contained on the triplicate Chain-of-Custody Record shall include:

- Project number
- Signature of sampler(s)
- Date and time sampled
- Sample I.D.
- Number of sample containers
- Sample matrix (water)
- Analyses required
- Remarks, including preservatives, special conditions, or specific quality control measures
- Turnaround time and person to receive laboratory report
- Method of shipment to the laboratory
- Release signature of sampler(s), and signatures of all people assuming custody
- Condition of samples when received by laboratory

Blank spaces on the Chain-of-Custody Record will be crossed out between the last sample listed and the signatures at the bottom of the sheet.

The field sampler shall sign the Chain-of-Custody Record and record the time and date at the time of transfer to the laboratory or to an intermediate person. A set of signatures is required for each relinquished/reserved transfer, including intermediate transfers. The original imprint of the Chain-of-Custody Record will accompany the sample containers. A duplicate copy shall be placed in the project file.

If the samples are to be shipped to the laboratory, the original Chain-of-Custody will be sealed inside a plastic bag within the ice chest, and the chest shall be sealed with custody tape which has been signed and dated by the last person listed on the Chain-of-Custody. U. S. Department of Transportation shipping requirements shall be followed and the sample shipping receipt retained in the project file as part of the permanent chain-of-custody document. The shipping company



(e.g. Federal Express, UPS, DHL) will not sign the chain-of-custody forms as a receiver, instead the laboratory shall sign as a receiver when the samples are received.

2.4.6 Quality Control Samples

Quality control samples shall consist of duplicates and blanks. At least one duplicate sample shall be collected during each day of sampling. The duplicate sample shall be collected from the same well as the original and immediately after the original sample. At least one blank sample shall be included with each batch of samples delivered to the laboratory. Blank samples shall consist of laboratory prepared deionized water that is containerized at the laboratory and delivered with the sample containers. Duplicate and blank samples will be analyzed by the laboratory, as specified in the project Quality Assurance Project Plan (QAPP)⁷ or by the project manager (see Appendix E).

2.4.7 Frequency of Measurement

Groundwater quality samples will be collected from the wells shown on Figure A1-6 on an annual basis, during the summer, and analyzed as described in Section 2.4.1 herein.

2.5 Land Subsidence 354.34 (c) (5)

Land surface subsidence has been observed in multiple areas within the Tule Subbasin. Based on United States Geological Survey (USGS) measurements and analysis of land subsidence that occurred in the area in the 1950s and 1960s,⁸ it has been determined that the land subsidence is associated with lowered groundwater levels due to groundwater pumping in areas where the subsurface contains a significant amount of clay and silt. Recent land subsidence in the Tule Subbasin has resulted in lowered flow capacity in the Friant-Kern Canal. Subsidence has also been observed from satellite data in the western portion of the subbasin.

2.5.1 Monitoring Features

Monitoring of changes in land surface elevation related to groundwater withdrawal will be conducted through global positioning surveys, data collected from extensometers, and satellite data.

⁷ Tule Basin Water Quality Coalition, 2017. Groundwater Trend Monitoring Workplan. January 6, 2017.

⁸ Lofgren, B.E., and Klausning, R.L., 1969. Land Subsidence Due to Ground-Water Withdrawal, Tulare-Wasco Area of California. USGS Professional Paper 437-B.



2.5.1.1 Global Positioning Surveys

A total of 60 benchmark stations have been established to monitor changes in land elevation across the subbasin using GPS measurements (see Figure A1-7). Each survey station is a benchmark labeled with the station identification. An additional 34 benchmark stations established by the Friant Water Authority (FWA) are included in the monitoring network. In addition to the existing benchmark network, additional benchmarks may be established in the subbasin in the future.

Land surface elevations from the Porterville GPS Station (Station P056), located at the Porterville Airport (see Figure A1-7), are also included in this plan. The data is available through the University NAVSTAR Consortium (UNAVCO) website.

2.5.1.2 Extensometers

The USGS collects data on aquifer system compaction, which causes land subsidence, from one existing extensometer near Porterville (22S/27E-30D2; see Figure A1-7). This station is located adjacent to the Friant-Kern Canal approximately one mile north of the Deer Creek crossing. Data from this extensometer can be accessed via the USGS website.

In addition to the existing extensometer, additional extensometers may be established at strategic locations of the subbasin in the future.

2.5.1.3 Satellite Data (InSAR)

Changes in land surface elevation over time can be observed on a regional scale using satellite data. The data is generated using interferometric synthetic aperture radar (InSAR). InSAR data is available and will be obtained from the CDWR on a quarterly basis.

2.5.2 Monitoring Procedure

2.5.2.1 Global Positioning Surveys

The GPS network will be established and monitored in accordance with National Geodetic Survey (NGS) Guidelines for Establishing GPS-Derived Ellipsoid Heights (National Oceanographic and Atmospheric Administration and Guidelines for Establishing GPS-Derived Orthometric Heights.⁹ All GPS-derived elevations will be constrained to an established NGS benchmark located on Lake

⁹ NOAA, 1997.



Success Dam (KT 200). All land surface elevation readings will be to an accuracy of 0.1 feet relative to NAVD88.

Land surface elevations from the Porterville GPS Station will be downloaded from the UNAVCO website as needed.

2.5.2.2 Extensometers

The USGS extensometer is equipped with a continuous monitoring device to record aquifer system compaction. Aquifer system compaction data will be downloaded from the USGS website for analysis as data updates are available.

2.5.2.3 Satellite Data (InSAR)

InSAR data will be obtained from the Jet Propulsion Laboratory, USGS, or European Space Agency for processing. The data will be analyzed and interpreted by an outside professional (Neva Ridge Technologies, Inc. or approved equal) in order to develop maps showing regional land surface changes.

2.5.3 Frequency of Measurement

2.5.3.1 Global Positioning Surveys

GPS surveys of the stations shown on Figure A1-7 will be conducted on an annual basis correlated to groundwater quality sampling events. GPS surveys of stations located within the Friant-Kern Canal Monitoring Zone will be conducted on a quarterly basis.

2.5.3.2 Extensometers

Aquifer system compaction is measured on a continuous basis at the USGS extensometer. Aquifer system compaction data will be downloaded from the USGS website for analysis as data updates are available.

2.5.3.3 Satellite Data (InSAR)

InSAR data will be obtained and analyzed on a quarterly basis.

2.6 Depletions of Interconnected Surface Water 354.34 (c) (6)

Surface water flow in the Tule River and Deer Creek ultimately flow into the historical Tulare Lake but only during periods of prolonged above-normal precipitation. Surface water flow in the White River does not reach the Tulare Lake bed. Surface water flow in the Tule River, including flow beyond the Tule Subbasin, is monitored and managed by the Tule River Association (TRA).



Surface water flow in the Deer Creek and White River are monitored by the USGS and USBR. The monitoring features, monitoring procedures, and monitoring frequency for surface water in the Tule Subbasin follows the features, procedures, and frequency already in place by these organizations.

2.6.1 Monitoring Features

A primary source of water to the Tule Subbasin is surface water runoff originating in the Sierra Nevada Mountains. The primary rivers/streams contributing surface water to the subbasin include the Tule River, Deer Creek, and White River (see Figure A1-8). Each of these rivers/streams contain existing surface water monitoring stations for the collection of both stream flow and surface water quality. The following summarizes the key monitoring features and locations in the subbasin.

2.6.1.1 Tule River

Stream flow in the portion of the Tule River that is within the Tule Subbasin is determined by controlled releases from Lake Success, measured by the Army Corps of Engineers (ACOE). Stream flow entering Lake Success is measured and distributed to various water rights holders as allocated at Success Dam in accordance with the Tule River Water Diversion Schedule and Storage Agreement.¹⁰ The accounting of surface water flow, storage, streambed losses, and diversions is documented for each water year in the TRA annual reports from 1962 through 2017.

Tule River Stream Flow – Main Channel

Stream flow in the Tule River is measured by the ACOE below Success Dam, at Rockford Station downstream of Porterville, and at Turnbull Weir by the TRA (see Figure A1-8). In addition, releases of imported Central Valley Project water into the Tule River and Porter Slough from the Friant-Kern Canal are conducted at two locations, which are measured via weir structures managed by the USBR. Details regarding the location and construction of each stream flow gage are provided in Table A1-4.

¹⁰ TRA, 1966. Tule River Diversion Schedule and Storage Agreement. Dated February 1, 1966; revised June 16, 1966.



Tule River Diversions - Structures and Headgates

Between Lake Success Dam and the Turnbull Weir, water is diverted from the Tule River to various water right holders. Diversion locations are shown on Figure A1-8 and described as follows:

Pioneer Water Company:

The headgate is a portion of the Success Reservoir outlet works and consists of a 42-inch gated conduit. The gaging station is a standard 5-foot concrete Parshall flume located 100 feet downstream of the reservoir outlet works at a point approximately 2,100 feet south and 1,400 feet east of the northwest corner of Section 35, Township 21 South, Range 28 East, M.D.B.&M., being in the southeast quarter of the northeast quarter of said Section 35.

Porter Slough at Headgate

The Porter Slough Headgate diverts water from the main channel of the Tule River to the Porter Slough, an ancestral branch of the Tule River that extends from the headgate to the LTRID No. 4 Canal (see Figure A1-8). The headgate is located in the southeast quarter of the northeast quarter of Section 4, Township 22 South, Range 28 East, M.D.B.&M. Five bays of flashboards control the diversions from the Tule River in Porter Slough.

Flows at the headgate of Porter Slough are computed by the addition of 5 cubic-feet per second to the daily mean flows measured at the Porter Slough at Porterville (B Lane) gaging station.

Porter Slough at Porterville

The gaging station is a rated section of the natural channel situated approximately 2,900 feet west and 1,100 feet north of the southeast corner of Section 32, Township 21 South, Range 28 East, M.D.B.&M. and 1.4 miles below the Porter Slough headgate in the Boydston Weir.

Porter Slough Ditch Company

The headgate is located in the Porter Slough check structure at Putnam Street being approximately 2,500 feet west and 1,500 feet north of the Southeast corner of Section 26, Township 21 South, Range 27 East, M.D.B.&M., being in the northwest quarter of the southeast quarter of said Section 26. The gaging station is a rated section 150 feet below the headgate.



Porter Slough Below Avenue 192

Porter Slough terminates with discharge through a concrete check structure into the No. 4 Canal of LTRID located near the center of Section 11, Township 21 South, Range 26 East, M.D.B.&M., one-half mile easterly of Tulare County Road 192. A daily weir measurement is used for recording the flow of Porter Slough Below 192.

Downstream of Avenue 192, the Porter Slough discharges into a series of unlined canals that deliver water to farmers in the LTRID.

Campbell and Moreland Ditch Company:

The headgate is located near the South end of Boydston Weir at a point approximately 600 feet west and 1,700 feet south of the northeast corner of Section 4, Township 22 South, Range 28 East, M.D.B.&M., being in the southeast quarter of the northeast quarter of said Section 4. The gaging station is a rated concrete lined canal section 2,600 feet below the headgate.

Vandalia Ditch Company:

The headgate is located in the south end of Vandalia Weir at a point approximately 1,160 feet west and 170 feet north of the southeast corner of Section 32, Township 21 South, Range 28 East, M.D.B.&M., being in the southeast quarter of the southeast quarter of said Section 32. The gaging station is a rated section 1,000 feet below the headgate.

Hubbs & Miner Ditch Company:

The canal diverts along the North levee of the Tule River at a point approximately 2,600 feet west and 2,100 feet north of the southeast corner of Section 35, Township 21 South, Range 27 East, M.D.B.&M., being in the northwest quarter of the southeast quarter of said Section 35. The gaging station is a rated section 3,100 feet below the canal diversion and 85 feet downstream of the River bypass headgate structure.

Poplar Irrigation Company:

The canal diverts along the south levee of the Tule River at a point approximately 740 feet west and 1,000 feet north of the southeast corner of Section 36, Township 21 South, Range 27 East, M.D.B.&M., being in the southeast quarter of the southeast quarter of said Section 36. The gaging station is a rated section 3,400 feet below the canal diversion and 325 feet downstream of the River bypass headgate structure.

Woods-Central Ditch Company:

The headgate structure is located in the South bank of the Tule River at a point approximately 2,300 feet west and 2,200 feet north of the southeast corner of Section 30,



Township 21 South, Range 27 East, M.D.B.&M., being in the northwest quarter of the southeast quarter of said Section 30. The gaging station is a rated section 150 feet below the River diversion.

2.6.1.2 Deer Creek

Deer Creek is a natural drainage that originates in the Sierra Nevada Mountains, flowing in a westerly direction north of Terra Bella and between Pixley and Earlimart (see Figure A1-8). The Deer Creek channel extends to the Homeland Canal, although surface water flow rarely reaches that location.

Deer Creek Stream Flow

Stream flow in Deer Creek is measured at the United States Geological Survey (USGS) gage at Fountain Springs (five miles east of, and outside of, the Tule Subbasin boundary), Trenton Weir, and at the point where Deer Creek outlets to the Homeland Canal (see Figure A1-8). Details regarding the location and construction of each stream flow gage are provided in Table A-4 and summarized below.

Friant-Kern Canal Discharges into Deer Creek

Friant-Kern Canal water is also discharged into Deer Creek approximately five miles upstream of Trenton Weir and measured by the USBR (see Figure A1-8).

2.6.1.3 White River

The White River drains out of the Sierra Nevada Mountains east of the community of Richgrove in the southern portion of the Tule Subbasin (see Figure A1-8). The White River channel extends as far as State Highway 99 but does not reach the historical Tulare Lake bed. Streamflow in this river is currently monitored manually at Road 208 by the Tule Basin Water Quality Coalition and the Delano-Earlimart Irrigation District.

2.6.2 Monitoring Procedure

2.6.2.1 Surface Water Flow Measurements

With the exception of the White River Turnbull Weir at Road 208, Porter Slough at 192, and Deer Creek outlet to Homeland Canal, all gaging stations and diversion structures on the Tule River and Deer Creek are equipped with water stage recorders that collect water stage readings automatically every 15 minutes. The gage on the Tule River Below Success Dam is operated and managed by the ACOE. The Trenton Weir on Deer Creek is operated and managed by the ACOE. All other gages (with the exceptions noted) report data electronically in real time to the TRA/LTRID.



Stream flow at the Turnbull Weir is measured manually when flow passes the gage. Manual measurements involve recording the reading on the staff gage in the river and conducting current meter measurements for verifying the rating curve and table. Current meter measurements will be collected within the rated section of the natural channel under laminar flow conditions. The required frequency of manual measurements at the Turnbull Weir is addressed in Section 2.6.3. Staff gage and current meter readings are recorded immediately after completion of the measurement and any significant shifts are verified immediately by re-measurement. All readings are recorded on standard forms that include the time the measurement began, the time the measurement was completed, the staff gage height in feet to the nearest hundredth, and any other pertinent data with respect to channel conditions, growth, etc.

For water stage recorders, should the flow double within any 24-hour period, the bi-hourly gage heights shall be converted to second-foot flows and the mean daily flow computed from the second-foot quantities rather than utilizing the normal procedure of obtaining a mean daily gage height and the gage height to a second-foot flow. In the final review of gage sheets, shifts shall be prorated through the period during which the change occurred as determined from the current meter measurements, unless the Hydrographer determines a specific reason for the shift to occur at a definite time.

2.6.2.2 Surface Water Quality Measurements

Surface water quality samples have historically been collected and analyzed from the Tule River, Deer Creek and White River by the Tule Basin Water Quality Coalition surface water quality program. Surface water quality monitoring stations are shown on Figure A1-8.

Surface Water Quality Monitoring Locations – Tule River

Porter Slough at Road 192

Surface water quality samples are collected from Porter Slough upstream of the discharge into the LTRID canal (see Figure A1-8). This surface water monitoring site is located approximately eight miles northwest of Porterville, California.

Tule River at Road 144

Surface water quality samples are collected from the North Fork of the Tule River at Road 144, approximately 3.5 miles northwest of Woodville, California.

Tule River at Road 92

Surface water quality samples are collected from the Tule River at Road 92, approximately four miles northwest of Tipton, California.



Surface Water Quality Monitoring Locations – Deer Creek

Surface water samples are collected from the following locations in Deer Creek:

Deer Creek at Road 248

Located approximately 2.5 miles northeast of Terra Bella in the foothills of the Sierra Nevada Mountains.

Deer Creek at Road 176

Located at Trenton Weir.

Deer Creek at Road 120

Located approximately six miles southeast of Pixley, California at the Road 120 bridge.

Surface Water Quality Monitoring Locations – White River

Surface water quality samples are collected from the White River at Road 208 when flow occurs.

2.6.2.3 Surface Water Quality Constituents

Each surface water quality sample is analyzed by a State certified analytical laboratory for the constituents listed in Table A1-5. In general, these constituents include electrical conductivity (EC), pH, dissolved oxygen (DO), E. Coli bacteria, total organic carbon (TOC), total suspended solids (TSS), total dissolved solids (TDS), turbidity, selected metals, hardness, ammonia, nitrate as N, orthophosphate, and phosphorus.

2.6.3 Frequency of Measurement

2.6.3.1 Stream Flow

Stream flows at gaged stations and diversion points are measured on a continuous basis and electronically transmitted to the TRA/LTRID.

For stream flows at locations with no established gage (e.g. Turnbull Weir and Porter Slough at 192), a current meter measurement is made at least once every two weeks when flows occur. An initial current meter measurement is made as soon as flow is detected and a final current meter measurement is made just prior to discontinuance of flow. Current meter measurements are made when a major change in the stage of flow occurs whether the flow is an increase or a decrease.



2.6.3.2 Surface Water Quality

Surface water quality samples are collected from all of the surface water quality monitoring locations shown on Figure A1-8 on a monthly basis when flow occurs.

2.6.4 Stream Gage Calibration and Maintenance

Manual readings are conducted at each active gaging station at least once per month in order to assess the accuracy of the gage reading to the rating curve. Adjustments are made as necessary.

All gaging stations undergo maintenance at least once per year to clean and backwash inlet pipes, clean and adjust recorder and appurtenances, check and repair time clocks, and repaint the station enclosures, as needed. If the time is off more than one-half hour, or the pen is off more than 0.05 feet, the recorder is reset to correct readings, the pen shall conform to the tape, and the drum shall be rolled for restarting the operation on a new coordinate with revised gage heights denoted.

Gage sheets are reduced as readily as possible after removal from the recorder with additional notations made for assistance in subsequent reviews. Such notations include estimated flows should the recorder provide an incomplete recording due to fouling, clock malfunction or if growth is observed in the channel.



3.0 Representative Monitoring §354.36

3.1.1 Groundwater Levels

A subset of groundwater level monitoring features in the monitoring plan have been identified as representative monitoring sites to be relied on for the purpose of assessing progress with respect to groundwater level sustainability in the subbasin. The representative groundwater level monitoring sites are shown on Figure A1-2. At least one representative groundwater level monitoring site has been identified within each management area. Where possible based on available wells, representative monitoring sites have been chosen with perforations exclusively in either the Upper or Lower Aquifer. To provide adequate spatial coverage of the subbasin, some representative monitoring sites include perforations across multiple aquifers until new monitoring features can be constructed. Representative groundwater level monitoring wells will be equipped with pressure transducers to measure groundwater levels on a daily basis.

3.1.2 Reduction of Groundwater Storage

Changes in groundwater storage within the Tule Subbasin will be estimated using either of the methods identified in Section 3.6 of the Tule Subbasin Coordination Agreement. Groundwater level data to be relied on for the change in groundwater storage estimates will be collected as described in Section 2.1 of this TSMP from the monitoring network shown on Figures A1-2 and A1-5. As such, there are no single representative monitoring sites for evaluating progress with respect to groundwater sustainability as it relates to changes in groundwater storage in the subbasin.

3.1.3 Seawater Intrusion

Seawater intrusion cannot occur in the Tule Subbasin due to its location with respect to the Pacific Ocean (see Section 2.3 herein). As such, representative monitoring sites for evaluating progress with respect to groundwater sustainability as it relates to seawater intrusion are not needed.

3.1.4 Degraded Groundwater Quality

Groundwater quality degradation in the Tule Subbasin is being monitored and regulated under the Irrigated Lands Regulatory Program (ILRP) and CV Salts. Monitoring of groundwater quality as it relates to the sustainability of the Tule Subbasin is focused on potential changes in the direction and/or flow rate of existing point-source groundwater contaminant plumes. These plumes have been identified and described in Section 2.2.4 of the Tule Subbasin Setting (Attachment 2 of the Tule Subbasin Coordination Agreement). As changes in the movement of contaminant plumes occurs as a result of changes in groundwater levels, the representative monitoring sites identified



for groundwater levels (Section 3.1.1 herein) serve as proxy representative monitoring sites for the potential movement of existing groundwater contaminant plumes.

3.1.5 Land Subsidence

Representative monitoring sites for land subsidence within the Tule Subbasin consist of the network of GPS benchmark stations shown on Figure A1-7. Land subsidence has been measured along the canal in the past and further land subsidence is considered an undesirable result as it restricts the ability to deliver water downstream of the area of subsidence. Measured subsidence at these GPS stations will inform progress as it relates to arresting future land subsidence along the canal.

3.1.6 Interconnected Surface Water

As described in Section 2.2.7 of the Tule Subbasin Setting (Tule Subbasin Coordination Agreement Attachment 2), there are no interconnected surface water systems within the Tule Subbasin. As such, representative monitoring sites for evaluating progress with respect to groundwater sustainability as it relates to interconnected surface water are not needed.



4.0 Assessment and Improvement of Monitoring Network §354.38

The TSMP is both flexible and iterative, allowing for the addition or subtraction of monitoring features, as necessary, and to accommodate changes in monitoring frequency and alternative methodologies, as appropriate.

4.1 Data Gaps §354.38 (b)

4.1.1 Groundwater Monitoring Data Gaps

Despite the number of existing monitoring wells that have been identified within the Tule Subbasin, there remain data gaps that, if addressed, would improve the ability to monitor groundwater level changes and flow patterns specific to the Upper and Lower aquifers. The current data gaps relate primarily to spatial coverage of monitoring features necessary to prepare complete groundwater level contour maps specific to the Upper and Lower aquifers in the subbasin.

In addition to groundwater level data gaps, there is a lack of aquifer parameter data, as obtained from controlled pumping tests of wells. The groundwater flow model has been developed based predominantly on short-term pumping tests, which enable the development of estimates of aquifer transmissivity. However, these tests are not as representative as long-term pumping tests (24-hr tests or longer). Further, pumping tests where groundwater level interference is measured in nearby monitoring wells have not been conducted. These tests enable the estimation of aquifer storage properties. During the construction of new monitoring features, it is anticipated that long-term pumping tests will be conducted to obtain aquifer parameter data specific to both the Upper and Lower aquifers. Further, pumping tests will be planned, where feasible, on existing high-capacity groundwater production wells.

Recommended Monitoring Features and Testing to Address Data Gaps §354.38 (d)

Identification of new monitoring well locations is an ongoing effort in the Tule Subbasin. Potential areas for new wells to address groundwater level data gaps are shown on Figure A1-2 and described in Sections 2.1.1.1 and 2.1.1.2 herein. The new monitoring wells, combined with existing monitoring wells, will improve the Tule Subbasin TAC's ability to develop detailed and representative groundwater contour maps and provide a better network of calibration targets for the subbasin-wide groundwater model. It is further anticipated that many of the new monitoring wells will eventually replace currently assigned representative monitoring sites.

As described in Section 2.1.1.1 herein, some of the new monitoring wells will be constructed as nested wells with two casing installed in the same borehole, each perforated in a distinct aquifer and isolated with a seal to ensure measurement of data unique to either the Upper or Lower aquifer.



In order to address the aquifer parameter data gaps, it is recommended to conduct controlled, long-term pumping tests in selected wells within the subbasin. Tests should be conducted in wells perforated exclusively in the Upper Aquifer and exclusively in the Lower Aquifer. Pumping wells will be selected near proposed monitoring wells in order to enable pumping interference measurements during the test. Each test will consist of a 24-hr constant rate pumping test.

4.1.2 Land Surface Monitoring Data Gaps

InSAR data that cover the entire Tule Subbasin have been historically available and indicate areas where land subsidence has been occurring. Confirmation of these data with more conventional land based survey methods such as GPS is ongoing. The USGS has refurbished one extensometer, which is located approximately one mile north of Deer Creek along the Friant-Kern Canal and is included in this plan. However, characteristics of aquifer system compaction in the northwestern portion of the subbasin, which is hydrogeologically different than the area where the existing extensometer is located, is unknown and represents a data gap.

Recommended Monitoring Features to Address Land Surface Monitoring Data Gaps §354.38 (d)

At least one new extensometer is recommended for the vicinity of the Homeland Canal at Highway 43 in the northwest portion of the subbasin. This instrument will provide the most accurate assessment of aquifer system compaction in the area of greatest subsidence in the subbasin.

4.1.3 Surface Water Monitoring Data Gaps

The following surface water monitoring data gaps have been identified for the Tule Subbasin:

- Tule River near Porterville - Channel infiltration losses in the upper portion of the Tule River are currently calculated between the gage below Success Dam and the gage at the Rockford Station, which is a 10-mile stretch of the river. It appears that more of the infiltration losses occur in the upper portion of the channel reach than in the lower. An intermediate gage between the Poplar diversion and Woods Central would be beneficial to understand the volume of infiltration losses above and below this point.
- Tule River at McCarthy Check - Channel infiltration losses between the Rockford Station and the Turnbull Weir are not well documented. An additional gage at the McCarthy Check at Road 96 (see Figure A1-8) would provide additional information on the channel losses upstream of this point and between McCarthy Check and Turnbull Weir.
- Deer Creek at Friant-Kern Canal – While the releases of imported water from the Friant-Kern Canal to the Deer Creek channel are well documented, the channel infiltration losses



between the Friant-Kern Canal and the Trenton Weir are not. An additional gage immediately upstream of the Friant-Kern Canal would enable the measurement of flows attributed to both imported water and natural stream flow as well as a better estimate of channel losses between these two points.

- Deer Creek at Homeland Canal – Stream flows at the downstream end of Deer Creek periodically reaches, and are discharged to, the Homeland Canal (see Figure A1-8). The nature and historical records of this discharge are not available and present a data gap for the surface water budget of the subbasin. Further, a gage record at this location would provide information on streambed infiltration during periods of time when surface water in Deer Creek reaches Homeland Canal.
- White River – Historical stream flow in the White River has been measured by the USGS at the gage near Ducor (see Figure A1-8). However, this gage is no longer active leaving a data gap for the volume of surface water entering the subbasin from this river (current estimates of flow into the subbasin are based on correlations with flows of Deer Creek). Further, there are no established gages downstream of this point.

Recommended Surface Water Monitoring Features to Fill the Data Gaps §354.38 (d)

The following surface water monitoring features are recommended to address the surface water data gaps:

- Tule River – Establish a rated section of channel, concrete weir structure and water stage recorder at an appropriate location between the Poplar diversion and the Rockford Station gage; and establish a rated section of channel, concrete weir structure and water stage recorder at the McCarthy Check.
- Deer Creek – Establish a stream gage immediately upstream of the Friant-Kern Canal to enable the portion of flow in the channel attributed to native stream flow and the portion attributed to imported Central Valley Project releases. Investigate the discharge structure at the Deer Creek inlet to Homeland Canal and develop a gaging station.
- White River – Refurbish and reinstate the USGS gage immediately east of the Tule Subbasin boundary near Ducor. Establish a rated section of channel, concrete weir structure and water stage recorder at Road 208 (if this has not already occurred).



5.0 Tule Subbasin Data Management System

Efficient data management will be a critical aspect of the Coordination Agreement in order to ensure that each GSA can access the data needed to prepare their respective annual reports in a timely manner and to ensure that the Tule Subbasin TAC can meet deadlines for submittal of the coordinated reports. Data to be managed will include:

- A. Historical data used as a basis for the Water Budget of the Tule Subbasin.
- B. Data to be collected in accordance with the Tule Subbasin Monitoring Plan.

Both historical and future data collected as part of this TSMP will be stored in a single comprehensive electronic database. This section satisfies § 352.6 of SGMA Regulations, which requires each agency to develop and maintain a data management system (DMS) that is capable of storing and reporting information relevant to the development and implementation of the plan and monitoring of the basin. The following table outlines the sections of the Tule Subbasin DMS as they relate to the various components of the SGMA Regulations.

Table A1-6 – Tule Subbasin DMS SGMA Requirements

Tule Subbasin DMS SGMA Requirements		
SGMA Regulation Section No.	Coordination Agreement Corresponding Section	Description
§ 352.4	Section 5.2	Data and Reporting Standards
§ 352.6	Section 5	Data Management System
§ 353.4	Section 5.2.4.2	Reporting Provisions
§ 354.4	Section 5.2.4.2	Reporting Monitoring Data to the Department
§ 356.2	Section 5.2.4.2	Annual Reports

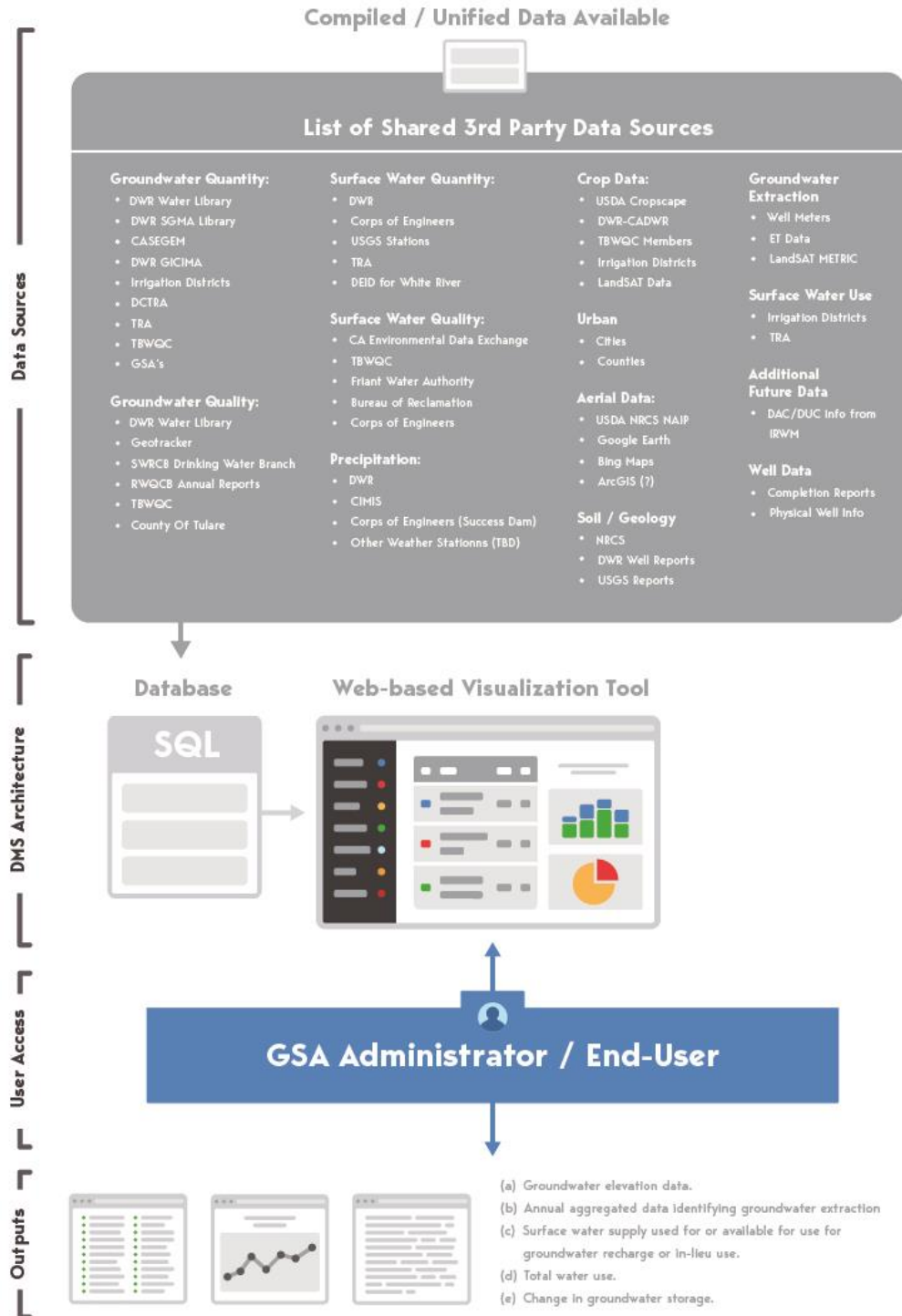
5.1 Overview of Tule Subbasin Data Management System

The Data Management System will allow users to view program data in comparison with all publicly available data from federal, state, and local jurisdictions to make the most informed decisions. Users will be able to submit, query, view, and analyze data as needed. The Tule Subbasin Data Management System (DMS) is comprised of two separate coordinated systems that include a SQL server and a web-based visualization platform. SQL will function as the storage and retrieval system to display the data in the web-based visualization platform. Users will have access to data sets through the web-based platform, to export data, import data, and view data in a dashboard format.



Figure A1-9 Data Management System Overview

Tule Subbasin Data Management System



5.2 Functionality of the Data Management System

The DMS will be comprised of various tools designed to assist GSAs in the development and implementation of their groundwater sustainability plans. At its Core, the DMS is a data storage system which grants users access to interact and upload data required to comply with SGMA regulations. Guiding the implementation of the DMS are the rules laid out in the following sections.

5.2.1 User and Data Access Permissions

User data access and permissions will be based on the predetermined user type and data source by the system administrator. User types include:

- System Admin - Users with this permission can perform all administrative functions.
- SGMA End-User - Users with this permission can perform all APN / Parcel Level functions and have access to Basin Level and GSA Level Public Data.
- End User Delegate - Users with this permission can perform all APN / Parcel Level functions and have access to Basin Level and GSA Level Public Data.
- GSA Staff - Users with this permission can perform all Farm Level and GSA Level functions and have access to Basin Level Public Data.
- GSA Manager - Users with this permission can perform all APN / Parcel Level and GSA Level functions and have access to Basin Level Public Data.
- Public User - Users may view published data but cannot import or edit information

Data viewing and access will be limited on geographic extent based on the user, such as a landowner will only be able to view data for land he/she owns or an administrator of the GSA can view data for the GSA he/she represents. Data from private or user sources will be protected in the system while publicly available data will be available basin wide. Data Source types include:

- Public - Federal, State, or local published data
- Private - District or agency specific data
- Shared - SGMA data available for all users of DMS excluding public users
- User - user specific data
- DMS - Data available from other programs (IRLP)
- Published - Data from SGMA/GSA sources available for public consumption

5.2.2 Data Entry and Validation

To encourage agency and user participation in the DMS, data entry and import tools are easy-to-use, accessible via web-based interface, and help maintain data consistency and standardization.



The DMS allows GSA Administrators and Users to enter data either manually via easy-to-use interfaces, or through an import tool utilizing standardized Microsoft Excel templates, ensuring data may be entered into the DMS consistently. The data imported will require validation by the managing GSAs Administrators or Users using a number of quality control checks prior to final import into the DMS. All data included in the system will comply with data standards laid out in § 352.4 of the SGMA Act.

5.2.2.1 Data Collection

The Tule Subbasin DMS is populated with data from various sources including public, private, contributing DMSs, and user data. Data collected in accordance with the Tule Subbasin Monitoring Plan as well as data regarding key water management areas, include:

- Precipitation
- Evapotranspiration
- Surface water flow
- Groundwater levels
- Groundwater quality
- Groundwater extraction
- Imported water deliveries
- Managed recharge
- Land surface elevation
- Land Subsidence measurements

5.2.2.2 Monitoring Data Entry (QA / QC)

For purposes of this plan, quality assurance (QA) is defined as the integrated program designed to assure reliability of monitoring and measurement data. Quality control (QC) is defined as the routine application of specified procedures to obtain prescribed standards of performance in the monitoring and measurement process.

Different monitoring protocols exist for the various data types stored in the DMS. Public sources included in the DMS as published from the source and referenced as such. User entry and private sourced data will be closely monitored for formatting and accuracy, in addition requiring chain of custody and acknowledgement of following protocols defined in the Monitoring Plan. These sources will be required to submit through pre-established forms to maintain the validity of the DMS.

5.2.2.3 Data Validation

Data Validation is required for non-public sources and will be performed in the following ways:

- **Standardized Form Input:** meant to comply with what is required by law



- **Using known possible values for a dataset:** This would represent a baseline range of what can be typed into an input. Ex: Parcels Assessed Acreage vs Irrigated Acreage
- **Data/Field Normalization:** Establishing unit consistency between datasets. The DMS will keep a normalized value behind the scenes for each variation of a reported unit. Regular Expressions on inputs to control the type/format of information being submitted to the DMS.
- **Outlier filtering:** Outlier filtering when interacting with publicly available data or data that has been mass imported. Using Statistical Analysis methods, any statistical outliers will be filtered out of reports unless the end user opts to have them included.

5.2.3 Visualizations and Analysis

The DMS will host a robust visualization and analysis component to allow end users the ability to view and provide context to the data. This can be performed in Map and Tabular views, as shown in Figure A1-10.

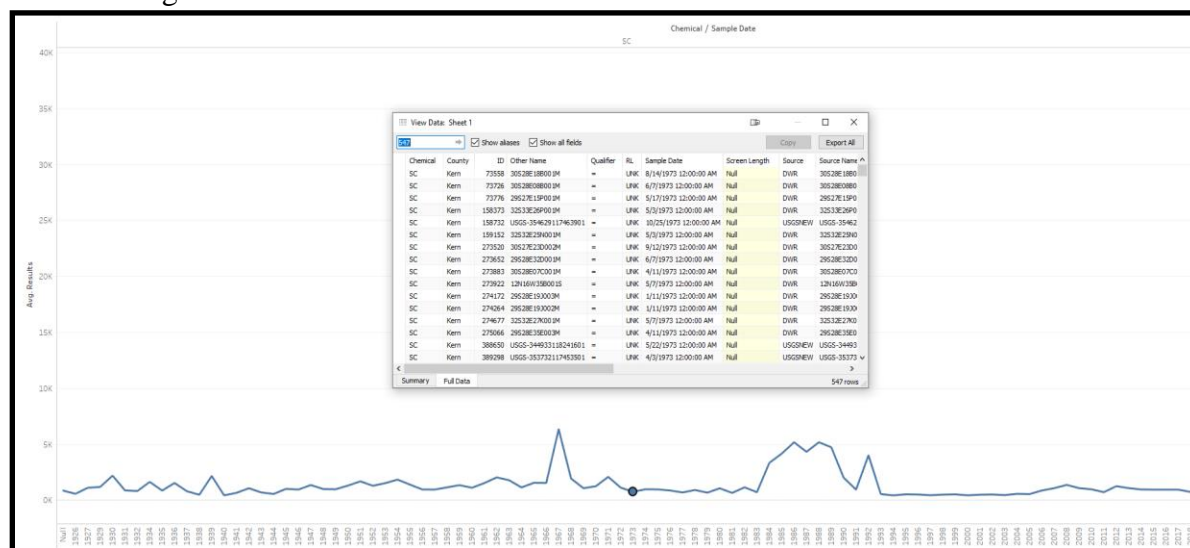


Figure A1-10: DMS Data Visualization Example - Average Specific Conductivity by Year within the Tule Sub Basin.

5.2.3.1 Map View

Map view in the DMS will allow users to visualize data that has spatial characteristics (wells, stream gages, precipitation stations, etc). **Figure A1-11** is an example of well data in the DMS. In map view users can scroll around the selected source data and click on the sites to bring up site specific information.



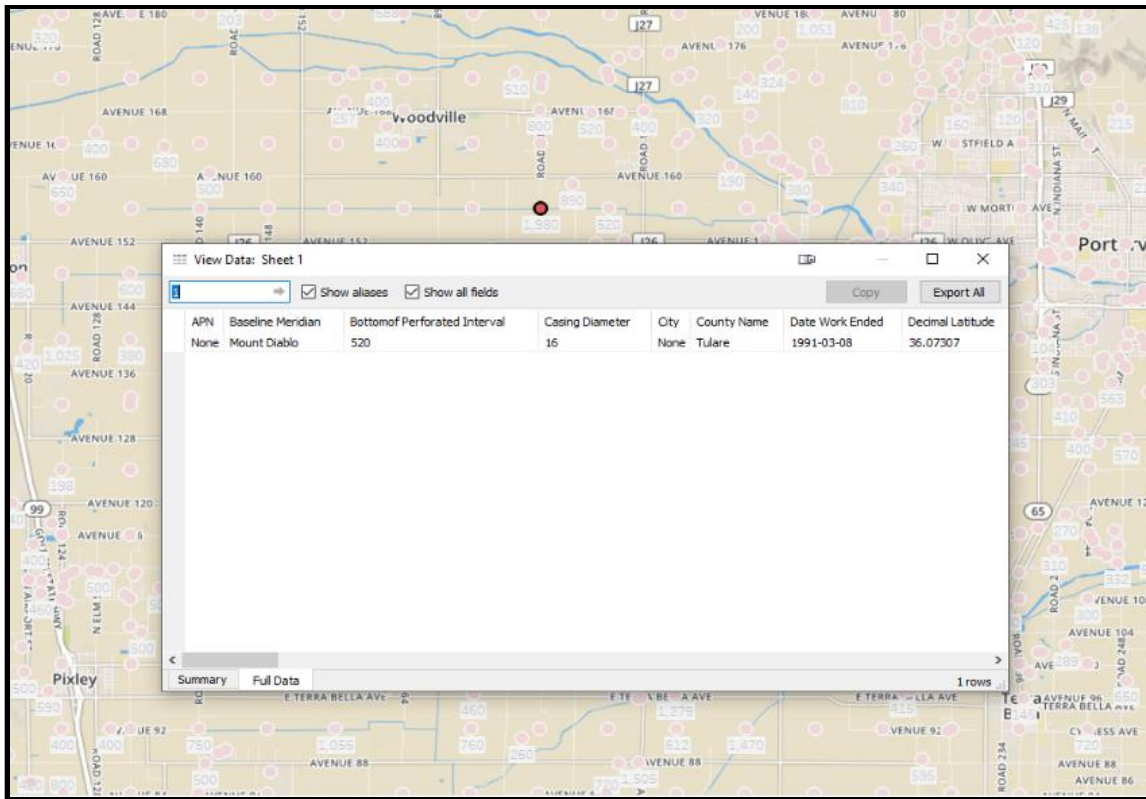


Figure A1-11: DMS Map View Example - Total Completed Well Depth Map

5.2.3.2 List View

List view presents all the data of a given dataset in tabular form. It will allow users to see all the data in the chosen data set and their attributes. Data is able to be filtered for specific attributes, geographic extent, and various other criteria.

5.2.4 Query and Reporting

Data in the DMS can be queried and reporting using various filtering and querying tools. The options are dependant on the source of the data. Reports can be prepared from the queried DMS for various formats based on the submitting agency.

5.2.4.1 Ad-hoc Query

As a relational database the DMS will have the ability to be queried by users with designed limitations for various end users (see section 5.2.1). Putting these limitations aside, any data included in the DMS can be queried based on the attributes which adhere to the data source (i.e data type, data source, parameters, geographic location, etc.). See **Figures A1-12 and A1-13** for querying examples.



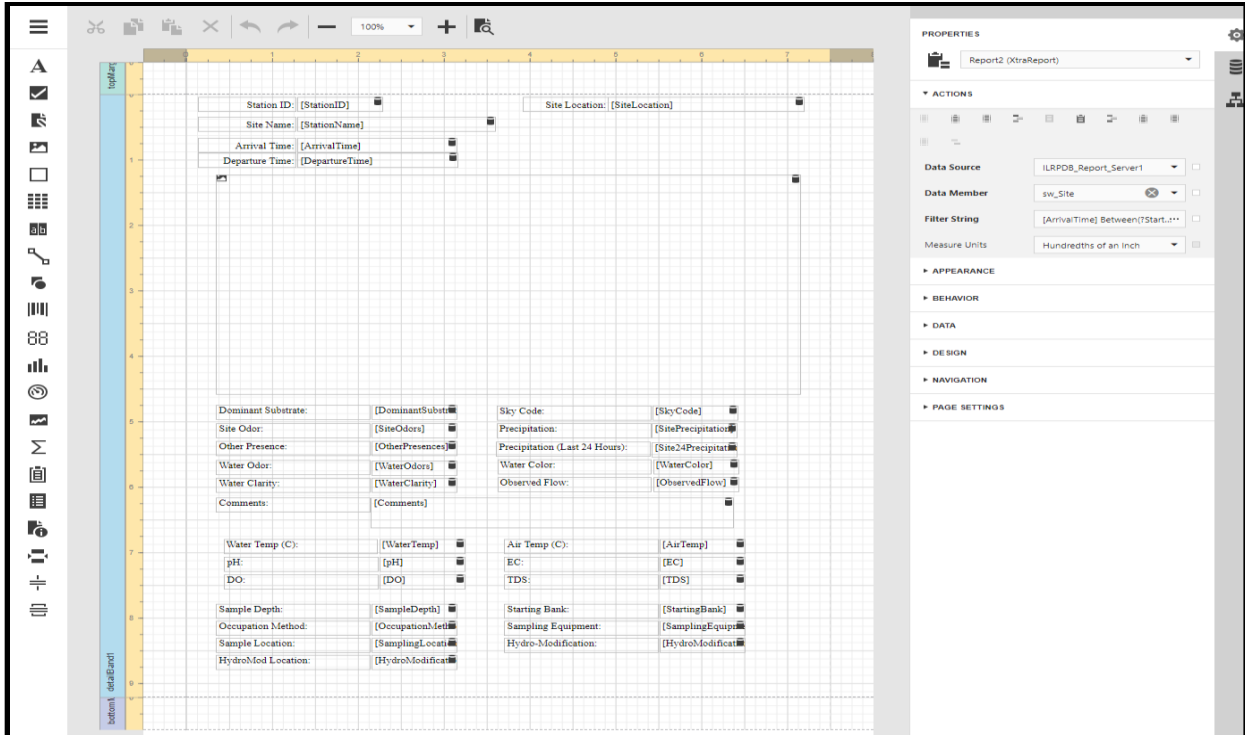


Figure A1-12: Ad Hoc Report Builder Designer View

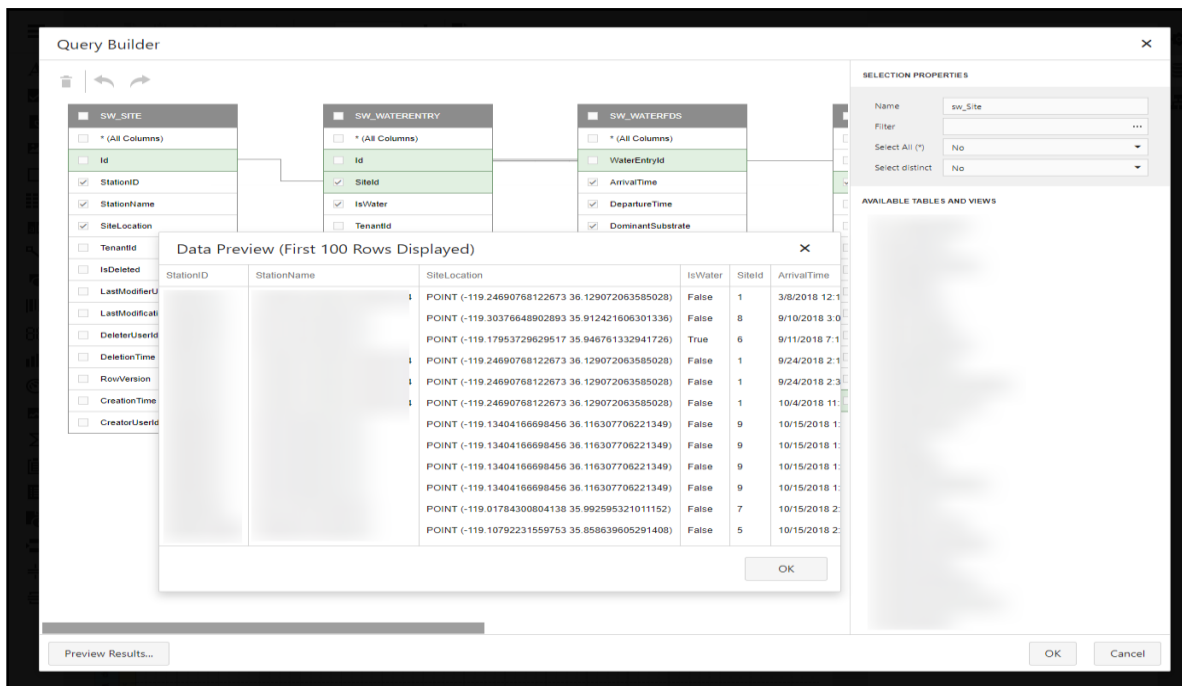


Figure A1-13: Redacted Ad Hoc Query Builder Example



5.2.4.2 Standard Reports

Standard report chart and table formats such as those included in the annual and 5-year reports can be generated utilizing the DMS. Additional reporting requirements can be created by end users. In order to provide end users with flexibility in reporting, the tools are intended to be self-serviced by the end-users. End-users will be able to create their own reports using data they have permission to access.

If commonality is discovered between participating agencies, a Standardized report can be created and shared with all agencies that as required. All generated reports and reporting tools will be built to comply with § 352.4 of the SGMA Act.

5.3 Data Included in the Data Management System

Table A1-7: Summary of Data included in DMS identifies the specific data type, the source of the data, and entry of the data in to the DMS.

Table A1-7: Summary of Data

Data Type	Source Name	Entry Type	
Groundwater Quantity	DWR Water Library	Public Source	
	DWR GICIMA	Public Source	
	CASGEM	Public Source	
	Irrigation Districts	Private Source	
	DCTRA	Private Source	
	TRA	Private Source	
	TBWQC	DMS Transfer	
	GSA'S		
	>	LTRID GSA	User Entry
	>	Pixley GSA	User Entry
	>	ET GSA	User Entry
	>	DEID GSA	User Entry
	>	Tri- County GSA	User Entry
	Tulare County GSA	User Entry	



	>	Alpaught GSA	User Entry
Groundwater Quality	DWR Water Library		Public Source
	GAMA Geotracker		Public Source
	SCWRB Drinking Water Branch		Public Source
	RWQCB Annual Reports		Public Source
	TBWQC		Public Source
	County of Tulare		Public Source
Surface Water Quantity	Army Corps of Engineers		Public Source
	USGS Gaging Stations		Public Source
	Bureau of Reclamation		Public Source
	Tule River Authority		Private Source
	DWR - CDEC Stations		Public Source
Surface Water Quality	CA Environmental Data Exchange		Public Source
	TBWQC		DMS Transfer
	Friant Water Authority		Public Source
	Corps of Engineers		Public Source
Precipitation	DWR		Public Source
	CIMIS		Public Source
	Corps of Engineers		Public Source
	TBD		N/A
Crop Data	USDA Cropscape		Public Source
	DWR-CADWR		Public Source
	TBWQC Members		DMS Transfer
	Irrigation Districts		Public Source
	FMMP		Public Source
	LandSAT		Public Source
Urban	Cities		Public Source
	Counties		Public Source



Soil/Geology	NRCS	Public Source
	DWR Well Reports	Public Source
	USGS Reports	Public Source
Subsidence	USGS	Public Source
	TBWQC	Public Source
	UNAVCO	Public Source
Groundwater Extraction	Well Meters	TBD
	ET Data	DMS Transfer
	LanSAT Metric	DMS Transfer
Surface Water Use	Irrigation Districts	Private Source
	TRA	Private Source
Future Sources	DAC/DUC IRWM Info	Private Source
Well Data	Well Completion Reports	Annually
	Physical Well Info	TBD



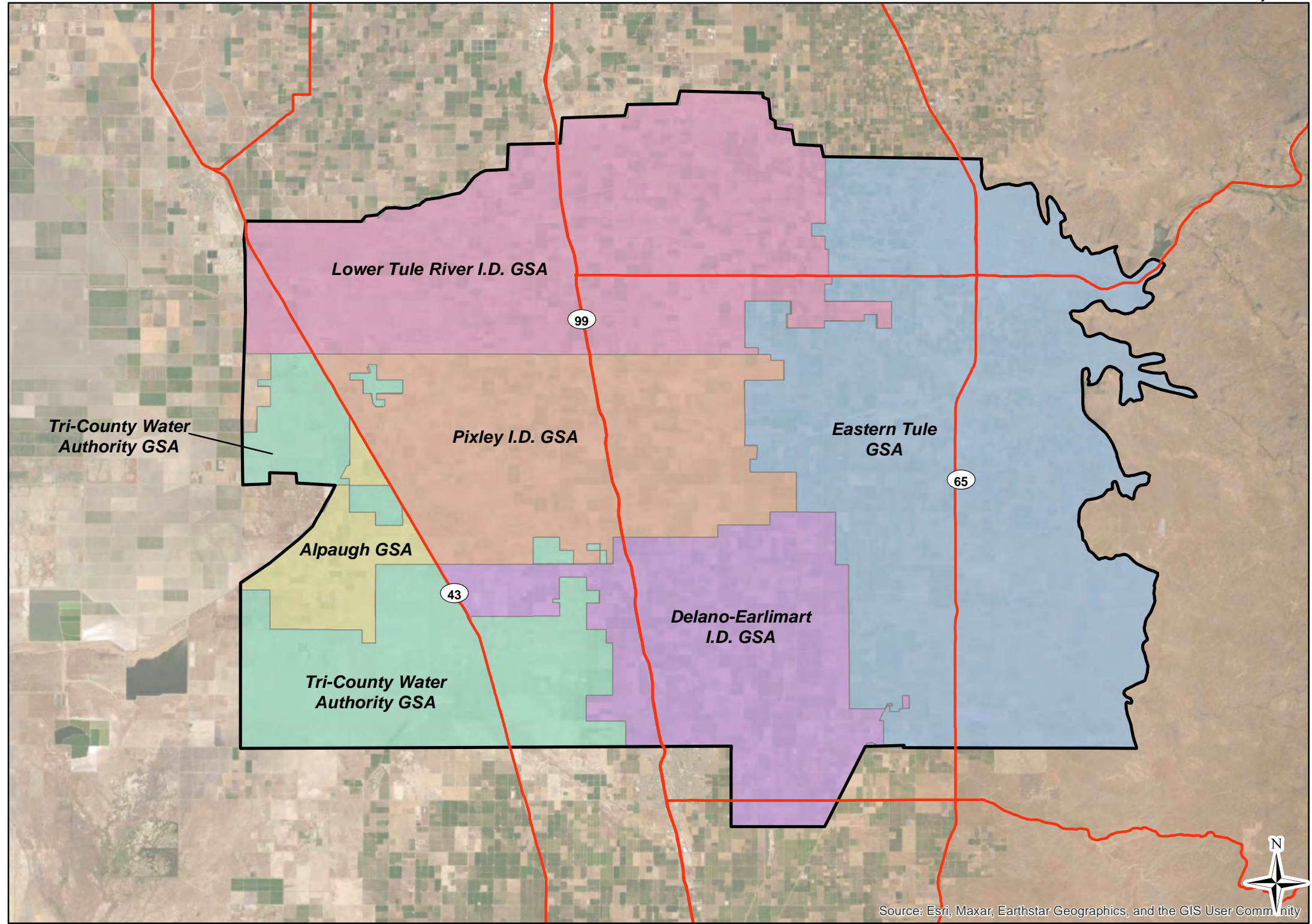
Figures



Tule Subbasin

July 2022

Tule Subbasin Monitoring Plan

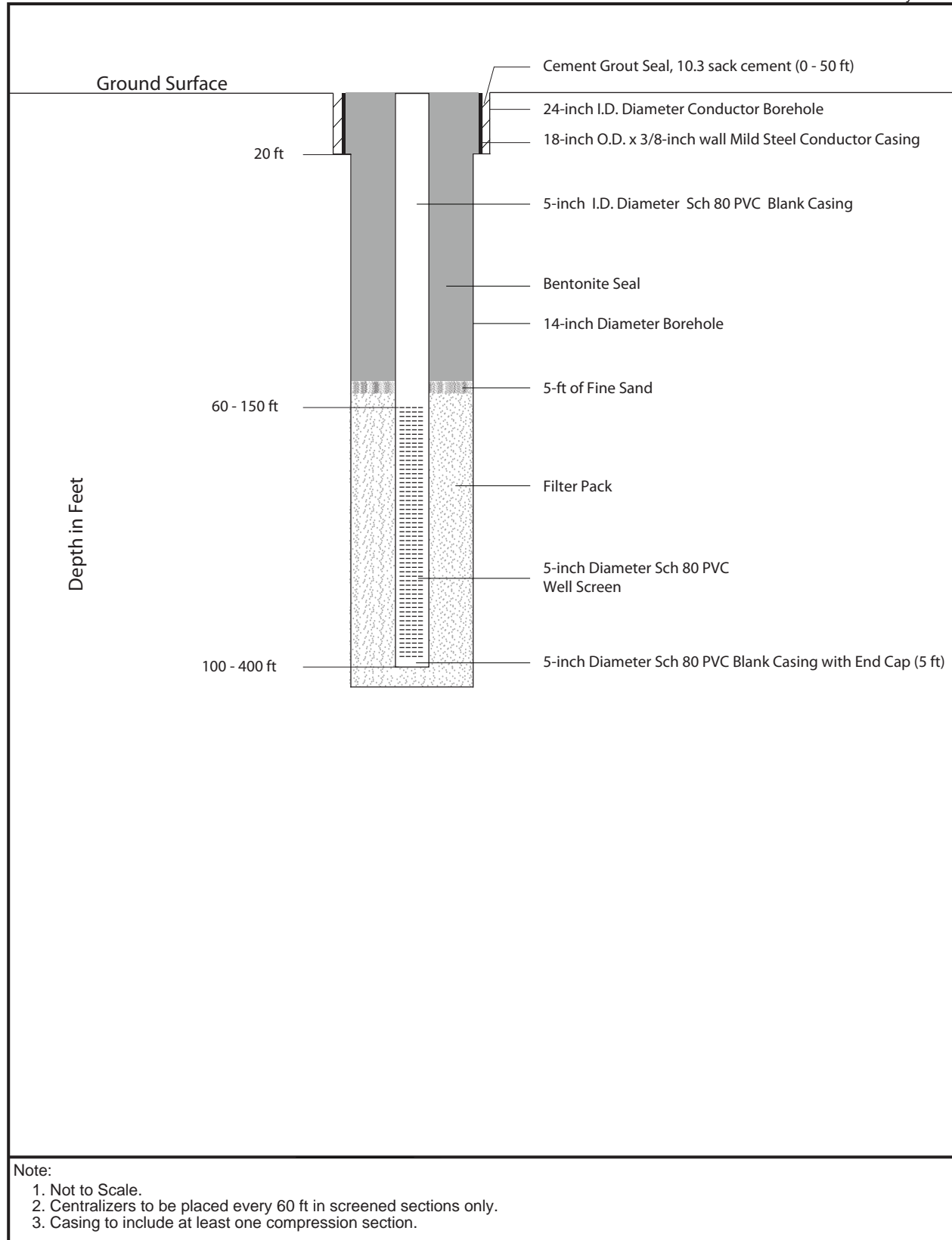


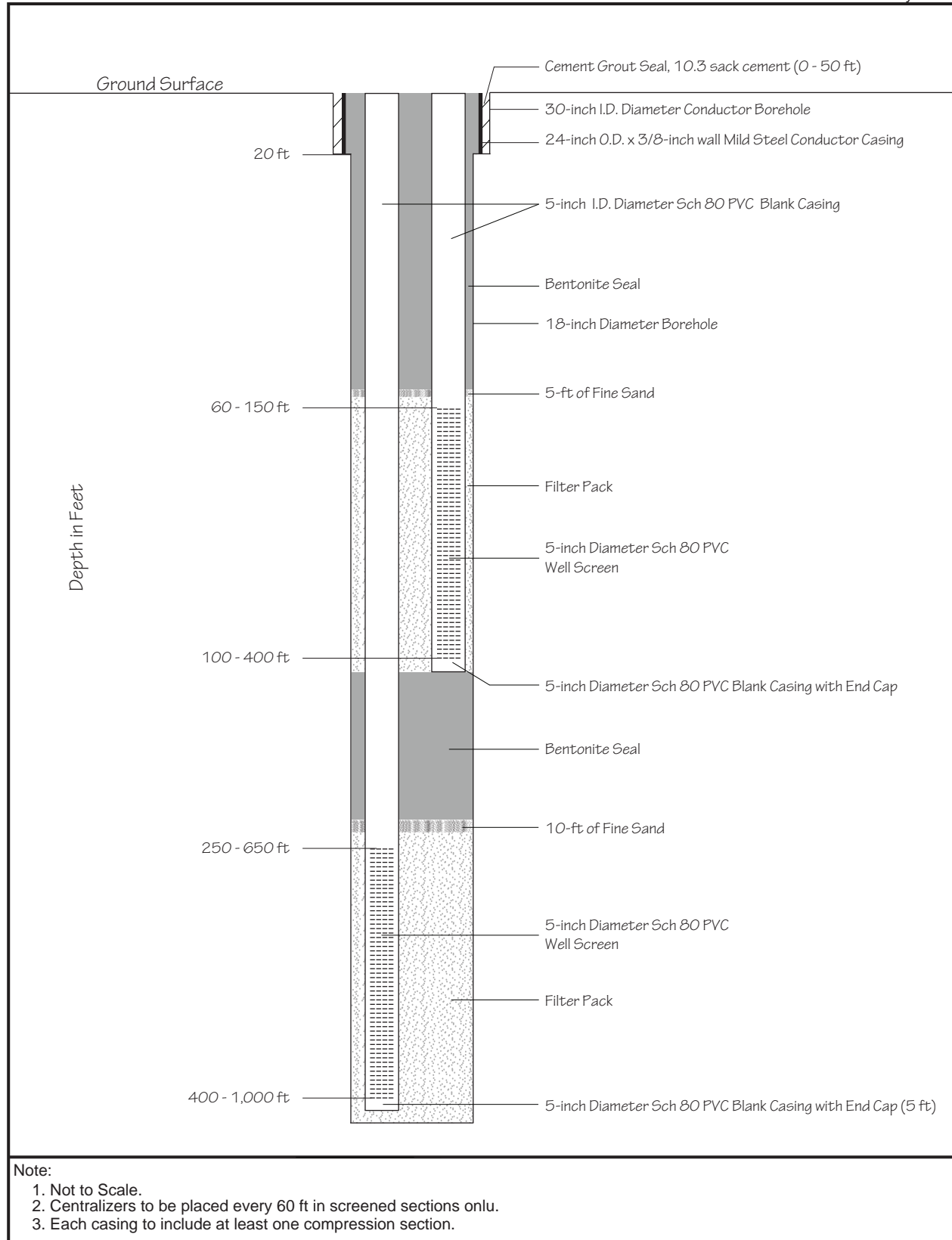
Map Features

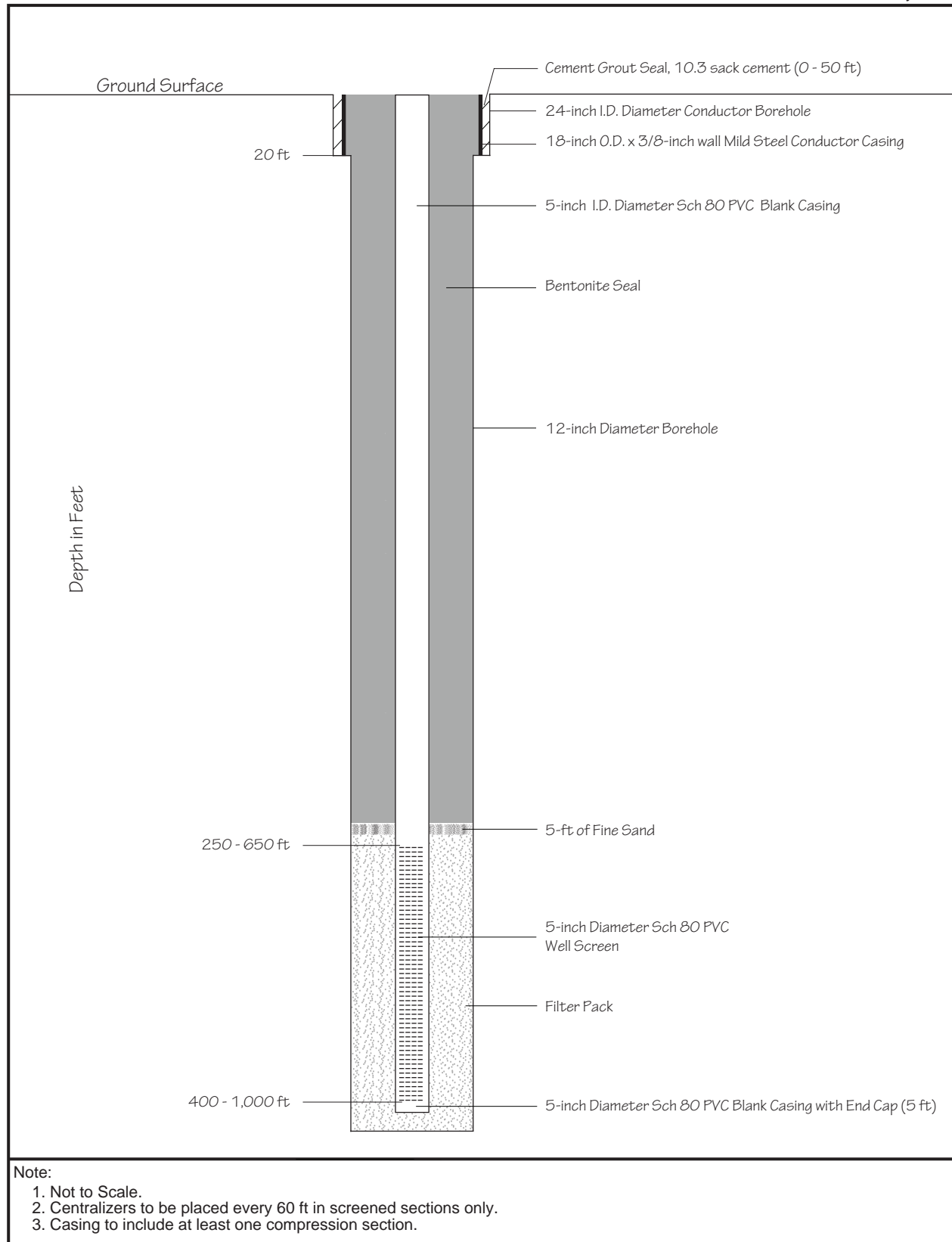
- Delano Earlimart ID GSA
- Tri-County Water Authority GSA
- Alpaugh GSA
- Lower Tule River ID GSA
- Pixley ID GSA
- Eastern Tule GSA
- Basin Boundary
- State Highway

GSA Boundaries from:
<http://sgma.water.ca.gov/portal/#gsa>
 Accessed 18-Jul-17





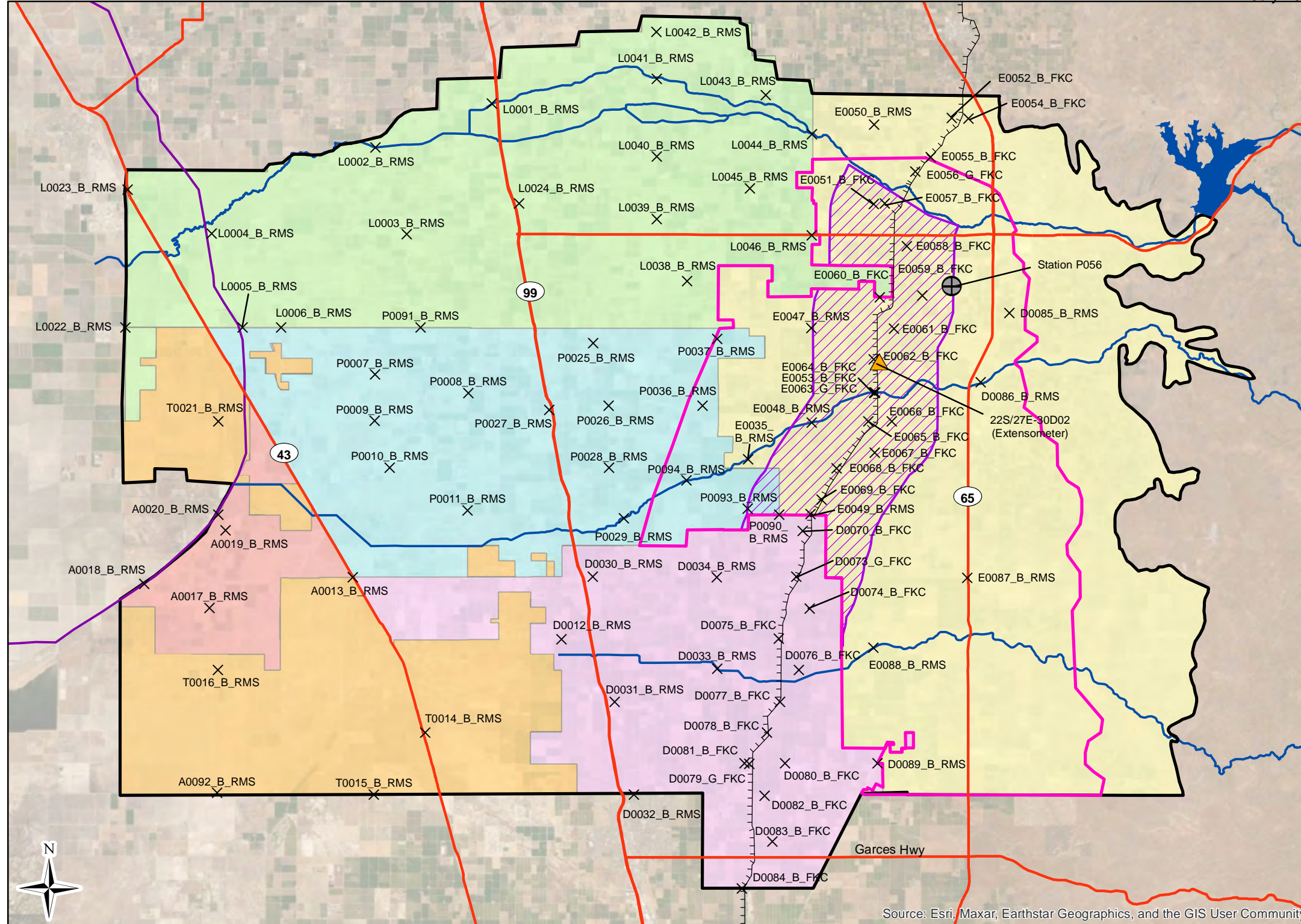




Tule Subbasin

July 2022

Tule Subbasin Monitoring Plan



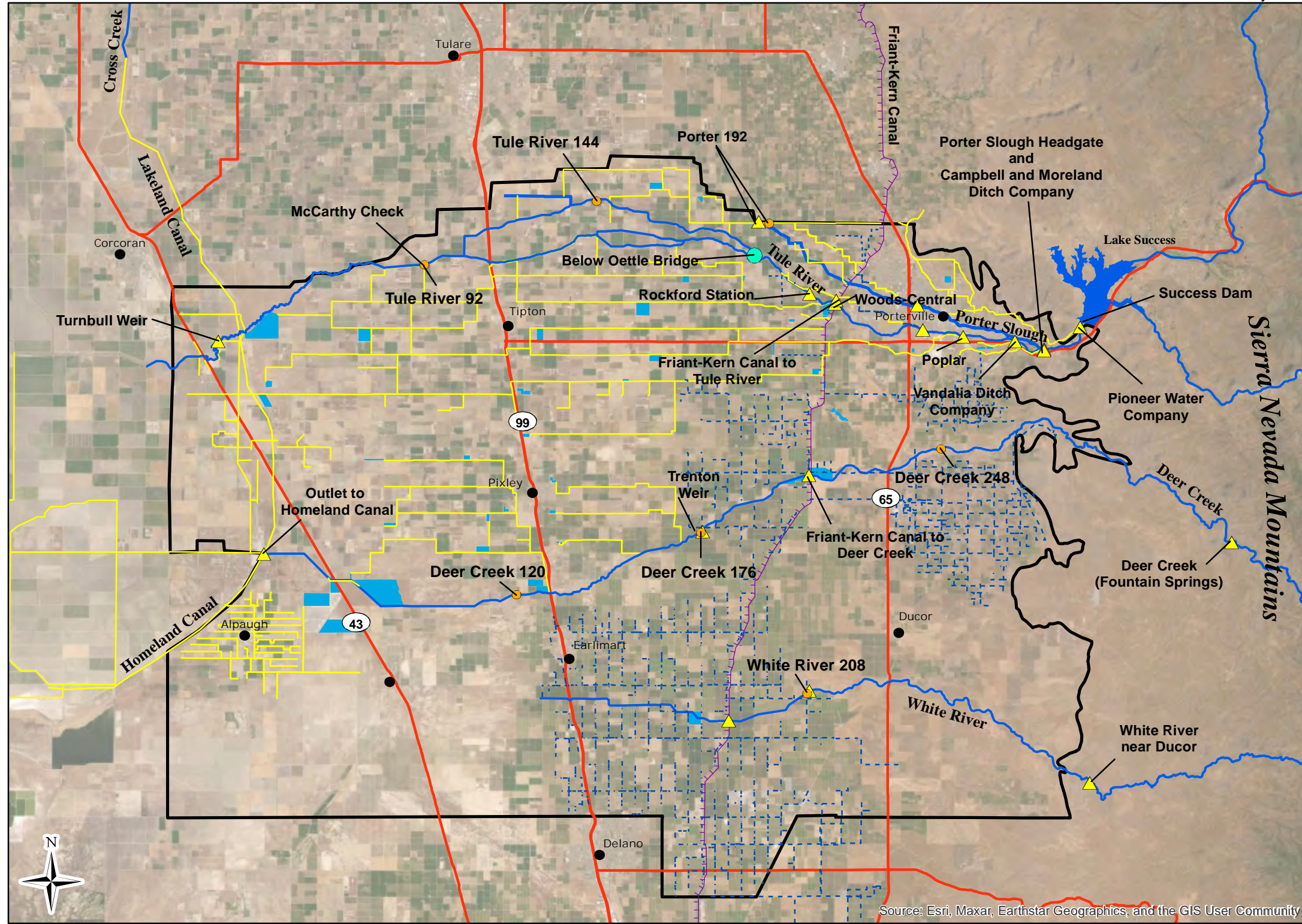
Map Features

- × Land Surface Elevation RMS
- ▲ Extensometer
- ⊕ GPS Station
- Alpaugh GSA
- Delano-Earlimart I.D. GSA
- Eastern Tule GSA
- Lower Tule River I.D. GSA
- Pixley I.D. GSA
- Tri-County Water Authority GSA
- Friant-Kern Canal and California Aqueduct
- Canal
- ETGSA Monitored Area
- ETGSA Management Area
- Basin Boundary
- State Highway

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Tule Subbasin

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Tule Subbasin Monitoring Plan

Map Features

- Surface Water Sampling Site
- Surface Water Measurement Location
- ▲ Surface Water Diversion Location
- Friant-Kern Canal and California Aqueduct
- Canals
- - - Pipe
- State Highway
- Major Hydrologic Feature
- Basin Boundary
- Artificial Recharge Basin
- City or Community

Tables



Summary of Existing Upper Aquifer RMS Wells

CASGEM State Well Number	Short State Well Number	Well Name/ Well Log	Owner	Borehole Depth (ft bgs)	Casing Depth (ft bgs)	Top of Perforations (ft bgs)	Bottom of Perforations (ft bgs)	Aquifer ¹	Groundwater Level Record	X-Coordinate ² (ft)	Y-Coordinate ³ (ft)
21S23E32K001M	21S/23E-32K01	32K01	N/A ⁴	N/A ⁵	406	104	402	U	1973 - 2016	6412096	1903994
21S24E35A001M	21S/24E-35A01	35A01	N/A	328	328	245	302	U	1954 - 2018	6461001	1906318
21S25E03R001M	21S/25E-03R01	03R01	N/A	328	274	145	238	U	1961 - 2016	6487724	1929460
N/A	21S/26E-34	Poplar CSD	N/A	400	400	120	400	U	N/A	6519268	1903301
22S26E13R001M	22S/26E-13R01	13R01	N/A	385	380	240	380	U	1960 - 2017	6529369	1886156
22S27E13A001M	22S/27E-13A01	13A01	Robert Job	400	400	120	380	U	1945 - 2017	6561151	1890683
23S24E28J002M	23S/24E-28J02	28J02	N/A	500	500	200	500	U	1953 - 2017	6450366	1846351
23S25E16N004M	23S/25E-16N04	16N04	USGS	250	240	200	240	U	1959 - 1982	6476961	1854788
24S26E04P001M	24S/26E-04P01	04P01	N/A	402	393	216	393	U	1979 - 2014	6511204	1834634
N/A	22S/23E-25C01	E20	Angiola W.D.	500	490	240	480	U	2008 - 2017	6430745	1880707
N/A	N/A	C-1	City of Porterville	330	240	120	240	U	1982 - 2017	6557099	1909024
N/A	N/A	R-11	City of Porterville	216	216	0	216	U	1984 - 2016	6531833	1909116
N/A	N/A	M-19	DEID	810	N/A	200	350	U	2017	6505880	1830731
22S24E23J001M	22S/24E-23J01	23J01	N/A	400	N/A	N/A	N/A	U	1947 - 2013	6461034	1883355
22S25E25N001M	22S/25E-25N01	25N01	N/A	437	N/A	N/A	N/A	U	1959 - 2018	6494108	1875965
N/A	24S/23E-22E01	22E01	N/A	N/A	N/A	N/A	N/A	U	1980 - 2007	6419302	1820863
24S26E32G001M	24S/26E-32G01	32G01	N/A	470	N/A	N/A	N/A	U	1932 - 2009	6507272	1810870
N/A	21S/26E-32B02	E049930	Jeremy Blackwell	N/A	280	200	260	U	N/A	6507607	1906658
N/A	24S/25E-35H01	1095774	Jonathan Martin	N/A	340	160	320	U	N/A	6489675	1809760
N/A	23S/26E-29D01	E0119660	N/A	N/A	300	160	300	U	N/A	6504558	1847673
N/A	21S/27E-18M01	360725	David Fenn	N/A	300	150	300	U	N/A	6535326	1921533
N/A	N/A	TSMW 5U	Tule Subbasin TAC	310	285	170	280	U	2020 - 2021	6413232	1823570
N/A	N/A	TSS PIDGSA-01 U	Tule Subbasin TAC	1,020	260	180	250	U	2021	6492776	1857661
N/A	23S/25E-08G01	08G01	N/A	N/A	420	320	420	U	2021	6471859	1863508
N/A	N/A	LTRID TSS U	Tule Subbasin TAC	1525	290	150	280	U	2020 - 2021	6469280	1930833
N/A	N/A	21S/23E-31	N/A	N/A	400	200	400	U	2021	6408325	1907222
N/A	N/A	36201	N/A	N/A	399	301	399	U	2003 - 2011	6521736	1830641

Notes:

- ¹ U = Well Perforated in Upper Aquifer
- ² X-Coordinates in State Plane Zone 4 (feet)
- ³ Y-Coordinates in State Plane Zone 4 (feet)
- ⁴ N/A = Not Available

Summary of Existing Lower Aquifer RMS Wells

CASGEM State Well Number	Short State Well Number	Well Name/ Well Log	Owner	Borehole Depth (ft bgs)	Casing Depth (ft bgs)	Top of Perforations (ft bgs)	Bottom of Perforations (ft bgs)	Aquifer ¹	Groundwater Level Record	X-Coordinate ² (ft)	Y-Coordinate ³ (ft)
22S24E01Q001M	22S/24E-01Q01	01Q01	N/A ⁴	720	700	480	700	C	1963 - 2016	6465168	1896727
24S24E03A001M	24S/24E-03A01	03A01	N/A	1,602	1,602	804	1,602	L	1961 - 2014	6455570	1838610
N/A ⁵	22S/23E-27F01	G13	Angiola W.D.	N/A	1,604	782	1,604	L	1962 - 2017	6420049	1878149
N/A	E0117919	M-19	DEID	810	N/A	705	805	L	2017	6505880	1830731
N/A	22S/23E-07	E0094101	Artesia Dairy Farm	1,020	1,000	660	1,000	L	N/A	6408375	1891526
N/A	22S/26E-24	E0094537	Gill & Sons Farm	1,270	1,240	670	1,220	L	N/A	6529798	1881999
N/A	23S/26E-23R01	23R01	A.L.G. Enterprises	1,720	1,700	600	1,700	L	N/A	6523098	1849144
24S23E22R002M	24S/23E-22R02	22R02	N/A	1,205	1,200	500	1,200	L	N/A	6423826	1817704
N/A	N/A	C-16	N/A	560	548	240	548	C	N/A	6546906	1912287
N/A	N/A	E0090245	N/A	N/A	680	320	680	L	N/A	6507628	1933560
N/A	N/A	489110	Richgrove CSD	N/A	850	480	830	C	N/A	6530537	1812175
N/A	N/A	E0155481	Jeremy Blackwell	N/A	1,500	1,090	1,500	L	N/A	6553106	1821699
N/A	23S/27E-27	925804	Tom Day	N/A	1,405	1,035	1,385	SM	N/A	6546617	1843950
N/A	N/A	E0084286	Doug Van Beek	N/A	650	320	640	L	N/A	6493618	1905179
N/A	N/A	E0259438	George Rispens	N/A	840	340	840	C	N/A	6475060	1883261
23S23E25N001M	23S/23E-25N01	25N01	N/A	N/A	N/A	N/A	N/A	L	1990 - 2017	6429320	1845090
N/A	N/A	Well 55	Alpaugh I.D.	N/A	1459	707	1459	L	2014 - 2021	6432067	1849112
N/A	N/A	TSMW 5L	Tule Subbasin TAC	1,010	955	670	950	L	2020 - 2021	6413230	1823473
N/A	N/A	LTRID TSS M	Tule Subbasin TAC	1,525	815	610	805	L	2020 - 2021	6469276	1930846
N/A	N/A	LTRID TSS L	Tule Subbasin TAC	1,525	1480	1100	1470	L	2020 - 2021	6469280	1930941
N/A	N/A	TSS PIGDSA-01 L	Tule Subbasin TAC	1,020	1015	400	1005	L	2021	6492772	1857661
N/A	23S/25E-36H01	36H01	N/A	N/A	600	360	600	L	2021	6497755	1841331
N/A	25S/26E-09C01	09C01	N/A	N/A	1002	450	1002	L	2021	6509077	1797598
N/A	24S/27E-32M01	32M01	N/A	N/A	1800	1002	1800	SM	2013 - 2022	6536532	1808343
N/A	N/A	TSMW 6L	Tule Subbasin TAC	610	605	350	600	L	2020 - 2021	6539199	1822265
N/A	N/A	TSMW 6SM	Tule Subbasin TAC	2,000	1955	1600	1950	SM	2020 - 2021	6539197	1822172
N/A	N/A	TSMW 1L	Tule Subbasin TAC	1,010	1005	550	1000	L	2021	6455531	1866659
N/A	N/A	E0174371	N/A	N/A	800	300	800	C	2020 - 2021	6487403	1846609
N/A	23S/28E-04K01	04K01	N/A	N/A	530	160	530	C	2020 - 2021	6573264	1865684

Notes:

- ¹ L = Well Perforated in Lower Aquifer
- C = Well Perforated Across Multiple Aquifers (i.e. Composite)
- SM = Well Perforated in Santa Margarita Aquifer
- ² X-Coordinates in State Plane Zone 4 (feet)
- ³ Y-Coordinates in State Plane Zone 4 (feet)
- ⁴ N/A = Not Available

Groundwater Quality Trend Monitoring Constituents

Annual Sampling				Five Year Sampling			
Field Analysis	Units	Laboratory Analysis	Units	Field Analysis	Units	Laboratory Analysis	Units
Electrical Conductivity (EC)	$\mu\text{mhos/cm}^1$ (at 25°C)	Nitrate as N	mg/L	Electrical Conductivity (EC)	$\mu\text{mhos/cm}$ (at 25°C)	Total Dissolved Solids (TDS)	mg/L
pH	Standard Unit	-	-	pH	Standard Unit	Nitrate as N	mg/L
Dissolved Oxygen (DO)	mg/L^2	-	-	Dissolved Oxygen (DO)	mg/L	Carbonate	mg/L
Temperature	$^{\circ}\text{C}^3$	-	-	Temperature	$^{\circ}\text{C}$	Bicarbonate	mg/L
-	-	-	-	-	-	Chloride	mg/L
-	-	-	-	-	-	Sulfate	mg/L
-	-	-	-	-	-	Boron	mg/L
-	-	-	-	-	-	Calcium	mg/L
-	-	-	-	-	-	Sodium	mg/L
-	-	-	-	-	-	Magnesium	mg/L
-	-	-	-	-	-	Potassium	mg/L

Notes:

- ¹ $\mu\text{mhos/cm}$ = micromhos per centimeter
- ² mg/L = milligrams per liter
- ³ $^{\circ}\text{C}$ = Degrees Celcius

Stream Gages in the Tule Subbasin

River	Stream Gage	Location (Latitude, Longitude)	Period of Record	Gage Type	Comments
Tule River	Success Dam	Lat 36° 03' 23", Long 118° 55' 22"	October 1953 - Present	Water stage recorder	The discharge at this station is controlled by the release from Success Reservoir. The recorder is operated and maintained by the U.S. Army Corps of Engineers.
	Rockford Station	Lat. 36° 04' 40", Long 119° 06' 22"	February 1957 - Present	Concrete weir equipped with a water stage recorder	The recorder is operated and maintained by the Tule River Association.
	Turnbull Weir	Lat 36° 03' 4", Long 119° 30'	1942 - Present	Rated section of the natural channel equipped with a staff gage	Records currently maintained by the TRA with the assistance of Downstream Kaweah and Tule Rivers Association. Manual measurements of stream velocity and stage are conducted by LTRID.
	Friant-Kern Canal Discharge into the Tule River	Lat. 36° 04' 25", Long 119° 05' 15"	June 1950 - Present	Modified 20 ft parshall flume	Records are furnished by the U.S. Bureau of Reclamation.
	Friant-Kern Canal Discharge into the Porter Slough	Lat. 36° 05' 00", Long. 119° 04' 50"	June 1950 - Present	15 ft rectangular weir	Records are furnished by the U.S. Bureau of Reclamation.
Deer Creek	Deer Creek at Fountain Springs	Lat 35° 56' 30", Long 118° 49' 19"	1968 - Present	Water stage recorder	Gage operated, managed and data collected by the USGS.
	Deer Creek at Trenton Weir*	Lat 36° 56' 46", Long 119° 10' 52"	N/A	Concrete weir equipped with a water stage recorder	Records currently maintained by the U.S. Army Corps of Engineers.
	Deer Creek at Homeland Canal	N/A ¹	N/A	N/A	
White River	Road 208*	Lat 35° 51' 32", Long 119° 6' 28"	N/A	N/A	Streamflow in this river is currently monitored manually at Road 208 by the Tule Basin Water Quality Coalition and Delano-Earlimart Irrigation District.

Notes:

¹ N/A = Not Available

* Latitude and Longitude are estimated from ArcGIS for Deer Creek at Trenton Weir and at Road 208 along the White River. All other latitude and longitude measurements are reported by the United States Geological Survey.

Surface Water Quality Constituents for Analysis

Constituent	Units	Trigger Limit	Tule River Poplar Avenue (2004 - 2005)	Deer Creek Road 248 (2010 - 2013)	White River Road 208 (2011)
Electrical Conductivity	µS/cm ¹	1,000.00	67.7 - 157.8	148 - 284	272 - 304
pH	n/a ⁶	6.5 - 8.3	7.02 - 8.94	7.7 - 8.9	8.18 - 9.03
Total Dissolved Oxygen	mg/L ²	min. 7.0	6.3 - 9.4	7.0 - 11.1	8.94 - 10.64
E. Coli	MPN ⁵ /100 mL	235.00	n/a	81.3 - 2,419	980.40
Total Organic Carbon	mg/L	n/a	0.58 - 6.77	1.65 - 7.2	6.2 - 8.7
Hardness (as CaCO ₃)	n/a	n/a	22.4 - 66.6	51.5 - 95.5	97.8 - 109.0
Total Suspended Solids	mg/L	n/a	n/a	4.75 - 574	73.3 - 91.0
Total Dissolved Solids	mg/L	450.00	50.0 - 120.0	99 - 398	180 - 211
Turbidity	NTU ⁴	n/a	4.4 - 35	1.58 - 12.0	55.8 - 86.9
Arsenic	µg/L ³	10	1.47 - 2.37	1.71 - 2.36	n/a
Boron	µg/L	700.00	19 - 38	28.6 - 93.7	n/a
Cadmium (Total)	µg/L	5	0.011 - 0.050	0.03 - 0.2	n/a
Copper (Total)	µg/L	1,300.00	3.54 - 5.93	1.58 - 3.82	n/a
Lead (Total)	µg/L	15.00	0.23 - 0.81	0.32 - 5.43	n/a
Molybdenum (Total)	µg/L	10 / 35	n/a	0.0044 - 0.0082	n/a
Nickel (Total)	µg/L	100.00	0.47 - 2.23	0.51 - 3.84	n/a
Selenium (Total)	µg/L	50.00	0.36	1.0 - 2.0	n/a
Zinc (Total)	µg/L	n/a	2.54 - 6.19	4.86 - 34.5	n/a
Phosphorus as P	mg/L	n/a	21.1 - 64.1	0.01 - 0.014	0.06 - 0.34
Ammonia	mg/L	1.50	0.07	0.05 - 0.028	0.069 - 0.20
Nitrate as N	mg/L	10.00	0.07 - 0.30	0.03 - 1.00	0.70 - 2.90
Orthophosphate as P	mg/L	n/a	0.01 - 0.16	0.03 - 0.022	0.23 - 0.84
Phosphorus as P	mg/L	n/a	21.1 - 64.1	0.01 - 0.014	0.06 - 0.34

Notes:

- ¹ µS/cm = microsiemen per centimeter
- ² mg/L = milligrams per liter
- ³ µg/L = micrograms per liter
- ⁴ NTU = Nephelometric Turbidity Unit
- ⁵ MPN = Most Probable Number
- ⁶ n/a = Not Available

Appendices



Appendix A

Driller's Logs and Hydrographs for Existing Upper Aquifer Wells



DUPLICATE
 First Original, Duplicate and Triplicate with the
 DIVISION OF WATER RESOURCES
 P. O. BOX 1070
 SACRAMENTO 8, CALIFORNIA

STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

SHEET 1

524
 J. W. [unclear]

21/24-35A1
 WATER WELL DRILLERS REPORT

Do Not Fill In
 State Well No. 21/24-35A1
 Other Well No. _____
 Region 5

Dec. 21, 1958 (Sections 7076, 7077, 7078, Water Code)

(1) Driller: Knapp & Graham
 Name _____
 Address 463 W. I Ave
Fullerton, Calif.
 License No. 17956 Classification 6-57

(2) Proposed use or uses (check): (3) Equipment used (check):
 Domestic Municipal
 Irrigation Industrial
 Domestic and Irrigation Test well
 Other _____ Rotary
 Cable
 Dug well
 Other

Owner: Ray Donaldson
 Name _____
 Address P.O. Box 306
Fullerton, Calif.

(4) Type of work (check):
 New well Reconditioning of well
 Deepening existing well

(5) Well log:
 Total depth of well 315 ft.

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

ANNE
 N
 W
 O
 D
 I
 F
 I
 N
 G

Depth From Ground Surface	
0	4
4	23
23	26
26	63
63	104
104	106
106	134
134	137
137	154
154	168
168	204
204	213
213	216
216	268
268	279
279	302
302	315
315	?

Soil
 Yellow Clay
 Sand med.
 Sandy clay
 Pack sand
 med sand
 Sandy clay
 Pack sand
 Sandy clay
 Coarse sand
 Sandy clay
 Blue clay
 Blue sandy clay
 Blue sand med.
 Sticky blue clay
 Coarse blue sand
 Sticky blue clay
 Blue clay

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

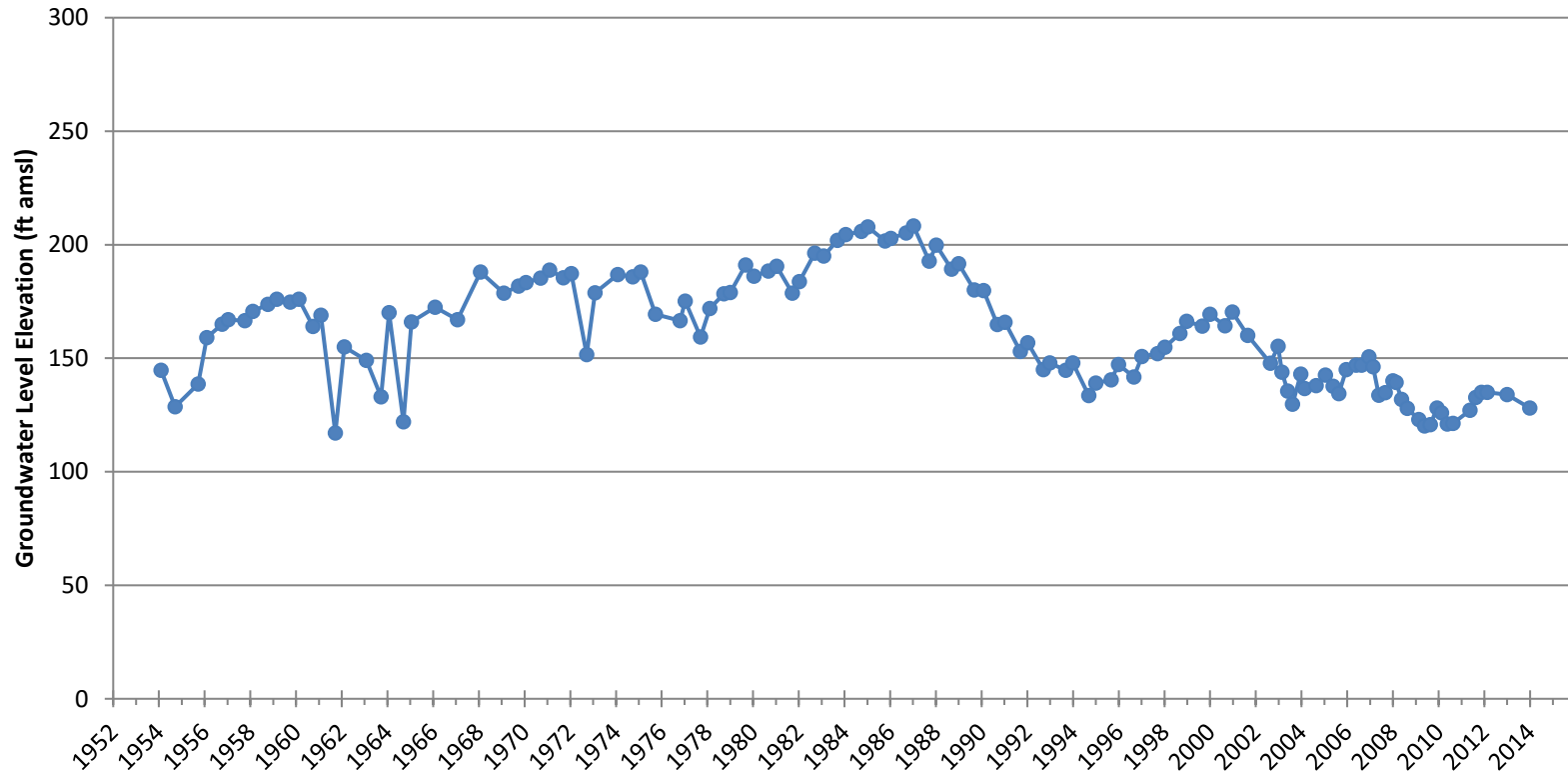
LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
328	12	WELDED	1092	315

Type and size of shoe or well ring _____ Welded joints Yes No

12" x 8" x 5/8" steel

Groundwater Hydrographs - Shallow

21S/24E-35A01



21/23-32K/TOP

21/23-32K

Well Log #2

J.W. Guiberson & Co.

CORCORAN, CALIF

Top	109'	PLAIN.
	5'	PER 5/8 SCREEN.
	6'	PLAIN.
	14'	PER 5/8 SCREEN.
	21'	PLAIN.
	6'	PER 5/8 SCREEN.
	11'	PLAIN.
	14'	PER 5/8 SCREEN.
	3'	PLAIN.
	6'	PER 5/8 SCREEN.
	22'	PLAIN.
	10'	PER 5/8 SCREEN.
	25'	PLAIN.
	10'	PER 5/8 SCREEN.
	5'	PLAIN.
	11'	PER 5/8 SCREEN.
	3'	PLAIN.
	12'	PER 5/8 SCREEN.
	8'	PLAIN.
	6'	PER 5/8 SCREEN.
	2'	PLAIN.
	8'	PER 5/8 SCREEN.
	11'	PLAIN.
	14'	PER 5/8 SCREEN.
	2'	PLAIN.
	8'	PER 5/8 SCREEN.
	28'	PLAIN.
	10'	PER 5/8 SCREEN.
	5'	PLAIN.
	7'	PER 5/8 SCREEN.
Bottom	4'	PLAIN

W.H. Lambert - Driller
Phone 3462 - CORCORAN,
CALIF.

PLAIN PIPE = 265'
PER 5/8 SCREEN = 141'
TOTAL FT. = 406

Reel 32-21-23

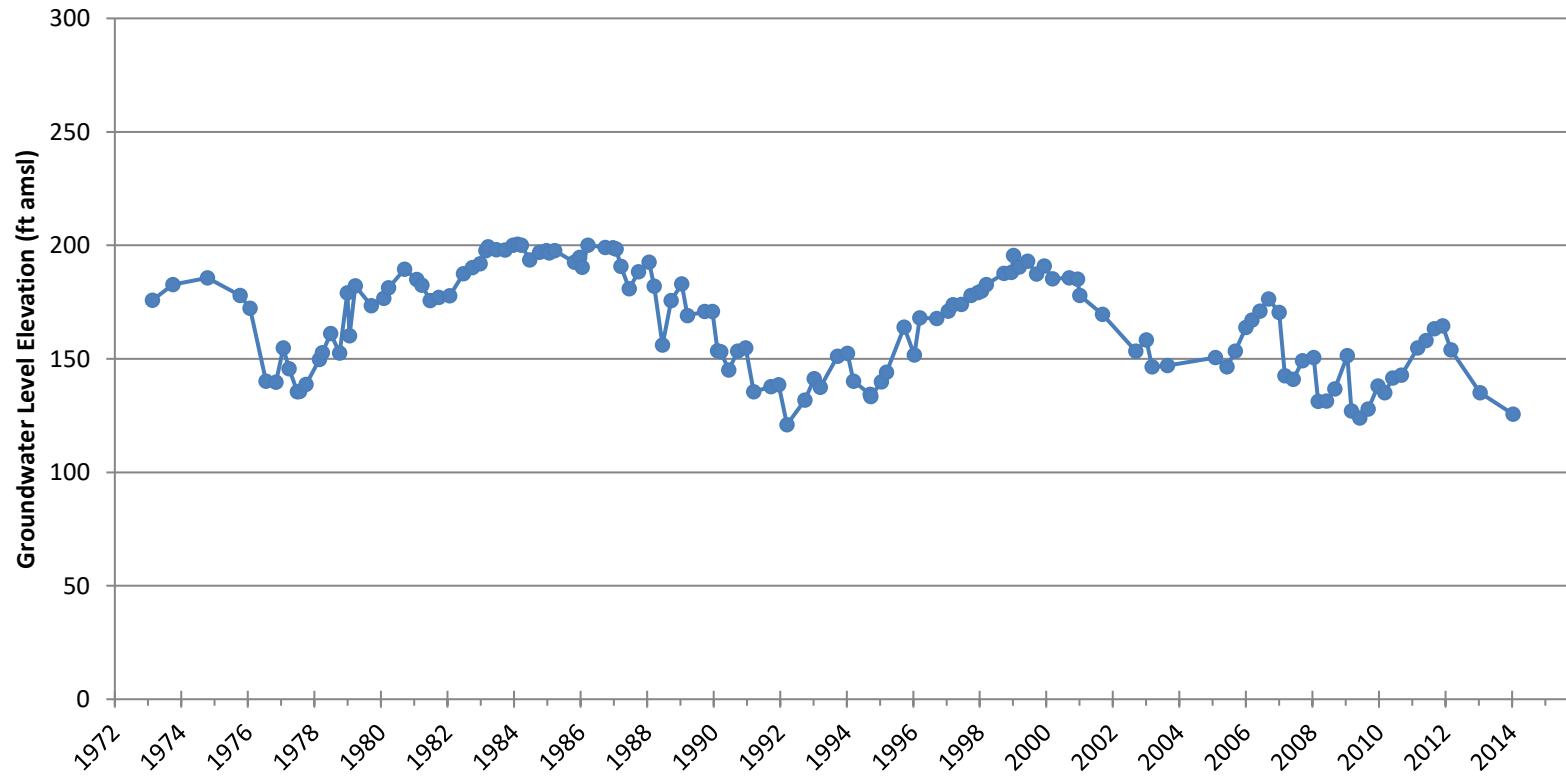
Southeast well

March 4, 1937

DESCRIPTION:		
JOB NO.	CONSOLIDATED PIPE CO. BAKERSFIELD ENGINEERING DEPARTMENT	DATE
NUMBER REQUIRED		SALESMAN

Groundwater Hydrographs - Shallow

21S/23E-32K01



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SACRAMENTO 5, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

SHEET 1
50'
Tulare
2/25-3R1

21/25-3R1 (G.S.)

Do Not Fill In
State Well No. ~~215/24E-3R1~~
Other Well No. _____
Region 5

LSD 300 WATER WELL DRILLERS REPORT

Feb. 3, 1950 (Sections 7076, 7077, 7078, Water Code)

(1) Driller:
Name Knapp & Graham
Address 4468 W. Inyo
Tulare Calif.
License No. 69956 Classification C-57

(2) Proposed use or uses (check):
Domestic Municipal
Irrigation Industrial
Domestic and Irrigation Test well
Other _____
(3) Equipment used (check):
Rotary
Cable
Dug well
Other _____

Owner:
Name G. O. Beramatz
Address Tulare Calif.

(4) Type of work (check):
New well Reconditioning of well
Deepening existing well

(5) Well log:
Total depth of well 328 ft. Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

Depth From Ground Surface		
ft. to	ft.	
0	6	SOIL
6	82	Sandy clay
82	90	SAND
90	102	Sandy clay
102	108	SAND
108	115	fine sand
115	122	Sandy clay
122	152	Coarse sand perf up to 145 ft.
152	168	fine sand
168	188	Sandy clay
188	198	fine sand
198	208	Sandy clay
208	220	fine sand
220	231	Sandy clay
231	238	SAND
238	292	Sandy clay
292	296	Coarse sand stayed open
296	324	Sandy clay
324	328	fine sand

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

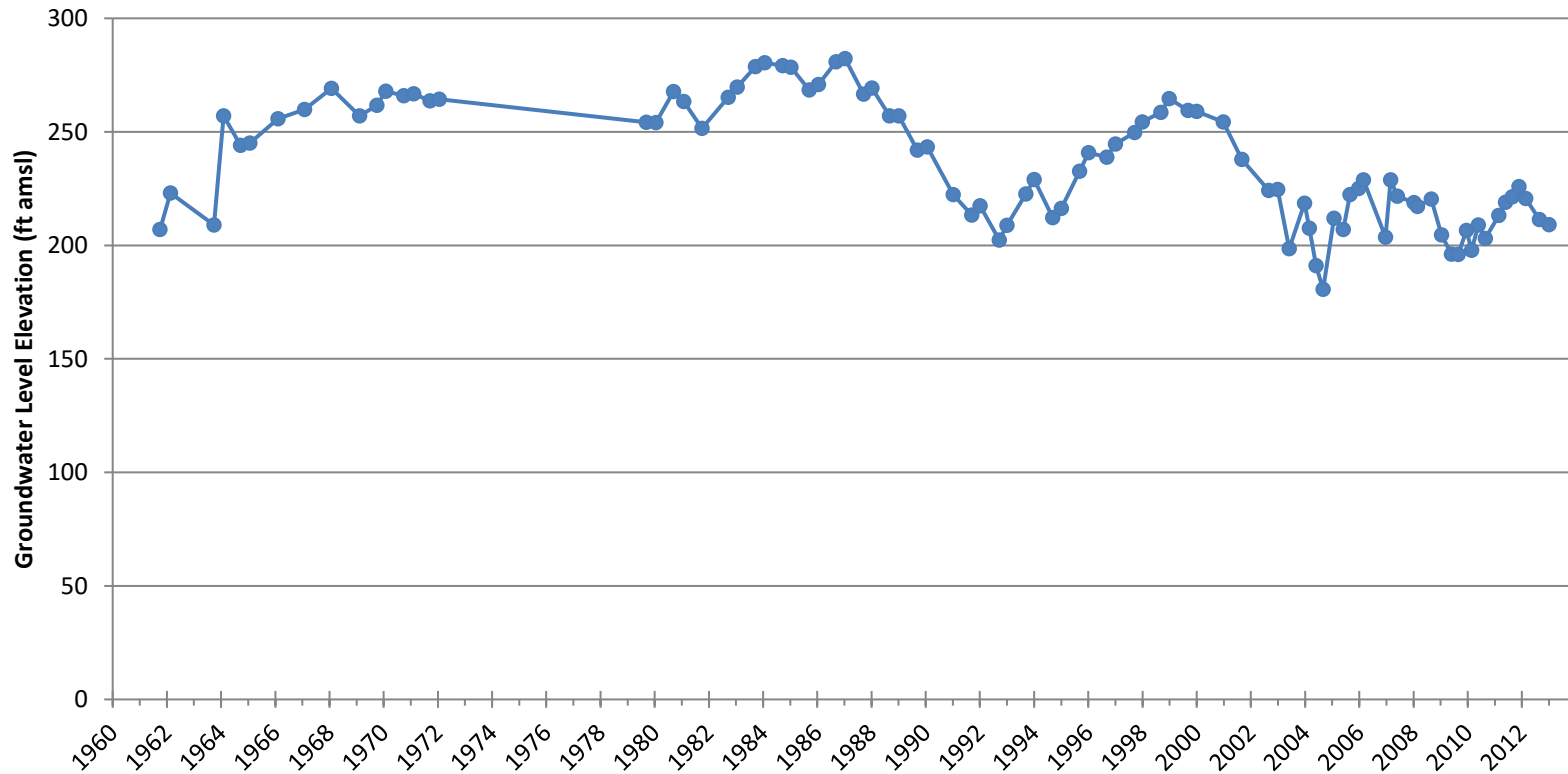
LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
<u>274</u>	<u>14</u>	<u>D. casing</u>	<u>12.92</u>	<u>274</u>
			<u>.105</u>	

Type and size of shoe or well ring _____ Welded joints Yes No

14" x 8" x 5/8" shoe
D.W.R. Form No. 246 400 feet north, 250 feet west of SE corner of section 3, (USGS) 2-50 40M QUIN SPO

Groundwater Hydrographs - Shallow

21S/25E-03R01



DUPLICATE
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DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

21/26-32A1 (G.S.)

SHEET 1

Do Not Fill In

State Well No.
Other Well No.
Region

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

LSD Elev. 348

(1) Driller:
Name: OE (Ed) Owens
Address: 700 E. Harrison St.
Porterville
License No. Classification

(2) Proposed use or uses (check): (3) Equipment used (check):
Domestic Municipal
Irrigation Industrial Rotary
Domestic and Test well Cable
Irrigation Other Dug well
Other Other

Owner:
Name: Harner Smartt
Address: Woodville

(4) Type of work (check):
New well Reconditioning of well
Deepening existing well

(5) Well log:
Total depth of well 267 ft.

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

Depth From Ground Surface	
215 ft. to 222 ft.	Sandy clay - Brown
222 " to 230 "	Sand & Gravel
230 " to 240 "	Sandy clay - Brown
240 " to 253 "	Sand - coarse
253 " to 258 "	Sandy - clay - Brown
258 " to 262 "	Sand - medium
262 " to 267 "	Sandy clay - Brown

CONFIDENTIAL

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

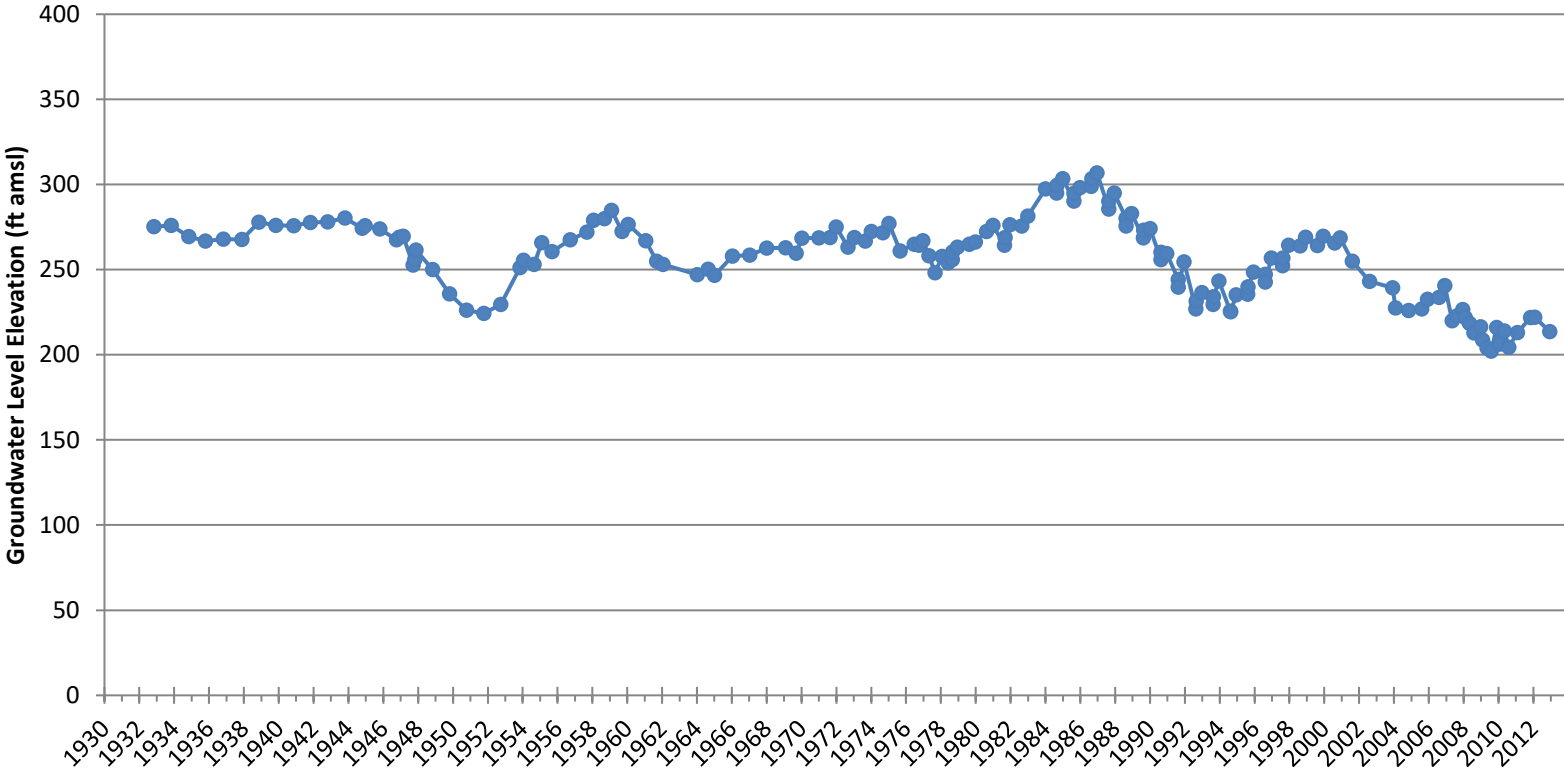
LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
120'	10"	Single welded	12 Ga.	267

Type and size of shoe or well rig 1 1/2 Welded joints Yes No

5100 foot north, 75 foot west of SE corner of section 32, (USGS)

Groundwater Hydrographs - Shallow

21S/26E-32A01



22/24-9A1

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
 WYOMING

22/24-9A1 ✓

County Yellowstone Owner Yellowstone National Park U.S.B.R. No. 22-24-9A1
 Dist. Yellowstone Use Recreation Local No. 22-24-9A1
 Quad. Yellowstone Driller Yellowstone National Park Date 1950
 Location Yellowstone National Park

Surf. Elev. 8200 Groundwater Elev. _____ Date _____
 Depth 10 Groundwater Elev. _____ Date _____
 Yield _____ Aquifers _____
 Drawdown _____ Artesian head _____ Date _____
 Casing 1 1/2" galv. steel Sand-Gravel _____

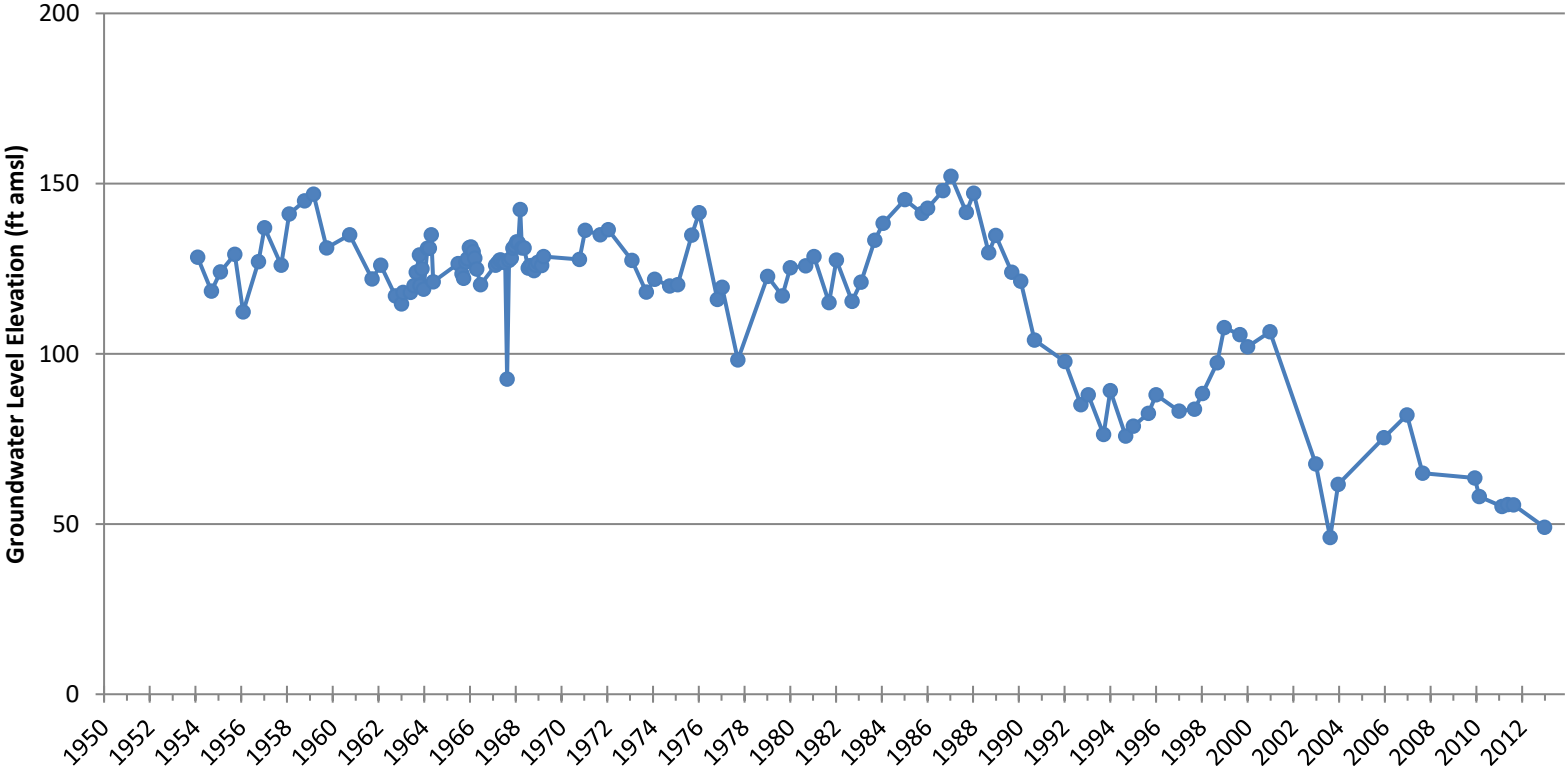
Source of data Well log Type drill Hand Diam. hole 2 1/2"

Depth	Elev.	Thick	Description
0	8200	0	Surface
10	8190	10	Clay
20	8180	10	Clay
30	8170	10	Clay
40	8160	10	Clay
50	8150	10	Clay
60	8140	10	Clay
70	8130	10	Clay
80	8120	10	Clay
90	8110	10	Clay
100	8100	10	Clay
110	8090	10	Clay
120	8080	10	Clay
130	8070	10	Clay
140	8060	10	Clay
150	8050	10	Clay
160	8040	10	Clay
170	8030	10	Clay
180	8020	10	Clay
190	8010	10	Clay
200	8000	10	Clay
210	7990	10	Clay
220	7980	10	Clay
230	7970	10	Clay
240	7960	10	Clay
250	7950	10	Clay
260	7940	10	Clay
270	7930	10	Clay
280	7920	10	Clay
290	7910	10	Clay
300	7900	10	Clay

	50	100	200
G			
S	3	1	2
F			
	36	17	28
	18	21	32
	44	50	700

Groundwater Hydrographs - Shallow

22S/24E-09A01



LSD Elev 373

22/26-10J1

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION, - REGION II
WELL LOG

22/26-10J1

County Tulare Owner Charley Soak U.S.B.R. No. 22-26-10A
Dist. _____ Use Irrigation Local No. _____
Quad. Woodville Driller James Woods Date March 15, 1947
Location 22-26-10 (0.98-0.11)

Surf. Elev. 373 Groundwater Elev. 278 Date March 15, 1947
Depth 351 Groundwater Elev. _____ Date _____
Yield _____ Aquifers _____
Drawdown _____ Artesian head _____ Date _____
Casing 351' x 11" perf. % Sand-Gravel 100

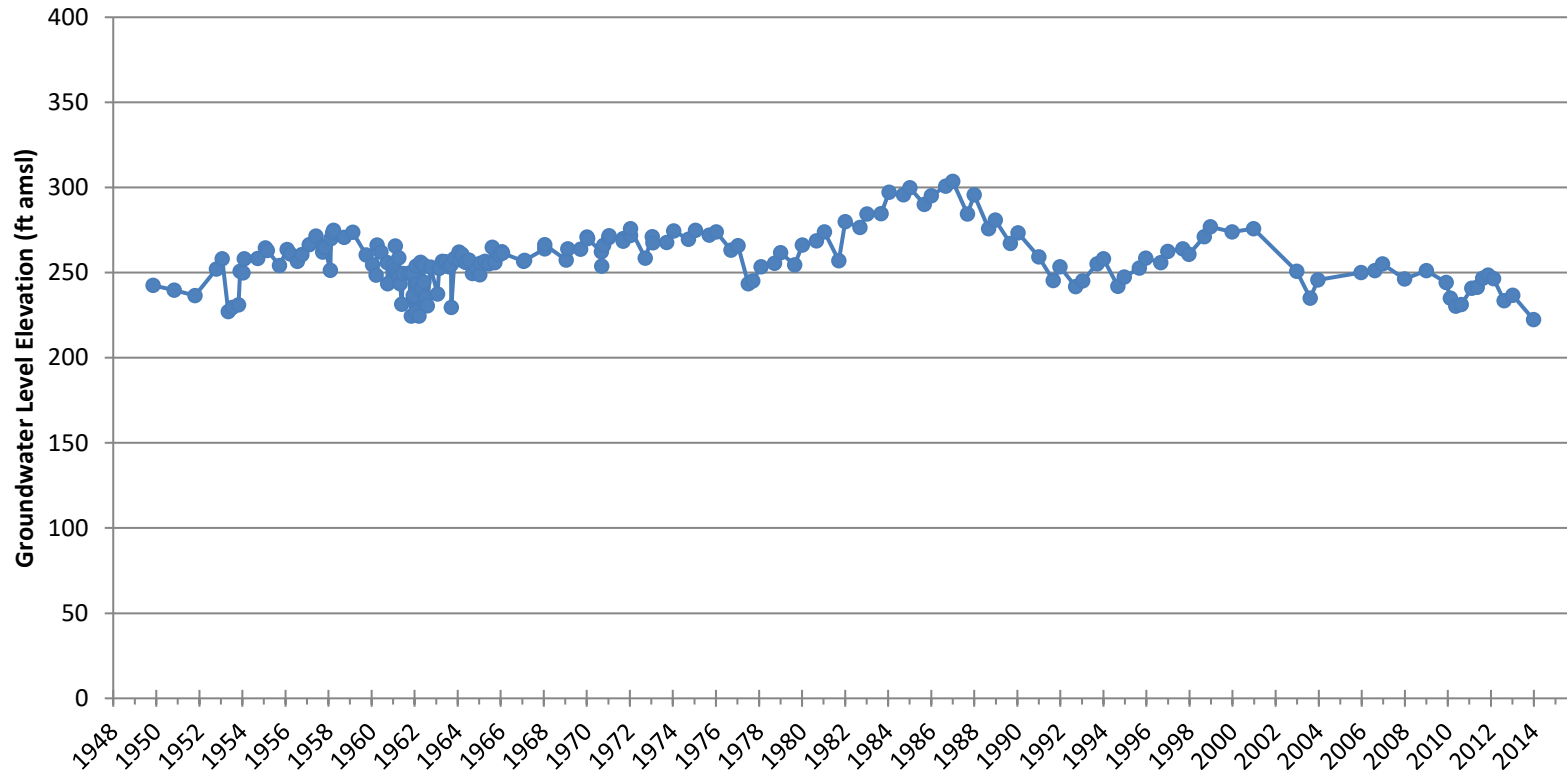
Source of data Anderson Type drill Cable-Tools Diam. hole 11"

Depth	Elev.	Thick	Description
0	373	8	(Top soil - Brown, soft, fine sandy loam, poor permeability)
8	365	62	(Sandy silt, light brown, hard sandy silt, relatively impermeable)
70	303	4	(Sand - brown, subrounded, fairly well sorted, loose, 0.50mm to 1.00mm in diameter, sand, predominantly quartzose)
74	299	56	(Sandy silt, brown, hard sandy silt, poor permeability)
130	243	36	(Sand and cobbles, gray to brown, subrounded, 0.50mm to 1.00mm in diameter, loose, quartz sand and subrounded cobbles up to 2 1/2" in diameter)
166	207	19	(Sandy clay, brown, very hard, sandy clay, relatively impermeable)
185	188	11	(Cobbles, subrounded, loose, cobbles up to 2" in diameter)
196	177	24	(Sandy clay, brown, hard, sandy clay, relatively impermeable)
220	153	108	Clay
328	145	7	Sand and gravel
335	138	10	Clay
345	28	6	Hard clay
351	22		Bottom

X

Groundwater Hydrographs - Shallow

22S/26E-10J01



In 257

R-6

R-6

R#6

ROY PULLIAM

WATER WELL DRILLING
ROUTE 1 BOX 744 SU 4 1593

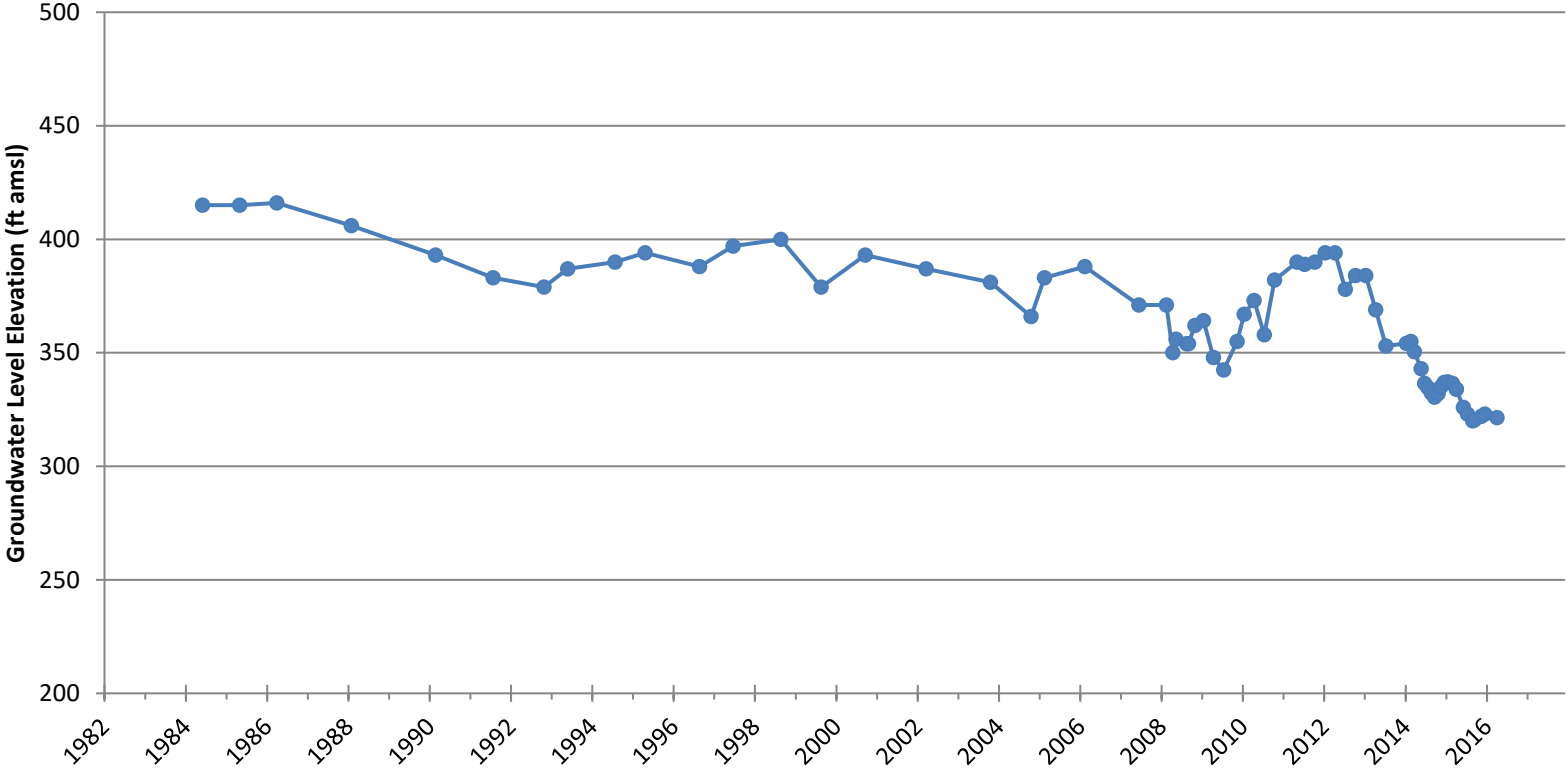
Log of 10 in. Well

0 to 41 ft. Sandy Clay
41 to 80 ft. Water, Sand and Gravel
80 to 123 ft. Sandy Clay
123 to 135 ft. Water, Sand and Gravel
135 to 150 ft. Clay

Cast to 144 ft.
6 ft. open hole
Perforated from 41 ft. to 144 ft.
Water Level 32 ft.

Groundwater Hydrographs - Shallow

R-6



DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

No 67312

Other Well No. R-11

TRIPPLICATE
Retain this copy

R#11

R-11

(1) OWNER:
Name ROWLAND WATER COMPANY
Address 1543 West Olive Ave
Porterville, California

(2) LOCATION OF WELL:
County Tulare Owner's number, if any _____
Township, Range, and Section 5 miles west of Porterville
Distance from cities, roads, railroads, etc. on Olive, 1/4 North on Cedar,
on east of in back of Rowland Tract.

(3) TYPE OF WORK (check):
New Well Deepening Reconditioning Destroying
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:
Rotary
Cable
Other

6) CASING INSTALLED:

STEEL: <input checked="" type="checkbox"/> OTHER: _____				If gravel packed		
From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	84	14	10			
0	212	10	10			

Describe joint Plain End Size of gravel: 3/4x4x10

7) PERFORATIONS OR SCREEN:

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
None				

8) CONSTRUCTION:
a surface sanitary seal provided? Yes No To what depth 84 ft.
c any strata sealed against pollution? Yes No If yes, note depth of strata

31	ft. to	36	ft.	<u>Fine Sand</u>
56	ft. to	79	ft.	<u>Cobbers & Sand</u>

Method of sealing Grout

9) WATER LEVELS:
h at which water was first found, if known 32 ft.
gling level before perforating, if known 32 ft.
gling level after perforating and developing 32 ft.

10) WELL TESTS:
pump test made? Yes No If yes, by whom? By Owner
gal./min. with _____ ft. drawdown after _____ hrs.
of water _____ Was a chemical analysis made? Yes No
electric log made of well? Yes No If yes, attach copy

(11) WELL LOG:

Total depth	ft.	Depth of completed well	ft.
216		216	
Formation: Describe by color, character, size of material, and structure			
0	-	31	Sandy Loam
31	-	36	Fine Sand
36	-	43	Very soft Silt
43	-	48	Very Fine Sand
48	-	56	Very Soft Silt
56	-	65	Cobbers & Sand
65	-	70	Cobbers
70	-	79	Cobbers & Sand
79	-	101	Brown Clay
101	-	114	Fine Sand
114	-	120	Med Sand & Gravel
120	-	131	Coarse Sand & Cobbers
131	-	178	Brown Clay
178	-	180	Tight Dark Sand
180	-	216	Tough Brown Clay
216	-	220	Coarse Sand & Sh. Rocks

Well Log
Lot 40 Tr. 213

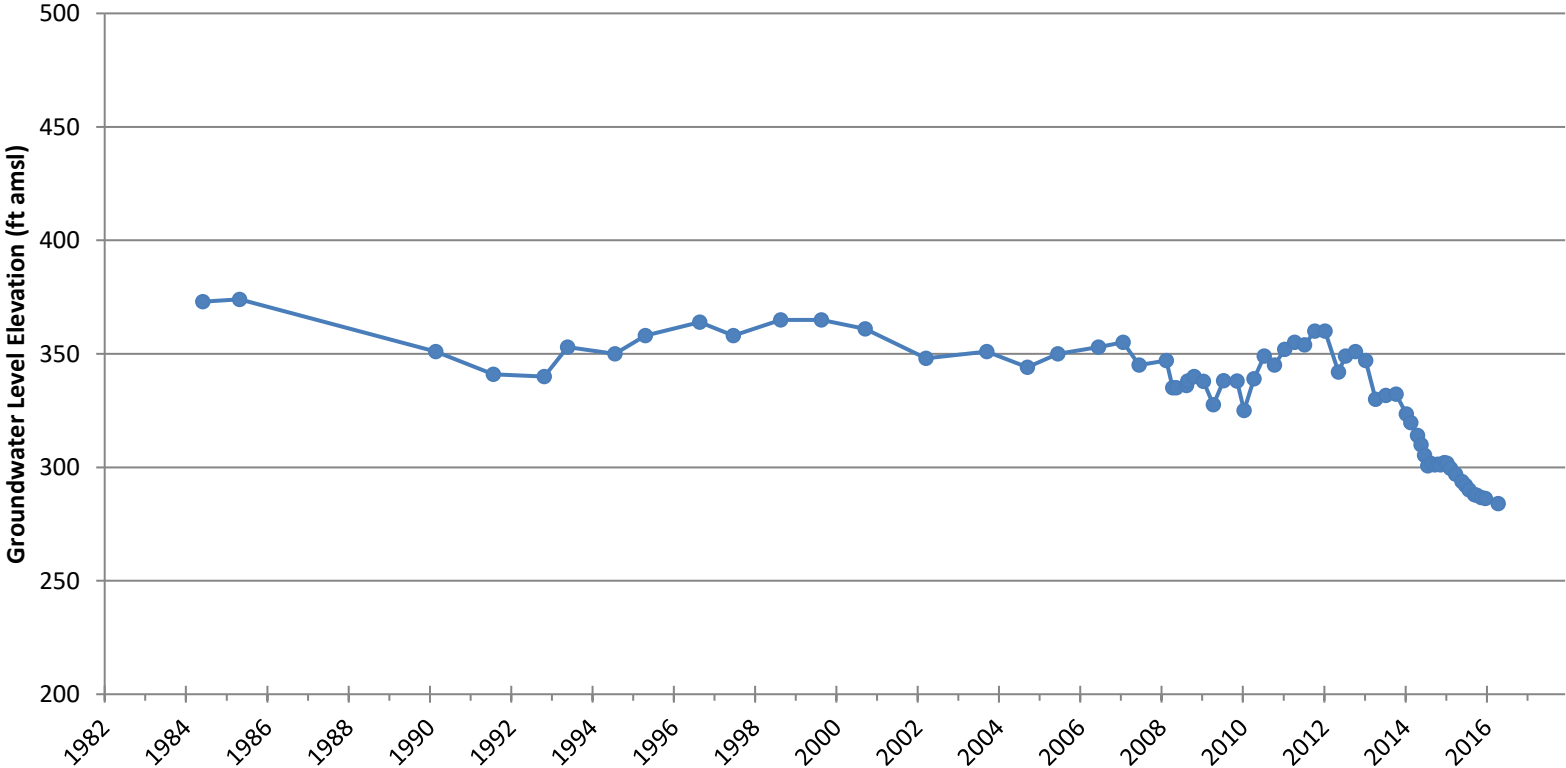
R#11

Work started 1/24 19 72 Completed 2/7 19 72
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: ROGER L. NATION
(Person, firm, or corporation) (Typed or printed)
Address: 26521. South Mooney
Visalia, California
[SIGNED] Roger L. Nation
(Well Driller)
License No. 259884 Dated 2/9 19 72

ETCH LOCATION OF WELL ON REVERS DE

Groundwater Hydrographs - Shallow

R-11



DIVISION OF WATER RESOURCES

23/26-9C1

WATER WELL DRILLERS REPORT (GS)

(Sections 7076, 7077, 7078, Water Code)

LSD Elev. 440

SHEET 1

Tulare

Do Not Fill In

State Well No. _____
Other Well No. _____
Region _____

(1) Driller:
Name: L. R. Henderson
Address: 675 Vandalia Ave
Porterville Calif.
License No. 125434 Classification C 57

(2) Proposed use or uses (check):
Domestic Municipal
Irrigation Industrial
Domestic and Irrigation Test well
Other _____
(3) Equipment used (check):
Rotary
Cable
Dug well
Other _____

Owner:
Name: Elmer Swisher
Address: P. T. Box 216
Porterville Calif.

(4) Type of work (check):
New well Reconditioning of well
Deepening existing well

(5) Well log:
Total depth of well 440 ft.
Depth From Ground Surface

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse); color of material, structure (loose, packed, cemented, soft, hard, brittle).

ft. to	ft. to	Formation
0	45	silt & clay
4.5	5.6	sand
5.6	7.7	clay
7.7	12.5	sand
12.5	14.8	clay
14.8	17.0	sand
17.0	19.5	clay
19.5	20.5	sand
20.5	21.5	clay
21.5	22.5	sand
22.5	24.8	clay
24.8	26.0	sand
26.0	27.8	clay
27.8	29.7	sand
29.7	31.7	clay
31.7	32.5	sand
32.5	33.0	clay
33.0	36.0	sand
36.0	38.0	clay
38.0	44.0	sand
44.0		clay

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
<u>400</u>	<u>14</u>	<u>double</u>	<u>12 gage</u>	<u>105</u>

Type and size of shoe or well ring 14 Welded joints Yes No
5/50 feet north, 3250 feet west of SE corner of section 9, (USGS)

CONFIDENTIAL

23/26-901

SHEET 2 94

Tulare

Do Not Fill In

State Well No. _____
 Other Well No. _____
 Region _____

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

(7) Perforations:

Type of perforator used Mills Perforator

Perforated	<u>200</u> ft. to	<u>390</u> ft.	Hole size	_____	No. of holes
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"

(8) Water levels:

Depth at which water first encountered 190 ft.
 Depth to water before perforating _____ ft.
 Depth to water after perforating _____ ft.
 Note any change in water level while drilling _____

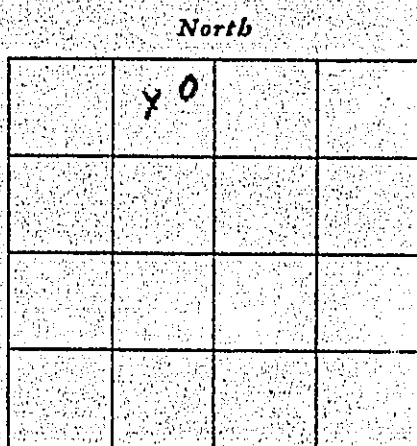
(9) Well pumping test:

Date of test _____ By whom _____
 Depth to water when test started _____ ft.
 G.P.M. at beginning of test _____
 Drawdown from standing level _____ ft.
 G.P.M. at completion of test _____
 Drawdown at completion of test _____ ft.
 Length of time tested _____
 Temperature of water _____
 Was gas present in water? Yes No

(10) General:

Was well gravel packed? no Size of rock _____ Thickness of pack _____
 Was a surface sanitary seal provided? _____
 Were any strata sealed against pollution? Yes No If yes, attach detailed description.
 Strata sealed _____
 Was analysis made of water? Yes No If yes, attach copy.
 Was electric log made of well? Yes No If yes, attach copy.
 If well abandoned, was it plugged and sealed? _____
 Method of plugging and sealing _____

(11) Location:



Section No. 9
 Township 23 - South
 Range 26 - East
 Base & Meridian M. D.
 Show location of well in Section, thus (X)
 Distances to section lines from well, N or S 100 ft. and E or W 2000 ft.
 Show location of nearest known well, thus (O)
 Distance to nearest known well 100 ft.

(12) Time of work:

Work started date Feb 12 Completed date March 22 1952
 Date of this report March 24 1952

WELL DRILLER'S STATEMENT:

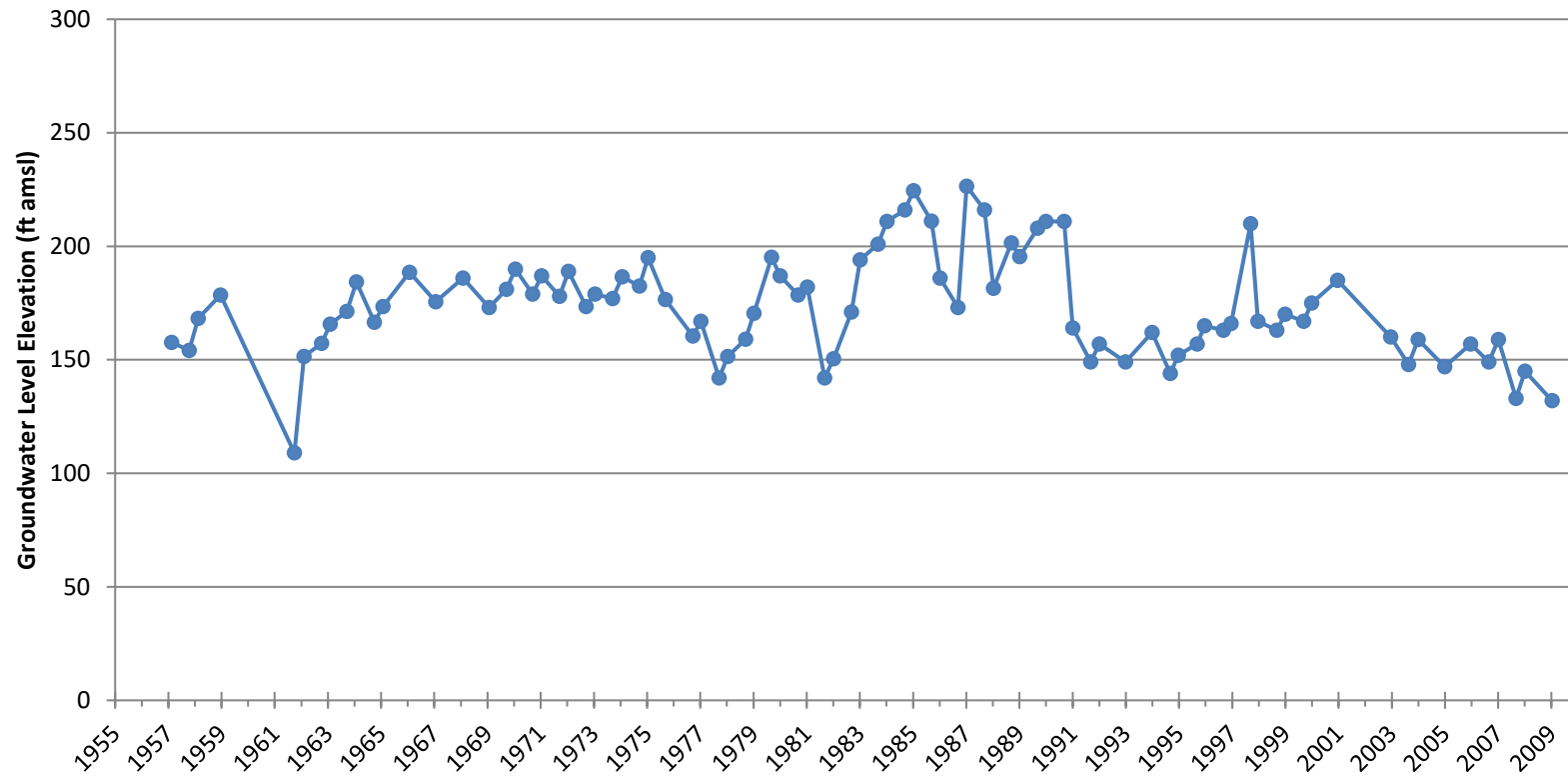
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

[SIGNED] L. R. Henderson
 Well Driller
 By Mrs R. R. Henderson
 License No. 125434 Classification C 57
 Dated March 24, 1952

CONFIDENTIAL

Groundwater Hydrographs - Shallow

23S/26E-09C01



23/26-12J1

PEG

23/26-12J1

Local Form No. 483

LSD Elev. 419

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
WELL LOG

County Yulore Owner Harvey Wood U.S.B.R. No. 23-26-12
 Dist. _____ Use Domestic Local No. _____
 Quad. 11000 Driller Shadrach Date March 1940
 Location 23-26-12 (S. 25. 14)

Surf. Elev. 120 Groundwater Elev. _____ Date _____
 Depth 20 Groundwater Elev. _____ Date _____
 Yield _____ Aquifers _____
 Drawdown _____ Artesian head _____ Date _____
 Casing 23-2781 perf. % Sand-Gravel _____

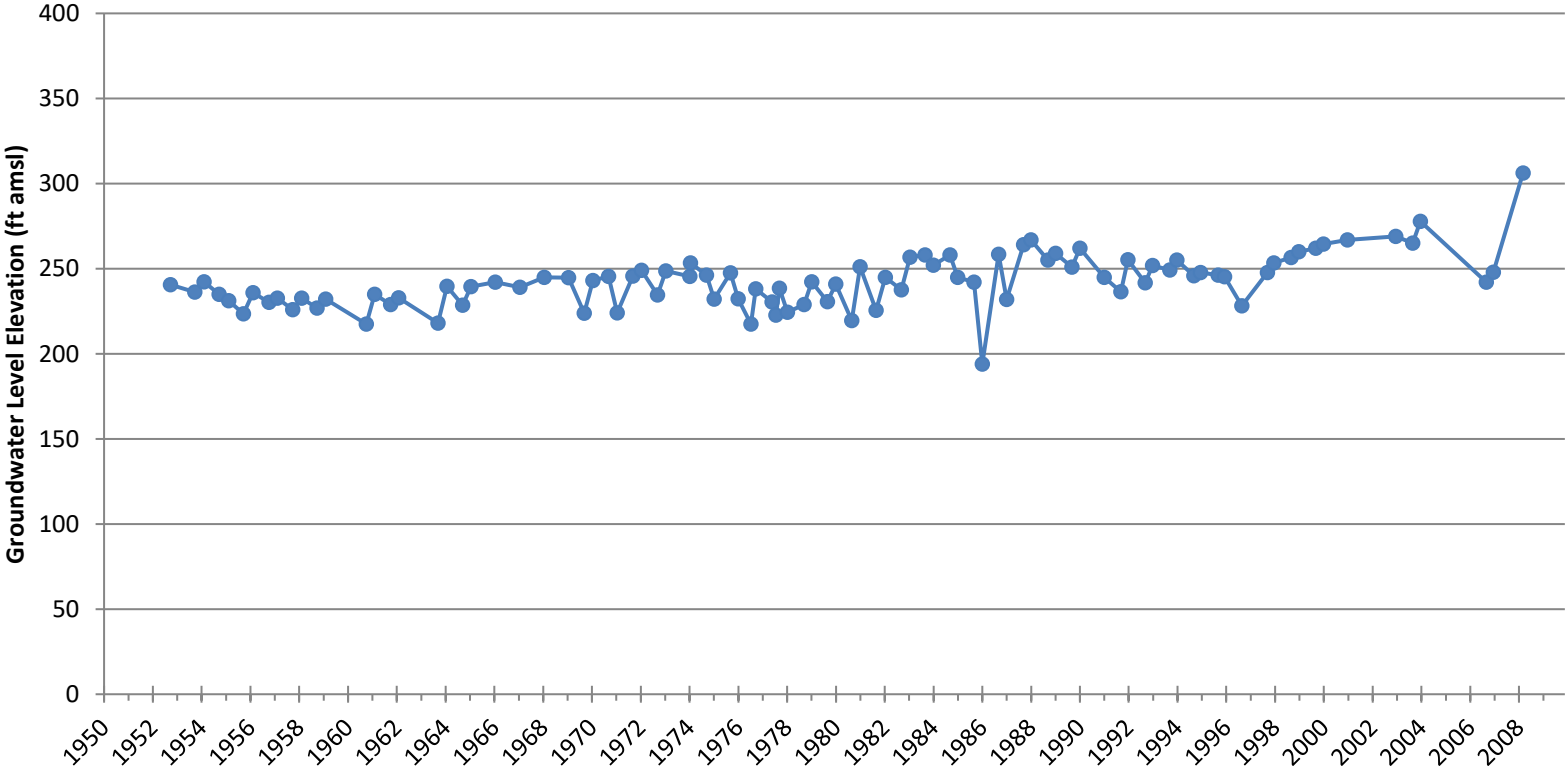
Source of data Driller Type drill cablotool Diam. hole 10"

Depth	Elev.	Thick	Description
0	120	130	yellow shale 10/50/30 C
130	210	5	light clay 5 C
135	205	30	sandy shale 30 G
165	215	2	sand, coarse water 2 F
167	215	28	sandy shale 28 G
195	215	10	light clay 5/5 C
205	215	58	sticky clay
243	217	1	sand, water bearing
247	213	13	sandy shale, gray
260	110		bottom of well

	50	100	200
			2
			58
	40	50	40
	40	50	100

Groundwater Hydrographs - Shallow

23S/26E-12J01



22/24-23J1

ASD Elev. _____

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
WELL LOG

22/24-23J1 ✓

County Salinas Owner Ben Coleman U.S.B.R. No. 22-24-23A
 Dist. _____ Use _____ Local No. _____
 Quad. 18400 Driller _____ Date 7/27/56
 Location 22-24-23 (Salinas) 550'

Surf. Elev. 2571 Groundwater Elev. 2570 Date 7/27/56
 Depth 400 Groundwater Elev. _____ Date _____
 Yield _____ Aquifers 2571 - 2570, 2569 - 2568, 2567 - 2566 Date _____
 Drawdown _____ Artesian head _____ Date _____
 Casing _____ Sand-Gravel _____

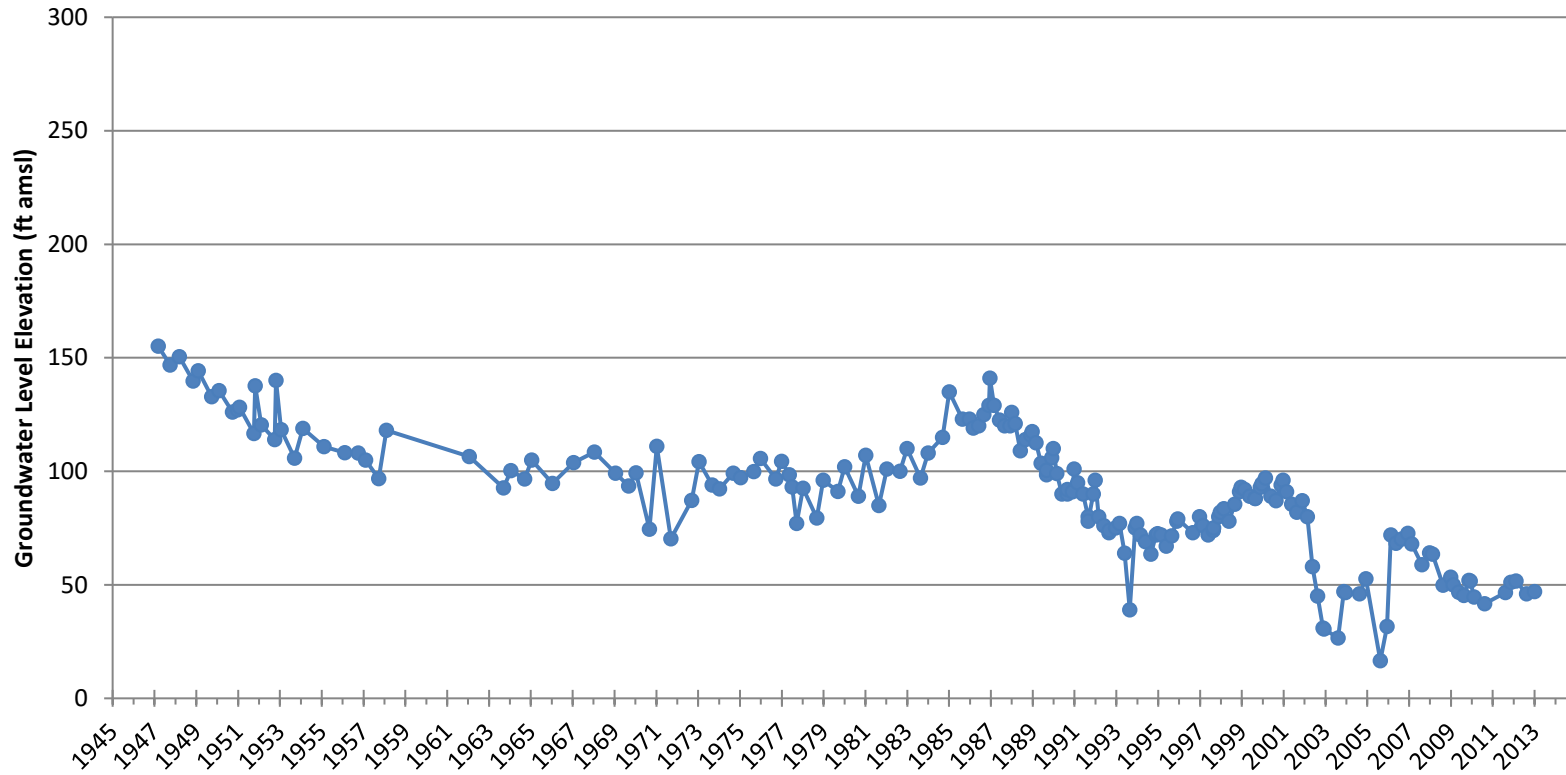
Source of data Prober Type drill 2 1/2" Diam. hole 3/8"

Depth	Elev.	Thick	Description
0	2572	F 2	Top soil (dark brown, silty clay, black in color when saturated)
2	2555	4 1/2" G 1	Dark brown, silty clay, black in color when saturated
63	2524	2" G 2	Dark brown, silty clay, black in color when saturated
65	2522	1 1/2" F 1B	Dark brown, silty clay, black in color when saturated
83	2517	7" G 7	Dark brown, silty clay, black in color when saturated
90	2516	F 6	Dark brown, silty clay, black in color when saturated
95	2514	4 1/2" G 1B	Dark brown, silty clay, black in color when saturated
117	2510	7" G 9	Dark brown, silty clay, black in color when saturated
126	2511	7" G 9	Dark brown, silty clay, black in color when saturated
135	2512	5" F 5	Dark brown, silty clay, black in color when saturated
140	2510	1 1/2" G 10	Dark brown, silty clay, black in color when saturated
155	2511	7" G 11	Dark brown, silty clay, black in color when saturated
160	2512	7" G 12	Dark brown, silty clay, black in color when saturated
153	2512	5" F 5	Dark brown, silty clay, black in color when saturated
511	210	1 1/2"	
513	210	1 1/2"	
515	210	1 1/2"	
517	210	1 1/2"	
519	210	1 1/2"	
521	210	1 1/2"	
523	210	1 1/2"	
525	210	1 1/2"	
527	210	1 1/2"	
529	210	1 1/2"	
531	210	1 1/2"	
533	210	1 1/2"	
535	210	1 1/2"	
537	210	1 1/2"	
539	210	1 1/2"	
541	210	1 1/2"	
543	210	1 1/2"	
545	210	1 1/2"	
547	210	1 1/2"	
549	210	1 1/2"	

401 2 1/2" 87
 50
 700

Groundwater Hydrographs - Shallow

22S/24E-23J01



USD Elev. 2/5

22/25-25

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
WELL LOG

22-25-25N1

County Tulosa Owner Cordosa Bros/ U.S.B.R. No. 22-25-25
Dist. _____ Use Irrigation Local No. _____
Quad. Sausalito School Driller Harmon & Graham Date March 25, 1937
Location 22-25-25 (0.25 - 0.07)

Surf. Elev. 315 Groundwater Elev. _____ Date _____
Depth 137 Groundwater Elev. _____ Date _____
Yield _____ Aquifers _____
Drawdown _____ Artesian head _____ Date _____
Casing _____ % Sand-Gravel _____

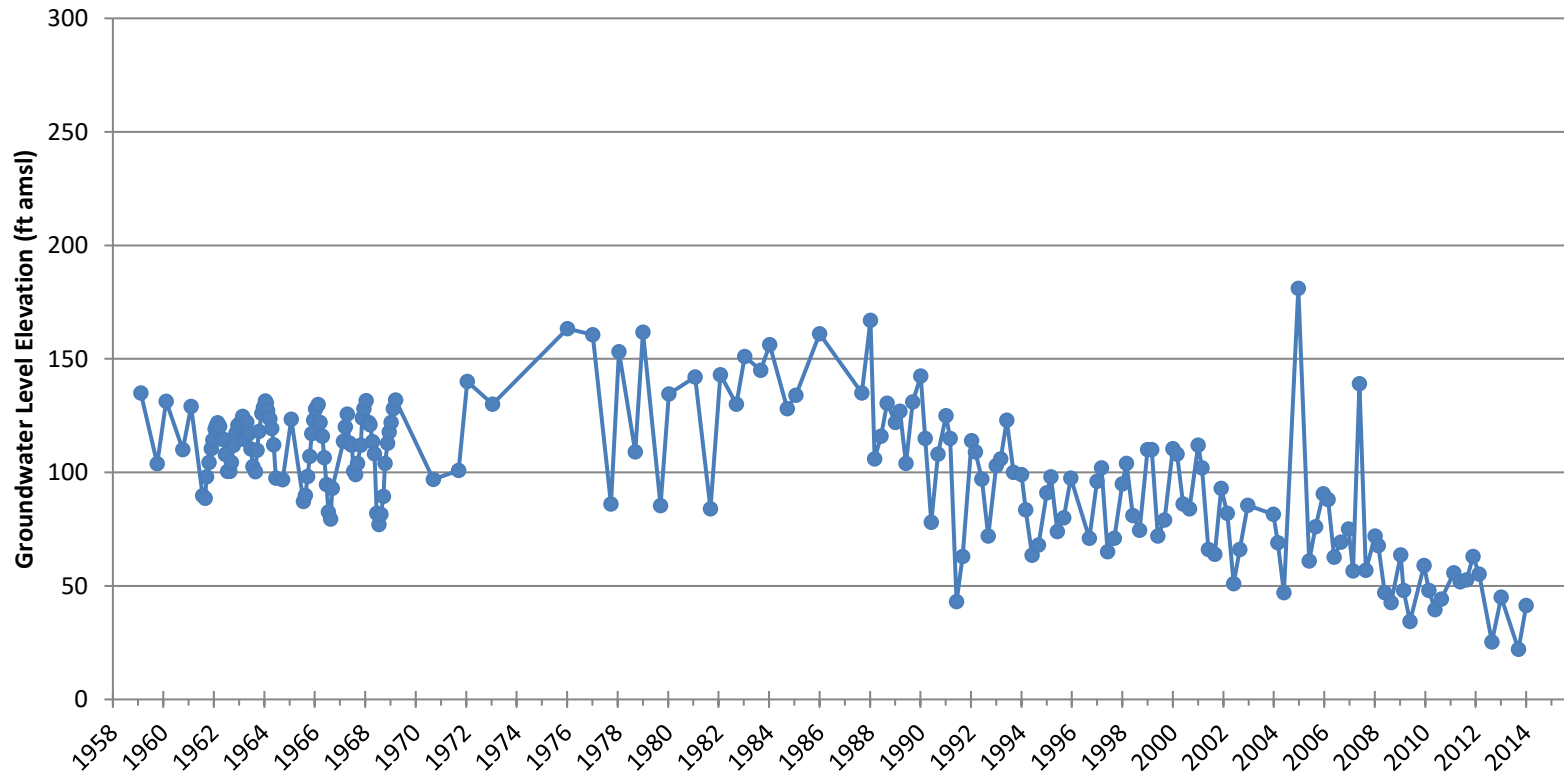
Source of data Anderson Type drill Cable-Tools Diam. hole 12"

Depth	Elev.	Thick	Description
0	315	4 99 14	(Sandy loam - light brown, fine grained very sandy loam, relatively permeable)
14	301	6 6 6	(Sand and gravel - light brown, poorly sorted, subrounded, 0.75 mm to 1.00 mm in diameter, loose quartz sand and sub-rounded quartz gravel up to 2.5mm)
20	295	7 6 36	(Sand, gravel and silt, brown, subrounded, 0.75mm to 1.00 mm in diameter, quartz sand, subrounded gravel up to 1.0 mm, and some silt)
56	259	44 50 64	(Same as above)
120	195	14 9 14	Sandy clay
134	181	36 9 26	(Sandy loam - light brown, hard, sandy loam, relatively impermeable)
160	155	40 9 70	(Sandy loam, brown, soft, sandy loam, very permeable)
230	85	15	(Sandy clay, brown, hard, sandy clay, relatively impermeable)
245	70	3	(Silt - brown, very soft, silt, relatively impermeable)
248	67	155	(Sandy loam - brown, compact, very sandy loam, relatively impermeable)
104	89	4	(Sand - brown, subrounded, 0.50mm to 1.00 mm, sand, relatively permeable, contains some silt)
108	83	3	(Sand - brown, subrounded to subrounded, 0.50 mm to 1.00 mm in diameter, quartz sand)
111	86	26	(Sandy clay - brown, hard, sandy clay, relatively impermeable)
137	122		(Sand - brown, subrounded to subrounded, 0.50mm to 1.00 mm in diameter, quartz sand) Bottom of well

50	100	200
75		
75	50	100
70	50	100

Groundwater Hydrographs - Shallow

22S/25E-25N01



23/24-16R1

(December 1940)

P 261

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY WATER RESOURCES DIVISION

USBR TEST WELL 23/24-16R1 23-24-16B

No. _____

OTHER NOS. _____

Depth 1400'

WELL LOG

elev 224'

State _____ County TULARE Subarea _____

Owner USBR

Location 99-.01

Drilled by USBR Address _____

Date 10/51 Casing diam. _____ Land-surf. alt. 224'

Core data 140-50, 90-98, 140-150, 190-200, 240-250, 290-300, 340-350, 390-400, 450-600, Source of data 690-700, 790-800, 890-900, 990-994, 1090-1100, 1190-1203, 1270-1280, 1390-1400

(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	no core		0
	Sand	10	40
	Sandy clay	35	50
	Sand	10	85
	Sandy clay	48	95
	Clay	7	143
	Sandy clay	6 10	150
	Sand	20	220
	Sandy clay	15	240
	Sand	7	255
	Sandy clay	58	262
	Clay	23	320
	Sand	5	343
	Clay	5	348
	Sandy clay	22	353
	Clay	10	375
	Sandy clay	5	385

RECORD BY Goldman DATE 7/20/53 SHEET 1 OF 5

23/24-16R1

D-0-1
(December 1949)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR Test Well

No. 23-24-16R1

OTHER NOS. _____

WELL LOG

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Sand	80	390
	Clay	5	470
	Sandy Clay	15	475
	Clay	70	490
	Sand	7	560
	Sandy Clay	13	567
	Sand	5	580
	Sandy Clay	30	585
	Sand	7	615
	Sandy Clay	33	622
	Sand	5	655
	Sandy Clay	5	660
	Sand	10	665
	Sandy Clay	40	675
	Sand	17	715
	Sandy Clay	7	732
	Sand	6	739

'Corcoran Clay'
#501'-553'

RECORD BY _____ DATE _____ SHEET 2 OF 5

23/24-16R1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR TEST WELL

No. 23-24-16R1

OTHER NOS. _____

WELL LOG

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Sandy Clay	30	745
	Sand	7	775
	Sandy Clay	8	782
	Sand	11	790
	Sandy Clay	6	801
	Sand	5	807
	Sandy Clay	18	812
	Sand	10	830
	Sandy Clay	10	840
	Sand	4	850
	Sandy Clay	6	854
	Sand	10	860
	Sandy Clay	10	870
	Sand	8	880
	Sandy Clay	12	888
	Sand	5	900
	Sandy Clay	20	905

RECORD BY _____ DATE _____ SHEET 3 OF 5

23/24-16R1

USBR Test Well

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

No. 23-24-16R1

WELL LOG

OTHER NOS. _____

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Sand	5	925
	Sandy Clay	5	930
	Sand	4	935
	Sandy Clay	26	939
	Sand	8	965
	Sandy Clay	42	973
	Sand	40	1015
	Clay	5	1055
	Sandy Clay	30	1060
	Sand	10	1090
	Sandy Clay	10	1100
	Sand	25	1110
	Sandy Clay	15	1135
	Sand	35	1150
	Clay	8	1185
	Sand	7	1193
	Clay	3	1200

RECORD BY _____ DATE _____

SHEET 4 OF 5

23/24-16R1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR TEST WELL

23-24-16R1

No. _____

OTHER NOS. _____

WELL LOG

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

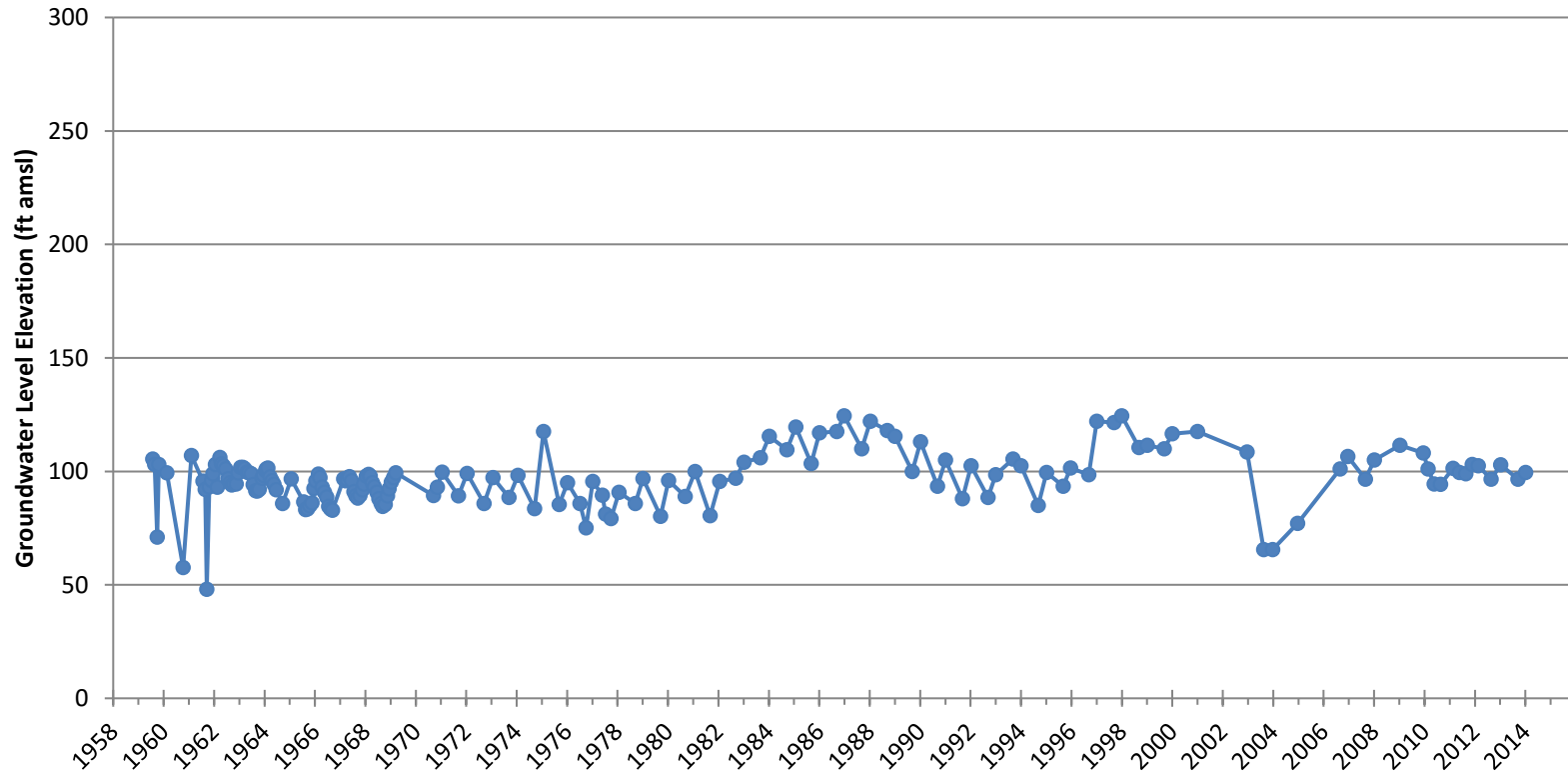
(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Sandy Clay	17	1203
	Sand	10	1220
	Sandy Clay	12	1230
	Sand	6	1242
	Sandy Clay	7	1248
	Sand	3	1255
	Sandy Clay	7	1258
	Sand	25	1265
	Sandy Clay	3	1290
	Sand	7	1293
	Sandy Clay	7	1300
	Sand	11	1307
	Sandy Clay	3	1318
	Sand	41	1321
	Sandy Clay	15	1362 1400
	Sand	23	1377
	B.H.		1400

RECORD BY _____ DATE _____ SHEET 5 OF 5

Groundwater Hydrographs - Shallow

23S/24E-16R01



STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **EO117919**

Owner's Well No. MW-6

Date Work Began 9/24/2010, Ended 9/24/2010

Local Permit Agency ENVIRO HEALTH, TULARE

Permit No. 10-0338 Permit Date 8/30/2010

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		DRILLING METHOD <u>ROTARY</u> FLUID WATER <u>WATER</u>
DEPTH FROM SURFACE		DESCRIPTION
Ft. to Ft.		Describe material, grain, size, color, etc.
0	20	TOP SOIL, MEDIUMFINE/COARSE SANDS
20	40	MEDIUM/FINE/COARSE SANDS
40	80	EDIUM/FINE/COARSE SANDS WITH SOME CLAY
80	120	MEDIUM/FINE/COARSE SANDS WITH MORE CLAY
120	140	MEDIUM/FINE/COARSE SANDS, WITH SOME CLAY
140	160	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
160	200	MEDIUM/FINE/COARSE SANDS
200	300	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
300	340	MEDIUM/FINE/COARSE SANDS, SOME CLAY SOME D.G.
340	420	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
420	560	CLAY WITH SOME SANDS
560	620	CLAY WITH MORE SANDS MEDIUM/FINE
620	680	CLAY WITH SOME MEDIUM/FINE SANDS
680	720	MOSTLEY CLAY
720	740	CLAY WITH SOME MEDIUM/FINE SANDS
740	760	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY AND SHALE
760	810	MEDIUM/FINE/COARSE SANDSWITH CLAY

TOTAL DEPTH OF BORING 810 (Feet)

TOTAL DEPTH OF COMPLETED WELL 805 (Feet)

WELL OWNER

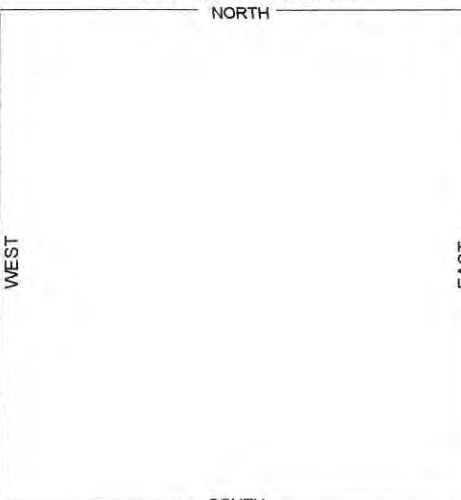
Name SURINDERPAL GILL
Mailing Address 16964 AVENUE 32 CA 93215
DELANO CITY STATE ZIP

WELL LOCATION

Address 1/2 MI N AVE. 26 & 1/2 MI E. ROAD 16
City DELANO CA 93215
County TULARE
APN Book 3381 Page 003 Parcel 24
Township 24 Range 26 Section 17
Latitude _____

DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH



ACTIVITY (✓)

NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify) _____

— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
— Domestic — Public
— Irrigation — Industrial

MONITORING

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH OF STATIC _____

WATER LEVEL _____ (Ft.) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE AIR LIFT

TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

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

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE				
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	CE-MENT (✓)		BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)		
#1													
0	200	16"	✓	PVC	4"	SCH 40		0	130	✓			
200	350	16"	✓	PVC	4"	SCH 40	.030	360	370		✓		
								464	474		✓		
#2								590	600		✓		
0	705	12 1/4"	✓	PVC	4"	SCH 40		630	640		✓		
705	805	12 1/4"	✓	PVC	4"	SCH 40	.030	660	670		✓		

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- 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.

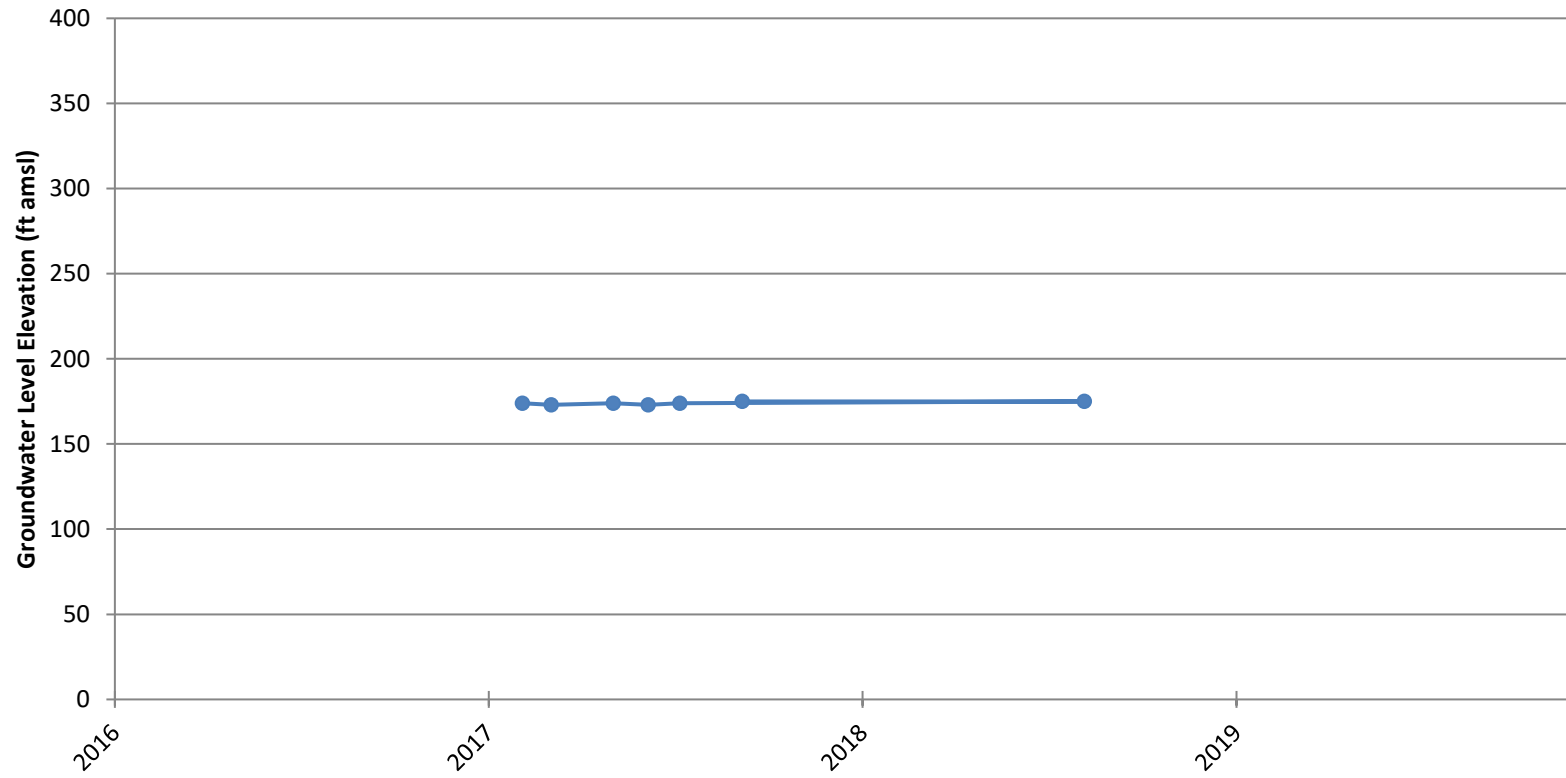
NAME BRADLEY & SONS
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

3625 S. HIGHLAND DEL REY CA 93616
ADDRESS CITY STATE ZIP

Signed Donna Bodice 10/06/10 414178
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

Groundwater Hydrographs - Shallow

M-19 (Formerly MW-6)



24/26-3261

24/26-3261

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION

Sierra Vista Ranch

County Tulare Owner _____ U.S.B.R. No. 24-26-32
Dist. Delano-Imperial Use _____ Local No. 4-11
Quad. Delano Driller H. B. Simbridge Date 4-11-27
Location Center of NW quarter of Section 32.

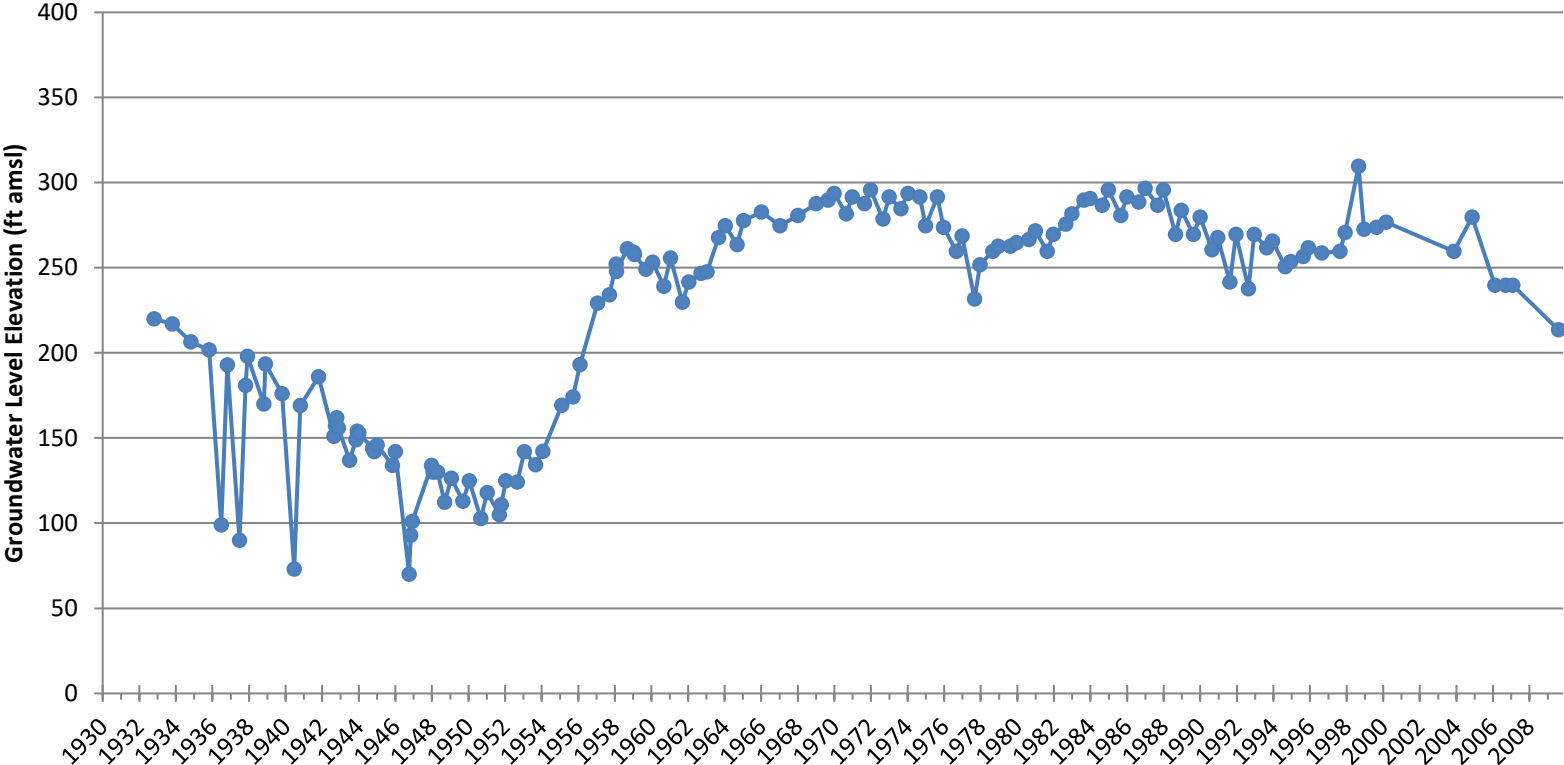
Surf. Elev. 893 Groundwater elev. _____ Date _____
Depth 70 Groundwater elev. _____ Date _____
Yield _____ Aquifers _____
Drawdown _____ Artesian head _____ Date _____
Casing _____ Sand-gravel _____

Source of data _____ Type drill cable tool Diam. hole 16"

Table with 4 columns: Depth, Elev., Thick., Description. Contains data for soil and groundwater layers down to 470 feet depth.

Groundwater Hydrographs - Shallow

24S/26E-32G01



ORIGINAL
File with DWR

22/23-30

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page ___ of ___

Owner's Well No. Angiola #1

No. 396637

Date Work Began 3-25-92, Ended 3-25-92

Local Permit Agency Tulare

Permit No. 63779 Permit Date 3-23-92

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

WELL OWNER

ORIENTATION (∠) VERTICAL HORIZONTAL ANGLE (SPECIFY)

Name Sunny Quillin

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

Mailing Address 12667 Rd. 96

DESCRIPTION

Tipton, CA 93272

Ft. to Ft.

Describe material, grain size, color, etc.

CITY _____ STATE _____ ZIP _____

WELL LOCATION

0 5 Top Soil 433-437 sand

Address 1/2 mi S. of Ave. 112 & 50 ft. W. of Rd

5 24 clay 437-439 clay

City Corcoran 24

24 26 sand 439-444 sand

County Tulare

26 44 clay 444-450 clay

APN Book Echoe Page 78 Parcel 291-130-01

44 49 sand

Township 22S Range 23E Section 30

49 86 clay

Latitude _____ NORTH Longitude _____ WEST

86 104 sand

DEG. MIN. SEC. DEG. MIN. SEC.

104 140 clay

LOCATION SKETCH

140 144 sand

ACTIVITY (∠)

144 186 clay

NEW WELL

186 192 sand

MODIFICATION/REPAIR

192 200 clay

Deepen

200 208 sand

Other (Specify)

208 218 clay

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

218 224 sand

PLANNED USE(S)

224 280 clay

(∠)

280 284 sand

MONITORING

284 288 clay

WATER SUPPLY

288 309 sand

Domestic

309 315 clay

Public

315 330 sand

Irrigation

330 334 clay

Industrial

334 339 sand

"TEST WELL"

339 344 clay

CATHODIC PROTECTION

344 351 sand

OTHER (Specify)

351 354 clay

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

354 373 sand

DRILLING METHOD Reverse FLUID Natural

373 377 clay

WATER LEVEL & YIELD OF COMPLETED WELL

377 419 sand

DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____

419 433 clay

ESTIMATED YIELD* _____ (GPM) & TEST TYPE _____

TOTAL DEPTH OF BORING 460 (Feet)

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

TOTAL DEPTH OF COMPLETED WELL 450 (Feet)

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

UNCONFINED

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING(S)						ANNULAR MATERIAL						
		TYPE (∠)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE				
		BLANK	SCREEN	CON-DUCTOR	FILL PIPE									CE-MENT (∠)
0 : 240	30	X				steel	15.5	1/4			X			
240 : 450	30		X			louver	15.5	1/4	.070				5/16x4	

ATTACHMENTS (∠)

CERTIFICATION STATEMENT

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

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

NAME Grabow Well Drilling, Inc.

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 12522 9th Ave. Hanford, CA 93230

CITY _____ STATE _____ ZIP _____

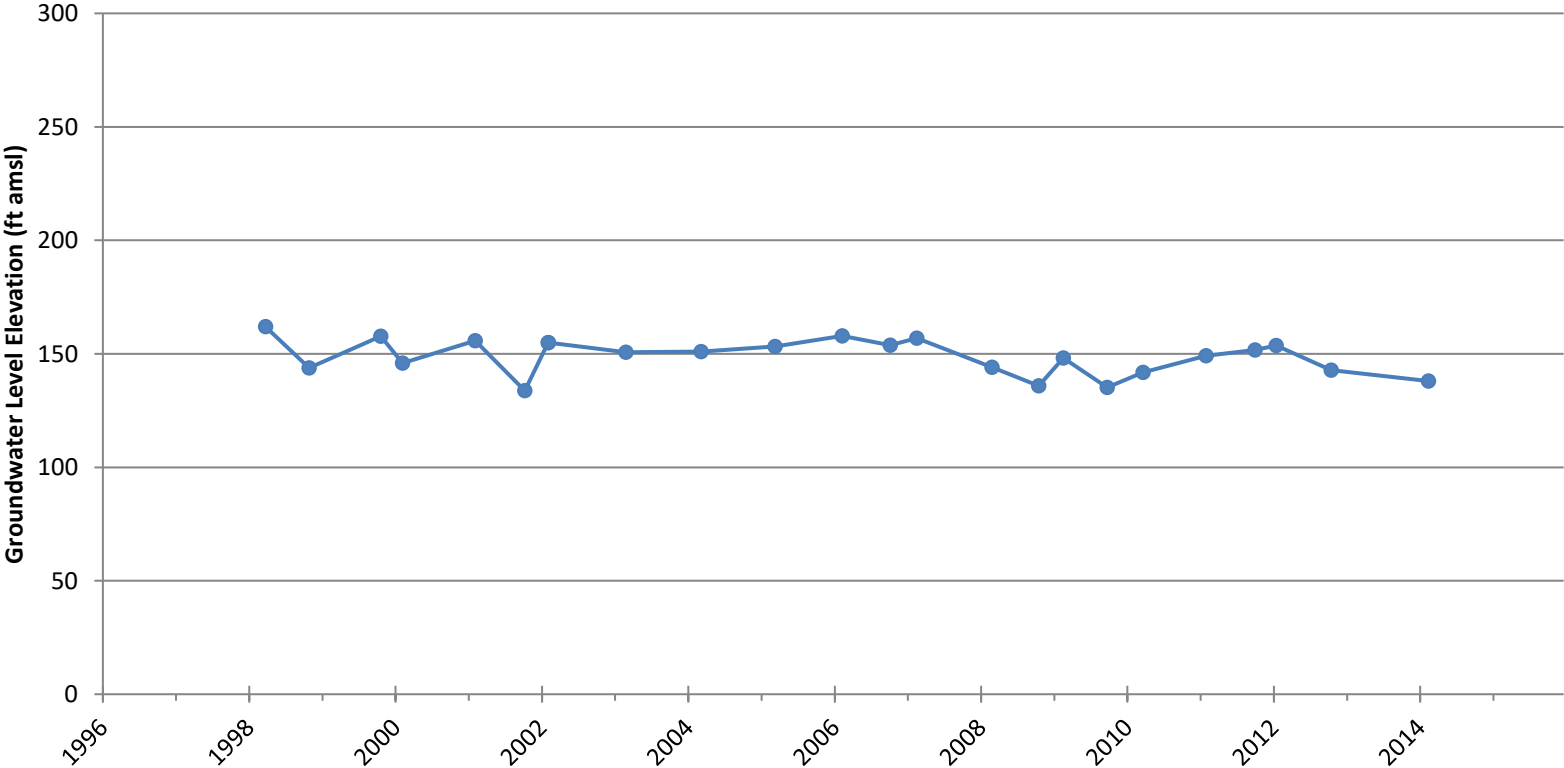
Signed Dean E. Grabow

DATE SIGNED 3-29-92 288489

WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

Groundwater Hydrographs - Shallow

22S/23E-30J01



Owner's Well No. 20-E

Date Work Began 6/20/2007, Ended 6/27/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0221

Permit Date 5/16/2007

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **E054449**

STATE WELL NO./ STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓)		DRILLING METHOD	FLUID	DESCRIPTION
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		<u>REVERSE</u>		<i>Describe material, grain, size, color, etc.</i>
DEPTH FROM SURFACE	Ft. to Ft.			
0	4	TOP SOIL		
4	7	MEDIUM SAND		
7	45	SANDY BROWN CLAY		
45	50	COARSE SAND & BROWN CLAY		
50	53	SAND (MEDIUM COARSE)		
53	54	BROWN CLAY		
54	58	SAND (MEDIUM COARSE)		
58	61	SAND & CLAY		
61	70	SAND (MEDIUM COARSE)		
70	93	CLAY BROWN		
93	104	SAND (MEDIUM COARSE)		
104	116	SAND & CLAY		
116	121	BROWN CLAY		
121	124	SAND & CLAY		
124	130	BROWN CLAY		
130	141	SAND (MEDIUM COARSE)		
141	150	BROWN CLAY		
150	152	SAND (MEDIUM)		
152	159	BROWN CLAY		
159	160	SAND & CLAY		
160	163	BROWN CLAY		
163	169	SAND & CLAY		
169	178	SAND		
178	181	BROWN CLAY		
181	183	SAND & CLAY		
183	200	BROWN CLAY		
200	202	SAND		
202	214	BROWN CLAY		
214	217	SAND (MEDIUM COARSE)		
217	219	BROWN CLAY		

TOTAL DEPTH OF BORING 500 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

Name ANGIOLA WATER DIST.
Mailing Address 944 WHITLEY AVE. SUITE
CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION
Address AVE 112
City ANGIOLA CA
County TULARE
APN Book 293 Page 230 Parcel 01
Township 22 S Range 23 E Section 28
Latitude _____

LOCATION SKETCH
NORTH _____ SOUTH _____
DEG. MIN. SEC. DEG. MIN. SEC.
ACTIVITY (✓)
 NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify) _____
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
PLANNED USES (✓)
WATER SUPPLY
— Domestic _____ Public _____
 Irrigation _____ Industrial _____
MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDIATION _____
OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WEST Hwy 43
3 miles
AVE 112
** 4 mi EAST*

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
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.

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)	BLANK	SCREEN	CON-DUCTOR				
0 to 50	44"					STEEL	36"	5/16"	
0 to 240	30"	✓				STEEL	18" OD	5/16"	
240 to 480	30"		✓			STEEL	18" OD	5/16"	.050 SLO
480 to 490	30"	✓				STEEL	18" OD	5/16"	

DEPTH FROM SURFACE	ANNULAR MATERIAL				
	TYPE	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 50		✓			6 SACK
0 to 500					MIX 6 X 16 & 1/4"

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed Carla Ferrel DATE SIGNED 06/28/07 548214
WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT

DWR USE ONLY -- DO NOT FILL IN

Refer to Instruction Pamphlet

STATE WELL NO./STATION NO.			
LATITUDE		LONGITUDE	
APN/TRS/OTHER			

Owner's Well No. 20-E

No. **E054449**

Date Work Began 6/20/2007, Ended 6/27/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0221

Permit Date 5/16/2007

ORIENTATION (✓)			DRILLING METHOD		DESCRIPTION <i>Describe material, grain, size, color, etc.</i>
VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)			REVERSE	FLUID _____	
DEPTH FROM SURFACE					
Ft.	to	Ft.			
219	222		SAND (MEDIUM COARSE)		
222	245		BROWN CLAY		
245	261		SAND & CLAY		
261	282		BROWN CLAY		
282	318		SAND (COARSE MEDIUM)		
318	326		SANDY BROWN CLAY		
326	331		COARSE SAND		
331	345		SANDY BROWN CLAY		
345	348		COARSE SAND		
348	362		SANDY BROWN CLAY		
362	367		SANDY BLUE CLAY		
367	376		COARSE SAND		
376	382		SANDY BLUE CLAY		
382	385		COARSE SAND		
385	387		SANDY BLUE CLAY		
387	389		COARSE SAND		
389	393		COARSE SAND & GRAVEL		
393	398		COARSE SAND		
398	406		SANDY BLUE CLAY		
406	408		BLUE CLAY & COARSE SAND		
408	410		COARSE SAND		
410	413		BLUE SANDY CLAY		
413	417		COARSE SAND		
417	442		SANDY BLUE CLAY		
442	453		COARSE SAND		
453	459		MEDIUM & COARSE SAND		
459	480		SANDY BLUE CLAY		
480	500		BLUE CLAY		

TOTAL DEPTH OF BORING 500 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

WELL OWNER		
Name <u>ANGIOLA WATER DIST.</u>		
Mailing Address <u>944 WHITLEY AVE. SUITE</u>		
<u>CORCORAN</u>	<u>CA</u>	<u>93212</u>
CITY	STATE	ZIP
WELL LOCATION		
Address <u>AVE 112</u>		
City <u>ANGIOLA CA</u>		
County <u>TULARE</u>		
APN Book <u>293</u>	Page <u>230</u>	Parcel <u>01</u>
Township <u>22 S</u>	Range <u>23 E</u>	Section <u>28</u>
Latitude _____		
DEG.	MIN.	SEC.
LOCATION SKETCH		
NORTH _____		
WEST _____ EAST _____ SOUTH _____		
Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.		
ACTIVITY (✓)		
<input checked="" type="checkbox"/> NEW WELL		
MODIFICATION/REPAIR		
<input type="checkbox"/> Deepen <input type="checkbox"/> Other (Specify) _____		
DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")		
PLANNED USES (✓)		
WATER SUPPLY		
<input type="checkbox"/> Domestic _____ Public _____ <input checked="" type="checkbox"/> Irrigation _____ Industrial _____		
MONITORING _____		
TEST WELL _____		
CATHODIC PROTECTION _____		
HEAT EXCHANGE _____		
DIRECT PUSH _____		
INJECTION _____		
VAPOR EXTRACTION _____		
SPARGING _____		
REMEDICATION _____		
OTHER (SPECIFY) _____		

WATER LEVEL & YIELD OF COMPLETED WELL	
DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE	
DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____	
ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____	
TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)	
<i>May not be representative of a well's long-term yield.</i>	

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	
		TYPE (✓)							
Ft.	to	Ft.	BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE		
0	50	44"					STEEL	36"	5/16"
0	240	30"	✓				STEEL	18" OD	5/16"
240	480	30"		✓			STEEL	18" OD	5/16" .050 SLO
480	490	30"	✓				STEEL	18" OD	5/16"

DEPTH FROM SURFACE	ANNULAR MATERIAL					
	TYPE					
Ft.	to	Ft.	CE-MENT	BEN-TONITE	FILL	FILTER PACK (TYPE/SIZE)
0	50		✓			6 SACK
0	500					MIX 6 X 16 & 1/4"

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP

Signed _____ DATE SIGNED 06/28/07 548214
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

9-185-July 1935
Revised

WELL SCHEDULE

Date Oct. 10, 1930 Field No. 22-23-2141
Record by MFE Office No. _____
Source of data PH

1. Location: State California County Tulare
Map TALENT TAYLOR WEIR S-429C
T 1/4 sec. NR E
S 1 W 1

2. Owner: John Wilson Address 172 Box 200, Tulare
Tenant John Wilson Address 1315 1/2 St

3. Topography Rolling Address _____

4. Elevation 205 ft. above _____

5. Type: Dug, drilled, driven, bored, jetted, 1950

6. Depth: Rept. 521 ft. Meas. _____ ft.

7. Casing: Diam. 1 1/2 in., to _____ in., Type _____

8. Chief Aquifer _____ From _____ ft. to _____ ft.

9. Water level _____ ft. rept. 19 above _____ below _____

10. Pump: Type _____ Capacity _____ which is _____ ft. above surface _____ below _____ G. M.

11. Yield: Flow _____ G. M., Pump _____ G. M., Meas., Rept. Est. _____ G. M.

12. Use: Dom., Stock, PS, RR., Ind., Irr., Obs. _____ hours pumping _____

13. Quality _____ Temp. _____ °F.

Taste, odor, color _____ Yes _____ No _____

Unfit for _____ Sample No _____

14. Remarks: (Log, Analyses, etc.) D-109

0169
FILED
FEB

22/23-2141

Well
G1

100 FT W OF DITCH ON EARF
SECTION LINE

40 FT SOUTH OF SECTION LINE

0.51 miles South of E Ave. 120

.52 mi. W/O Rd 40 (sec. line)

.485 mi. N/O Ave. 112 (sec. line) on W. side
of canal.

meter no. ~~594989~~ 322502

Trans. No. - 3661

10 Length

Disc. Diam. 8 in Length 11 ft into ditch
15 ft into ditch
161 ft into ditch East
of canal

Remarks Nov. 6, 1958

Byron Jackson turb

U.S. E. loc. 75 M.P.

S.W. 4 = 65, 78 ft.

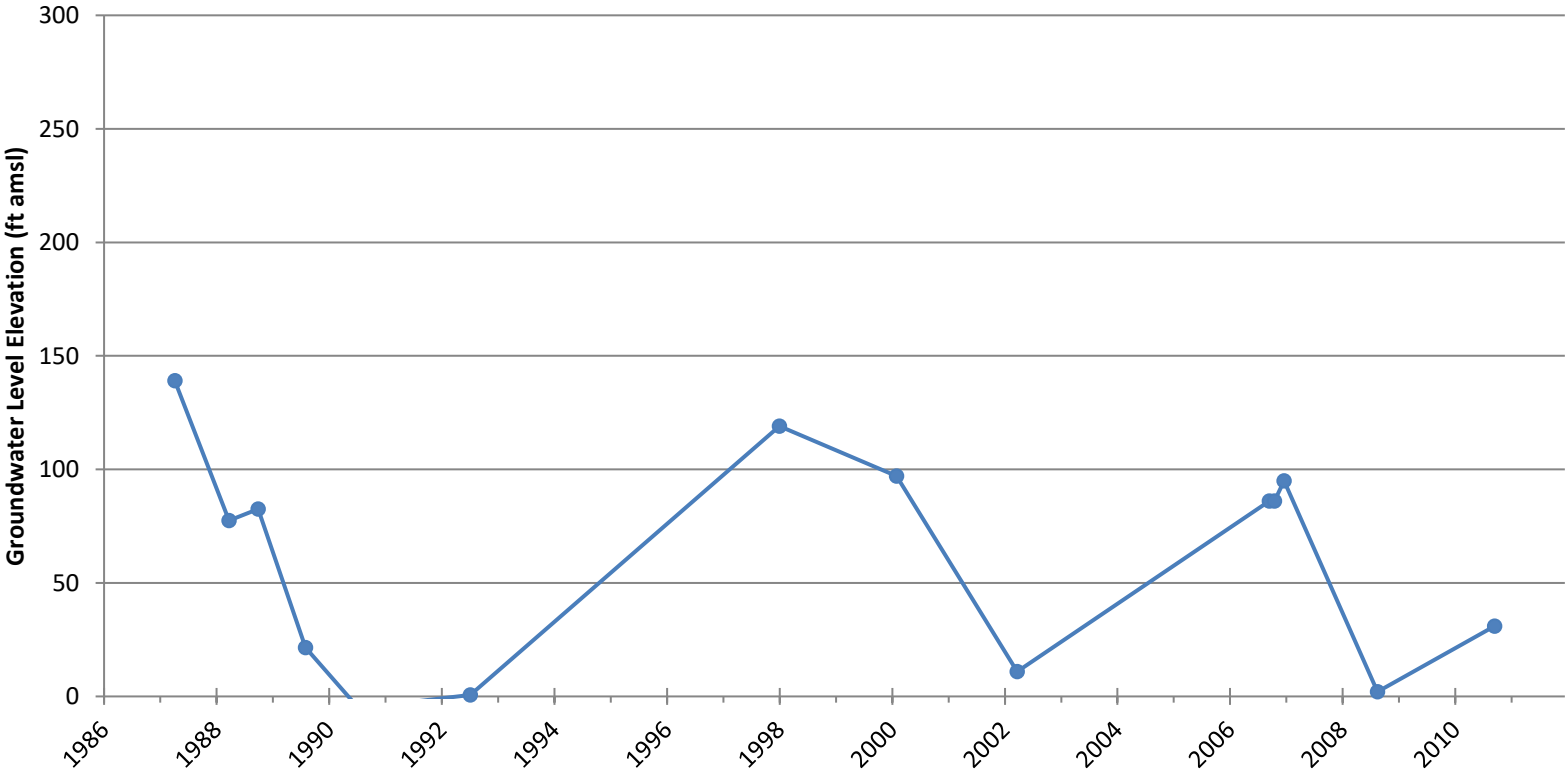
M.P. = T.G. W. side which is 1.5 ft. above

WL = 67.4' (12-51)

L-5D

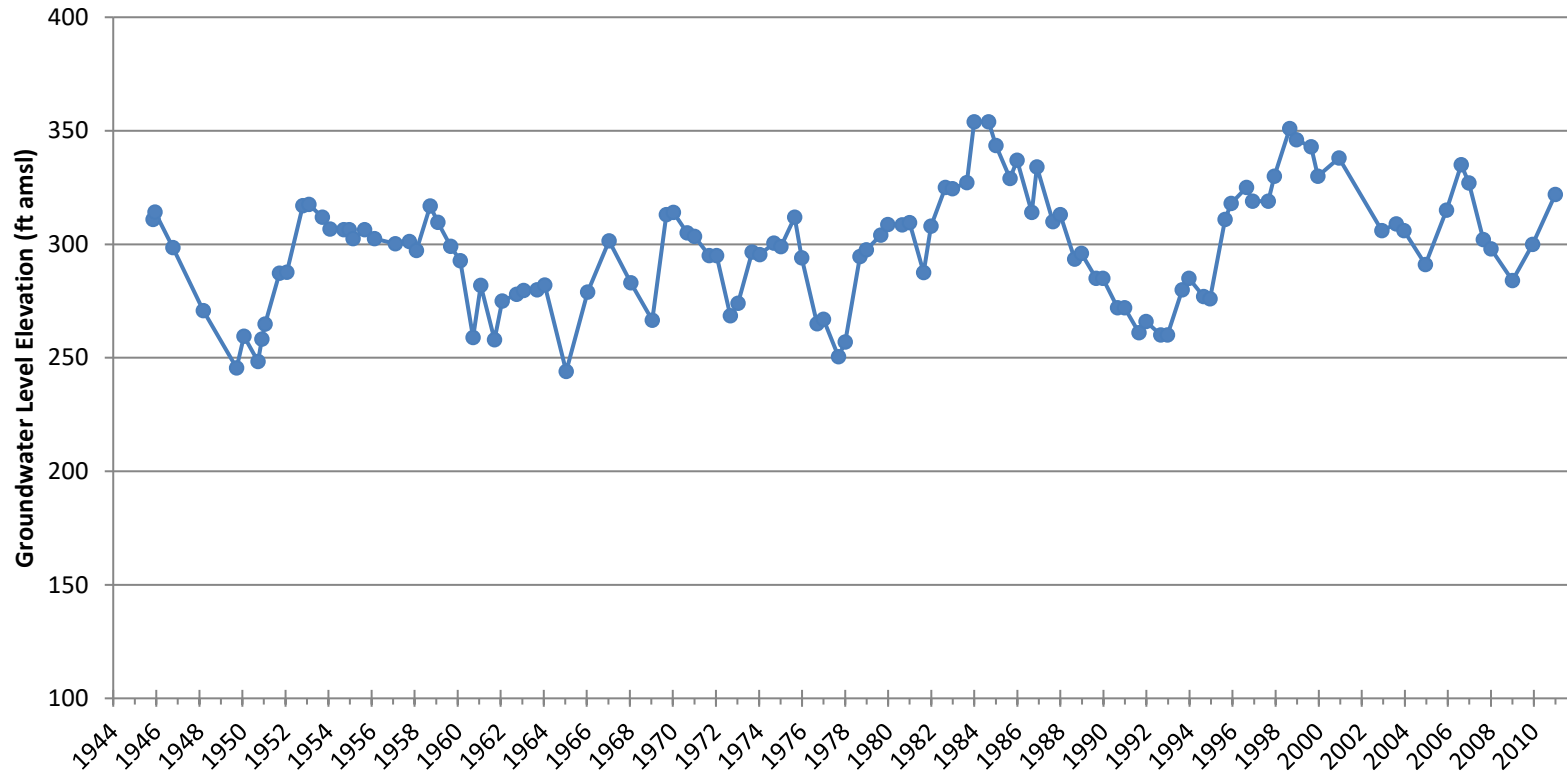
Groundwater Hydrographs - Shallow

G-1



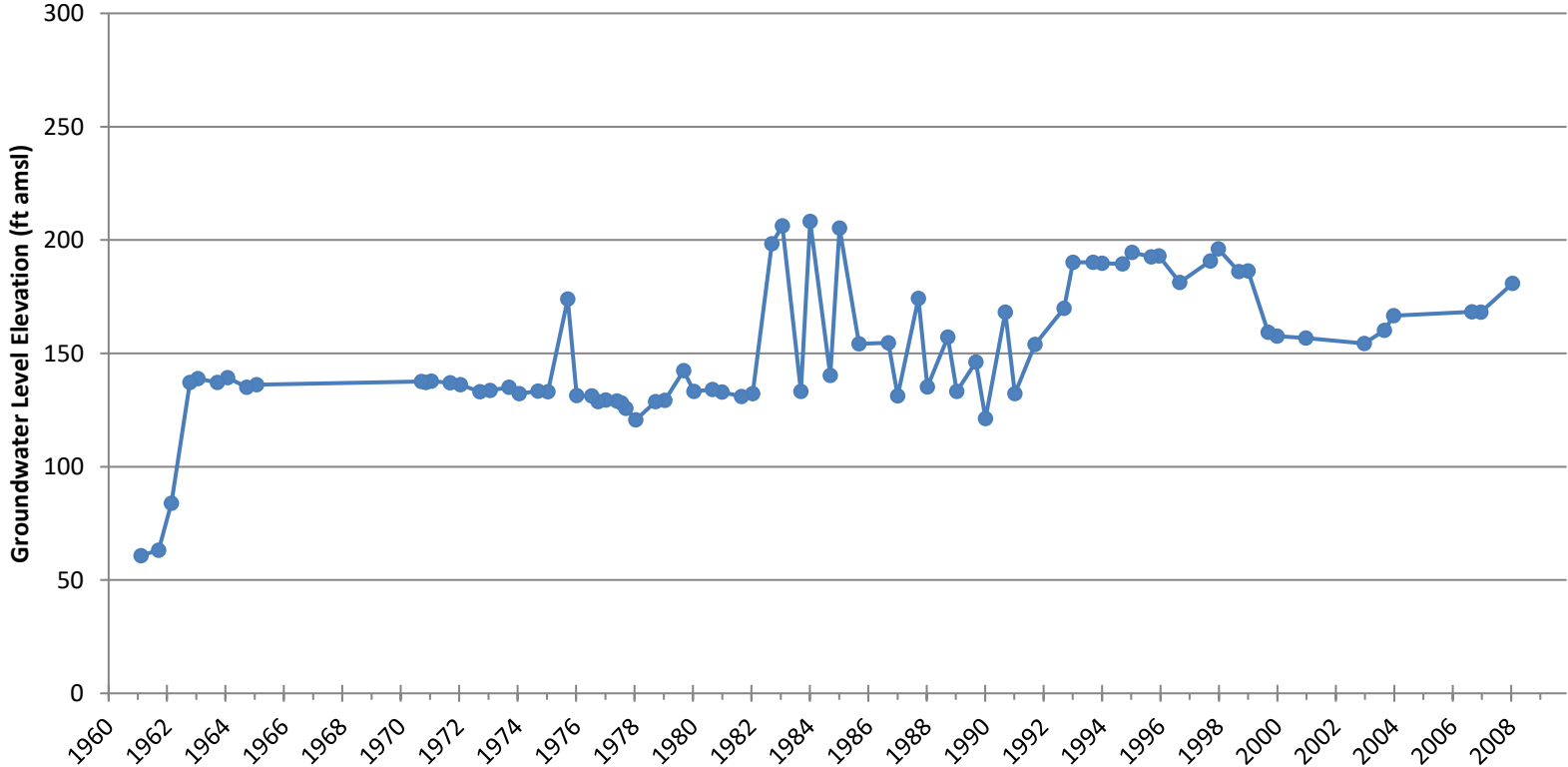
Groundwater Hydrographs - Shallow

22S/26E-25J01



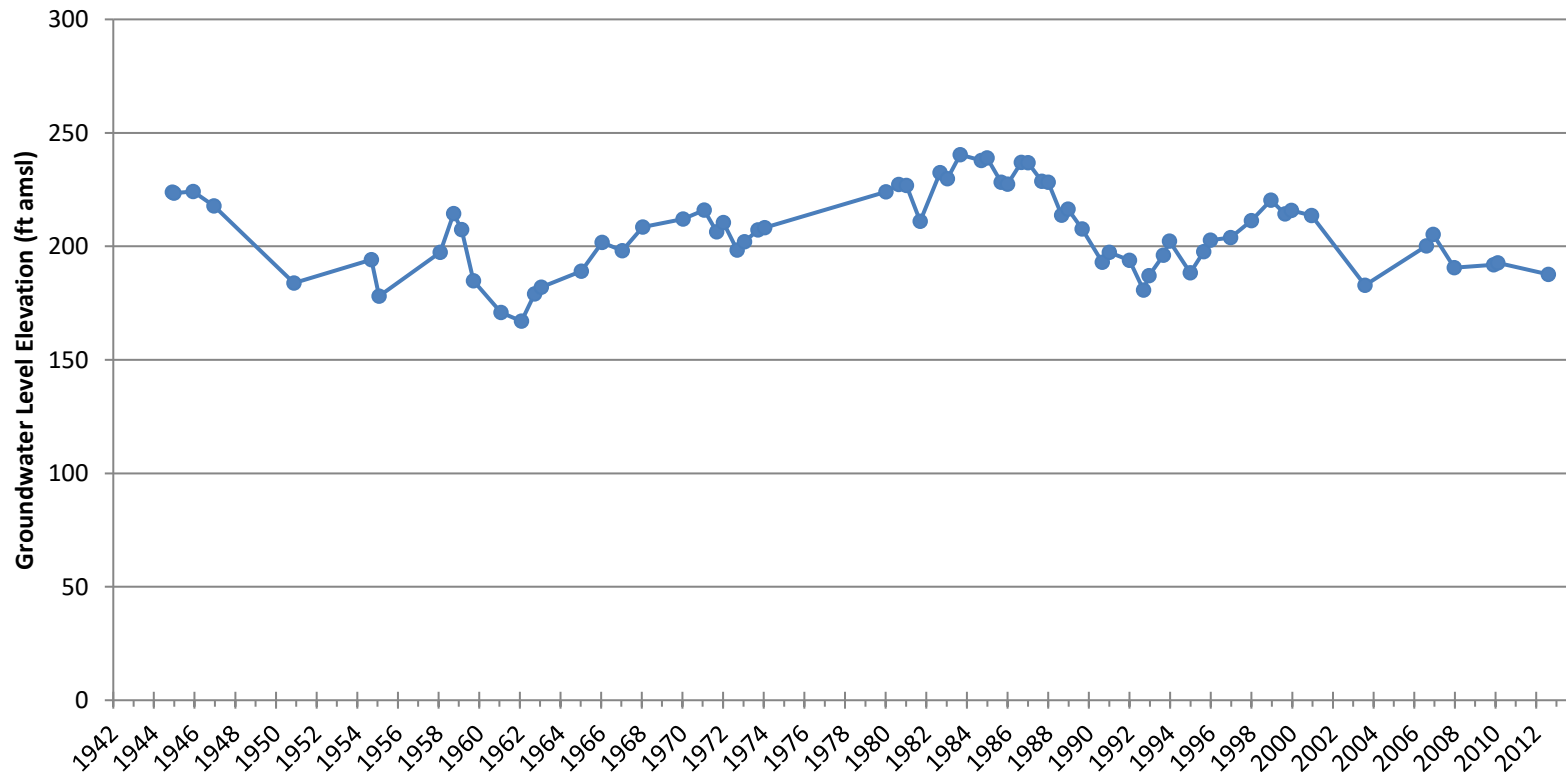
Groundwater Hydrographs - Shallow

23S/23E-33A02



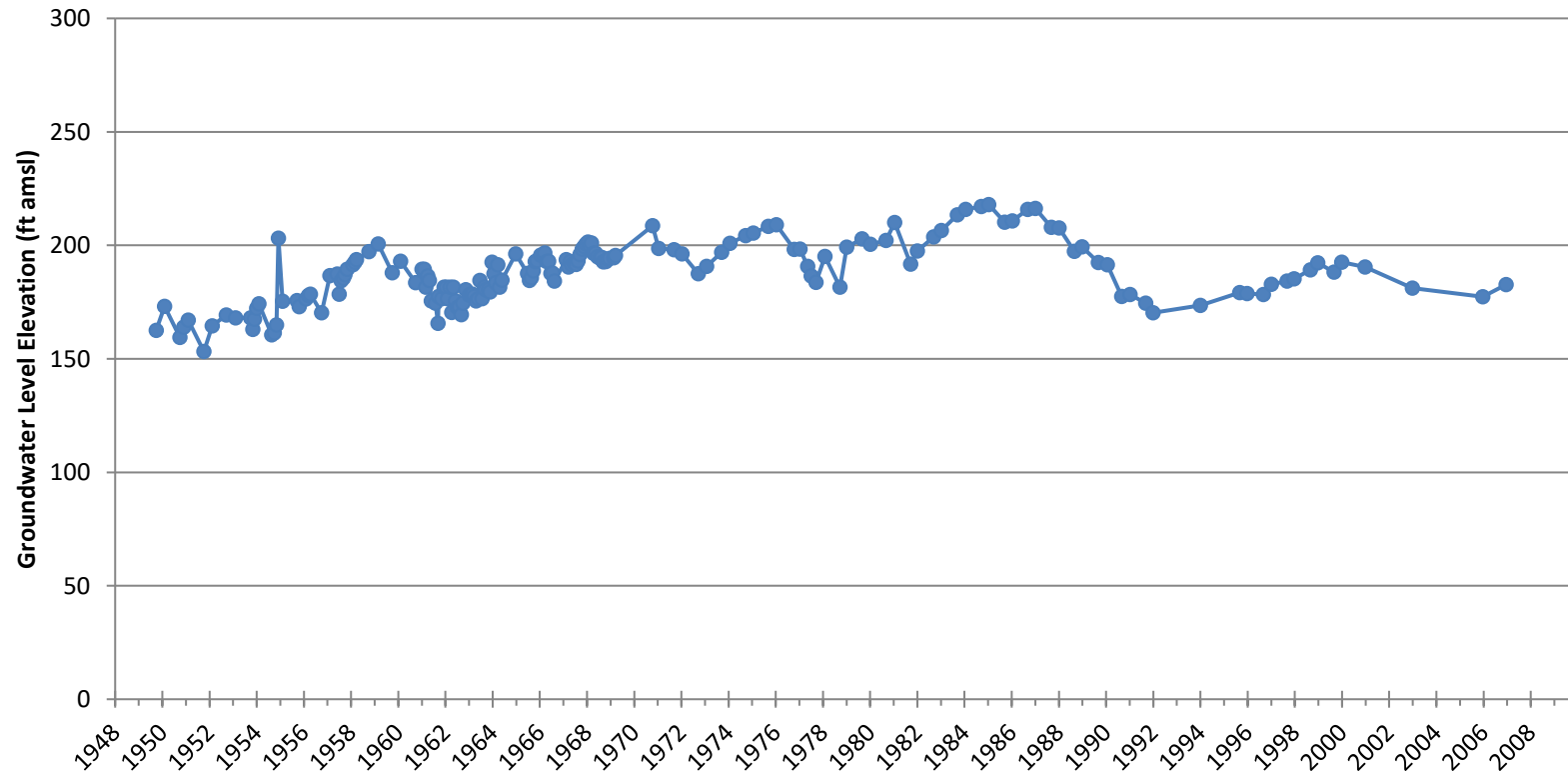
Groundwater Hydrographs - Shallow

21S/24E-15H01



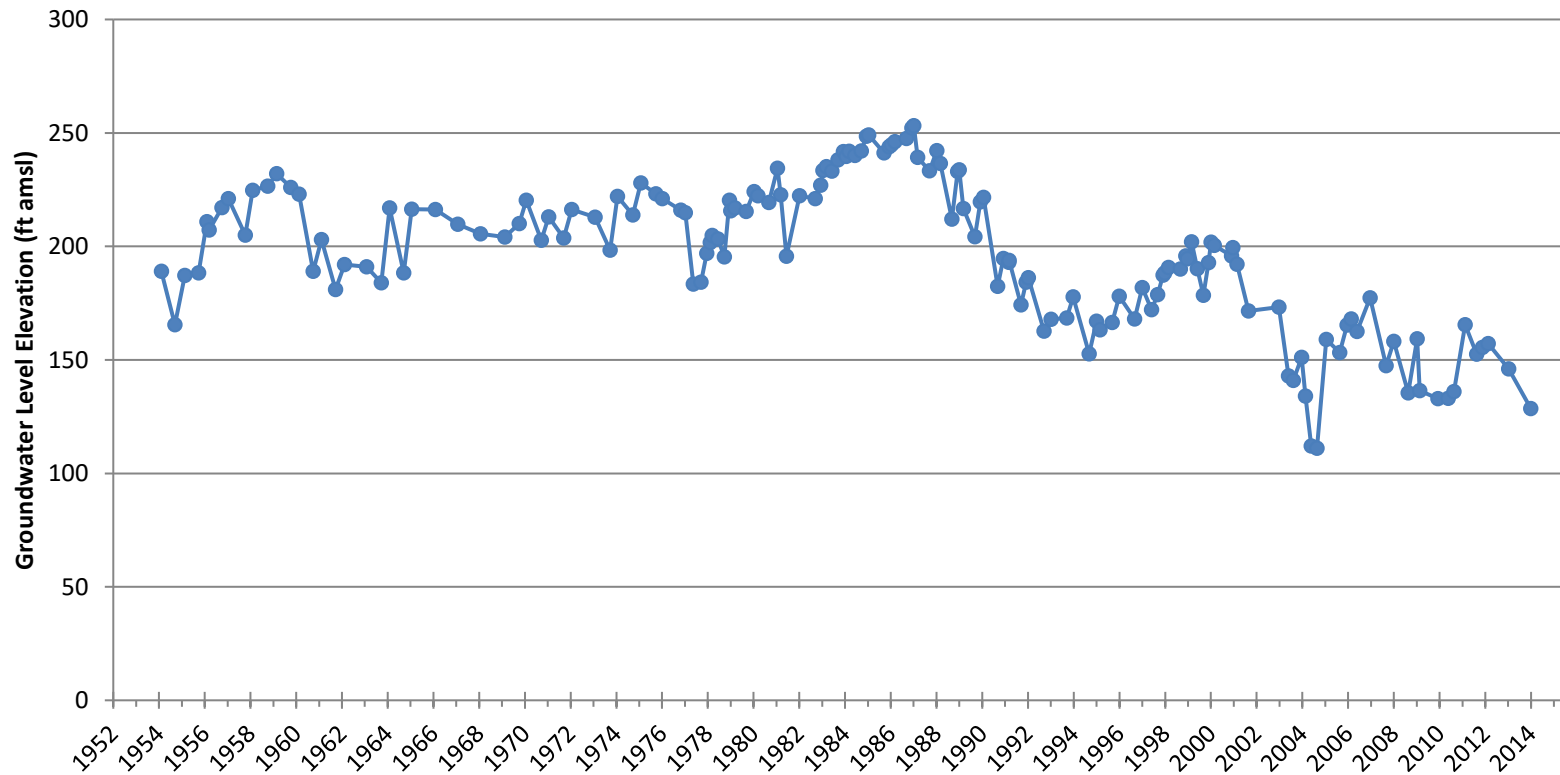
Groundwater Hydrographs - Shallow

22S/25E-10E01



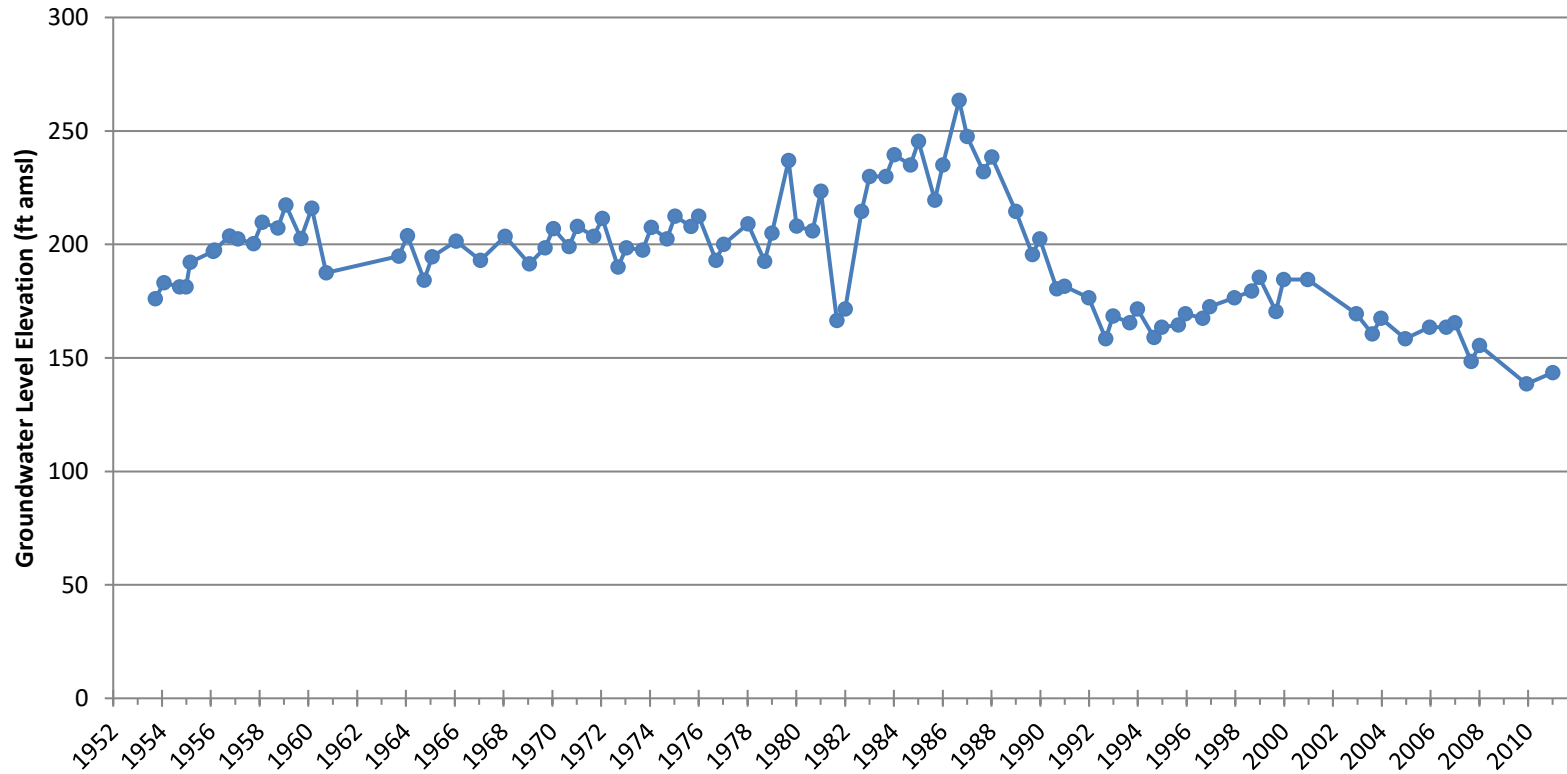
Groundwater Hydrographs - Shallow

21S/25E-36R01



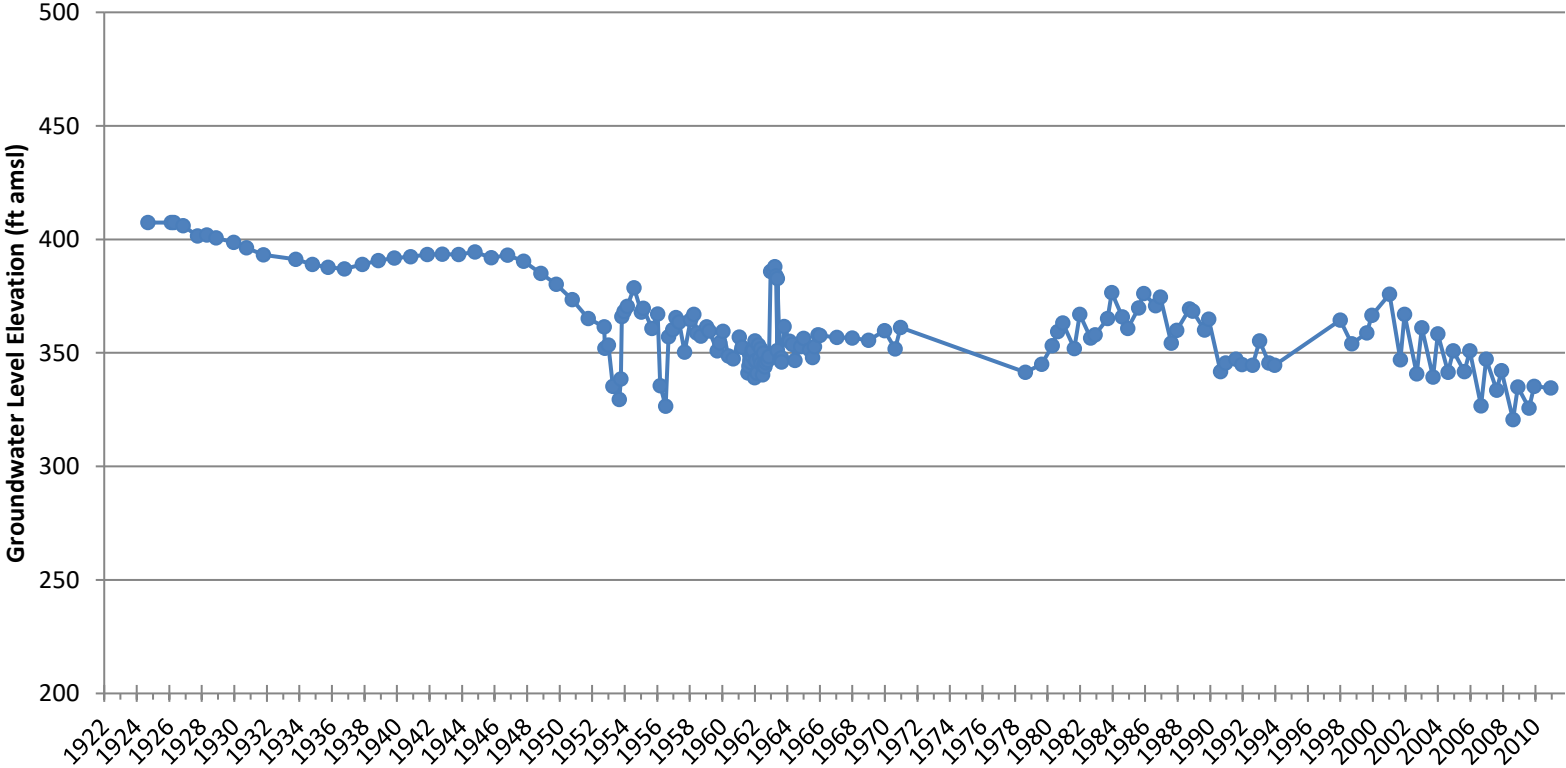
Groundwater Hydrographs - Shallow

22S/26E-07J01



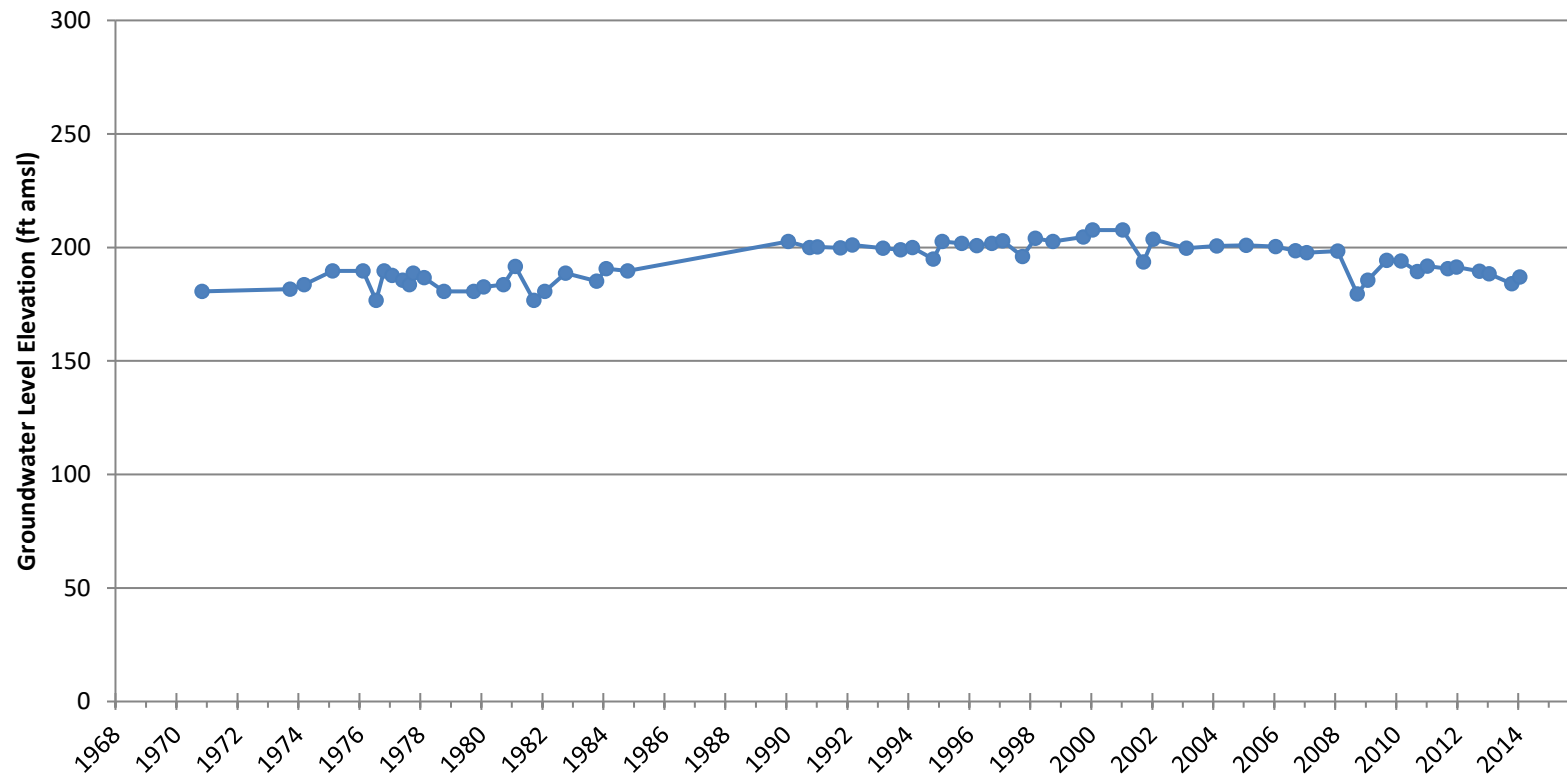
Groundwater Hydrographs - Shallow

22S/27E-10R01



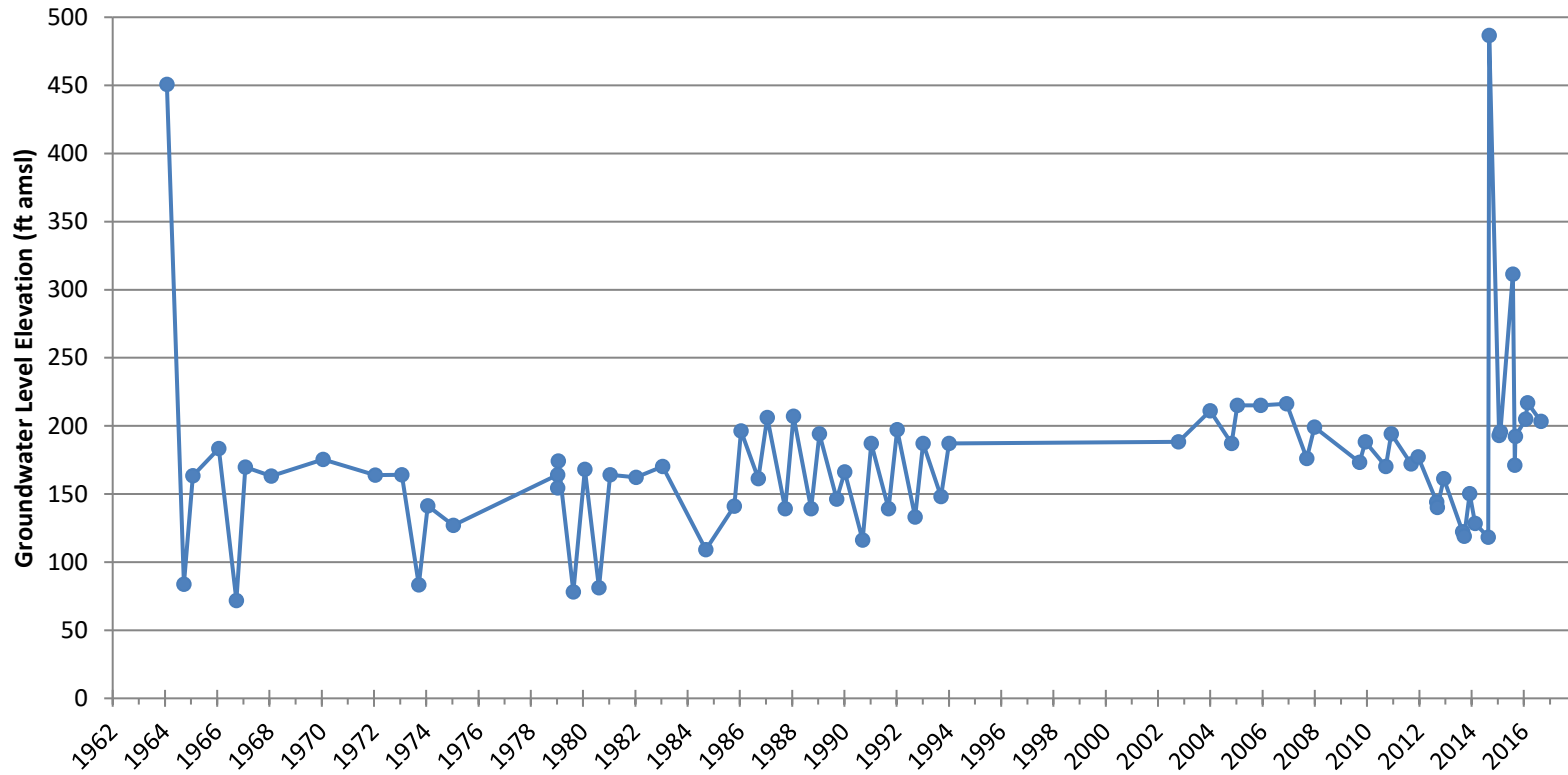
Groundwater Hydrographs - Shallow

24S/24E-25J01



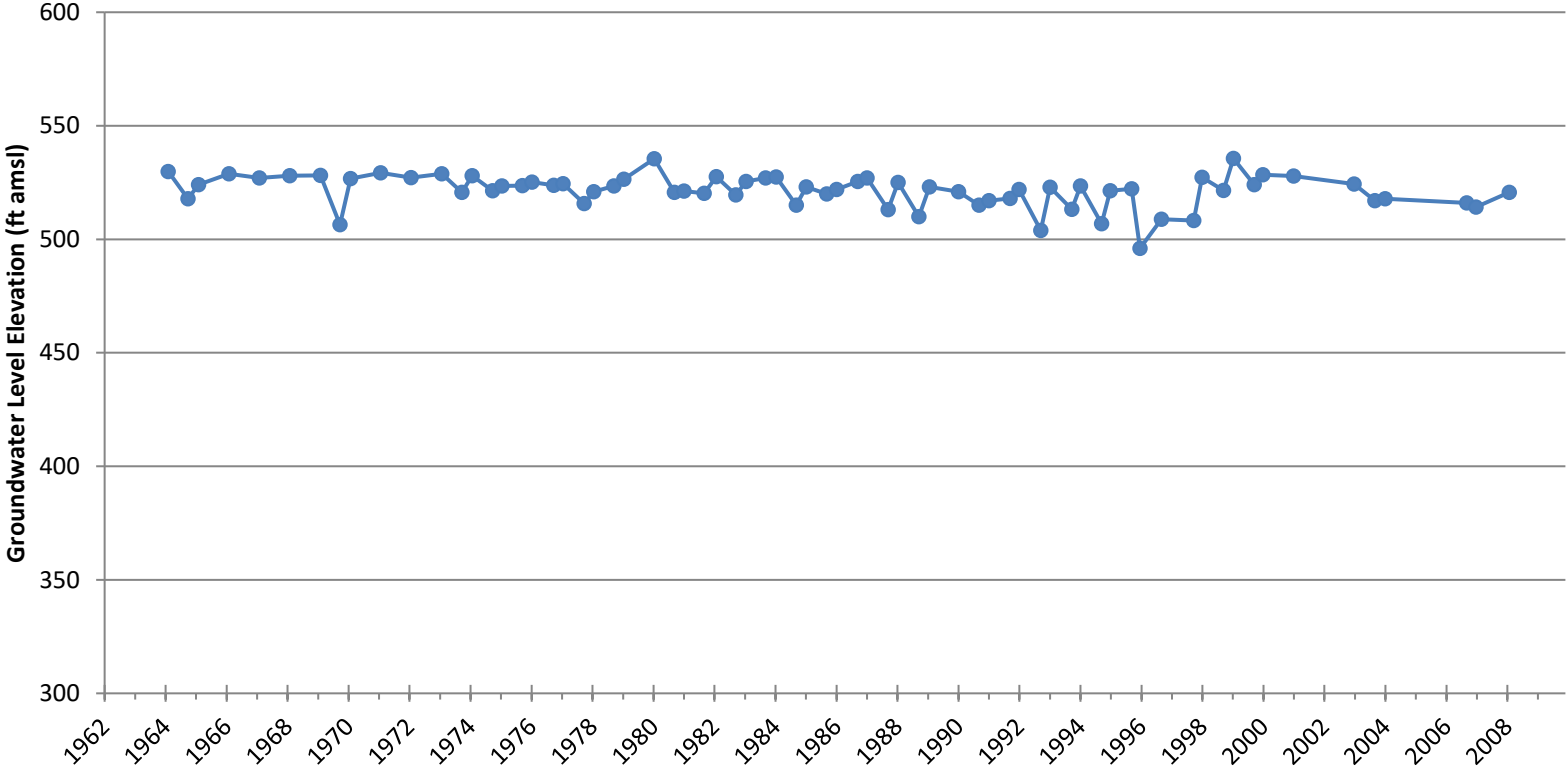
Groundwater Hydrographs - Shallow

24S/26E-01R01



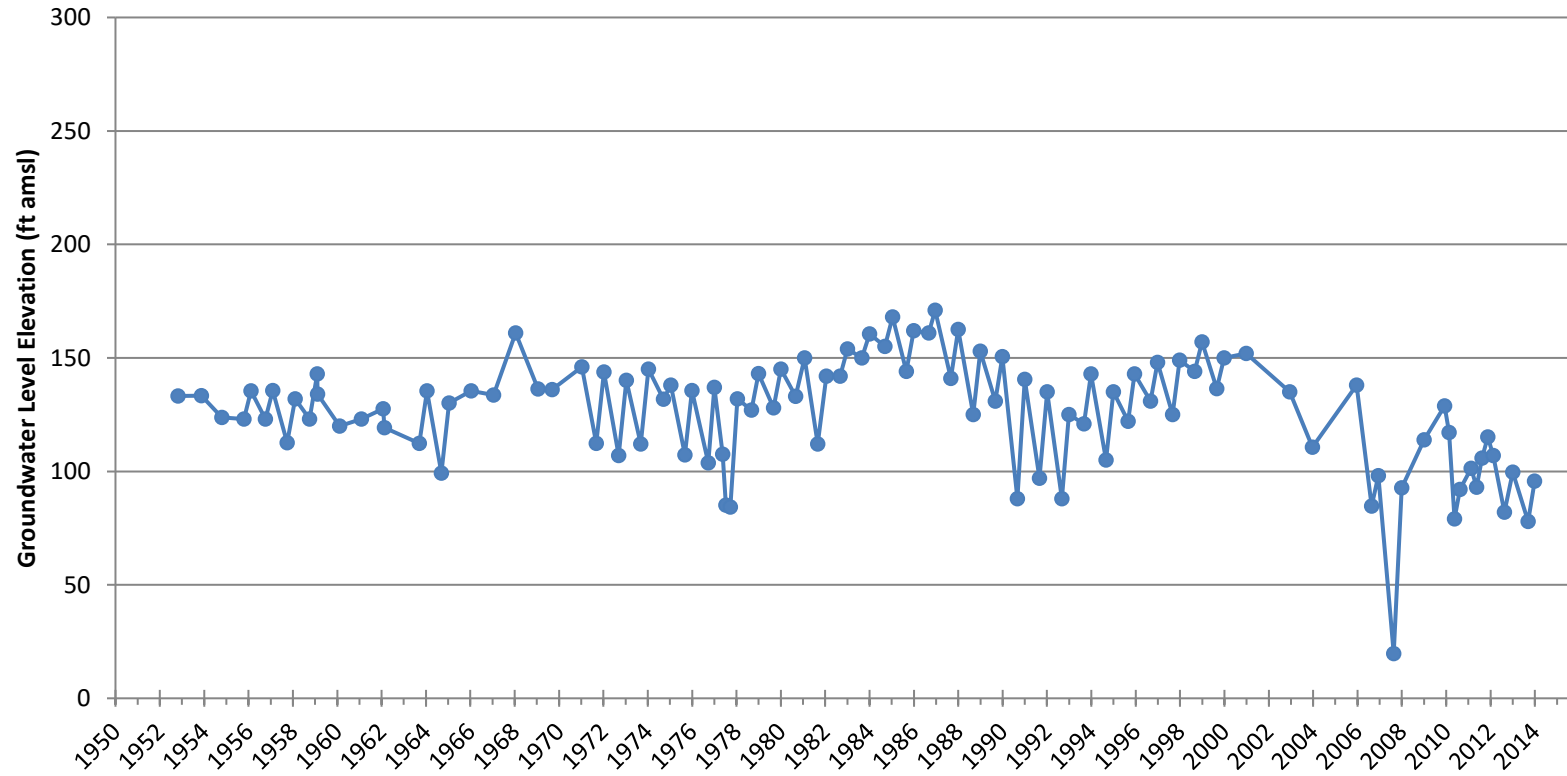
Groundwater Hydrographs - Shallow

22S/28E-03H01



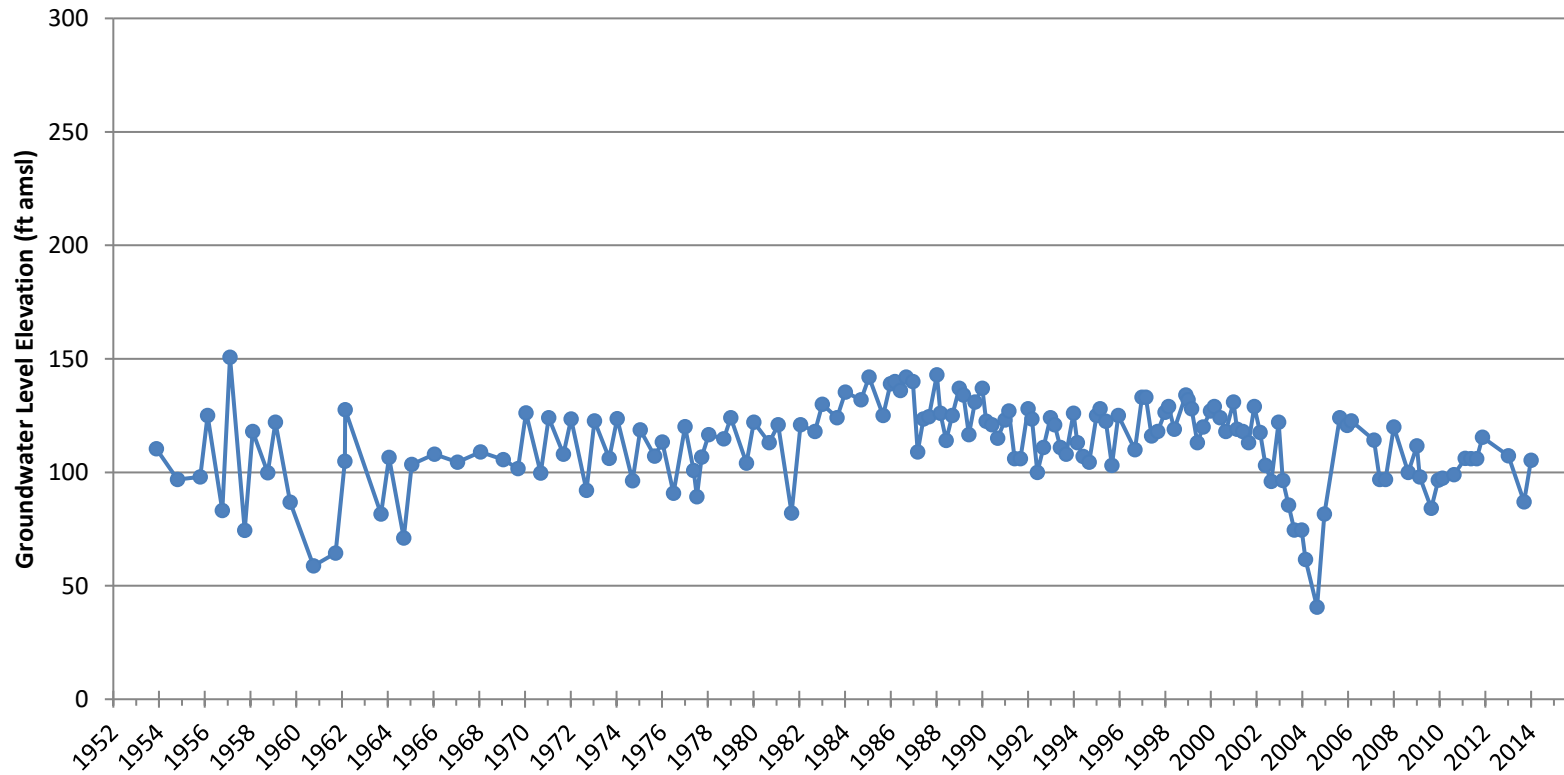
Groundwater Hydrographs - Shallow

23S/25E-19D01



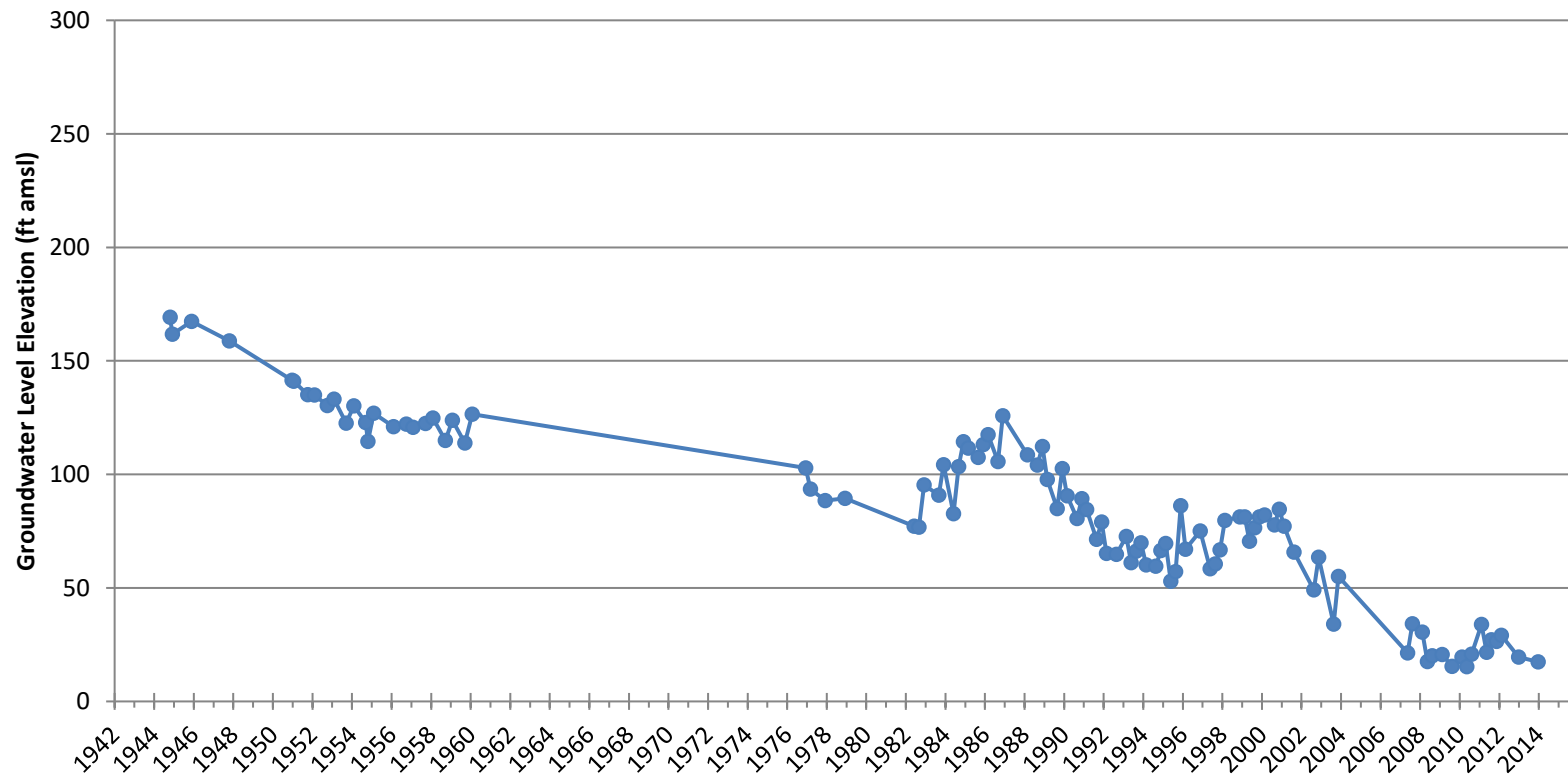
Groundwater Hydrographs - Shallow

23S/24E-28J02



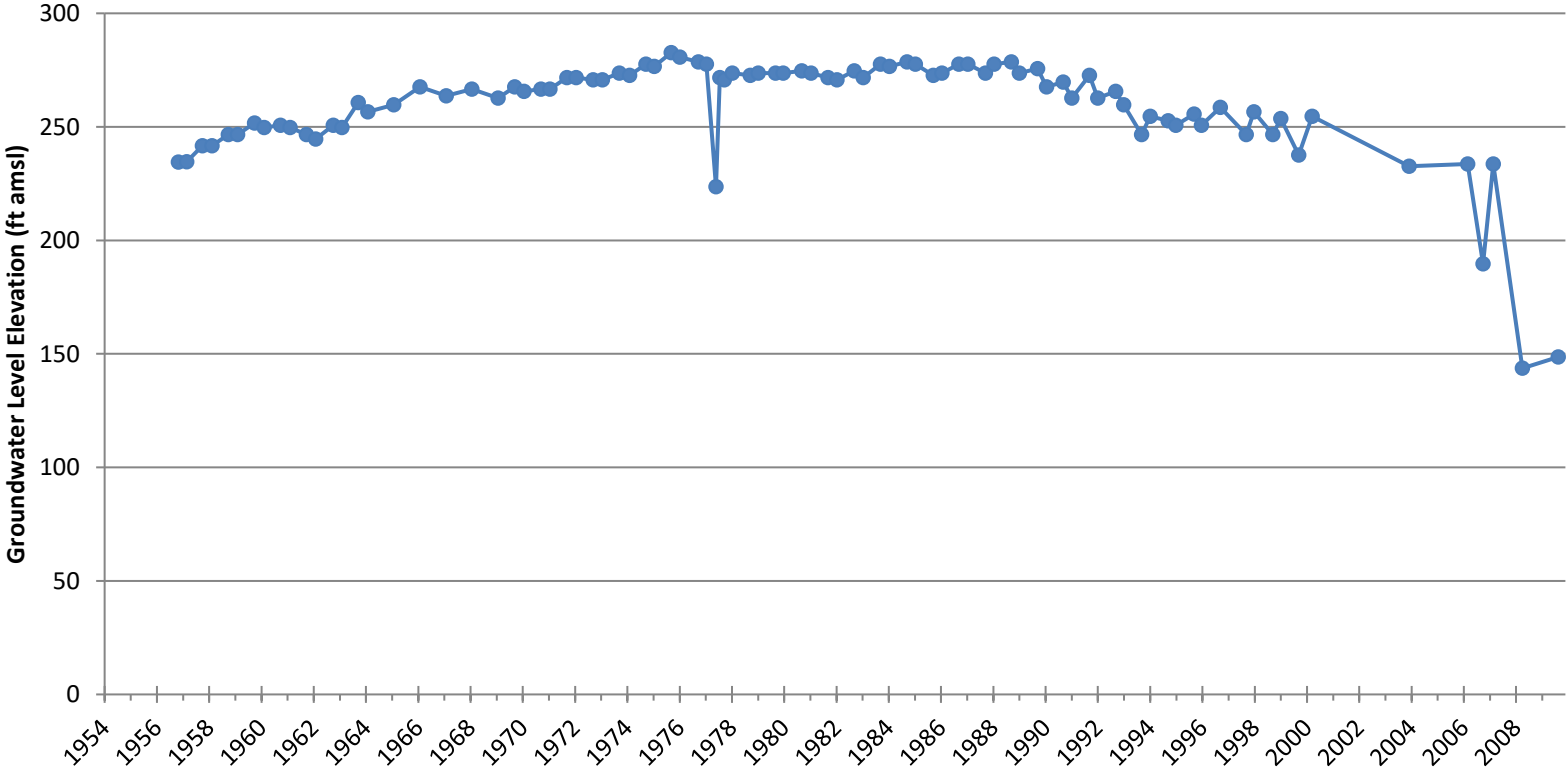
Groundwater Hydrographs - Shallow

22S/24E-20A01



Groundwater Hydrographs - Shallow

24S/25E-35P01



22/23-2141

POLSKY PORTABLE

ORIGINAL

LOG OF WELL WINTEN BROS. DRILLING COMPANY

"The Old" and "The New"
DELANO, CALIFORNIA
Well Number 2141

PHONE 2021

Name Wintgen Bros. Drilling Company

Address Angola, California

Well Started 7/20/50

Well finished 7/31/50

Diameter 3"

Gauge 5/16

Total Depth _____

Depth to Water _____

Well
GI

Strata Formation	From Feet	To Feet	Perforated
Top Soil	0	6	2 ft. 16" 5/16 O.D. perforated
Sand	6	15	
Clay	15	52	37 ft. 5/16 16" O.D. p. in.
Sandy Clay	52	105	
Sand	105	119	
Sandy Clay	119	202	
Hard Sand	202	262	
Sand	262	285	
Sandy Clay	285	420	
Sand	420	432	
Hardy Clay	432	460	
Tough Clay	460	480	
Sandy Clay	480	510	
Hard Blue Slate	510	521	

POLSKY PORTABLE

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY --- DO NOT FILL IN

Owner's Well No. #2-13W

~~E20~~ W-14

No. **E054456**

Date Work Began 6/19/2007, Ended 7/12/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0220

Permit Date 5/15/2007

STATE WELL NO./STATION NO.			
LATITUDE		LONGITUDE	
APN/TRS/OTHER			

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		DRILLING METHOD REVERSE FLUID _____	DESCRIPTION
DEPTH FROM SURFACE		Describe material, grain, size, color, etc.	
Ft.	to Ft.		
0	25		SANDY BROWN CLAY
25	38		SANDY BLUE CLAY
38	50		SANDY BROWN CLAY
50	54		SAND
54	61		CLAY
61	66		SANDY CLAY
66	74		CLAY
74	79		SANDY CLAY
79	86		CLAY BROWN
86	91		BLUE CLAY
91	95		SAND
95	98		SANDY CLAY
98	111		CLAY
111	118		FINE SAND
118	126		SANDY CLAY
126	133		BLUE CLAY
133	142		SAND
142	158		BLUE CLAY
158	161		SAND
161	170		BLUE CLAY
170	177		SAND
177	196		BLUE CLAY
196	202		SANDY CLAY
202	205		BLUE CLAY
205	216		SANDY CLAY
216	228		BLUE CLAY
228	234		BLUE CLAY & SAND
234	243		CLAY
243	248		SAND
248	253		SANDY CLAY

Name **ANGIOLA WATER DIST.**
Mailing Address **944 WHITLEY AVE. SUITE CORCORAN CA 93212**
CITY STATE ZIP

WELL LOCATION
Address **RD 40 & AVE 112**
City **ANGIOLA CA**
County **TULARE**
APN Book **291** Page **110** Parcel **05**
Township **22 S** Range **23 E** Section **33**
Latitude _____

LOCATION SKETCH

DEG. MIN. SEC. NORTH SOUTH WEST EAST

Ave 112
Rd 40 1/4 mile

ACTIVITY (✓)
 NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify) _____

— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)
WATER SUPPLY
Domestic _____ Public _____
 Irrigation _____ Industrial _____

MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDICATION _____
OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
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.

TOTAL DEPTH OF BORING **490** (Feet)
TOTAL DEPTH OF COMPLETED WELL **490** (Feet)

DEPTH FROM SURFACE	BORE HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)							
Ft.	to Ft.	BLANK	SCREEN	CON-DUCTOR	FILL PIPE				
0	50			✓		STEEL	36"	5/16"	
0	240	✓				STEEL	18"	5/16"	
240	480		✓			STEEL	18"	5/16"	.050 SLO
480	490	✓				STEEL	18"	5/16"	

DEPTH FROM SURFACE	ANNULAR MATERIAL				
	TYPE				
Ft.	to Ft.	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	490			✓	1/4 X 10

ATTACHMENTS (✓)

— Geologic Log
 Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 **MYERS BROS. WELL DRILLING, INC.**
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA **93230-4844**
ADDRESS CITY STATE ZIP
Signed *Carla Daniel* DATE SIGNED **07/16/07** 548214
WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Owner's Well No. #2-13W

No. **E054456**

Date Work Began 6/19/2007, Ended 7/12/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0220

Permit Date 5/15/2007

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓)		DRILLING METHOD	FLUID	DESCRIPTION
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE (SPECIFY)		REVERSE		Describe material, grain, size, color, etc.
DEPTH FROM SURFACE	Ft. to Ft.			
253	265	SAND		
265	269	CLAY		
269	276	SAND		
276	278	CLAY W/SAND		
278	296	CLAY		
296	303	SAND		
303	309	CLAY		
309	316	SAND		
316	322	SANDY CLAY		
322	325	SAND		
325	337	CLAY		
337	346	SAND		
346	354	SANDY CLAY		
354	367	CLAY		
367	374	SAND		
374	381	SANDY CLAY		
381	384	CLAY		
384	385	SANDY CLAY		
385	391	SAND		
391	404	CLAY		
404	410	SAND		
410	423	CLAY		
423	434	CLAY W/LITTLE SAND		
434	439	SAND		
439	443	SANDY CLAY		
443	454	SAND		
454	456	CLAY		
456	463	SAND		
463	472	CLAY		
472	480	SAND		

Name ANGIOLA WATER DIST.
Mailing Address 944 WHITLEY AVE. SUITE
CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION
Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 05
Township 22 S Range 23 E Section 33
Latitude

LOCATION SKETCH

DEG. MIN. SEC. DEG. MIN. SEC.

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)
 NEW WELL
 MODIFICATION/REPAIR
 Deepen
 Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)
 WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING _____
 TEST WELL _____
 CATHODIC PROTECTION _____
 HEAT EXCHANGE _____
 DIRECT PUSH _____
 INJECTION _____
 VAPOR EXTRACTION _____
 SPARGING _____
 REMEDIATION _____
 OTHER (SPECIFY) _____

TOTAL DEPTH OF BORING 490 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
 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.

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)	BLANK	SCREEN	CON-DUCTOR				
0	50	44"				STEEL	36"	5/16"	
0	240	30"	✓			STEEL	18"	5/16"	
240	480	30"		✓		STEEL	18"	5/16"	.050 SLO
480	490	30"	✓			STEEL	18"	5/16"	

DEPTH FROM SURFACE	ANNULAR MATERIAL				
	TYPE				
0	50	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	490				SIX SACK
					1/4 X 10

- ATTACHMENTS (✓)**
- Geologic Log
 - Well Construction Diagram
 - Geophysical Log(s)
 - Soil/Water Chemical Analysis
 - 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP

Signed _____ 07/16/07 548214
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

Owner's Well No. #2-13W

Date Work Began 6/19/2007, Ended 7/12/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0220 Permit Date 5/15/2007

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. **E054456**

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.			
LATITUDE		LONGITUDE	
APN/TRS/OTHER			

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE _____ (SPECIFY)

Name ANGIOLA WATER DIST.

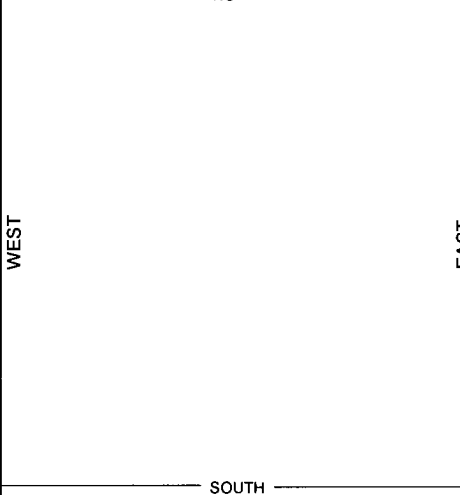
DRILLING METHOD REVERSE FLUID _____

Mailing Address 944 WHITLEY AVE. SUITE CORCORAN CA 93212
CITY STATE ZIP

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain, size, color, etc.</i>
Ft.	to Ft.	
480	490	CLAY

WELL LOCATION
Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 05
Township 22 S Range 23 E Section 33
Latitude _____

LOCATION SKETCH NORTH



ACTIVITY (✓)
 NEW WELL
 MODIFICATION/REPAIR
 Deepen
 Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)
WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING
 TEST WELL
 CATHODIC PROTECTION
 HEAT EXCHANGE
 DIRECT PUSH
 INJECTION
 VAPOR EXTRACTION
 SPARGING
 REMEDIATION
 OTHER (SPECIFY)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

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.

TOTAL DEPTH OF BORING 490 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING (S)							
		TYPE (✓)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
BLANK	SCREEN	CON-DUCTOR	FILL PIPE						
0: 50	44"			✓		STEEL	36"	5/16"	
0: 240	30"	✓				STEEL	18"	5/16"	
240: 480	30"		✓			STEEL	18"	5/16"	.050 SLO
480: 490	30"	✓				STEEL	18"	5/16"	

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE			
	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0: 50	✓			SIX SACK
0: 490			✓	1/4 X 10

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP

Signed _____ DATE SIGNED 07/16/07 C-57 LICENSE NUMBER 548214

WELL DRILLER/AUTHORIZED REPRESENTATIVE

DATE SIGNED

C-57 LICENSE NUMBER

21/25-13

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page ___ of ___

Owner's Well No. _____

No. 488425

Date Work Began 2/8/92, Ended 3/12/92

Local Permit Agency Tulare County Health Dept.

Permit No. _____ Permit Date 1/9/92

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

Name Midge Jones
Mailing Address 15754 Ave 168
Tulare Ca 93274

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE		DESCRIPTION
Ft.	to Ft.	
0	12	Sandy clay.
12	15	sand
15	88	Sandy clay.
88	122	sand
112	124	Sandy clay
124	154	sand
154	178	gray clay.
178	190	red-gray clay.
190	210	red clay
210	222	sand & joint clay.
222	252	red clay.
252	260	sands

WELL LOCATION

Address 15754 Ave 168
City Tulare
County Tulare
APN Book 232 Page 090 Parcel 16
Township 21S Range 25E Section 13
Latitude _____ Longitude _____

LOCATION SKETCH

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)

Well

Ave 168

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

OUTSIDE CONC. CLAY AREA

TOTAL DEPTH OF BORING 256 (Feet)
TOTAL DEPTH OF COMPLETED WELL 257 (Feet)

DRILLING METHOD Cable tool FLUID MUD

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 112 (Ft.) & DATE MEASURED 3/12/92

ESTIMATED YIELD 250 (GPM) & TEST TYPE air lift

TEST LENGTH 12 (Hrs.) TOTAL DRAWDOWN 116 (Ft.)

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

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING(S)					ANNULAR MATERIAL				
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE				
0 to 20	20"	✓	Steel	19 1/2	0.250	None	✓				
0 to 243	12"	✓	Steel	12	10ga.						
175 to 225	mils		perforations	from 175-225							

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 Lott Drilling Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 1593 Joyce Circle Tulare Ca 93274
CITY STATE ZIP

Signed Marked Lott DATE SIGNED 3/15/92 398407
WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

ORIGINAL
File with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

215/26E-10
STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page 1 of 1
Owner's Well No. 2
Date Work Began 2-5-99, Ended 2-13-99 No. 519706
Local Permit Agency TCEH
Permit No. 79084 Permit Date 2-2-99

GEOLOGIC LOG

ORIENTATION (✓) VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain size, color, etc.</i>
Ft.	to Ft.	
0	3	Top Soil
3	15	(Fine) sand
15	19	(Coarse) sand
19	30	Green clay
30	35	(Coarse) sand (H ₂ O)
35	41	(Fine) sand
41	57	sand + Gravel (H ₂ O)
57	105	Brown sandy clay
105	107	(Coarse) sand (H ₂ O)
107	132	Brown clay + sand
132	140	sandstone (Hard)
140	162	Red clay + sand
162	167	(Coarse) sand (H ₂ O)
167	172	sandstone (Hard)
172	176	(coarse) sand (H ₂ O)
176	205	Brown clay + sand

WELL OWNER

Name Neil Hefner
Mailing Address 18777 Ave 184
Strathmore Ca. 93267
CITY STATE ZIP

WELL LOCATION

Address _____
City SAME
County _____
APN Book 236 Page 030 Parcel 008
Township 215 Range 26E Section 10
Latitude _____ NORTH Longitude _____ WEST
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

WEST EAST

Ave 184
Rd 192
40 Acres

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)

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

DRILLING METHOD Rotary FLUID H₂O

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 24 (Ft.) & DATE MEASURED 2-13-99

ESTIMATED YIELD 100 (GPM) & TEST TYPE Airlift

TEST LENGTH 1 (Hrs.) TOTAL DRAWDOWN NA (Ft.)

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

TOTAL DEPTH OF BORING 205 (Feet)
TOTAL DEPTH OF COMPLETED WELL 200 (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING(S)						DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE			
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	CE-MENT (✓)		BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)	
0 : 80	12 1/2	✓	PVC	6"	3sch 40	90x3	0 : 23	✓				
80 : 200	12 1/2	✓	PVC	6"	3sch 40	90x3	23 : 205			✓	3/8 minus	

- 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 Disgo Drilling
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

1410 Tomah Porterville Ca. 93257
ADDRESS CITY STATE ZIP

Signed Lenny R Cordery
WELL DRILLER/AUTHORIZED REPRESENTATIVE

2-15-99 662109
DATE SIGNED C-57 LICENSE NUMBER

21/26-22A1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

No. 21/26-22A1
domestic well
OTHER NOS. _____

WELL LOG

State Calif County Tulare Subarea _____

Owner Bert Jackson

Location _____

Drilled by Wells Bros Address Porterville

Date August 1949 Casing diam. 10" Land-surf. alt. _____

Source of data Owner's log

(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
0-75	Soil		
75-83	Muddy sand		
83-96	Sand, Rock & gravel		
96-110	Sandy clay		
110-125	Brown clay		
125-144	Mucky sand		
144-149	Sand		
149-160	Brown clay		
160-164	Muddy sand		
164-174	Clay		
	9-170 10" pipe, 2 7/8" pipe		
	perf. 118' to 160'		

RECORD BY P. L. Klausner DATE 12/7/59 SHEET 1 OF 1

ORIGINAL
File with DWR

21/26-34

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page ___ of ___

Owner's Well No. _____ No. **489973**

Date Work Began 4-29-92 Ended 4-30-92

Local Permit Agency Tulare co.

Permit No. 64027 Permit Date 4-27-92

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

ORIENTATION () VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain size, color, etc.</i>
Ft. to	Ft.	
0	5	Top Soil
5	10	Clay
10	20	Sandy Clay
20	40	Gravelly sand
40	60	Sandy Clay Gray
60	80	Sandy Clay Coarse
80	100	Cobbles
100	120	Gravelly Clay
120	140	Sandy Clay (some cobbles)
140	160	Coarse sand
160	180	" "
180	200	" "

WATER CORC. LAY AREA

WELL OWNER

Name Brigitta Holter mann

Mailing Address 347 N. Newcomb
Porterville Ca.

CITY _____ STATE _____ ZIP _____

WELL LOCATION

Address 18975 Ave 152

City Porterville Ca.

County Tulare

APN Book 237 Page 010 Parcel 14

or Township 21S Range 26E Section 34

Latitude _____ NORTH Longitude _____ WEST

DEG. MIN. SEC. DEG. MIN. SEC.

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 Rotary FLUID Mud

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 89 (Ft.) & DATE MEASURED 4-30-92

ESTIMATED YIELD 175 (GPM) & TEST TYPE Air Lift

TEST LENGTH 5 (Hrs.) TOTAL DRAWDOWN 97 (Ft.)

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

TOTAL DEPTH OF BORING 220 (Feet)

TOTAL DEPTH OF COMPLETED WELL 200 (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING(S)					DEPTH FROM SURFACE	ANNULAR MATERIAL				
		TYPE ()	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		TYPE				
Ft. to	Ft.	BLANK	SCREEN	CON- DUCTOR	FILL PIPE		Ft. to	Ft.	CE- MENT ()	BEN- TONITE ()	FILL ()	FILTER PACK (TYPE/SIZE)
0	200						0	50	X			
0	80	X				P V C	6	Scd	40			3/8 Grav
80	200		X			"	"	"				3/32

- 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 L & L Well Drilling

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 2459 N. Oaks Sp. # 47 CITY Tulare Ca. STATE 93274 ZIP

Signed Ken Lissia DATE SIGNED 4-30-92 620671 C-57 LICENSE NUMBER

WELL DRILLER/AUTHORIZED REPRESENTATIVE

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY -- DO NOT FILL IN
2/15/23E-30
STATE WELL NO./STATION NO.
LATITUDE _____ LONGITUDE _____
APN/TRS/OTHER _____

Owner's Well No. Craig Silveira No. **47663**
Date Work Began 5/21/2007, Ended 5/22/2007
Local Permit Agency Tulare Co.
Permit No. 07-0116 Permit Date 3/28/2007

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain, size, color, etc.</i>
Ft.	to Ft.	
332	342	CLAY
342	356	SAND
356	362	CLAY
362	370	SAND
370	375	CLAY
375	395	SAND
395	406	CLAY
406	411	SAND
411	440	CLAY

WELL OWNER
Name Craig Silveria
Mailing Address 2143 N. Adams CA 93274
Tulare CITY STATE ZIP

WELL LOCATION
Address 1/4 mile s. ave 160 1/2 mile w. rd 24
City Corcoran, Ca CA
County tulare
APN Book 200 Page 230 Parcel 02
Township 21 S Range 23 E Section 30
Latitude _____ DEG. MIN. SEC. _____

LOCATION SKETCH
NORTH _____ SOUTH _____
WEST _____ EAST _____

ACTIVITY (✓)
 NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify) _____
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG") _____
PLANNED USES (✓)
WATER SUPPLY
 Domestic _____ Public _____
 Irrigation _____ Industrial _____
MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDICATION _____
OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL
DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
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.

TOTAL DEPTH OF BORING 440 (Feet)
TOTAL DEPTH OF COMPLETED WELL 420 (Feet)

DEPTH FROM SURFACE		BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE					
Ft.	to Ft.		BLANK	SCREEN	CONDUCTOR	FILL PIPE					Ft.	to Ft.	CE-MENT	BEN-TONITE	FILL	FILTER PACK (TYPE/SIZE)		
0	260	28	✓				STEEL	15.5	1/4		0	20	✓					
260	420	28		✓			STEEL	15.5	5/16	.125	20	440				GRAVEL		

ATTACHMENTS (✓)
 Geologic Log
 Well Construction Diagram
 Geophysical Log(s)
 Soil/Water Chemical Analysis
 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 Myers Well Drilling
 (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
 ADDRESS 12522 9th ave Hanford CA 93230
 CITY STATE ZIP
 Signed [Signature] DATE SIGNED 05/23/07 865822
 WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
N^o 105172
State Well No. 22/23-6
Other Well No. _____

(1) OWNER:

Name Andy Wheat
Address 143 W Prosperity ave
Tulare, Calif - 93274

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No. 1/4 mi. No. E. of Ave. 4th. So.
side of Tule river, section 6. corcoran,
22/23/6

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE <input checked="" type="checkbox"/> DOUBLE <input type="checkbox"/>				Gage or Wall	If gravel packed		
From	ft. to	ft.	Diam.		Diameter of Bore	from ft.	to ft.
" 0	" 450	"	" 16x1/4	"	0	" 450	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"

Type and size of shoe or well ring _____
Describe joint _____

(7) PERFORATIONS:

Type of perforator used stand. louver

From	ft. to	ft.	Size of perforations	in., length, by	Perf. per row	Rows per ft.
" 240	" 450	"	"	"	"	"
"	"	"	"	"	"	"
"	"	"	"	"	"	"
"	"	"	"	"	"	"

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata _____

WELL DRILLERS REPORT
7078, Water Code)

N^o 105157

AGENCY OF CALIFORNIA

State Well No. _____
Other Well No. _____

(11) WELL LOG:

Andy Wheat

Total depth	ft.	Depth of completed well	ft.
462		450	
Formation: Describe by color, character, size of material, and structure.			
434	.. 457	.. sand med.	
437	.. 440	.. clay	
440	.. 445	.. sand & clay	
445	.. 462	.. clay blue. Bottom	

Was electric log made of well? Yes No

(11) WELL LOG:

Total depth	ft.	Depth of completed well	ft.
462		450	
Formation: Describe by color, character, size of material, and structure.			
0	" 6	" top soil	
6	" 13	" sand fine & clay gray	
13	" 27	" sand med.	
27	" 32	" clay gray	
32	" 45	" sand med.	
45	" 48	" sand & blue clay	
48	" 61	" sand med.	
61	" 96	" clay blue	
96	" 121	" sand med.	
121	" 128	" clay blue	
128	" 142	" sand stone & fine & med. sand	
142	" 179	" clay blue	
179	" 184	" sand med.	
184	" 189	" clay blue	
189	" 209	" sand med.	
209	" 225	" clay blue	
225	" 236	" sand fine	
236	" 238	" clay blue	
238	" 240	" sand fine	
240	" 252	" sand med. & fine	
252	" 260	" blue clay & med. sand	
260	" 269	" sand med.	
269	" 275	" clay blue	
275	" 279	" sand med & coarse	
279	" 289	" clay blue	
289	" 291	" sand stone & med sand	
291	" 297	" clay blue	
297	" 302	" sand med. & fine	
302	" 310	" clay blue	
310	" 324	" sand med. & coarse	
324	" 332	" clay blue	
332	" 345	" sand med.	
345	" 348	" green clay	
348	" 351	" clay blue	
351	" 359	" clay blue	
359	" 371	" sand coarse & med.	
371	" 379	" clay blue	
379	" 398	" sand fine & med.	
398	" 410	" clay blue	
410	" 419	" fine & med. sand	
419	" 432	" clay green	
432	" 434	" sand fine	
continued			
Work started	6/ 24	19 77	Completed 6/30 1977

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 Dail Rhoads Well drilling
(Person, firm, or corporation) (Typed or printed)
Address 570 E. Gail ave. Tulare, Calif. 93274
Dail Rhoads
[SIGNED]
Well Driller
License No. 303612 Dated 7/7, 1977

UNCONFIRMED

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

Do Not Fill In

No. 30889

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

State Well No. _____
Other Well No. 225-33E-18

(1) OWNER:
Name SALYER LAND Co
Address Corcoran Calif

(2) LOCATION OF WELL:
County Butte Owner's number, if any Mitchell-1
Township, Range, and Section Sec 18, R23E-T22S
Distance from cities, roads, railroads, etc. 60 W Rd 24 and 1/4 mi N-Ave 120 Butte Co

(3) TYPE OF WORK (check):
New Well Deepening Reconditioning Destroying
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:
Rotary
Cable
Other

(6) CASING INSTALLED:

STEEL:		OTHER:		If gravel packed			
From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.	
0	440	140	1/4	26	0	440	

Size of shoe or well ring: _____ Size of gravel: _____
Describe joint: _____

(7) PERFORATIONS OR SCREEN:

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.	
0	200	3	14	1/8	

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata _____
From _____ ft. to _____ ft.
From _____ ft. to _____ ft.
Method of sealing Cement

(9) WATER LEVELS:
Depth at which water was first found, if known _____ ft.
Standing level before perforating, if known _____ ft.
Standing level after perforating and developing _____ ft. 34'

(10) WELL TESTS:
Was pump test made? Yes No If yes, by whom? _____
Yield: 2000 gal./min. with 80 ft. drawdown after 4 hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No If yes, attach copy

(11) WELL LOG:

Total depth	ft.	Depth of completed well	ft.
Formation: Describe by color, character, size of material, and structure			
		ft. to	ft.
100-114	Sand		
114-130	Clay		
130-148	Sand		
148-154	Clay		
154-170	Sand		
170-180	Clay		
180-195	Sand		
195-200	Clay		
200-205	Sand		
205-215	Clay		
215-230	Sand		
230-255	Clay		
255-260	Sand		
260-270	Clay		
270-277	Sand		
277-295	Clay		
295-305	Sand		
305-315	Clay		
315-335	Sand		
335-340	Clay		
340-376	Sand		
376-390	Clay		
390-402	Sand		
402-420	Clay		
420-424	Sand		
424-430	Clay		
430-434	Sand		
434-456	Clay		
456-			

UNCONFINED

CONFIDENTIAL
 Water Code Sec. 15732

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.

NAME Jerry's Well Drilling
(Person, firm, or corporation) (Typed or printed)

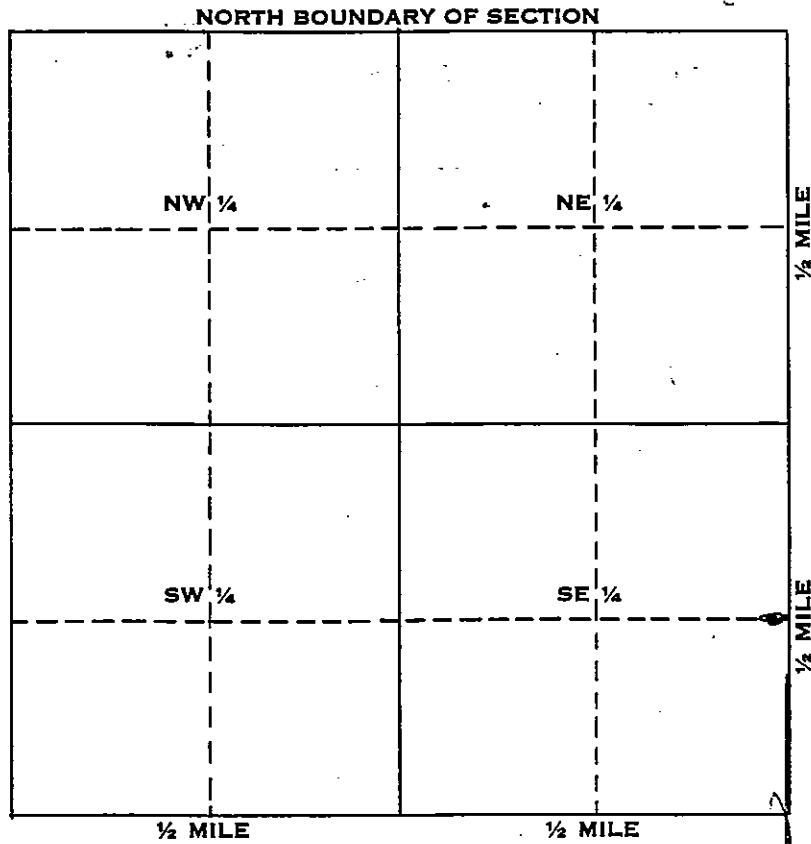
Address PO Box 787 Corcoran Calif

[SIGNED] _____
(Well Driller)

License No. 144440 Date Oct 20, 1970

SKETCH LOCATION OF WELL ON REVERSE SIDE

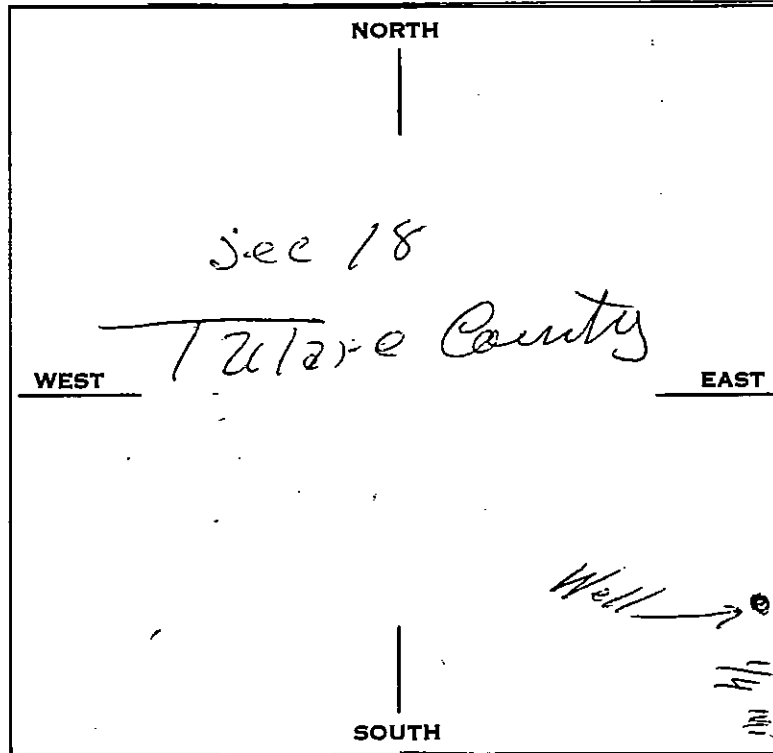
WELL LOCATION SKETCH



Township 22 S N/S
 Range 23 E E/W
 Section No. 18

Tulare Co

A. Location of well in sectionized areas.
 Sketch roads, railroads, streams, or other features as necessary.



Ave 128

SAN JOAQUIN DISTRICT
 RECEIVED

Ave 120

B. Location of well in areas not sectionized.
 Sketch roads, railroads, streams, or other features as necessary.
 Indicate distances.

ORIGINAL
File with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page ___ of ___

Owner's Well No. _____

No. **458715**

Date Work Began _____, Ended _____

Local Permit Agency _____

Permit No. _____ Permit Date _____

DWR USE ONLY - DO NOT FILL IN

21 S 24 E 19

STATE WELL NO./STATION NO.

LATITUDE _____ LONGITUDE _____

APN/TRS/OTHER _____

GEOLOGIC LOG			WELL OWNER	
ORIENTATION (∠) <input checked="" type="checkbox"/> VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)			Name <u>G. J. te VELDE RANCH</u>	
DEPTH TO FIRST WATER <u>88</u> (Ft.) BELOW SURFACE			Mailing Address <u>5850 Ave 160</u>	
DESCRIPTION			City <u>Tipton, Ca.</u> 93272	
Describe material, grain size, color, etc.			STATE _____ ZIP _____	
DEPTH FROM SURFACE			WELL LOCATION	
Ft. to Ft.			Address <u>½ mi. north of ave 160 on Rd. 64,</u>	
0 11	L.B. Clay		City <u>west side of rd., south side of tulle</u>	
11 15	Fine Sand		County <u>Tulare, Tipton</u>	
15 25	L.B. Clay		APN Book <u>200</u> Page <u>160</u> Parcel <u>016</u>	
25 31	Coarse Sand		Township <u>21s</u> Range <u>24e</u> Section <u>19</u>	
31 68	L.B. Clay		Latitude _____ NORTH Longitude _____ WEST	
68 72	Med Sand		DEG. MIN. SEC. DEG. MIN. SEC.	
72 88	L.B. Clay		LOCATION SKETCH	
88 96	Fine Sand (water)		ACTIVITY (∠)	
96 102	Med Coarse Sand		<input checked="" type="checkbox"/> NEW WELL	
102 108	L.B. CLAY		MODIFICATION/REPAIR	
108 114	Med Sand		_____ Deepen	
114 116	L. CLAY		_____ Other (Specify)	
116 124	Coarse Sand		DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")	
124 142	L.B. Clay		PLANNED USE(S)	
142 145	Coarse Sand		<input checked="" type="checkbox"/> MONITORING	
145 165	Brown Clay		WATER SUPPLY	
165 168	Coarse Sand		_____ Domestic	
168 173	Brown Clay		_____ Public	
173 185	Med Coarse Sand		<input checked="" type="checkbox"/> Irrigation	
185 190	Brown Clay		_____ Industrial	
190 206	Med Coarse Sand		"TEST WELL"	
206 230	L.B. Clay		_____ CATHODIC PROTECTION	
230 235	Blue Clay		_____ OTHER (Specify)	
TOTAL DEPTH OF BORING <u>235</u> (Feet)			SOUTH _____	
TOTAL DEPTH OF COMPLETED WELL <u>235</u> (Feet)			Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.	
			DRILLING METHOD <u>CABLE</u> FLUID _____	
			WATER LEVEL & YIELD OF COMPLETED WELL	
			DEPTH OF STATIC WATER LEVEL <u>86</u> (Ft.) & DATE MEASURED <u>12/29/95</u>	
			ESTIMATED YIELD* <u>250</u> (GPM) & TEST TYPE <u>Air</u>	
			TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN <u>6</u> (Ft.)	
			* May not be representative of a well's long-term yield.	

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING(S)						DEPTH FROM SURFACE	ANNULAR MATERIAL					
		TYPE (∠)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)		GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE			
Ft. to Ft.		BLANK	SCREEN	CON-DUCTOR	FILL PIPE									Ft. to Ft.
0 228	14	X				Cal. Weld	14	10		0 20	X			
						½"x4"x14" Steel Shoe								
163 208						Mills Perf.								

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 Roger L. Nation
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

26521 South Mooney Blvd. Visalia, Ca. 93277
ADDRESS CITY STATE ZIP

Signed Roger L. Nation 12/30/95 259884
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

ORIGINAL

File with DWR

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

Do not fill in
No. 165525
21/29-29
State Well No.
Other Well No.

Notice of Intent No.
Local Permit No. or Date.

(1) OWNER: Name ROBERT HARLEY
Address 7234 Ave 144
City TIPTON, CA.
(2) LOCATION OF WELL (See instructions):
County TULARE
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc. 1/2 mi. south of Ave 160 on Rd. 80, 75' west side of road north side of ditch bank.

(12) WELL LOG: Total depth 220 ft. Depth of completed well 220 ft.
Table with columns: from ft., to ft., Formation (Describe by color, character, size or material)
Rows: 25-32 L.B. Clay, 32-46 Coarse Sand, 46-53 L.B. Clay, 53-54 Med Sand (water), 54-62 Soft Clay, 62-95 Coarse Sand, 95-98 L.B. Clay, 98-100 Coarse Sand, 100-102 Soft Clay, 102-104 Coarse Sand, 104-107 Soft Sandy Clay, 107-133 L.B. Clay, 133-157 Coarse Sand, 157-161 L.B. Sand & Clay, 161-173 Coarse Sand & Sandstones, 173-190 L.B. Clay, 190-194 Med Sand, 194-220 L.B. Clay

(3) TYPE OF WORK:
New Well [X] Deepening []
Reconstruction []
Reconditioning []
Horizontal Well []
Destruction [] (Describe destruction materials and procedures in Item 12)
(4) PROPOSED USE:
Domestic []
Irrigation [X]
Industrial []
Test Well []
Stock []
Municipal []
Other []

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary [] Reverse []
Cable [X] Air []
Other [] Bucket []
(6) GRAVEL PACK:
Yes [] No [X] Size
Diameter of bore
Packed from to
(7) CASING INSTALLED:
Steel [X] Plastic [] Concrete []
(8) PERFORATIONS:
Type of perforation or size of screen
Table with columns: From ft., To ft., Dia. in., Gage of Wall, From ft., To ft., Slot size
Row 1: 0, 184, 14, 10, 132, 175, 1/2x3
Row 2: 1/2x14" Steel Shoe

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

(10) WATER LEVELS:
Depth of first water, if known 50 ft.
Standing level after well completion 44 ft.

(11) WELL TESTS:
Was well test made? Yes [X] No [] If yes, by whom? Nation
Type of test Pump [] Bailer [] Air lift [X]
Depth to water at start of test 44 ft. At end of test 50 ft.
Discharge 250 gal/min after hours Water temperature
Chemical analysis made? Yes [] No [X] If yes, by whom?
Was electric log made? Yes [] No [X] If yes, attach copy to this report

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: Roger L. Nation (Well Driller)
NAME: ROGER L. NATION (Person, firm, or corporation) (Typed or printed)
Address: P.O. BOX 216
City: IVANHOE, CA. Zip: 93235
License No. 259884 Date of this report 11/6/87

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

Do Not Fill In

No 30891

THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

State Well No. _____
Other Well No. 225/23 E-15

(1) OWNER:
Name Boswell Co
Address 710 Rainum Ave
Corco

(11) WELL LOG:
Total depth _____ ft. Depth of completed well _____ ft.
Formation: Describe by color, character, size of material, and structure
_____ ft. to _____ ft.

(2) LOCATION OF WELL:
County Tulare Owner's number, if any _____
Township, Range, and Section Sec. 15 - T22S - R23E
Distance from cities, roads, railroads, etc. 80ft N of Ave 120
and 1/2 miles E of Highway 43

160 - 171 clay
171 - 179 sand
179 - 184 clay
184 - 200 sand

(3) TYPE OF WORK (check):
New Well Deepening Reconditioning Destroying
If destruction, describe material and procedure in Item 11.

200 - 212 clay
212 - 217 sand
217 - 226 clay

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:
Rotary
Cable
Other

226 - 234 sand
234 - 239 clay
239 - 245 sand
245 - 261 clay

(6) CASING INSTALLED:

STEEL:		OTHER:		If gravel packed			
SINGLE <input type="checkbox"/>	DOUBLE <input type="checkbox"/>			Diameter of Bore	From ft.	To ft.	
From ft.	To ft.	Diam.	Gage or Wall				
0	420	14 1/2	1/4	26	0	420	

261 - 266 sand
266 - 277 clay
277 - 298 sand
298 - 314 clay
314 - 324 sand
324 - 328 clay
328 - 340 sand
340 - 348 clay
348 - 352 sand

Size of shoe or well ring: _____ Size of gravel: _____
Describe joint _____

(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.
240	420	4	12	1/8 1.00

352 - 355 clay
355 - 368 sand
368 - 398 clay
398 - 407 sand
407 - 412 clay
412 - 424 sand

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From 0 ft. to 50 ft.
From _____ ft. to _____ ft.
Method of sealing Cement

Work started _____ 19____, Completed _____ 19____

(9) WATER LEVELS:
Depth at which water was first found, if known _____ ft.
Standing level before perforating, if known _____ ft.
Standing level after perforating and developing _____ ft.

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

(10) WELL TESTS:
Was pump test made? Yes No If yes, by whom? Wilson
Yield: 1500 gal./min. with 38 ft. drawdown after 4 hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No If yes, attach copy _____

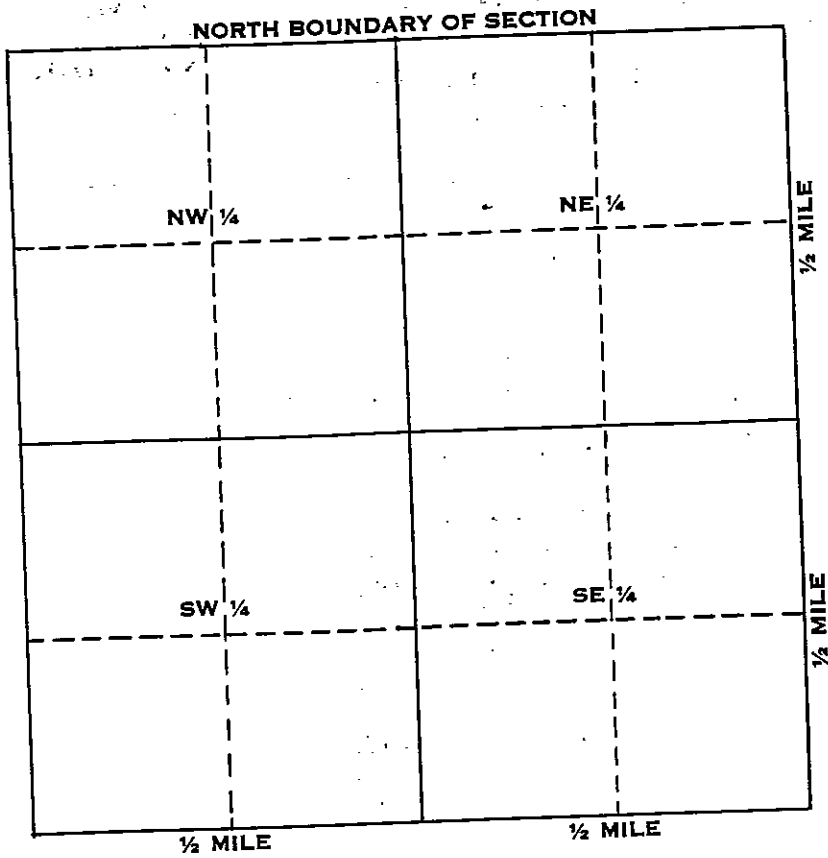
NAME TERRY'S WELL DRILLING
(Person, firm, or corporation) (Typed or printed)
Address Box 787 Corcoran Cal
[SIGNED] Terry's Well Drilling
(Well Driller)
License No. 144990 Dated 10-20, 1970

UNCONFINED
CONFIDENTIAL
Water Code Sec. 13752

SKETCH LOCATION OF WELL ON REVERSE SIDE

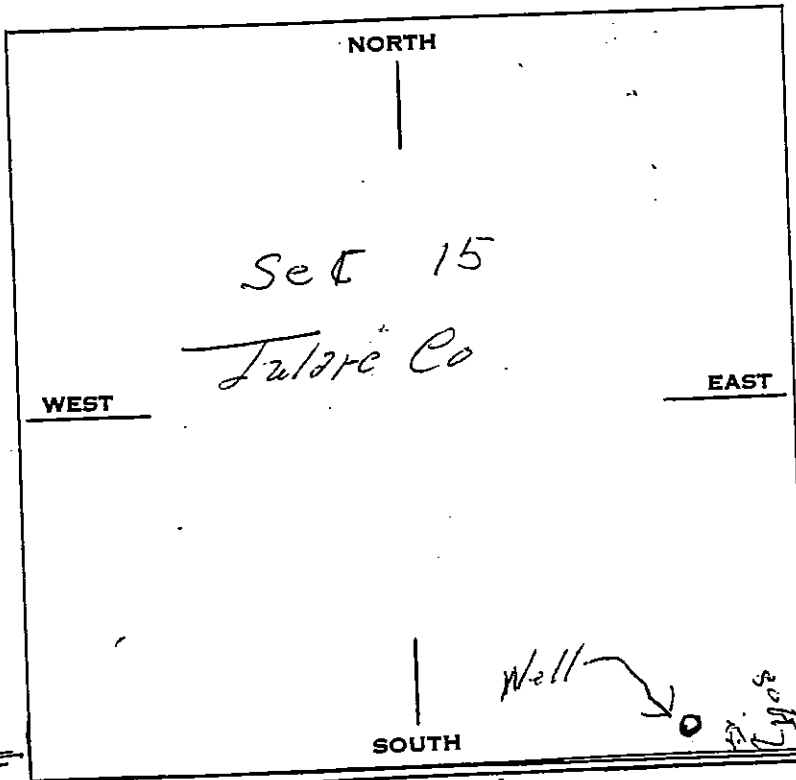
WELL LOCATION SKETCH

LANDING
No. 10/11/12



Township 22 S N/S
 Range 23 E E/W
 Section No. 15

A. Location of well in sectionized areas.
 Sketch roads, railroads, streams, or other features as necessary.



RECEIVED
 COUNTY CLERK
 SAN JOAQUIN COUNTY

B. Location of well in areas not sectionized.
 Sketch roads, railroads, streams, or other features as necessary.
 Indicate distances.

22/24-6L

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

Do Not Fill In

No 23071

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

State Well No. _____
Other Well No. 22/24-6L

(1) OWNER:

Name Los Feliz Ranch
Address RI - Box 321 Tipton Cal.

(11) WELL LOG:

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

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

100-111 Clay ft. to _____ ft.

111-123 SAND

123-135 Clay

135-141 SAND

141-144 Clay

144-148 SAND

148-170 Clay

170-177 SAND C.

177-188 Clay

188-194 SAND C.

194-219 Clay

219-228 SAND C.

228-233 Clay

233-238 SAND C.

238-251 Clay

251-254 SAND C.

254-256 Clay

256-258 SAND C.

258-267 Clay

267-275 SAND C.

275-284 Clay

284-293 SAND C.

293-304 Clay

304-308 SAND C.

308-310 Clay

310-316 SAND M. + F.

316-324 Clay

324-330 SAND M.

330-334 Clay

334-340 SAND F.

340-345 Clay

345-360 SAND C.

(2) LOCATION OF WELL:

County Tulare Owner's number, if any #61

Township, Range, and Section S 6 - R 24 E - T 2 S

Distance from cities, roads, railroads, etc. 1/2 mile SW of

AVE 144 & RD 72 INTERSECTION

(3) TYPE OF WORK (check):

New Well Deepening Reconditioning Destroying

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal

Irrigation Test Well Other

(5) EQUIPMENT:

Rotary

Cable

Other

(6) CASING INSTALLED:

STEEL: _____ OTHER: _____
SINGLE DOUBLE

If gravel packed

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	466	16	1/4	27	0	460

Size of shoe or well ring:

Size of gravel:

Describe joint

(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.
160	360	24	2	1/8

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.

Were any strata sealed against pollution? Yes No If yes, note depth of strata _____

From _____ ft. to _____ ft.

From _____ ft. to _____ ft.

Method of sealing

(9) WATER LEVELS:

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

Standing level before perforating, if known _____ ft.

Standing level after perforating and developing _____ ft. 110

(10) WELL TESTS:

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

Yield: 1600 gal./min. with 50 ft. drawdown after _____ hrs.

Temperature of water _____ Was a chemical analysis made? Yes No

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

CONFIDENTIAL
Water Code Sec. 7080

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.

NAME Terrys Well Drilling
(Person, firm, or corporation) (Typed or printed)

Address 2125 Vandorsten

Corcoran
[SIGNED] _____
(Well Driller)

License No. 140990 Dated Aug 31, 1966

SKETCH LOCATION OF WELL ON REVERSE SIDE

EP-5

EP-5

PROPERTY LOCATED I MILE EAST OF PORTERVILLE

Date drilling completed Oct. 17th. 1934:

Depth of well: 154 ft.

Depth of casing 154 ft.

Water level: 60 ft.

155 ft. Of 14 gage 12 inch single collar hard red steel casing
1/2 X 8 shoes

Depth perforated 60 to 144 ft.

Penetration record

<u>From</u>	<u>To</u>	<u>Type of formation</u>
68	119	Coarse
119	135	Clay. Rocky
135	152	Sand and Bolders
152	154	Black Rock

Driller; Hickman

Well 21

MYERS BROTHERS, Inc.

Reverse Circulation Rotary Gravel Pack Well Log
8650 E. Lacey Blvd. — Hanford, California — Phone 582-9031

Dates:
Started: 11-16-67
Completed: 11-23-67
Driller: Summers
Well No. TH 21
Industrial
Domestic
Irrigation
Other

CUSTOMER CITY OF PORTERVILLE CITY - 21
ADDRESS
WELL LOCATION CORNER OF HARRISON & LOCKETT STS.
PORTERVILLE. TULARE CO.

TYPE OF WORK

STRATA INFORMATION

1. Hole Size 5 5/8"
2. Casing Dia.
3. Casing Thickness
4. Blank Casing
5. Perforation
5. Type of Perforation
7. Depth 280'
8. Gravel Tons
9. Gravel size

BROWN CLAY	Ft. 0	to Ft. 7
SAND	Ft. 7	to Ft. 16
ROCKS & GRAVEL	Ft. 16	to Ft. 31
SAND, STRINGERS BROWN CLAY	Ft. 31	to Ft. 44
BROWN CLAY	Ft. 44	to Ft. 72
RED CLAY	Ft. 72	to Ft. 101
BROWN CLAY	Ft. 101	to Ft. 130
COARSE SAND	Ft. 130	to Ft. 137
BROWN CLAY	Ft. 137	to Ft. 143
SAND	Ft. 143	to Ft. 150
BROWN CLAY	Ft. 150	to Ft. 152
SAND	Ft. 152	to Ft. 161
ROCKS	Ft. 161	to Ft. 165
SAND	Ft. 165	to Ft. 168
ROCKS & SAND	Ft. 168	to Ft. 174
SAND, SMALL STRINGERS BR. CLAY	Ft. 174	to Ft. 187
BROWN CLAY	Ft. 187	to Ft. 215
BR. CLAY & SAND STRINGERS	Ft. 215	to Ft. 217
SAND	Ft. 217	to Ft. 221
BROWN CLAY	Ft. 221	to Ft. 225
HARD BR. CLAY, ROCK STRINGERS	Ft. 225	to Ft. 257
HARD BLUE ROCK	Ft. 257	to Ft. 258
MED. HARD BROWN ROCK	Ft. 258	to Ft. 263
HARD GREEN ROCK	Ft. 263	to Ft. 280
	Ft.	to Ft.
	Ft.	to Ft.
	Ft.	to Ft.

EXTRAS

1. Hole Size
2. Conductor Pipe Size
3. Depth
4. Cement Yds.

Remarks:
GET WATER SAMPLES
WITH SUBMERSIBLE
PUMP. 138-143 & 177-184'
FILLED HOLE WITH
CUTTINGS 280'-100'
PUT IN 15 BAGS BENTONITE
HOLE PLUG 100'-20'
PUMPED IN CEMENT &
BENTONITE 20'-

23/27-301

23/27-301 (3)

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
WELL LOG

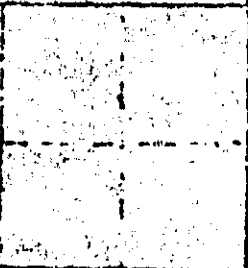
County Tulare Owner _____ U.S.B.R. No. 23-27-3
Dist. _____ Use _____ Local No. Saucelito 5
Quad. Dacor Driller _____ Date 11-10-47
Location 23-27-3 (0.01-0.995) 53' E & 22.5' S of NW Cor. S 3, T 23 R 27

Surf. Elev. _____ Groundwater Elev. _____ Date _____
Depth _____ Groundwater Elev. _____ Date _____
Yield _____ Aquifers _____
Drawdown _____ Artesian head _____ Date _____
Casing _____ % Sand-Gravel _____

Source of data _____ Type drill _____ Diam. hole _____

Depth	Elev.	Thick	Description
161	310	4.2	Reddish-brown firm clay with many fractures & manganese stains, 10% angular sand grains to 1mm; white feldspars very prominent, relatively impermeable.
165.2	305.3	2.7	Tn silty loam as 87.5 - 96 but with 20% sand
167.9	303.1	4.6	Tan loose silty ng. fairly well sorted arkosic coarse sand, av. 0.6mm, max. 3mm; 15% white silty clay, decomposition product matrix, permeable.
172.5	298.5		Bottom

Note; Above core examined while very dry. As materials were found in place, indurations were much different than here noted.



No. 258421
22/27-9

Notice of Intent No. _____
Local Permit No. or Date _____

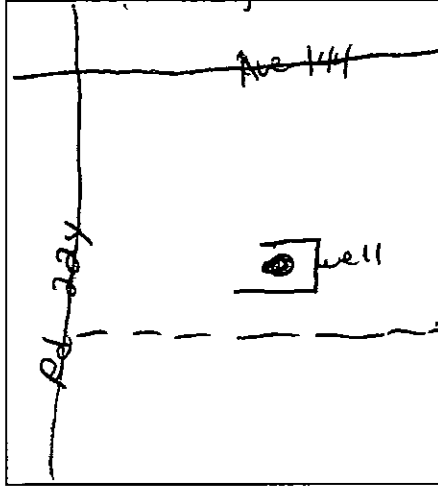
State Well No. _____
Other Well No. _____

(1) OWNER: Name Jess Blasingame,
Address 22156 Ave 152
City Porterville, Ca. ZIP 93257

(12) WELL LOG: Total depth 156 ft. Completed depth 156 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0	-	2	hvd clay.
2	-	3	hard pan
3	-	32	sandy clay.
32	-	44	sand
44	-	84	rock, gravel, cobbles.
84	-	104	sandy clay.
104	-	140	joint clay.
140	-	150	hard clay.
150	-	156	gravel + joint clay.

(2) LOCATION OF WELL (See instructions):
County Tulare Owner's Well Number _____
Well address if different from above 22511 Ave 144
Township 27S Range 27E Section 4
Distance from cities, roads, railroads, fences, etc. approximately
2 miles southwest of Porterville to inter-
section of Ave 144 + Rd 224 in south-
east corner of intersection approx 250 feet S.E. of inter-



(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
Municipal
Other (Describe)

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	140	8	12	104	156	1/8x4

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

Work started 3-24 1988 Completed 3-31 1988

(10) WATER LEVELS:
Depth of first water, if known 32 ft.
Standing level after well completion 32 ft.

WELL DRILLER'S STATEMENT:

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

(11) WELL TESTS:
Was well test made? Yes No If yes, by whom? Lott Drilling
Type of test Pump Bailer Air lift
Depth to water at start of test 52 ft. At end of test 65 ft.
Discharge 100 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

Signed Markus Lott (Well Driller)
NAME Lott Drilling Co.
(Person, firm, or corporation) (Typed or printed)
Address 1593 Joyce Creek
City Tulare Ca. ZIP 93274
License No. 398407 Date of this report 4-8-88

NOT FOR PUBLIC USE
WATER CODE SEC. 13752

OUTSIDE CORG
CLAY AREA

22/26-17A1

22/26-17A1

BOLSEY PORTABLE MICROFILMER

Poplar well - G

245 feet

90 ft. 12" casing

155 ft. 12" "

245

Ed 13-50 (190')

BOLSEY PORTABLE MICROFILMER

ORIGINAL
File with DWR

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

Do not fill in

No. 085866

Notice of Intent No. _____

Local Permit No. or Date _____

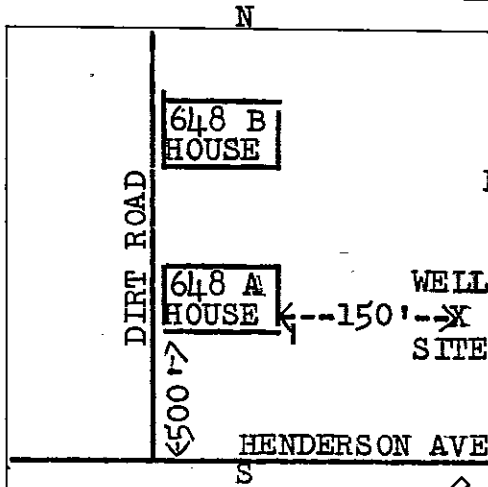
State Well No. 21/27-24
Other Well No. _____

(1) OWNER: Name DENNIS & TYNES
Address 1181 W. PUTNUM
City PORTERVILLE, CALIF. Zip 93257

(2) LOCATION OF WELL (See instructions):
County TULARE Owner's Well Number _____
Well address if different from above _____
Township _____ Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. 150 FT. EAST OF
648 A EAST HENDERSON, PORTERVILLE

(12) WELL LOG: Total depth 152 ft. Depth of completed well 152 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0 - 3	TOP SOIL
3 - 74	RED CLAY
74 - 76	GREY CLAY
76 - 82	GREY ROCK
82 - 108	GREY CLAY
108 - 112	GREY ROCK
112 - 118	GREY CLAY
118 - 128	GREY ROCK
128 - 142	GREY CLAY
142 - 152	1/8" to 1/2" ROCK



(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 _____
Diameter of bore _____
Packed from _____ to _____ ft.

(7) CASING INSTALLED:
Steel Plastic Concrete

From ft.	To ft.	Dia. in.	Gage or Wall
0	152	12	10

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

From ft.	To ft.	Slot size
124	148	1" x 1/2"

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

(10) WATER LEVELS:
Depth of first water, if known 76 ft.
Standing level after well completion 56 ft.

(11) WELL TESTS:
Was well test made? Yes No If yes, by whom? _____
Type of test Pump Bailor 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

Work started 6-8 19 79 Completed 6-14 19 79

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 Arthur Cuddeback RIG #1
(Well Driller)
NAME STAR WELL DRILLING
(Person, firm, or corporation) (Typed or printed)
Address 14583 AVE. 384 RT. #1
City VISALIA, CALIF. Zip 93277
License No. #373338 Date of this report 6-19-79

23/25-16N4

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

LOCATION NOT CHECKED

Do Not Fill In

No. 55087

State Well No. 23/25-16N4

Other Well No. _____

(1) OWNER: U. S. Geological Survey
Name Geodetic Survey Groundwater Branch
Address 2520 Marconi Ave.
Sacramento 21, Calif.

(2) LOCATION OF WELL:
County Tulare Owner's number, if any--
R. F. D. or Street No.
650' West of Southern Pacific R.R.
near 99 Hwy
470' North of Avenue 72

(3) TYPE OF WORK (check):
New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other
(5) EQUIPMENT:
Rotary
Cable
Dug Well

(6) CASING INSTALLED:
SINGLE DOUBLE
From 6 ft. to 240 ft. 8" Diam. # 12 Gage or Wall
Diameter of Bore from 14" to 250 ft.
Type and size of shoe or well ring None Size of gravel: Rejects
Describe joint Belled End, Welded

(7) PERFORATIONS:
Type of perforator used Milled slots
Size of perforations 2- 1/2 in., length, by 1/8 in.
From 200 ft. to 240 ft. Perf. per row 8 Rows per ft. 2

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From _____ ft. to _____ ft.
Method of Sealing _____

(9) WATER LEVELS:
Depth at which water was first found 115 ft.
Standing level before perforating _____ ft.
Ling level after perforating 115 ft.

(10) WELL TESTS: (Air lift)
Was a pump test made? Yes No If yes, by whom? Belknap
Yield: 60 gal./min. with 15 ft. draw down after 1 hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG: **PAGE 1 OF 2**
Total depth 250 ft. Depth of completed well Est. 258 ft.

Formations: Describe by color, character, size of material, and structure.		
ft.	to	ft.
0	6	Sand
6	16	Sandy Clay
16	33	Coarse Sand
33	40	Brown Sandy Clay
40	43	Brown Hardpan
43	57	Brown Clay
57	58	Medium Coarse Sand
58	59	Clay
59	64	Medium Coarse Sand
64	72	Hard Clay
72	75	Coarse Sand
75	80	Brown Sandy Clay
80	84	Coarse Sand
84	89	Brown Clay
89	90	Coarse Sand
90	95	Brown Clay
95	103	Coarse Sand
103	107	Brown Clay
107	110	Coarse Sand
110	111	Brown Clay
111	115	Coarse Sand
115	122	Sandy Brown Clay
122	125	Coarse Sand
125	126	Brown Clay
126	129	Coarse Sand
129	137	Brown Clay
137	146	Coarse Sand
146	153	Sandy Brown Clay
153	157	Coarse Sand
157	158	Brown Clay
158	164	Coarse Sand
164	168	Brown Clay
168	170	Coarse Sand
170	178	Brown Sandy Clay
178	180	Coarse Sand
180	181	Sandy Brown Clay
181	183	Coarse Sand
183	190	Sandy Brown Clay
190	201	Coarse Sand
201	203	Sandy Brown Clay
203	211	Coarse Sand
211	218	Brown Clay
218	219	Coarse Sand (OVER)

Work started 6-19-59 Completed 6-23-59

WELL DRILLER'S STATEMENT: **Cont'**
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME Bill Belknap BH
(Person, firm, or corporation) (Typed or printed)
Address 9274 So. Buttonwillow Ave.
Reedley, Calif.

[SIGNED] Bill Belknap
Well Driller
License No. 106833 Dated 6-26-59

23/25-16W4

Page 2 of 2

Log No 55087

219
221
225
230
237
244

221
225
230
237
244
250

Sandy Brown Clay
Coarse Sand -
Sandy Brown Clay
Coarse Sand
Sandy Brown Clay
Coarse Sand

U. S. M. S.

TEST WELL

All strata where no color is designated were logged as being yellow-brown

The bottom of the casing is open and the gravel was allowed to flow into the well on top of an anchor to which a plastic covered wire rope is attached.

1959 SEP 10 AM 11 35

DEPARTMENT OF
MINERAL RESOURCES
SACRAMENTO

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(Insert appropriate number)

25/26-9

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

25/26-9N1 (G.S.)
Kern

LOCATION NOT CHECKED

Do Not Fill In
No. 36188

State Well No. _____
Other Well No. 25/26-9

(2) LOCATION OF WELL:

County Kern Owner's number, if any—
R. F. D. or Street No. _____
Sec. 9
Twnshp 25 S
Range 26 E

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandonment
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE
From 0 ft. to 351 ft. Diam. 8" Gage of Wall 12 ga.
If gravel packed
Diameter of Bore from 0 ft. to 351 ft.
Type and size of shoe or well ring _____
Describe joint _____

(7) PERFORATIONS:

Type of perforator used Machine
Size of perforations 1 1/8" in. length, by 1/32" in.
From 276 ft. to 351 ft. Perf. per row _____ Rows per ft. _____

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any struts sealed against pollution? Yes No If yes, note depth of struts _____
From _____ ft. to _____ ft.
Method of Sealing _____

(9) WATER LEVELS:

Depth at which water was first found _____ ft.
Standing level before perforating _____ ft.
Standing level after perforating _____ ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom? _____
Yield _____ gal./min. with _____ ft. draw down after _____ hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:

Total depth	ft.	Depth of completed well	ft.
0	ft. to 5	ft.	Top Soil
5	150		Hard Sand
150	240		Clay
240	250		Sand
250	310		Sandy Clay
310	320		Sand
320	351		Clay

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.
NAME Whitten Pump Inc. (Typed or printed)
Address 1744 High St.
Bozamo, Calif.
[SIGNED] Arnold E. Whitten Well Driller
License No. 148282 Dated 4/9/56
51559 2-54 50M QUIN © 2PO DWR FORM NO. 240 (REV. 3-54)

24/25-16B1

LOG OF WELL 24/25-16B1

ORIGINAL

LOG OF WELL
WHITTEN BROS. DRILLING COMPANY

"The Oldest and Best"
DELANO, CALIFORNIA

Well Drilled For

SINCE 1913

PHONE 2621

Name Emitt Brown

Address Delano, California

Well Started March 6 Well finished March 20 Diameter 12"

Gauge 12-Dble Total Depth 300' Depth to Water Water level 107'

Strata Formation	From Feet	To Feet	Perforated	From Feet	To Feet
Clay	0	187	Perforating well from 120' to 285'		
Sand	187	190			
Clay	190	300			

23/26-28H1

23/26-28H1 (G.S.)

LOCATION NOT CHECKED
Do Not Fill In
No. 32114

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)
STATE OF CALIFORNIA

State Well No. _____
Other Well No. 235/26F 28

(1) OWNER:
Name L.H. Bendosky
Address P.O. Box 1442
Farland, California

(2) LOCATION OF WELL:
County Tulare Owner's number, if any—
R. F. D. or Street No.
Section NW 28
Township 23S
Range 26E

(3) TYPE OF WORK (check):
New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other
(5) EQUIPMENT:
Rotary
Cable
Dug Well

(6) CASING INSTALLED:
SINGLE DOUBLE
From 300 ft. to 8" x #12 Diam. Gage or Wall
If gravel packed
Diameter of Bore 12 1/2 from 0 to 300 ft.
Type and size of shoe or well ring
Describe joint

(7) PERFORATIONS:
Type of perforator used Machine
Size of perforations 1/8" x 1" cc in. length, by in.
From 190 ft. to 300 ft. Perf. per row Rows per ft.

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From 140 to 160 ft.
Method of Sealing Cement plug

(9) WATER LEVELS:
Depth at which water was first found ft.
Standing level before perforating ft.
Standing level after perforating ft.

(10) WELL TESTS:
Was a pump test made? Yes No If yes, by whom?
Yield gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:
Total depth 300 ft. Depth of completed well 300 ft.
Formations: Describe by color, character, size of material, and structure.
0 ft. to 6 ft. Top Soil
6 " 24 " Hard Pan
24 " 100 " Sandy Clay
100 " 125 " Sand
125 " 200 " Yellow Clay
200 " 215 " Sand
215 " 280 " Clay
280 " 285 " Sand
285 " 300 " Hard Clay

Section 7076.1, Water Code

Work started 4/55 19 Completed 4/55 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.
NAME Whitten Pumps Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 High St.
Delano, California
[SIGNED] [Signature] Well Driller
License No. 148282 Dated 6/16 1955
DWR FORM NO. 246 (REV. 3-54)

Appendix B

Driller's Logs and Hydrographs for Existing Lower Aquifer Wells



21/23-36 R1

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

Do Not Fill In

No 23051

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

State Well No. 21/23-36 R1
Other Well No. 21/23-36 R1

(1) OWNER:
Name L.F. Roswell, Co
Address Po Box 877 Corcoran

(11) WELL LOG:
Total depth 1000 ft. Depth of completed well _____ ft.
Formations: Describe by color, character, size of material, and structure

(2) LOCATION OF WELL:
County Tulare Owner's number, if any 5116
Township, Range, and Section 21S-23E-36
Distance from cities, roads, railroads, etc. _____

200 - 300 Clay
300 - 330 Sand
330 - 390 Clay
390 - 440 Sand
440 - 460 Clay
460 - 475 Sand
475 - 590 Clay
590 - 600 Sand
600 - 620 Clay
620 - 635 Sand
635 - 650 Clay
650 - 660 Sand
660 - 675 Clay
675 - 770 Sand
770 - 810 Clay
810 - 820 Sand
820 - 845 Clay
845 - 850 Sand
850 - 880 Clay
880 - 900 Sand
900 - 950 Clay
950 - 1000 Clay

(3) TYPE OF WORK (check):
New Well Deepening Reconditioning Destroying
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:
Rotary
Cable
Other

(6) CASING INSTALLED:

STEEL:		OTHER:		If gravel packed		
From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	400	18"	3/8"	28"	0	1000
400	1000	12"				

Size of shoe or well ring: _____ Size of gravel: 1/4"
Describe joint 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.
400	1000	12	7.4	1/8

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata _____
From _____ ft. to _____ ft.
From _____ ft. to _____ ft.
Method of sealing _____

(9) WATER LEVELS:
Depth at which water was first found, if known _____ ft.
Standing level before perforating, if known _____ ft.
Standing level after perforating and developing _____ ft. 130

(10) WELL TESTS:
Was pump test made? Yes No If yes, by whom? Wilson
Yield: 2000 gal./min. from 190 ft. drawdown after _____ hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No If yes, attach copy _____

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.
NAME Terry's Well Drilling
(Person, firm, or corporation) (Typed or printed)
Address 2125 Van Dorsten
[SIGNED Terry's Well Drilling]
(Well Driller)
License No. 140990 Dated 11-20-60, 1960

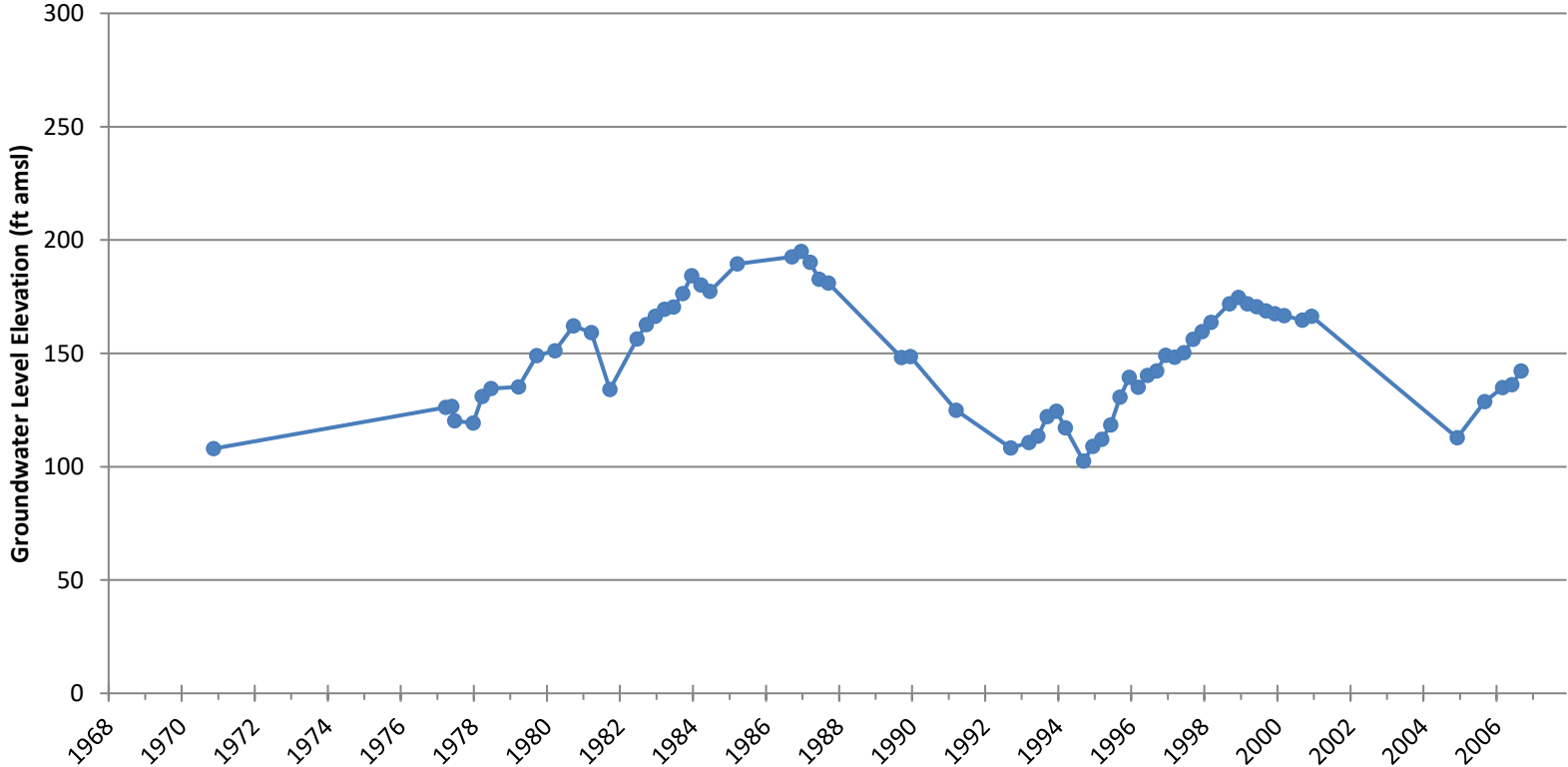
CONFIDENTIAL
Water Code Sec 7180

*2 wells
Same
1/8 mile apart*

SKETCH LOCATION OF WELL ON REVERSE SIDE

Groundwater Hydrographs - Deep

21S/23E-36R01



22/24-101

LOCATION NOT CHECKED

ORIGINAL -
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
No 66984

State Well No. _____
Other Well No. 22/24-101

(1) OWNER:

Name Mrs. C. P. Mauser
Address 447 E/ Poplar Rd.
Porterville, Calif.

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No. _____

(3) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE <input checked="" type="checkbox"/> DOUBLE <input type="checkbox"/>				Gage or Wall	If gravel packed		
From	ft. to	ft.	Diam.		Diameter of Bore	from ft.	to ft.
	480'		3/16" Wall				
Type and size of shoe or well ring					Size of gravel: 6-20		
Describe joint					78 ton		

(7) PERFORATIONS:

Type of perforator used			
Size	of perforations	in., length, by	in.
From	ft. to	ft.	Rows per ft.
	480 ft. to	700 ft.	
		220' perforated	

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata _____
From _____ ft. to _____ ft.
Method of Sealing _____

(9) WATER LEVELS:

Depth at which water was first found 90 ft.
Standing level before perforating _____ ft.
Standing level after perforating _____ ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom?
Yield: _____ gal./min. with _____ ft. draw down after _____ hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:

Total depth	720	ft.	Depth of completed well	700	ft.
Formations: Describe by color, character, size of material, and structure.					
0 ft. to	50	ft.	Sandy clay		
50 "	140	"	Sand, clay strks.		
140 "	152	"	Clay		
152 "	230	"	Sand, clay strks.		
230 "	245	"	Clay		
245 "	320	"	Sand		
320 "	328	"	Clay		
328 "	420	"	Sand, clay strks.		
420 "	440	"	Clay		
440 "	550	"	Sand		
550 "	572	"	Hard sand		
572 "	720	"	Sand, clay strks.		

REGISTRATION NO. 7076.1, Water Code

Work started Jan. 23 1961. Completed Feb. 7 1961

WELL DRILLER'S STATEMENT:

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

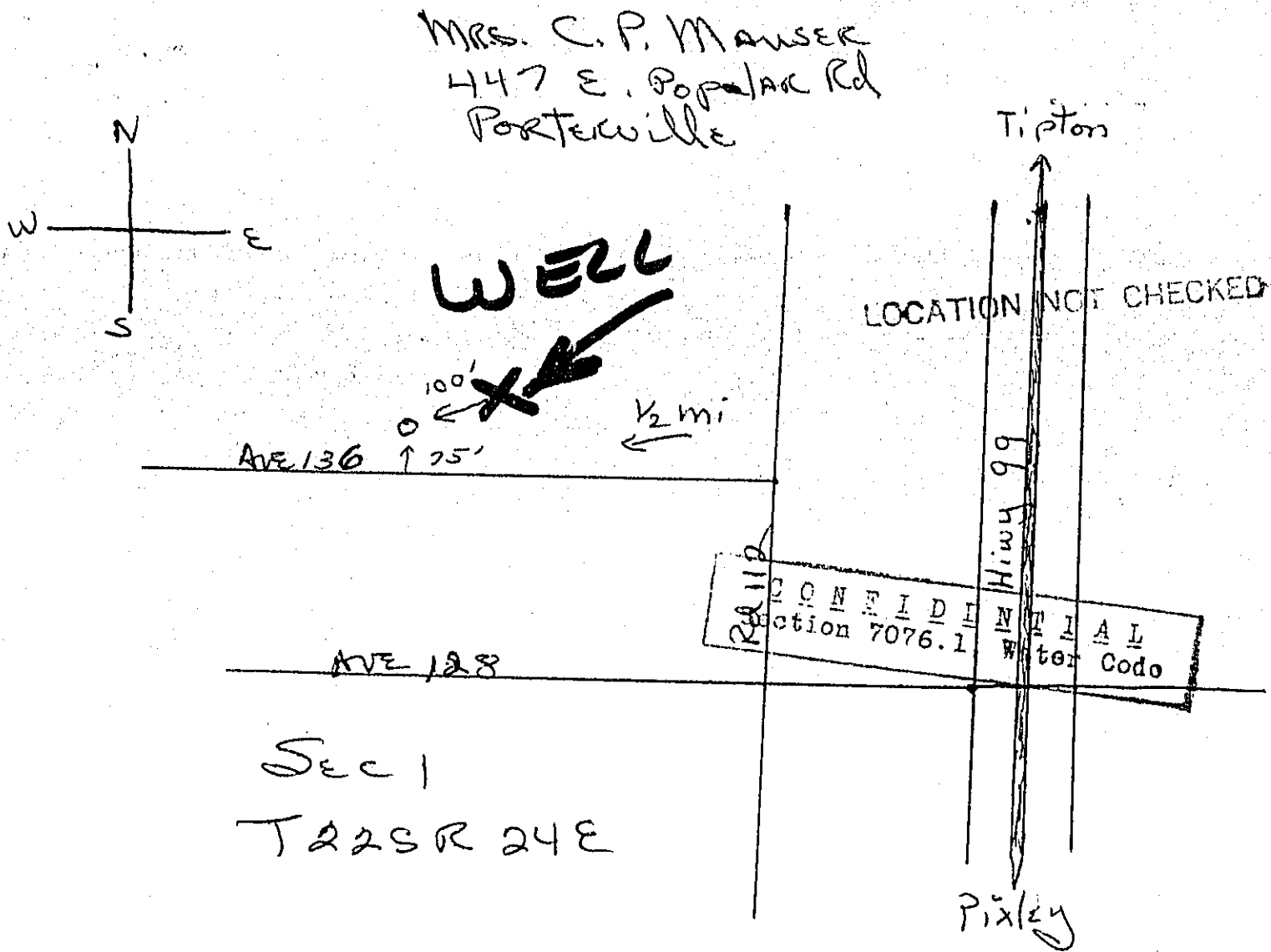
NAME Knapp & Graham, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1155 W. Inyo St.
Tulare, Calif.

[SIGNED] J. M. Lillo
Well Driller
License No. 193493 Dated Feb. 8, 1961

22/24-1Q1

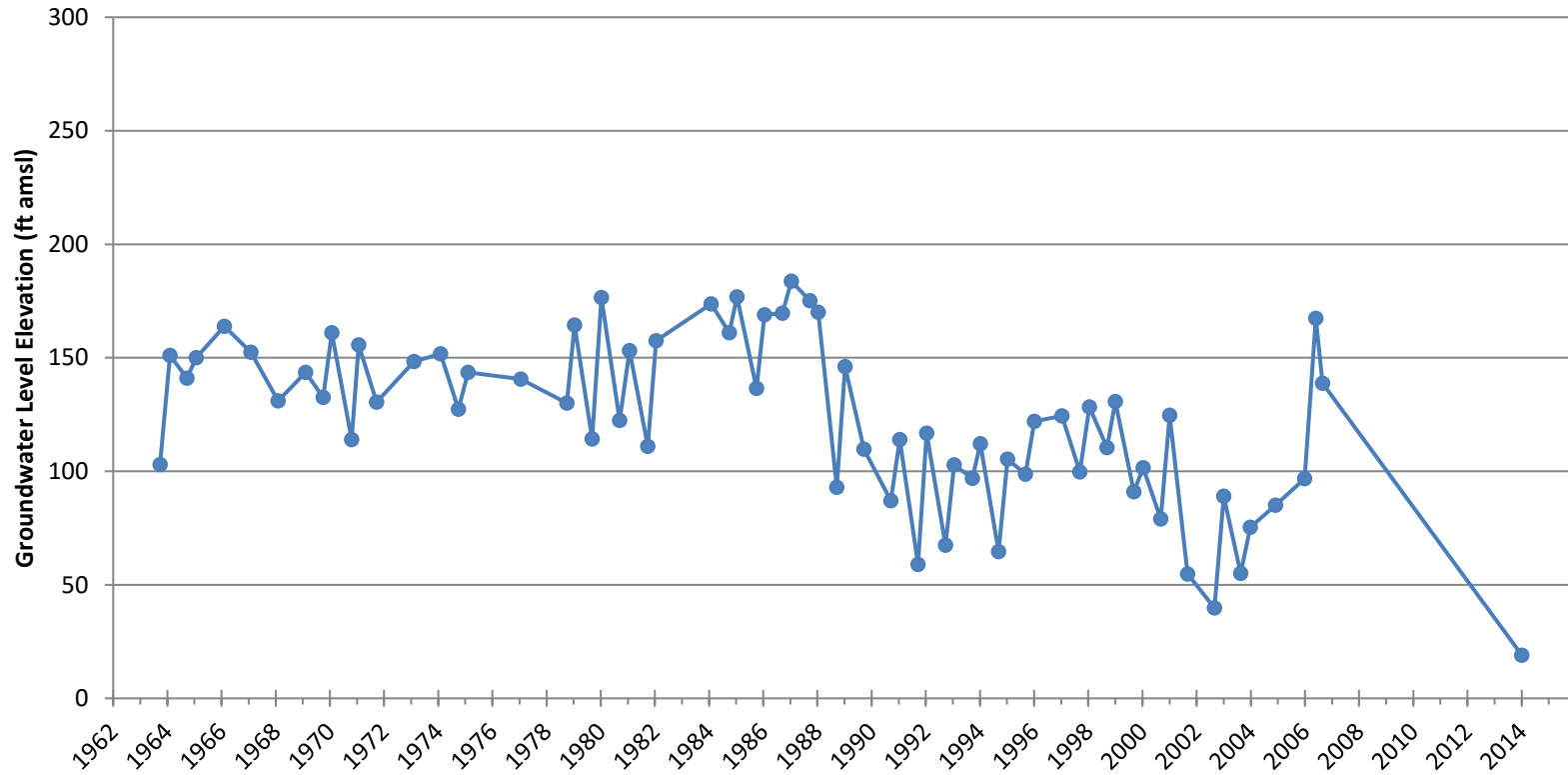
LOCATION OF
well

Log # 66984



Groundwater Hydrographs - Deep

22S/24E-01Q01



ORIGINAL
File with DW

24/27-86

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

Do Not Fill In

No. 337

THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

State Well No. _____
Other Well No. 24/27E-86

(1) OWNER:

Name Marko Zaninovich, Inc.
Address Rt. 1, Box 725
Delano, Calif. 93215

(2) LOCATION OF WELL:

County Tulare Owner's number, if any _____
Township, Range, and Section _____
Distance from cities, roads, railroads, etc. 1/2 mile North of Ave.
32 and 1/2 mile East of Rd. 216

(3) TYPE OF WORK (check):

New Well Deepening Reconditioning Destroying
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Other

(6) CASING INSTALLED:

STEEL: _____ OTHER: _____
SINGLE DOUBLE

If gravel packed

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	703	16"	1/4"	25 1/2	top	bottom
703	1747	14"	1/4"			
16" to 14" slip jt.						

Size of shoe or well ring: _____ Size of gravel: 1/4"

Describe joint: collar w/ fillet weld.

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen machine

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
522	703	2	16	.100 x 2
703	1747	2	14	.100 x 2

CONFIDENTIAL

Water Code Sec. 13752

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.

Were any strata sealed against pollution? Yes No If yes, note depth of strata _____

From _____ ft. to _____ ft.

From _____ ft. to _____ ft.

Method of sealing _____

(9) WATER LEVELS:

Depth at which water was first found, if known unknown.

Standing level before perforating, if known _____ ft.

Standing level after perforating and developing _____ ft.

(10) WELL TESTS:

Was pump test made? Yes No If yes, by whom? _____

Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.

Temperature of water _____ Was a chemical analysis made? Yes No

Was electric log made of well? Yes No If yes, attach copy _____

(11) WELL LOG:

Total depth 1747 ft. Depth of completed well 1747 ft.

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

ft. to _____ ft.

ft. to	ft.	Formation
0	9	top soil
9	60	sandy clay
60	63	sand
63	253	sandy clay
253	257	sand
257	473	sandy clay
473	479	sand
479	695	sandy clay
695	745	blue clay
745	748	sand
748	812	blue clay
812	943	sandy clay
943	1033	sediment
1033	1246	shale & clay
1246	1361	blue clay
1361	1371	hard shale
1371	1455	shale & clay
1455	1488	hard shale
1488	1588	hard shale & clay
1588	1729	hard sand
1729	1747	sand & clay

Work started 11/1/67 Completed 11/14/67

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 Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 Inyo St.
Delano, Calif. 93215

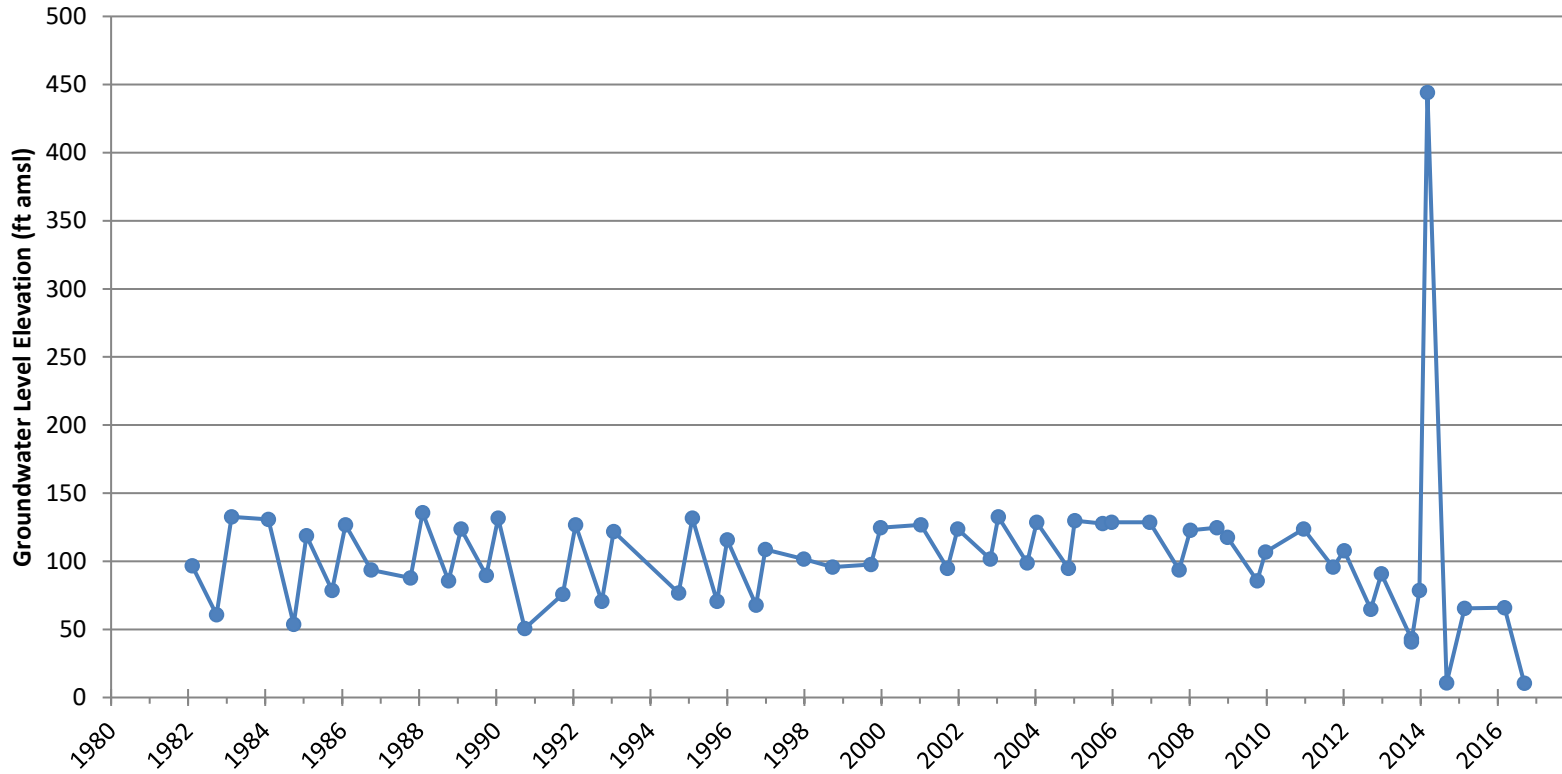
[SIGNED] *Donald E. ...*
(Well Driller)

License No. 148282 Dated 11/13/68, 19__

SKETCH LOCATION OF WELL ON REVERSE SIDE

Groundwater Hydrographs - Deep

24S/27E-08L01



24/27-32KI

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

24/27-32KI (G.S.)
STATE OF CALIFORNIA

LOCATION NOT CHECKED

Do Not Fill In

No. 32108

State Well No.

Other Well No. 245/27E-32

1) OWNER:

Name Earl Thomas Enterprises

Address Rt. 2 Box 296

Delano, California

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

SE 1/4 Section 32

Township 24S

Range 27E

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal

Irrigation Test Well Other

(5) EQUIPMENT:

Rotary

Cable

Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE

From 1800 ft. to 0 ft. Dism.

If gravel packed

Diameter of Bore 26" from 0 to 1800 ft.

Type and size of shoe or well ring

Describe joint

Size of gravel: 3/8"

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1/8" x 1" cc in., length, by

From 1002 ft. to 1800 ft. Perf. per row Rows per ft.

(8) CONSTRUCTION:

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

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

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? Yes No

Was electric log made of well? Yes No

(11) WELL LOG:

Total depth 1800 ft. ft. Depth of completed well 1800 ft. ft.

Formations: Describe by color, character, size of material, and structure.

0 ft. to	3 ft.	Formation
0	3	Top Soil
3	180	Sandy Clay
180	183	Sand
183	240	Hard Sand
240	310	Sandy Clay
310	356	Hard Clay
356	360	Sand
360	395	Hard Clay
395	420	Hard Sand
420	427	Sand
427	465	Sandy Clay
465	500	Blue Clay
500	516	Blue Shale
516	530	Clay
530	544	Sediment
544	569	Hard Sandy Clay
569	633	Sediment
633	650	Shale & Clay
650	679	Sediment
679	709	Blue Clay
709	712	Sand
712	739	Blue Sediment
739	742	Sand
742	767	Hard Clay
767	770	Hard Slate
770	802	Shale
802	812	Blue Clay
812	816	Sand
816	822	Clay
822	850	Sediment
850	865	Sediment Clay
865	944	Sediment
944	948	Sand
948	958	Hard Clay
958	1004	Sediment
1004	1008	Sand
1008	1080	Blue Sediment
1080	1082	Sand
1082	1108	Sediment
1108	1271	Shale & Clay
1271	1301	Hard Slate
1301	1401	Shale

0 1/2 mi North of P...
1/2 mi West of SE corner of section 32
(G.S.S.)

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 Whitten Pump Co. (Typed or printed)

Address 1744 High St. Delano, California

[SIGNED] [Signature] Well Driller

License No. 148282 Dated 5/5/55

24/27-32K1

LOG No.
32108

PAGE 2 OF 2

Well Log Continued

1401	ft. to	1410	ft.	Hard Clay
1410	" "	1413		Sand
1413		1423		Clay
1423		1426		Sand
1426		1433		Clay
1433		1435		Hard Shale
1435		1475		Shale
1475		1493		Blue Shale
1493		1500		Clay
1500		1515		Shale
1515		1522		Clay
1522		1526		Shale
1526		1551		Very Hard Slate
1551		1590		Shale
1590		1628		Sandy Shale
1628		1750		Sand & Shale
1750		1765		Sandy Clay
1765		1780		Clay
1780		1800		Blue Shale

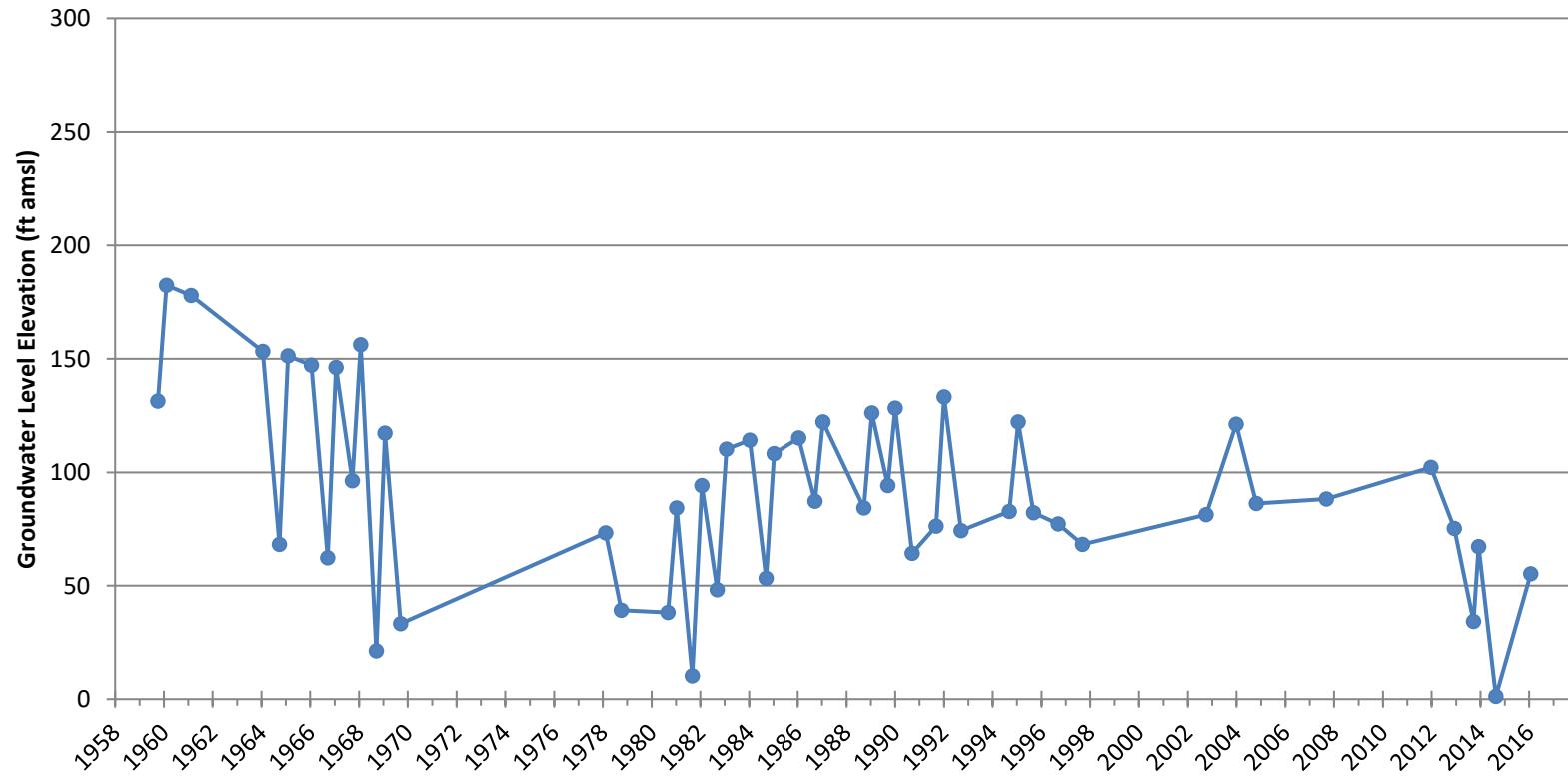
0.47 mile north, 0.47 mile west of

SECTION 32
Water Code
Section 70707 of Section 32

24/27-32K1 (USGS)

Groundwater Hydrographs - Deep

24S/27E-32K01



DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(Insert appropriate number)

24/24-3A1

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

LOCATION NOT CHECKED

Do Not Fill In

No. **63263**

STATE OF CALIFORNIA

State Well No. 3A1
Other Well No. 295/296-3

(1) OWNER:

Name Jack C. Phillips Ranch
Address Star Route, Box 65
Earlimart, California

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No.
Southwest corner of intersection of
Ave. 48 and Rd. 92.

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE
From 600 ft. to 1002 ft. Diam. 1 1/4" Single
1002 ft. to 1002 ft. Diam. 1 1/4" Single
Type and size of shoe or well ring
Describe joint Butt Welded
If gravel packed
Diameter of Bore 2 1/2" from Top to both to Bottom
Size of gravel: 3/8

(7) PERFORATIONS:

Type of perforator used Machine
Size of perforations 1/8 in., length, by 1 cc in.
From 804 ft. to 1,602 ft. Perf. per row 18 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found Unknown ft.
Standing level before perforating ft.
Rising level after perforating ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:

Total depth 1,602 ft. Depth of completed well 1,602 ft. 36

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

0 ft. to	35 ft.	Sandy Clay
35 "	153 "	Sandy
153 "	188 "	Clay
188 "	235 "	Hard Sand
235 "	270 "	Clay
270 "	273 "	Sand
273 "	315 "	Sandy Clay
315 "	338 "	Hard Shale
338 "	430 "	Sandy Clay
430 "	436 "	Sand
436 "	458 "	Sandy Clay
458 "	582 "	Clay
582 "	643 "	Blue Clay
643 "	710 "	Sandy Clay
710 "	730 "	Sand
730 "	745 "	Sandy Clay
745 "	792 "	Shale
792 "	892 "	Clay
892 "	906 "	Sand
906 "	945 "	Sandy Clay
945 "	960 "	Blue Clay
960 "	963 "	Sand
963 "	1036 "	Hard Shale
1036 "	1070 "	Clay
1070 "	1096 "	Shale
1096 "	1125 "	Clay
1125 "	1140 "	Sand
1140 "	1170 "	Shale
1170 "	1200 "	Clay
1200 "	1247 "	Sandy Clay
1247 "	1257 "	Hard Shale
1257 "	1260 "	Sand
1260 "	1390 "	Shale
1390 "	1405 "	Sand
1405 "	1425 "	Sandy Clay
1425 "	1488 "	Shale
1488 "	1502 "	Clay
1502 "	1575 "	Shale
1575 "	1590 "	Sand
1590 "	1602 "	Hard Shale

Work started 6/7/60 19 Completed 6/24/60 19

WELL DRILLER'S STATEMENT:

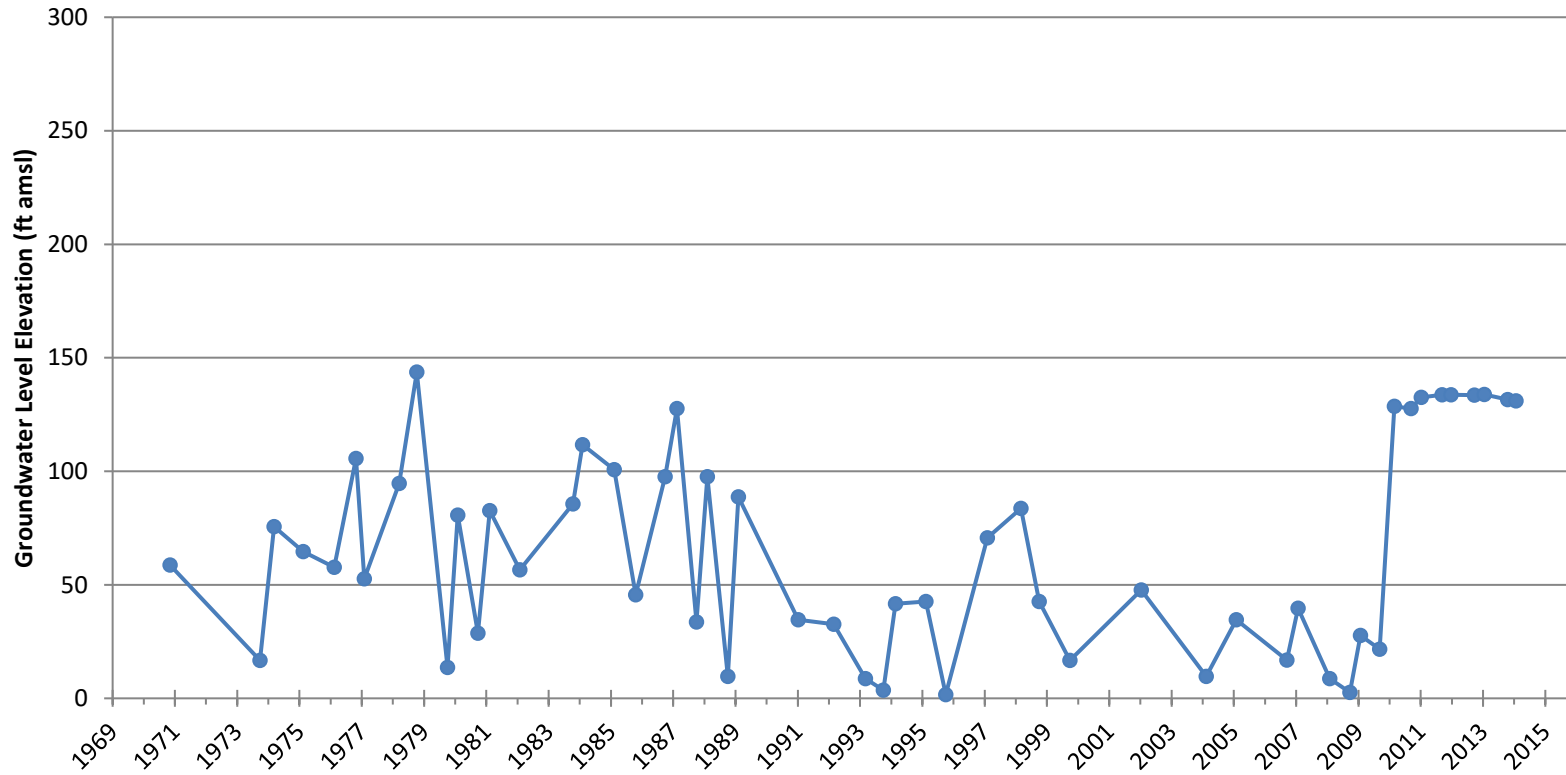
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 High St.

Plano, Calif.
[SIGNED] Donald Egan
148282 Well Driller
License No. Dated 11-1-60, 19 60

Groundwater Hydrographs - Deep

24S/24E-03A01



STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **EO117919**

Owner's Well No. MW-6

Date Work Began 9/24/2010, Ended 9/24/2010

Local Permit Agency ENVIRO HEALTH, TULARE

Permit No. 10-0338 Permit Date 8/30/2010

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		DRILLING METHOD <u>ROTARY</u> FLUID WATER
DEPTH FROM SURFACE		DESCRIPTION
Ft. to Ft.		Describe material, grain, size, color, etc.
0	20	TOP SOIL, MEDIUMFINE/COARSE SANDS
20	40	MEDIUM/FINE/COARSE SANDS
40	80	EDIUM/FINE/COARSE SANDS WITH SOME CLAY
80	120	MEDIUM/FINE/COARSE SANDS WITH MORE CLAY
120	140	MEDIUM/FINE/COARSE SANDS, WITH SOME CLAY
140	160	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
160	200	MEDIUM/FINE/COARSE SANDS
200	300	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
300	340	MEDIUM/FINE/COARSE SANDS, SOME CLAY SOME D.G.
340	420	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
420	560	CLAY WITH SOME SANDS
560	620	CLAY WITH MORE SANDS MEDIUM/FINE
620	680	CLAY WITH SOME MEDIUM/FINE SANDS
680	720	MOSTLEY CLAY
720	740	CLAY WITH SOME MEDIUM/FINE SANDS
740	760	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY AND SHALE
760	810	MEDIUM/FINE/COARSE SANDSWITH CLAY

TOTAL DEPTH OF BORING 810 (Feet)

TOTAL DEPTH OF COMPLETED WELL 805 (Feet)

WELL OWNER

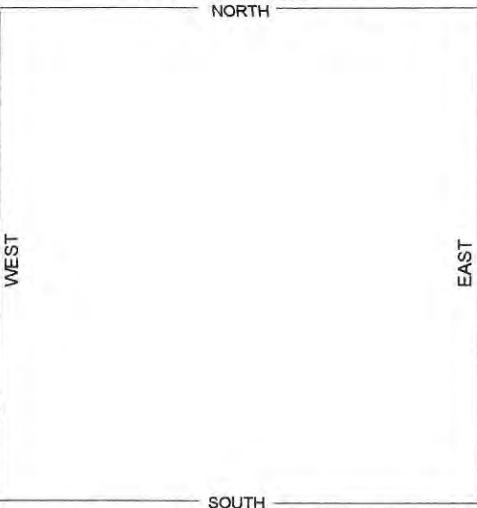
Name SURINDERPAL GILL
Mailing Address 16964 AVENUE 32 CA 93215
DELANO CITY STATE ZIP

WELL LOCATION

Address 1/2 MI N AVE. 26 & 1/2 MI E. ROAD 16
City DELANO CA 93215
County TULARE
APN Book 3381 Page 003 Parcel 24
Township 24 Range 26 Section 17
Latitude _____

DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
— Domestic — Public
— Irrigation — Industrial

MONITORING

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH OF STATIC _____

WATER LEVEL _____ (Ft.) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE AIR LIFT

TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

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

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE				
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	CE-MENT (✓)		BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)		
#1													
0	200	16"	✓	PVC	4"	SCH 40		0	130	✓			
200	350	16"	✓	PVC	4"	SCH 40	.030	360	370		✓		
								464	474		✓		
#2								590	600		✓		
0	705	12 1/4"	✓	PVC	4"	SCH 40		630	640		✓		
705	805	12 1/4"	✓	PVC	4"	SCH 40	.030	660	670		✓		

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- 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 BRADLEY & SONS
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 3625 S. HIGHLAND

Signed _____

WELL DRILLER/AUTHORIZED REPRESENTATIVE

CITY DEL REY

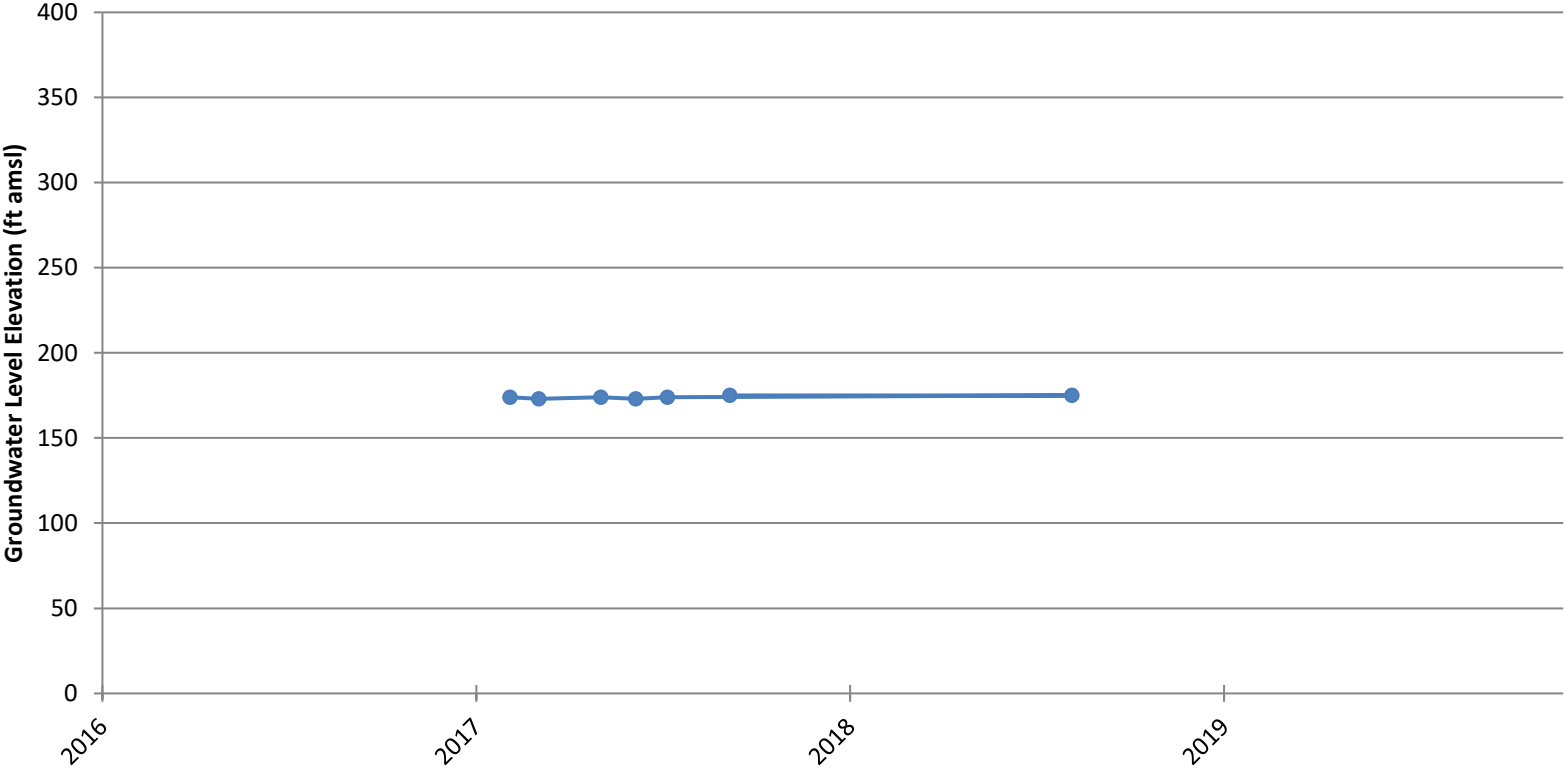
DATE SIGNED 10/06/10

STATE CA ZIP 93616

C-57 LICENSE NUMBER 414178

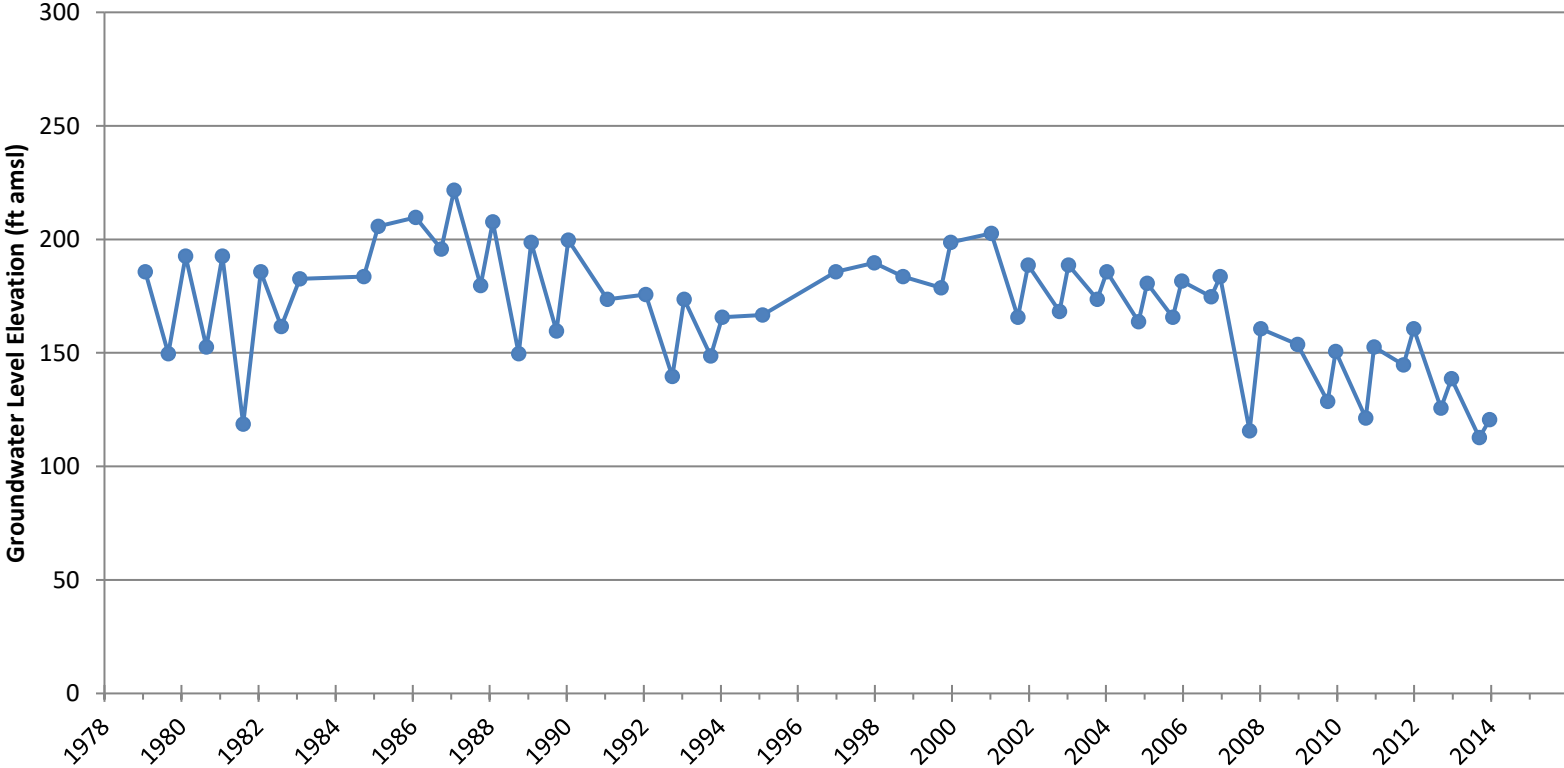
Groundwater Hydrographs - Deep

M-19



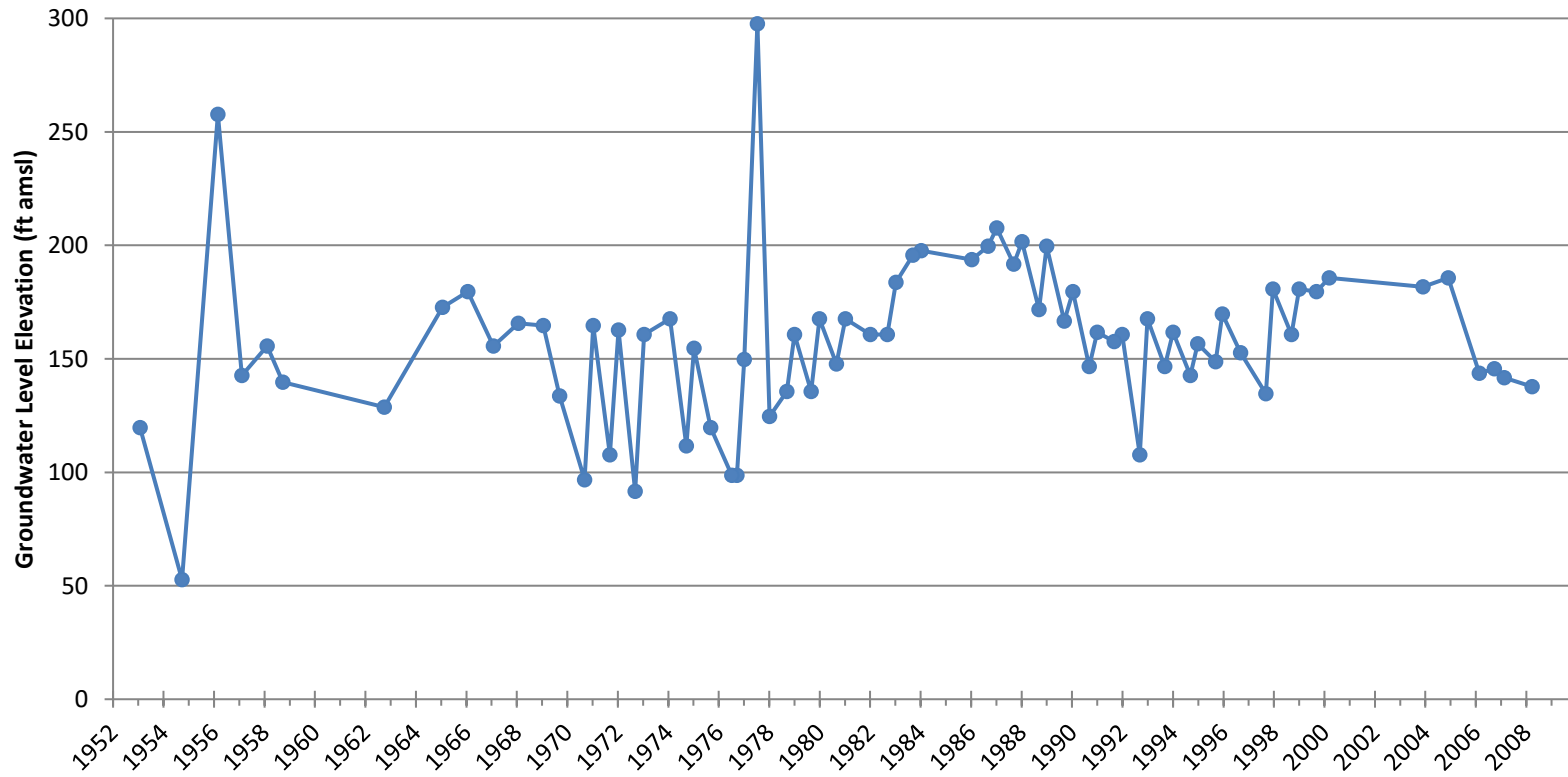
Groundwater Hydrographs - Deep

24S/25E-13F01



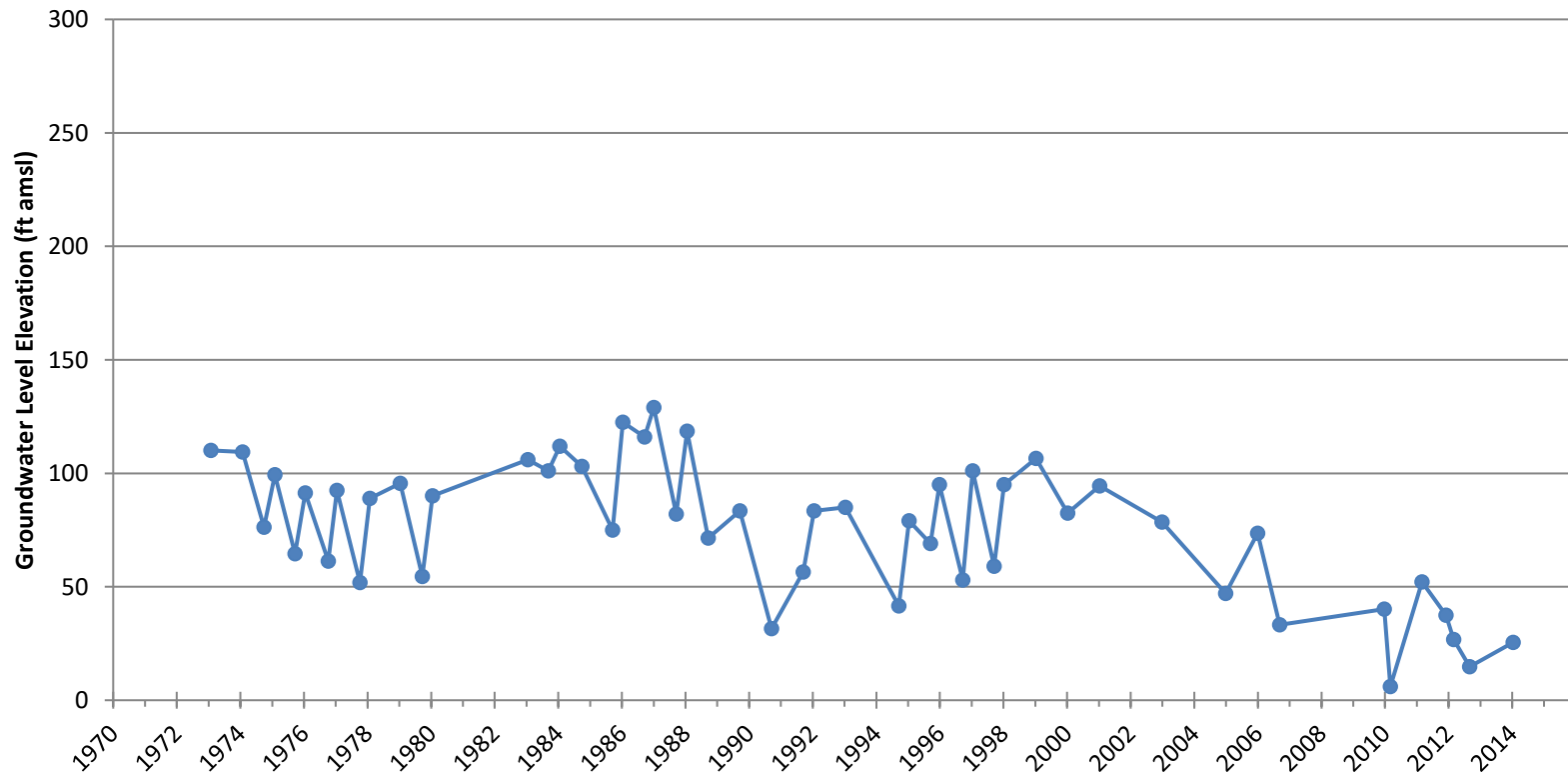
Groundwater Hydrographs - Deep

24S/25E-36J01



Groundwater Hydrographs - Deep

23S/23E-02A01



STATE OF CALIFORNIA WELL COMPLETION REPORT

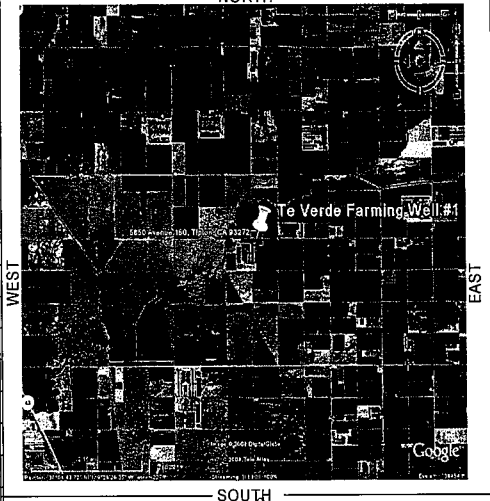
Refer to Instruction Pamphlet

DWR USE ONLY	DO NOT FILL IN
21S/23E25	1/B
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

Page 1 of 2
 Owner's Well No. _____ Well #1 _____ No. e0078297
 Date Work Began 8/16/08 Ended 10/07/08
 Local Permit Agency Tulare County Environmental Health Division
 Permit No. 08-0339 Permit Date 7/9/08

ORIENTATION (X)		X VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)	
DEPTH FROM SURFACE		DRILLING METHOD <u>Reverse Rotary</u> FLUID _____	
FL to Ft.		DESCRIPTION	
Describe material, grain size, color, etc.			
50	80	Brown clay, gravel	
80	90	Brown clay	
90	230	Brown clay, gravel	
230	260	Gray clay, gravel	
260	280	Gray clay	
280	310	Gray clay, sand	
310	320	Gray clay, gravel	
320	360	Gray clay, sand	
360	370	Gray clay	
370	380	Gray clay, sand	
380	410	Gray clay, gravel	
410	420	Clay and cobbles, gravel	
420	470	Clay and gravel	
470	490	Gray clay	
500	510	Gray clay, sandy	
510	530	Gray clay	
530	540	Gray clay, sandy	
540	550	Gray clay	
550	570	Clay and gravel	
570	580	Coarse sand	
580	590	Clay, gravel, and sand	
590	610	Clay and little gravel	
610	620	Clay and gravel	
620	630	Gray clay and gravel	
630	640	Gray clay	
640	720	Gray clay and gravel	
720	730	Gravel	
730	740	Clay	
740	760	Gray clay and gravel	
760	790	Gray clay	
TOTAL DEPTH OF BORING <u>1280</u> (Feet)			
TOTAL DEPTH OF COMPLETED WELL <u>1270</u> (Feet)			

WELL OWNER
 Name Te Velde Farming
 Mailing Address 5850 Ave 160
Tipton CA 93272
 CITY STATE ZIP
 Address 5850 Ave 160
Tipton CA 93272
 City STATE ZIP
Tulare County
 County
 APN Book 200 Page 190 Parcel 004
 Township 21S Range 23E Section 25
 Latitude 36 4 46.53 NORTH Longitude 119 26 11.47 WEST
 DEG. MIN. SEC. DEG. MIN. SEC.
LOCATION SKETCH



ACTIVITY (X)
 NEW WELL
 MODIFICATION/REPAIR
 _____ Deepen
 _____ Other (Specify) _____
 _____ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
PLANNED USES (X)
 WATER SUPPLY
 Domestic _____ Public
 Irrigation _____ Industrial
 _____ MONITORING _____
 _____ TEST WELL _____
 _____ CATHODIC PROTECTION _____
 _____ HEAT EXCHANGE _____
 _____ DIRECT PUSH _____
 _____ INJECTION _____
 _____ VAPOR EXTRACTION _____
 _____ SPARGING _____
 _____ REMEDIATION - OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL
 DEPTH TO FIRST WATER N/A (Ft.) BELOW SURFACE
 DEPTH OF STATIC WATER LEVEL 259.6 (Ft.) & DATE MEASURED 10/04/08-10/07/08
 ESTIMATED YIELD 2008 (GPM) & TEST TYPE Constant
 TEST LENGTH 37 (Hrs.) TOTAL DRAWDOWN 216.88 (Ft.)
 * May not be representative of a well's long-term yield.

DEPTH FROM SURFACE	BORE-HOLE DIA. (inches)	CASING (S)							
		TYPE (-)				MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (inches)
		BLANK	SCREEN	CON. DUCTOR	FILL PIPE				
0 to 40	40			X		Steel	32	.375	
0 to 640	28	X				Steel	18	.375	
640 to 660	28		X			Steel	16	.312	.060 Standard Louver
660 to 1260	26		X			Steel	16	.312	.060 Standard Louver
1260 to 1270	26	X				Steel	18	.375	

DEPTH FROM SURFACE	ANNULAR MATERIAL			
	TYPE			
	CE-MENT	BEN-TONITE	FILL	FILTER PACK (TYPE/SIZE)
0 to 20	(X)	(X)	(X)	
20 to 1260			X	1/4 x 10 Gravel Pack

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

CERTIFICATION STATEMENT

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

 Layne Christensen Company
 NAME (PERSON, FIRM OR CORPORATION) (TYPED OR PRINTED)
11001 Etiwanda Ave
 ADDRESS _____ Fontana CA 92337

 Signed _____ DATE SIGNED 10/10/08 STATE CA ZIP 91011
 WELL DRILLER AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

ORIGINAL
File with DWR

225/23E/16

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

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

Page 1 of 1

Owner's Well No. 6535

No. 545936

Date Work Began 09/26/94, Ended 10/04/94

Local Permit Agency TULARE CO ENVIRONMENTAL HEALTH

Permit No. 30036 Permit Date 08/24/94

GEOLOGIC LOG

DEPTH FROM SURFACE		DESCRIPTION
Ft.	to Ft.	
0	3	TOP SOIL
3	15	SANDY YELLOW CLAY
15	110	SAND WITH BROWN CLAY STREAKS
110	250	SANDY BLUE CLAY W/SAND STRKS
250	300	SAND W/BLUE CLAY STREAKS
300	325	SANDY BLUE CLAY
325	400	SAND WITH BLUE CLAY STREAKS
400	420	BLUE CLAY
420	435	SANDY BLUE CLAY
435	555	CORCORAN CLAY
555	700	SAND WITH BLUE CLAY STREAKS
700	860	INTERBEDDED SAND & BLUE CLAY
860	885	SANDY BLUE CLAY
885	930	SAND WITH BLUE CLAY STREAKS
930	970	INTERBEDDED SAND & BLUE CLAY
970	1010	SAND WITH BLUE CLAY STREAKS
1010	1090	INTERBEDDED SAND & BLUE CLAY
1090	1210	SILTY BLUE SAND
1210	1300	INTERBEDDED SAND

WELL OWNER
Name CORCPORK COMPANY

Mailing Address 3922 AVENUE 120
CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION
Address HWY 43 AVE 120
City
County TULARE
APN Book 291 Page 060 Parcel 19001
Township 22 S Range 23 E Section 16
Latitude _____ NORTH Longitude _____ WEST
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

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)

WEST EAST

CONFINED

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

DRILLING METHOD ROTARY FLUID MUD
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.

TOTAL DEPTH OF BORING 1270 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING(S)								
		TYPE ()				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	
		BLANK	SCREEN	CON. DUCTOR	FILL PIPE					
0	540	28"					ACCESS TUBE	2"	SCH 40	
0	560	28"	X				ASTM-135	16"	.312	
560	690	28"	X				DBL WILLSLOT	16"	.312	0.060
690	710	26"	X				ASTM-135	12-3/4	.312	
710	720	26"	X				DBL WILLSLOT	12-3/4	.312	0.050
720	730	26"	X				ASTM-135	12-3/4	.312	

DEPTH FROM SURFACE	ANNULAR MATERIAL				
	TYPE				
	CE-MENT ()	BEN-TONITE ()	FILL ()	FILTER PACK (TYPE/SIZE)	
0	50	X			SAND SLURRY
50	540			X	GRAVEL
540	1270			X	SAND PACK

- 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 EATON DRILLING COMPANY, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. Kentucky Ave. Woodland CA 95695
ADDRESS CITY STATE ZIP

Signed [Signature]
WELL DRILLER/AUTHORIZED REPRESENTATIVE

10/13/94 132782657
DATE SIGNED E-97 LICENSE NUMBER

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. 6535P3

No. 545938

Date Work Began 09/26/94, Ended 10/04/94

Local Permit Agency TULARE CO ENVIRONMENTAL HEALTH

Permit No. 30036 Permit Date 08/24/94

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

WELL OWNER

ORIENTATION (∠) VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

Name CORCPORK COMPANY

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

Mailing Address 3922 AVENUE 120

DEPTH FROM SURFACE	
Ft.	to Ft.

DESCRIPTION

Describe material, grain size, color, etc.

CORCORAN

CA 93212
STATE ZIP

WELL LOCATION

Address SAME AS PAGE ONE

City _____

County TULARE

APN Book 291 Page 060 Parcel 19001

Township 22 S Range 23 E Section 16

Latitude _____ NORTH Longitude _____ WEST
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

ACTIVITY (∠)

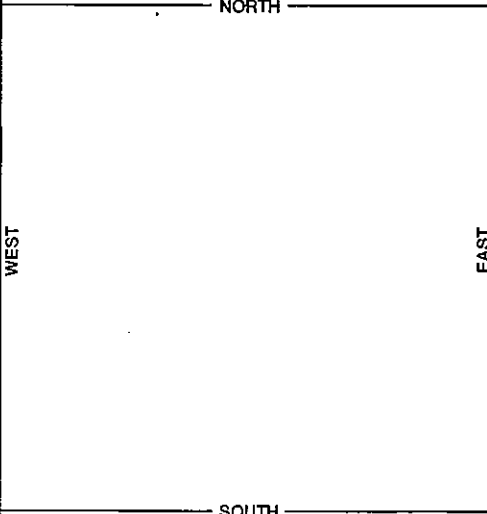
- NEW WELL
- MODIFICATION/REPAIR
- _____ Deepen
- _____ Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S)
(∠)

_____ MONITORING

- WATER SUPPLY
- _____ Domestic
- _____ Public
- Irrigation
- _____ Industrial
- _____ "TEST WELL"
- _____ CATHODIC PROTECTION
- _____ OTHER (Specify) _____



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

DRILLING METHOD ROTARY FLUID MUD

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.

TOTAL DEPTH OF BORING 1270 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING(S)						DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL				
		TYPE (∠)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)		GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE		
		BLANK	SCREEN	CON- DUCTOR	FILL PIPE								
970	1000	26"				DBL MILLSLOT	12-3/4	.312	0.050				
1000	1020	26"				COMPRESSON		SECTION					
1020	1050	26"				DBL MILLSLOT	12-3/4	.312	0.050				
1050	1060	26"	X			ASTM-135	12-3/4	.312					
1060	1080	26"	X			DBL MILLSLOT	12-3/4	.312	0.050				
1080	1090	26"	X			ASTM-135	12-3/4	.312					

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 EATON DRILLING COMPANY, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 20 W. Kentucky Ave. City Woodland STATE CA ZIP 95605

Signed [Signature]
WELL DRILLER/AUTHORIZED REPRESENTATIVE

DATE SIGNED 10/13/94 LICENSE NUMBER 122782657

ORIGINAL
File with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.			
LATITUDE		LONGITUDE	
APN/TRS/OTHER			

Page 1 of 1

Owner's Well No. 6535P4

No. 545939

Date Work Began _____, Ended _____

Local Permit Agency TULARE CO ENVIRONMENTAL HEALTH

Permit No. 30036

Permit Date 08/24/94

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

Name CORCPORK COMPANY

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

Mailing Address 3922 AVENUE 120

DEPTH FROM SURFACE	
Ft.	to Ft.

DESCRIPTION

Describe material, grain size, color, etc.

CITY CORCORAN

STATE CA ZIP 93212

WELL LOCATION

Address SAME AS PAGE ONE

City _____

County TULARE

APN Book 291 Page 060 Parcel 19001

Township 22 S Range 23 E Section 16

Latitude _____ NORTH Longitude _____ WEST
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

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)

WEST _____ EAST _____
NORTH _____ SOUTH _____

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

DRILLING METHOD ROTARY

FLUID MUD

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.

TOTAL DEPTH OF BORING 1270 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING(S)						ANNULAR MATERIAL					
		TYPE (✓)				MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE			
		BLANK	SCREEN	CON- DUCTOR	FILL PIPE								
1090 - 1140	26"		X			DBL WILLSLOT	12-3/4	.312	0.050				
1140 - 1150	26"		X			ASTM-135	12-3/4	.312					
1150 - 1210	26"		X			DBL WILLSLOT	12-3/4	.312	0.050				

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 EATON DRILLING COMPANY, INC.

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. Kentucky Ave.

Woodland

CA 95695

ADDRESS

CITY

STATE

ZIP

Signed _____

WELL DRILLER/AUTHORIZED REPRESENTATIVE

10/13/94

DATE SIGNED

133783C57

C-57 LICENSE NUMBER

23/26-151

9-063
(December 1949)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

(Conflict in shaded sheet)

No. 23/26-151

OTHER Nos. Maze #1

WELL LOG

State California County Tulare Subarea DUCOR-Famoso

Owner Maze T.D. = 1913 E-10

Location 0.49 miles N of sec. line (E Ave 88) + 50 ft. W of Rd. 208
T.D. = 1830 complete

Drilled by Hilton Drilling Co. Address 17th + I st., Bakersfield

Date 12-6-56 Casing diam. _____ Land-surf. alt. 410

Source of data Examination of dry rotary samples - Partial log
(Enter type of well, perforations, yield, and drawdown at end of log)

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
1030-1110	sand, medium to coarse	80	
1110-1230	sand, and clay, dark green	120	
1230-1270	sand, medium to coarse, some dark green clay	40	
1270-1290	sand, medium to coarse	20	
1290-1390	clay, sandy, dark greenish	100	
1390-1430	sand, fine to coarse	40	
1430-1450	clay, dark green	20	
1470-1490	sand, medium to coarse	20	
1490-1510	clay, dark green	20	
1510-1630	clay, sandy, dark green	120	
1630-1650	sand, clayey, to coarse	20	
1650-1690	clay, sandy, dark green	40	
1690-1700	sand, clayey, to coarse	10	
1700-1780	Gravel, 2-8mm with some dark green clay & sand	80	
1780-1820	Gravel 2-8mm + dark green clay	40	
1820-1840	Gravel 2-8mm with some dark green clay & sand	20	
1840-1900	Gravel 2-8mm + dark green clay	60	

RECORD BY George J. Hilton DATE 12-6-56

SHEET 1 OF 1

23/26-151

23/26-151

23/26-151 Maze (Camp, S.A.) #1 12-14-56

1830 ft pipe, perf 1390-1830, Schlumberger
gr ran. to 2100'

3 mi W Terrabella 1/2 mi S on 208.

- 0-20 Surf km
- 20-46 Sd & Gravel
- 46-84 Sdy brn clay
- 84-290 Sdy brn clay w/ streaks of sd.
- 290-314 Tough sdy brown clay
- 314-378 Sdy brn clay w/ streaks of sd
- 378-390 Hard sd
- 390-620 Sdy brn clay w/ streaks of sd
- 620-975 Sdy blue clay w/ streaks of sd.
- 975-1015 Hard sdy blue clay & shale.
- 1015-1127 Hard blue clay w/ streaks of shale
- 1127-1350 Hard sdy clay
- 1350-1830 Sdy blue clay w/ streaks of sd.

ORIGINAL

File with DWR

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

Do not fill in

No. 085678

22/27-16

Notice of Intent No.

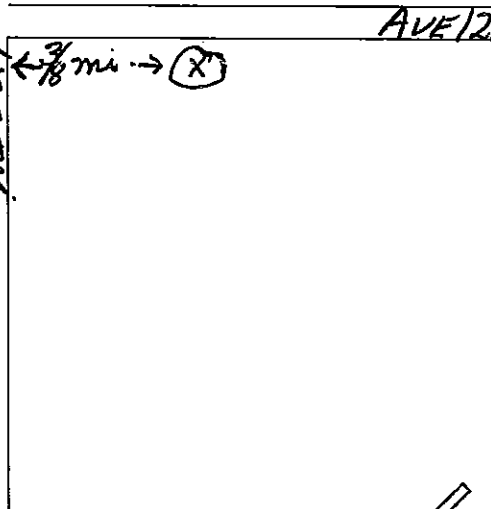
Local Permit No. or Date

State Well No. Other Well No.

(1) OWNER: Name Buttes Farmland Development Address P. O. Box 1206 City Delano, CA Zip 93215

(2) LOCATION OF WELL (See instructions): County Tulare Owner's Well Number Well address if different from above Township 22 Range 27 Section 16 Distance from cities, roads, railroads, fences, etc. 3/8 mile East of Road 224 on South side of Ave. 128.

(12) WELL LOG: Total depth 1240. Depth of completed well 1240. from ft. to ft. Formation (Describe by color, character, size or material) 0 - 90 Sand 90 - 94 Gravel 94 - 237 Gravel 237 - 277 Gravel 277 - 338 Clay w/Sand Streaks 338 - 399 Clay w/Gravel Streaks 399 - 522 Clay w/Sand Streaks 522 - 590 Blue Clay 590 - 700 Blue Clay 700 - 770 Clay 770 - 936 Sandy Clay 936 - 1088 Sand w/Clay Streaks 1088 - 1166 Sandy Clay 1166 - 1186 Coarse Sand & Clay 1186 - 1240 Sand w/Shade Streaks



(3) TYPE OF WORK: New Well [X] Deepening [] Reconstruction [] Reconditioning [] Horizontal Well [] Destruction [] (Describe destruction materials and procedures in Item 12) (4) PROPOSED USE: Domestic [] Irrigation [X] Industrial [] Test Well [] Stock [] Municipal [] Other []

(5) EQUIPMENT: Rotary [X] Reverse [] Cable [] Air [] Other [] Bucket []

(6) GRAVEL PACK: Yes [X] No [] Size 1/4" Diameter of bore 27-1/2" Packed from 0 to 1240 ft.

(7) CASING INSTALLED: Steel [X] Plastic [] Concrete []

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

Table with columns: From ft., To ft., Dia. in., Casing or Wall, From ft., To ft., Slot size. Row 1: 0, 1240, 1 1/4", 1/4", 800', 1240', 125x2-1/2"

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

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

(11) WELL TESTS: Was well test made? Yes [X] 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 [X] If yes, by whom? Was electric log made? Yes [X] No [] If yes, attach copy to this report

Work started 11-5-1979 Completed 11-30-1979

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 Donald Edgar (Well Driller) NAME Whitten Pumps, Inc. (Person, firm, or corporation) (Typed or printed) Address Rt. 1 Box 1101 City Delano, CA Zip 93215 License No. 148282 Date of this report 3-24-80

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0094537

Page 1 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

DWR Use Only - Do Not Fill In

025/26E-24

State Well Number/Site Number

Latitude Longitude

APN/TRS/Other

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify		
Drilling Method Reverse Rotary Drilling Fluid Polybore		
Depth from Surface	Description	
Feet to Feet	Describe material, grain size, color, etc	
40	110	Sand Gravel
110	150	Sand
150	190	Sand Gravel Clay
190	240	Sand Clay
240	290	Sand
290	360	Sand Clay
360	400	Clay
400	1,120	Sand Clay
1120	1,270	Clay
Total Depth of Boring 1270 Feet		
Total Depth of Completed Well 1240 Feet		

Well Owner

Name Gill & Sons Farm

Mailing Address 16964 Ave 32

City Delano State CA Zip 93292

Well Location

Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208

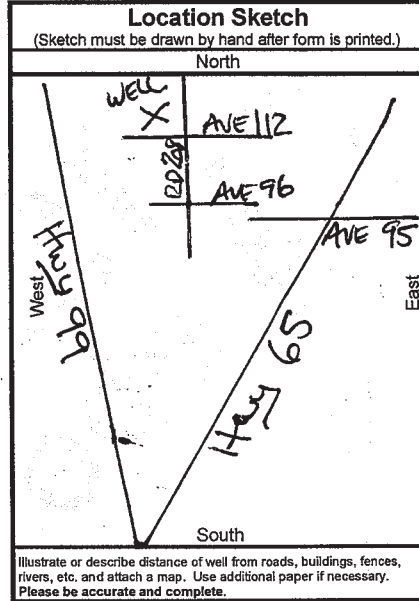
City Pixley County Tulare

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 302 Page 280 Parcel 013

Township 22S Range 26E Section 24 S



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 270 (Feet below surface)

Depth to Static

Water Level 270 (Feet) Date Measured 05/06/2009

Estimated Yield * 2,600 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 190 (Feet)

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

Casings							
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size if Any
Feet to Feet	(Inches)			(Inches)	(Inches)		(Inches)
0	40	42	Conductor	A53 Grade B	.375	30	
0	670	26	Blank	A53 Grade B	.312	16	
670	700	26	Ful Flo	Ful Flo A139	.312	16	Louver 0.080
700	800	26	Standard Flo	SF A139	.312	16	Louver
800	820	26	Ful Flo	Ful flo A139	.312	16	Louver 0.080
820	840	26	Standard Flo	SF A139	.312	16	Louver

Annular Material			
Depth from Surface	Fill	Description	
Feet to Feet			
0	40	Cement	Annular Seal
0	1,270	Filter Pack	4x16 SRI

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

7212 Fruitvale Ave Bakersfield CA 93308

Address City State Zip

Signed Date 7/13/2009 440537

C-57 Licensed Water Well Contractor Date Signed C-57 License Number

*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. e0094537

DWR Use Only - Do Not Fill In
22.5 / 26 E - 24
State Well Number/Site Number
Latitude Longitude
APN/TRS/Other

Page 2 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

Geologic Log
Orientation: [X] Vertical, [] Horizontal, [] Angle
Drilling Method: Reverse Rotary
Drilling Fluid: Polybore
Depth from Surface (Feet) to Description (Describe material, grain size, color, etc)
40-110 Sand Gravel
110-150 Sand
150-190 Sand Gravel Clay
190-240 Sand Clay
240-290 Sand
290-360 Sand Clay
360-400 Clay
400-1,120 Sand Clay
1120-1,270 Clay
Total Depth of Boring 1270 Feet
Total Depth of Completed Well 1240 Feet

Well Owner
Name Gill & Sons Farm
Mailing Address 16964 Ave 32
City Delano State CA Zip 93292

Well Location
Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208
City Pixley County Tulare
Latitude Longitude
Datum Decimal Lat. Decimal Long.
APN Book 302 Page 280 Parcel 013
Township 22S Range 26E Section 24 S

Location Sketch
(Sketch must be drawn by hand after form is printed.)
North
West
East
South
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.

Activity
[X] New Well
[] Modification/Repair
[] Deepen
[] Other
[] Destroy
Describe procedures and materials under "GEOLOGIC LOG"
Planned Uses
[X] Water Supply
[] Domestic [] Public
[X] 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 270 (Feet below surface)
Depth to Static
Water Level 270 (Feet) Date Measured 05/06/2009
Estimated Yield * 2,600 (GPM) Test Type Constant Rate
Test Length 12.0 (Hours) Total Drawdown 190 (Feet)
*May not be representative of a well's long term yield.

Casings
Annular Material
Table with columns: Depth from Surface, Borehole Diameter, Type, Material, Wall Thickness, Outside Diameter, Screen Type, Slot Size, Depth from Surface, Fill, Description

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
7212 Fruitvale Ave. Bakersfield CA 93308
Address City State Zip
Signed [Signature] Date Signed 7/13/2009 440537
Licensed Water Well Contractor C-57 License Number

*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.

3/6

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0094537

Page 3 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

DWR Use Only - Do Not Fill In

22S/26E-24

State Well Number/Site Number

Latitude Longitude

APN/TRS/Other

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Drilling Method <u>Reverse Rotary</u>		Drilling Fluid <u>Polybore</u>
Depth from Surface	Description	
Feet to Feet	Describe material, grain size, color, etc	
40	110	Sand Gravel
110	150	Sand
150	190	Sand Gravel Clay
190	240	Sand Clay
240	290	Sand
290	360	Sand Clay
360	400	Clay
400	1,120	Sand Clay
1120	1,270	Clay
Total Depth of Boring <u>1270</u> Feet		
Total Depth of Completed Well <u>1240</u> Feet		

Well Owner

Name Gill & Sons Farm

Mailing Address 16964 Ave 32

City Delano State CA Zip 93292

Well Location

Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208

City Pixley County Tulare

Latitude _____ Deg. Min. Sec. N Longitude _____ Deg. Min. Sec. W

Datum _____ Decimal Lat. _____ Decimal Long. _____

APN Book 302 Page 280 Parcel 013

Township 22S Range 26E Section 24 S

Location Sketch

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

North

West East

South

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.

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 270 (Feet below surface)

Depth to Static _____

Water Level 270 (Feet) Date Measured 05/06/2009

Estimated Yield * 2,600 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 190 (Feet)

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

Casings								Annular Material			
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size if Any	Depth from Surface	Fill	Description	
Feet to Feet	(Inches)			(Inches)	(Inches)		(Inches)	Feet to Feet			
1,030	1,060	26	Ful Flo	Ful Flo A139	.312	16	Louwer	0	40	Cement	Annular Seal
1,060	1,110	26	Standard Flo	SF A139	.312	16	Louwer	0	1,270	Filter Pack	4x16 SRI
1,110	1,130	26	Ful Flo	Ful Flo A139	.312	16	Louwer				
1,130	1,145	26	Standard Flo	SF A139	.312	16	Louwer				
1,145	1,170	26	Ful Flo	Ful flo A139	.312	16	Louwer				
1,170	1,200	26	Standard Flo	SF A139	.312	16	Louwer				

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

7212 Fruitvale Ave. Bakersfield CA 93308

Address City State Zip

Signed [Signature] Date Signed 7/13/2009 440537

C-57 Licensed Water Well Contractor License Number

24/27-34

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)
THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
No. 118749
State Well No. 24/27E-34
Other Well No. _____

(1) OWNER:

Name Buena Vista Orchards
Address P.O. Box 1458
McFarland, Calif. 93250

(2) LOCATION OF WELL:

County Kern Owner's number, if any—
R. F. D. or Street No. 1/4 mile East of Hwy 65 and 1/4
mile North of Ave. 2

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE
From 0 ft. to 1750 ft. 1 1/4" diam. 1/4" Gage or Wall
Diameter of Bore 25 1/2" from top to bottom
Type and size of shoe or well ring Size of gravel: 1/4"
Describe joint: collar w/ fillet weld

(7) PERFORATIONS:

Type of perforator used machine
Size of perforations .125 x 2 in., length, by 6 cc in.
From 600 ft. to 1750 ft. 2 Perf. per row 14 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From _____ ft. to _____ ft.
Method of Sealing _____

(9) WATER LEVELS:

Depth at which water was first found unknown ft.
Standing level before perforating _____ ft.
Standing level after perforating _____ ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom?
Yield: _____ gal./min. with _____ ft. draw down after _____ hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:

Total depth 1750 ft. Depth of completed well 1750 ft.
Formation: Describe by color, character, size of material, and structure.
0 ft. to 9 ft. top soil
9 " 127 " sand
127 " 409 " sandy clay
409 " 564 " clay
564 " 740 " sandy clay
740 " 743 " sand
743 " 881 " blue clay
881 " 943 " sandy clay
943 " 1066 " hard shale
1066 " 1220 " sandy clay
1220 " 1370 " blue shale
1370 " 1441 " hard blue shale
1441 " 1565 " hard shale
1565 " 1750 " shale w/ sand streaks

CONFIDENTIAL
Water Code Sec. 13752

Work started 12-28-68 19 Completed 1-15-68 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.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 Inyo St.
Delano, Calif. 93215
[SIGNED] _____
Well Driller
License No. 148282 Dated 10-23-68 19

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(Insert appropriate number)

24/27-20

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

LOCATION NOT CHECKED
Do Not Fill In

No. **60087**

State Well No.

Other Well No. 245/27E-20

(1) OWNER:

Name Lanza Vineyards
Address P.O. Box 397
Delano, Calif.

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No.
1/4 mile North of Ave. 16
3/8 mile East of Rd. 216

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE
From 1,824 ft. to 14" # single Diam. 14" # single Gage of Wall
If gravel packed
Diameter of Bore 26 from 3/4" to ft.
Top to bottom
Type and size of shoe or well ring
Describe joint Butt welded
Size of gravel 3/8"

(7) PERFORATIONS:

Type of perforator used Machine
Size of perforations 1/8 X 1cc in., length, by in.
From 648 ft. to 1824 ft. Perf. per row 21 Rows per ft. 3

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From ft. to ft.
Method of Sealing ft.

(9) WATER LEVELS:

Depth at which water was first found not known ft.
Standing level before perforating ft.
Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:

Total depth	1824 ft.	Depth of completed well	1824 ft.
Formation: Describe by color, character, size of material, and structure.			
0 ft. to	86 ft.	Sandy Top Soil	
86 "	196 "	Sandy Clay	
196 "	200 "	Hard Sand	
200 "	285 "	Sandy Clay	
285 "	302 "	Hard Sand	
302 "	460 "	Sandy Clay	
460 "	500 "	Sandy Clay	
500 "	540 "	Hard Clay	
540 "	543 "	Sand	
543 "	620 "	Hard Clay	
620 "	640 "	Hard Shale	
640 "	723 "	Hard Clay	
723 "	763 "	Shale	
763 "	840 "	Blue Clay	
840 "	843 "	Sand	
843 "	1042 "	Blue Clay	
1042 "	1105 "	Shale	
1105 "	1125 "	Soft Clay	
1125 "	1140 "	Shale	
1140 "	1230 "	Blue Clay	
1230 "	1233 "	Sand	
1233 "	1275 "	Blue Shale	
1275 "	1295 "	Hard Shale	
1295 "	1450 "	Clay	
1450 "	1452 "	Hard Shale	
1452 "	1481 "	Clay	
1481 "	1515 "	Hard Shale	
1515 "	1526 "	Clay	
1526 "	1570 "	Hard Shale	
1570 "	1574 "	Sand	
1574 "	1616 "	Hard Shale	
1616 "	1626 "	Sand	
1626 "	1636 "	Shale	
1636 "	1691 "	Clay & Shale	
1691 "	1739 "	Sand	
1739 "	1824 "	Hard Shale	

CONFIDENTIAL
Section 7076.1, Water Code

Work started 12/26/59 19 Completed 1/21/60 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.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 High Street
Delano, Calif.

[SIGNED] Ronald Egan
Well Driller
License No. 148282 Dated 7-15-60

File Original with DWR

State of California Well Completion Report

Refer to Instruction Pamphlet
No. e059519

DWR Use Only - Do Not Fill In			
<u>23S/27E-34</u>			
State Well Number/Site Number			
N	W		
Latitude		Longitude	
APN/TRS/Other			

Page 1 of 2

Owner's Well Number _____

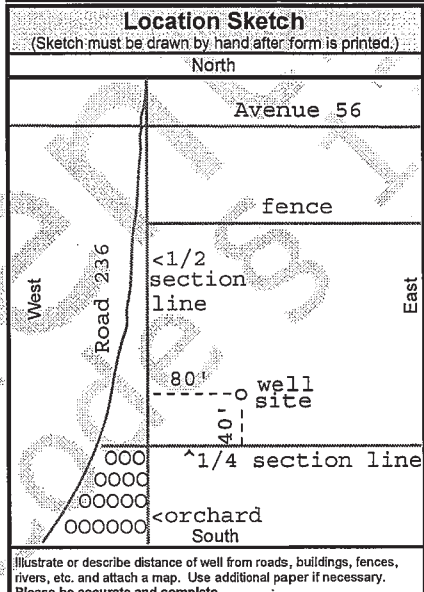
Date Work Began 07/12/2007 Date Work Ended 9/25/2007

Local Permit Agency Tulare County Environmental Health Department

Permit Number 07-0234 Permit Date 5/23/07

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Drilling Method <u>Direct Rotary</u> Drilling Fluid <u>Bentonite mud</u>		
Depth from Surface	Feet to Feet	Description
Describe material, grain size, color, etc		
0	32	Drill conductor
32	115	Fine to coarse sand
115	125	80% fine to coarse sand, 20% clay
125	135	Coarse sand with some clay
135	155	Fine to coarse sand
155	186	Fine to coarse sand with a little clay
186	245	5% fine to medium sand, 95% brown clay
245	330	95% brown and white clay, 5% medium sand
330	345	60% brown clay, 40% fine to medium sand
345	350	Brown clay
350	370	70% brown clay, 30% fine to medium sand
370	470	80% brown clay, 20% fine to medium sand
470	483	60% white and brown clay, 40% fine to medium sand
483	493	90% white and brown clay, 10% sand
493	503	80% fine to medium sand, 20% clay
503	535	95% blue & brown clay, 5% fine sand
535	567	Blue and brown clay, with some shale and fine sand
567	785	80% blue and brown clay, 20% sand
785	816	Hard blue and brown clay with some sand
816	878	90% blue-green shale and fine sand
878	888	80% blue clay and shale with some fine sand
888	898	90% clay and hard shale with fine to medium sand
898	970	Clay and hard shale
970	1,006	Clay and hard shale with some fine sand
1006	1,038	80% blue clay with shale and fine sand
1038	1,058	70% blue clay and shale with fine to medium sand
1058	1,100	80% blue clay and shale with fine sand
1100	1,110	60% clay and shale, 40% fine to coarse sand
1110	1,130	Blue clay and shale with some fine sand
Total Depth of Boring		1832 Feet
Total Depth of Completed Well		1800 Feet

Well Owner			
Name <u>JAY, LLC</u>			
Mailing Address <u>5060 California Avenue, Suite 910</u>			
City <u>Bakersfield</u>		State <u>CA</u>	Zip <u>93309</u>
Well Location			
Address <u>Hwy 56 & 240th, 1 mile SW</u>			
City <u>Ducor</u>		County <u>Tulare</u>	
Latitude <u>35</u> <u>52</u> <u>51</u> N	Longitude <u>119</u> <u>2</u> <u>37</u> W		
Deg. Min. Sec.		Deg. Min. Sec.	
Datum <u>WGS84</u>		Decimal Lat. _____	Decimal Long. _____
APN Book <u>321</u>	Page <u>160</u>	Parcel <u>009</u>	
Township <u>23S</u>	Range <u>27E</u>	Section <u>34</u>	



Activity
<input checked="" type="radio"/> New Well
<input type="radio"/> Modification/Repair
<input type="radio"/> Deepen
<input type="radio"/> Other _____
<input type="radio"/> Destroy
Describe procedures and materials under "GEOLOGIC LOG"
Planned Uses
<input checked="" type="radio"/> Water Supply
<input type="checkbox"/> Domestic <input type="checkbox"/> Public
<input checked="" type="checkbox"/> Irrigation <input type="checkbox"/> Industrial
<input type="radio"/> Cathodic Protection
<input type="radio"/> Dewatering
<input type="radio"/> Heat Exchange
<input type="radio"/> Injection
<input type="radio"/> Monitoring
<input type="radio"/> Remediation
<input type="radio"/> Sparging
<input type="radio"/> Test Well
<input type="radio"/> Vapor Extraction
<input type="radio"/> Other _____

Water Level and Yield of Completed Well	
Depth to first water <u>511</u>	(Feet below surface)
Depth to Static _____	
Water Level <u>511</u>	(Feet) Date Measured <u>09/25/2007</u>
Estimated Yield * <u>2,000</u>	(GPM) Test Type <u>Constant Rate</u>
Test Length <u>8.0</u>	(Hours) Total Drawdown <u>26</u> (Feet)
*May not be representative of a well's long term yield. PL 537	

Casings							Annular Material				
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size if Any	Depth from Surface	Fill	Description	
Feet to Feet	(Inches)			(Inches)	(Inches)		(Inches)	Feet to Feet			
0	20	36	Conductor	A53B	.375	30		0	150	Cement	10-sack
0	160	26	Solid	A53B	.375	16		150	1,832	Filter Pack	1/4 x 10 Gravel
160	760	26	Solid	A53B	.312	16					
760	880	26	Perforated	A53B	.312	16	Millslot	0.070			
880	1,000	26	Perforated	A53B	.312	16	Millslot	0.070			
1,000	1,260	26	Perforated	A53B	.312	16	Millslot	0.040			

Attachments
<input type="checkbox"/> Geologic Log
<input type="checkbox"/> Well Construction Diagram
<input type="checkbox"/> Geophysical Log(s)
<input type="checkbox"/> Soil/Water Chemical Analyses
<input type="checkbox"/> 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 <u>Rottman Drilling Co.</u>			
Person, Firm or Corporation			
46471 N. Division Street		Lancaster	CA 93535-5906
Address		City	State Zip
Signed <u><i>Michael W. Rottman</i></u>	<u>10/26/07</u>	<u>316599</u>	
C-57 Licensed Water Well Contractor		Date Signed	C-57 License Number

STATE OF CALIFORNIA
WELL COMPLETION REPORT

DWR USE ONLY — DO NOT FILL IN

238127E-27

STATE WELL NO./STATION NO.

LATITUDE _____ LONGITUDE _____

APN/TRS/OTHER _____

Page 1 of 1

Owner's Well No. North

No. **0925804**

Date Work Began 6-4-04, Ended 8-20-04

Local Permit Agency Tulare County Environmental Health

Permit No. 5400542 Permit Date 5-19-04

GEOLOGIC LOG

WELL OWNER

DEPTH FROM SURFACE		DESCRIPTION
Ft.	to Ft.	
0	60	Clay & Gravel
60	200	Sand & Clay
200	240	Sand & Little Clay
240	370	Sand & Grey Clay
370	380	Clay & Little Sand
380	390	Green Clay & Sand
390	400	Clay & Little Sand
400	410	Sand & Clay
410	440	Green Clay & Sand
440	540	Green Clay & Fine Sand
540	550	Green Clay Sand & Little Rock
550	930	Sand & Grey Clay
930	940	Grey Clay
940	960	Fine Sand & Grey Clay
960	1000	Sand Grey Clay & Shell
1000	1060	Sand & Grey Clay
1060	1090	Sand Grey Clay & Little Rock
1090	1150	Sand & Grey Clay
1150	1230	Sand Shell & Grey Clay
1230	1270	Shell & Grey Clay
1270	1290	Fine Sand & Shell, Grey Clay
1290	1380	Fine Sand & Grey Clay
1380	1430	Grey Clay
1430	1460	Fine Sand & Grey Clay
1460	1500	Grey Clay

ORIENTATION () VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

DRILLING METHOD Reverse Circulation FLUID Poly Bore

Describe material, grain size, color, etc.

Name Ducor Community Services Dist

Mailing Address P.O. Box 137

Ducor CA 93218

CITY STATE ZIP

WELL LOCATION

Address 14 Mile N. of Ave 56 75' West of Brady

City Ducor

County Tulare

APN Book 321 Page 080 Parcel 025

Township 23 Range 27E Section 27

Lat _____ N Long _____ W

LOCATION SKETCH

NORTH

WEST EAST

HWY 105

Ave 56

Brady Rd

ACTIVITY ()

NEW WELL

MODIFICATION/REPAIR

_____ Deepen

_____ Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES ()

WATER SUPPLY

_____ Domestic Public

_____ Irrigation _____ Industrial

MONITORING _____

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 502 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 502 (Ft.) & DATE MEASURED 7-26-04

ESTIMATED YIELD * 550 (GPM) & TEST TYPE Constant/ Flowmeter

TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 97 (Ft.)

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

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)						ANNULAR MATERIAL					
		TYPE ()				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE			
Ft.	to Ft.	BLANK	SCREEN	CONDUCTOR	FILL PIPE					CE-MENT ()	BEN-TONITE ()	FILL ()	FILTER PACK (TYPE/SIZE)
0	50			x		ASTM 139	30	5/16					
+2	1015		x			ASTM A 606	14	5/16					
1015	1035		x			ASTM A 606	14	5/16	Comp Section				6x16
1035	1385		x			A 606 Full Flo	14	5/16	.060				CCST
1385	1405		x			ASTM A 606	14	5/16					
+2	1010				x	A53 Grade B	3	Sch.40					

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 7212 Fruitvale Ave Bakersfield CA 93308

CITY STATE ZIP

Signed [Signature] DATE SIGNED 11-11-04 C-57 LICENSE NUMBER 440537

C-57 LICENSED WATER WELL CONTRACTOR

23/27-19R1

LOCATION NOT CHECKED

ORIGINAL File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. (Insert appropriate number)

WATER WELL DRILLERS REPORT (Sections 7076, 7077, 7078, Water Code)

Do Not Fill In No. 14164

STATE OF CALIFORNIA

State Well No. 19R Other Well No. 23/27-34

(1) OWNER: Name Guimarra Vineyards Co. Address P. O. Box 1653 Bakersfield, Calif.

(2) LOCATION OF WELL: County Tulare Owner's number, if any 5 R. F. D. or Street No. E. End of Road 64

(3) TYPE OF WORK (check): New well [X] Deepening [] Reconditioning [] Abandon [] If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check): Domestic [] Industrial [] Municipal [] Irrigation [X] Test Well [] Other [] (5) EQUIPMENT: Rotary [X] Cable [] Dug Well []

(6) CASING INSTALLED: Table with columns for From, to, Diam., Gage or Wall, Diameter of Bore, from, to, Size of gravel: 1/2"

(7) PERFORATIONS: Type of perforator used Machine Size of perforations 125 mesh in., length, by 2" in. From 645 to 1610 14 rows on 6" centers

(8) CONSTRUCTION: Was a surface sanitary seal provided? [] Yes [] No To what depth ft. Were any strata sealed against pollution? [X] Yes [] No If yes, note depth of strata From 1610 ft. to 1817 ft. Method of Sealing cemented

(9) WATER LEVELS: Depth at which water was first found ft. Standing level before perforating ft. Standing level after perforating ft.

(10) WELL TESTS: Was a pump test made? [X] Yes [] No If yes, by whom? I.S.A. Camp Co. Yield: 3500 gal./min. with 37 ft. draw down after 6 hrs. Temperature of water: Was electric log made of well? [X] Yes [] No

(11) WELL LOG: Total depth 1817' ft. Depth of completed well 1610' ft. Formation: Describe by color, character, size of material, and structure. 0 to 75 ft. Surface 75 to 130 Sand with strcs of clay 130 to 360 Sandy brown clay 360 to 460 Sandy br. clay w/ stks of sand 460 to 696 Sandy blue " " " " 696 to 800 Sandy clay 800 to 845 Hard Sand 845 to 900 Hard Sandy Blue Clay 900 to 960 Sand w/ thin streaks blue clay 960 to 1127 Blue shale 1127 to 1220 Hard blue shale w/ stks hard sand 1220 to 1517 Blue clay w/ streaks of sand 1517 to 1817 Sand w/ streaks of blue clay and hard shale

CONFIDENTIAL Section 7076.1, Water Code

Work started 6-5-57 19 Completed 6-21-57 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. NAME HYLTON DRILLING CO. (Person, firm, or corporation) (Typed or printed) Address 716 Eye Street Bakersfield, Calif. [SIGNED] Pres Hylton Well Driller License No. 111580 Dated June 25, 1957

ORIGINAL
File with DWR

Page 1 of 2

Owner's Well No. _____

Date Work Began 5-19-08, Ended 6-30-08

Local Permit Agency TULARE COUNTY

Permit No. 08-0200 Permit Date 4-23-08

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **0942277**

DWR USE ONLY - DO NOT FILL IN

23S/27E-07 / 15
STATE WELL NO./STATION NO.

LATITUDE _____ LONGITUDE _____

APN/TRS/OTHER _____

GEOLOGIC LOG

WELL OWNER

ORIENTATION (≠)		DRILLING METHOD		FLUID		DESCRIPTION
VERTICAL	HORIZONTAL	ANGLE	(SPECIFY)			
<input checked="" type="checkbox"/>	<input type="checkbox"/>			<u>Rotary</u>	<u>Mud</u>	
DEPTH FROM SURFACE		Describe material, grain size, color, etc.				
Ft. to Ft.						
0	50	TOP SOIL				
50	100	SAND				
100	140	SANDY CLAY				
140	150	SAND				
150	180	CLAY				
180	190	SAND				
190	290	CLAY				
290	310	SAND				
310	350	SANDY CLAY				
350	360	SAND				
360	390	SANDY CLAY				
390	410	SAND				
410	490	SANDY CLAY				
490	510	SAND				
510	660	SANDY CLAY				
660	690	SAND				
690	730	SANDY CLAY				
730	750	SAND				
750	820	SANDY CLAY				
820	830	CLAY				
830	850	SAND				
850	960	SANDY CLAY				
960	980	SAND				
980	1010	SHALE				
1010	1050	SANDY CLAY				
1050	1060	CLAY				
1060	1080	SAND				
1080	1090	CLAY				
1090	1100	SAND				
1100	1110	CLAY				
TOTAL DEPTH OF BORING _____ (Feet)						
TOTAL DEPTH OF COMPLETED WELL _____ (Feet)						

Name DOLE FRESH FRUIT CO

Mailing Address 1 DOLE AVE

WESTLAKE VILLAGE CA 91362

CITY STATE ZIP

WELL LOCATION

Address 1490 RD 208 100 N 1/4 AVE 80

City TERRA BELLA

County TULARE

APN Book 320 Page 010 Parcel 013

Township 23S Range 27E Section 07

Lat _____ N Long _____ W

DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

NORTH

WEST RD. 208

EAST

AVE 80

SOUTH

← 1/4 → X NEW WELL

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (≠)

NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify) _____

___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES (≠)

WATER SUPPLY

Domestic _____ Public _____

Irrigation _____ Industrial _____

MONITORING _____

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 476 (Ft.) & DATE MEASURED 8-6-08

ESTIMATED YIELD 1300 (GPM) & TEST TYPE Pump

TEST LENGTH 16 (Hrs.) TOTAL DRAWDOWN 551 (Ft.)

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

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)							
		TYPE (≠)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY, (Inches)
Ft. to Ft.		BLANK	SCREEN	CONDUIT	FILL PIPE				
0	40				X	A53B	33/4	.188	
0	625	X				A53B	15 1/4	.312	
625	1800		X			A53B	15 1/4	.312	.90

DEPTH FROM SURFACE	ANNULAR MATERIAL TYPE				
		CE-MENT (≠)	BEN-TONITE (≠)	FILL (≠)	FILTER PACK (TYPE/SIZE)
Ft. to Ft.					
0	30	X			
30	1800				1/4" GRAVEL

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 Whitten Pump Inc.

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

502 COUNTYLINE RD DELANO CA 93215

ADDRESS CITY STATE ZIP

Signed Paul A. Whitt DATE SIGNED 8/11/2008 C-57 LICENSE NUMBER 148282

C-57 LICENSED WATER WELL CONTRACTOR

ORIGINAL
File with DWR

Page 2 of 2

Owner's Well No. _____

Date Work Began 5-19-08, Ended 6-30-08

Local Permit Agency Tulare County

Permit No. 08-0200 Permit Date _____

(Continued)

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **0942278**

DWR USE ONLY -- DO NOT FILL IN

23S / 27E + 07 2
STATE WELL NO./STATION NO.

LATITUDE _____ LONGITUDE _____

APN/TRS/OTHER _____

GEOLOGIC LOG

WELL OWNER

ORIENTATION () VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)
DRILLING METHOD _____ FLUID _____

Name DOLE FRESH FRUIT CO

Mailing Address _____

CITY _____ STATE _____ ZIP _____

DEPTH FROM SURFACE
Ft. to Ft. DESCRIPTION
Describe material, grain size, color, etc.

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION Describe material, grain size, color, etc.
1110 1130	SAND
1130 1140	CLAY
1140 1150	SAND
1150 1170	CLAY
1170 1190	SAND
1190 1220	CLAY
1220 1250	SAND
1250 1290	SANDY CLAY
1290 1310	CLAY
1310 1330	SAND
1330 1350	CLAY
1350 1360	SAND
1360 1440	CLAY
1440 1450	SANDY CLAY
1450 1570	SAND
1570 1580	CLAY
1580 1610	SAND
1610 1670	CLAY
1670 1720	SAND
1720 1760	SANDY CLAY
1760 1800	SAND

WELL LOCATION

Address _____

City _____

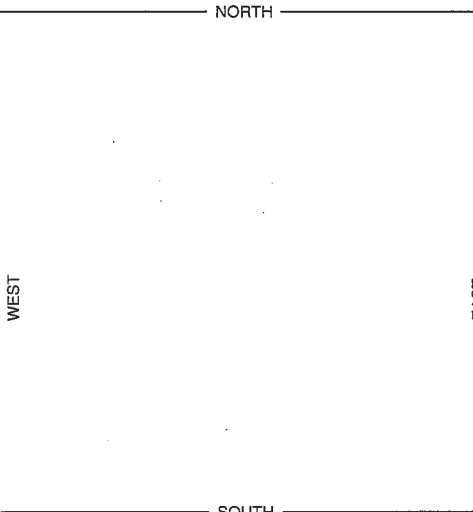
County _____

APN Book _____ Page _____ Parcel _____

Township 23S Range 27E Section 07

Lat _____ N Long _____ W
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH



ACTIVITY ()

NEW WELL

MODIFICATION/REPAIR

_____ Deepen
_____ Other (Specify) _____

_____ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES ()

WATER SUPPLY
_____ Domestic _____ Public
_____ Irrigation _____ Industrial

MONITORING _____

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

TOTAL DEPTH OF BORING _____ (Feet)

TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

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.

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

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL			
	TYPE			
	CE- MENT ()	BEN- TONITE ()	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 _____
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS _____ CITY _____ STATE _____ ZIP _____

Signed Paul A. White
C-57 LICENSED WATER WELL CONTRACTOR

DATE SIGNED 8/11/2008

C-57 LICENSE NUMBER _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. **783343**

DWR USE ONLY - DO NOT FILL IN

23S/26E-23R1

STATE WELL NO./STATION NO.

LATITUDE _____ LONGITUDE _____

APN/TRS/OTHER _____

GEOLOGIC LOG			
ORIENTATION (±)		DRILLING METHOD	FLUID
<input checked="" type="checkbox"/> VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)		ROTARY	BENTONITE MUD
DEPTH FROM SURFACE	DESCRIPTION		
Ft. to Ft.	Describe material, grain size, color, etc.		
0 to 260	SANDY CLAY		
260 to 275	SAND		
275 to 500	SANDY CLAY		
500 to 515	SAND		
515 to 570	SANDY CLAY		
570 to 590	CLAY		
590 to 635	SANDY CLAY		
635 to 660	SAND		
660 to 700	SANDY CLAY		
700 to 720	SAND		
720 to 770	SANDY CLAY		
770 to 795	CLAY		
795 to 875	SANDY CLAY		
875 to 895	SAND		
895 to 960	SANDY CLAY		
960 to 995	SAND		
995 to 1105	SANDY CLAY		
1105 to 1120	SAND		
1120 to 1145	CLAY		
1145 to 1165	SAND		
1165 to 1240	SANDY CLAY		
1240 to 1265	CLAY		
1265 to 1510	CLAY WITH SAND STREAKS		
1510 to 1530	SAND		
1530 to 1620	SANDY CLAY		
1620 to 1645	SAND		
1645 to 1670	SANDY CLAY		
1670 to 1685	SAND		
1685 to 1690	SANDY CLAY		
1690 to 1720	SAND		
TOTAL DEPTH OF BORING: 1720 Feet			
TOTAL DEPTH OF COMPLETED WELL: 1700 Feet			

WELL OWNER			
Name	A.L.G. ENTERPRISES		
Mailing Address	RT. 2, BOX 299 DELANO CA. 93215		
CITY	STATE	ZIP	
WELL LOCATION			
Address	1-1/8 MILE NORTH OF AVENUE 56 AND		
City	1/4 MILE WEST OF ROAD 200		
County	TULARE COUNTY ENVIRONMENTAL HEALTH		
APN Book	Page	Parcel	
319	160	01	
Township	Range	Section	
23S	26E	23R	
Latitude	NORTH	Longitude	WEST
DEG. MIN. SEC.		DEG. MIN. SEC.	
LOCATION SKETCH			
NORTH			
SOUTH			
Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.			
ACTIVITY (±)			
<input checked="" type="checkbox"/> NEW WELL			
MODIFICATION/REPAIR			
<input type="checkbox"/> Deepen <input type="checkbox"/> Other (Specify) _____			
DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")			
PLANNED USES (±)			
WATER SUPPLY			
<input type="checkbox"/> Domestic _____ Public _____ <input checked="" type="checkbox"/> Irrigation _____ Industrial _____			
MONITORING _____			
TEST WELL _____			
CATHODIC PROTECTION _____			
HEAT EXCHANGE _____			
DIRECT PUSH _____			
INJECTION _____			
VAPOR EXTRACTION _____			
SPARGING _____			
REMEDICATION _____			
OTHER (SPECIFY) _____			
WATER LEVEL & YIELD OF COMPLETED WELL			
DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE			
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.			

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)							
		TYPE (±)				MATERIAL GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		BLANK	SCREEN	CON-DOCTOR	FILL PIPE				
0 to 600	27	X				A53B	15.37	.312	
600 to 1700	27		X			A53B	15.37	.312	100X2-1/2
0 to 30					X	A252	3.75		

DEPTH FROM SURFACE	ANNULAR MATERIAL			
	TYPE			
	CE-MENT (±)	BEN-TONITE (±)	FILL (±)	FILTER PACK (TYPE/SIZE)
0 to 20	X			
20 to 1700				1/4" GRAVEL

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 **WHITTEN PUMPS, INC.**
(PERSON, FIRM OR CORPORATION) (TYPED OR PRINTED)

ADDRESS **502 COUNTY LINE RD. DELANO CA. 93215**

Signed *Ronald E. Ryan* DATE SIGNED **3/9/01** 148282 C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT

DWR USE ONLY — DO NOT FILL IN

235/26E-11

STATE WELL NO./STATION NO.

LATITUDE _____ LONGITUDE _____

APN/TRS/OTHER _____

Page 1 of 1

Refer to Instruction Pamphlet

No. **0915717**

Owner's Well No. _____

Date Work Began 3/16/05, Ended 4/13/05

Local Permit Agency Environmental Health Services

Permit No. 23791 Permit Date 2/24/05

GEOLOGIC LOG

WELL OWNER

ORIENTATION (°)		VERTICAL	HORIZONTAL	ANGLE	(SPECIFY)
DEPTH FROM SURFACE		DRILLING METHOD _____ FLUID _____			
Ft.	to Ft.	DESCRIPTION			
Describe material, grain size, color, etc.					
50	30	Cond. Pipe			
50	58	Clay			
58	80	Sand			
80	118	Clay			
118	128	Sand			
128	200	Clay			
200	220	Sand			
220	225	Clay			
225	238	Sand			
238	280	Clay			
280	290	Sand			
290	440	Sand, Clay			
440	458	Sand, Rock			
458	568	Sand, Clay			
568	578	Sand			
578	660	Clay			
660	718	Sand, Rock			
718	720	Clay			
720	742	Sand			
742	768	Clay			
768	778	Sand			
778	788	Clay			
788	818	Sand			
818	828	Clay, Sand			
828	898	Sand			
898	920	Clay			
920	1000	Sand			
1000	1069	Clay			

Name Road 208 Ranches

Mailing Address 20191 Ave. 128

Porterville Ca. 93257

CITY STATE ZIP

WELL LOCATION

Address Ave. 56 E. to 192, 192 N. to Ave. 80,

City Ave. 80, 3/8 mi. E. On L. side of rd.

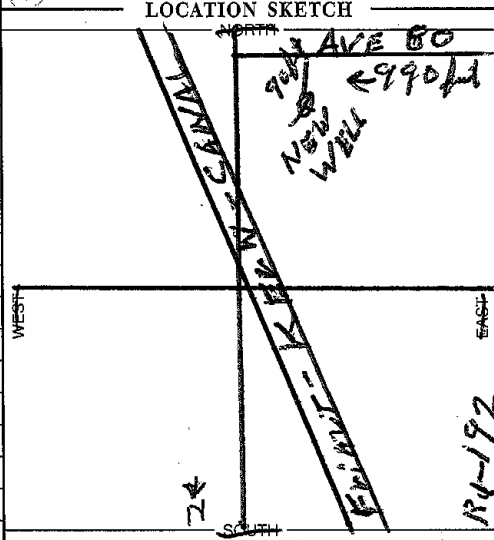
County Tulare

APN Book _____ Page _____ Parcel _____

Township 23 Range 26 Section 11

Lat _____ Long _____

DEG. MIN. SEC. N Long DEG. MIN. SEC. W



ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

— Deepen _____

— Other (Specify) _____

— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES (✓)

WATER SUPPLY

Domestic _____ Public _____

Irrigation _____ Industrial _____

MONITORING _____

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

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.

TOTAL DEPTH OF BORING 1069 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1011 (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)							
		TYPE (✓)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
Ft.	to Ft.	BLANK	SCREEN	CON-DUCTOR	FILL PIPE				
0	1011	27 1/2					16	312	.090
Blank Casing - 567'									
Perf. " - 444'									
0 - 50' top sanitary seal									

DEPTH FROM SURFACE	ANNULAR MATERIAL				
	TYPE				
Ft.	to Ft.	CE-MENT (✓)	BEN-TONITE (✓)	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 WASCO DRILLING COMPANY, INC.

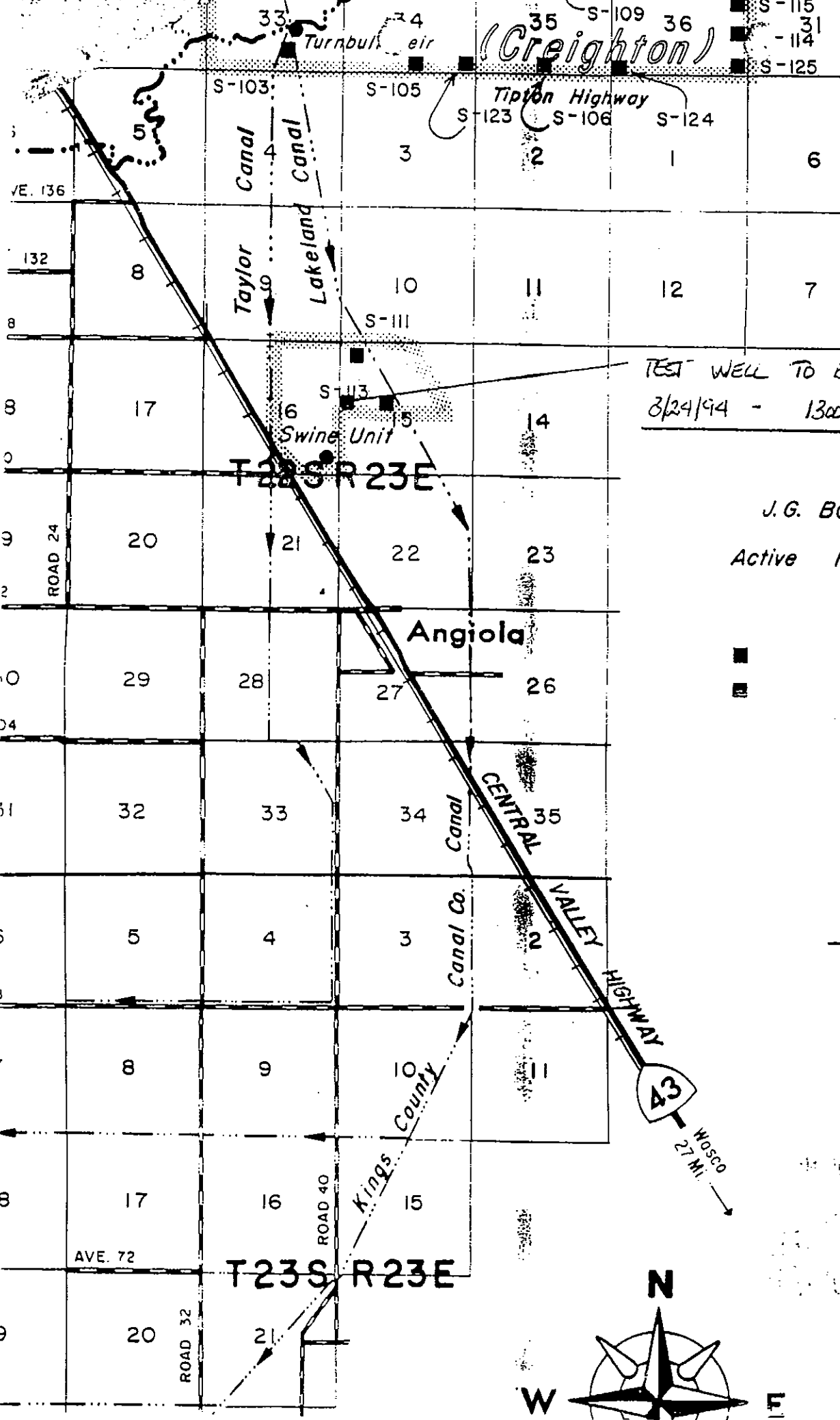
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

P. O. Box 181 Wasco Ca. 93280

ADDRESS CITY STATE ZIP

Signed [Signature] 4/18/05 582658

C-57 LICENSED WATER WELL CONTRACTOR DATE SIGNED C-57 LICENSE NUMBER

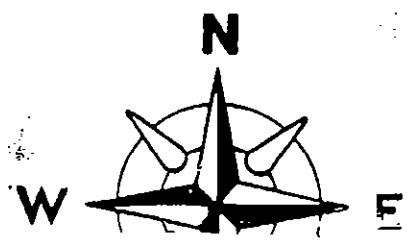
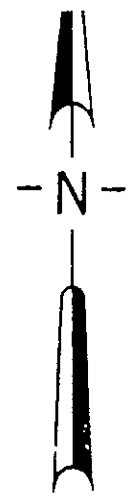


(Creighton)

TEST WELL TO BE DRILLED
3/24/94 - 1300 FT.

J.G. BOSWELL CO.

Active Irrigation Wells
6535-T



23/24-27C

ORIGINAL File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5 (Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

LOCATION NOT CHECKED Do Not Fill In

No. 63272

State Well No. 27C1

Other Well No. 23/24E-27

(1) OWNER:

Name Dr. A. W. Carlson Address P.O. Box 427 McFarland, Calif.

(2) LOCATION OF WELL:

County Tulare Owner's number, if any-- R. F. D. or Street No. 1/2 mile East of Road 88 and 1 mile North of Ave. 56. 125' S of 0.45 mi E/O NW Cor.

(3) TYPE OF WORK (check):

New well [X] Deepening [] Reconditioning [] Abandon [] If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

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

(5) EQUIPMENT:

Rotary [X] Cable [] Dug Well []

(6) CASING INSTALLED:

SINGLE [X] DOUBLE [] From 600 ft. to 1002 ft. Diam. 16" 1/4 single 14" 1/4 single If gravel packed Diameter of Bore 26" from Top to bottom Size of gravel: 3/8" Describe joint Butt Welded

(7) PERFORATIONS:

Type of perforator used Machine Size of perforations 1/8 X 1cc in., length, by From 804 ft. to 1602 ft. Perf. per row 18 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? [] Yes [X] No To what depth ft. Were any strata sealed against pollution? [] Yes [X] No If yes, note depth of strata From ft. to ft. Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found Unknown ft. Standing level before perforating ft. Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? [] Yes [X] No If yes, by whom? Yield: gal./min. with ft. draw down after hrs. Temperature of water Was a chemical analysis made? [] Yes [X] No Was electric log made of well? [] Yes [X] No

(11) WELL LOG:

Table with columns: Total depth, Depth of completed well, Formation, Depth (ft.), and Material. Rows include Top Soil, Sandy Clay, Clay, Sand, and Shale from 0 to 1602 ft.

DTW = 170' 11-18-70 JD

Work started 1/28/61 19 Completed 2/18/61 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.

NAME Whitten Pumps, Inc. (Person, firm, or corporation) (Typed or printed) Address 1744 High Street Delano, California

[SIGNED] Will Driller License No. 148282 Dated 3/27/61 1961

ORIGINAL

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

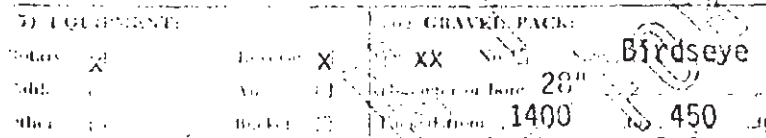
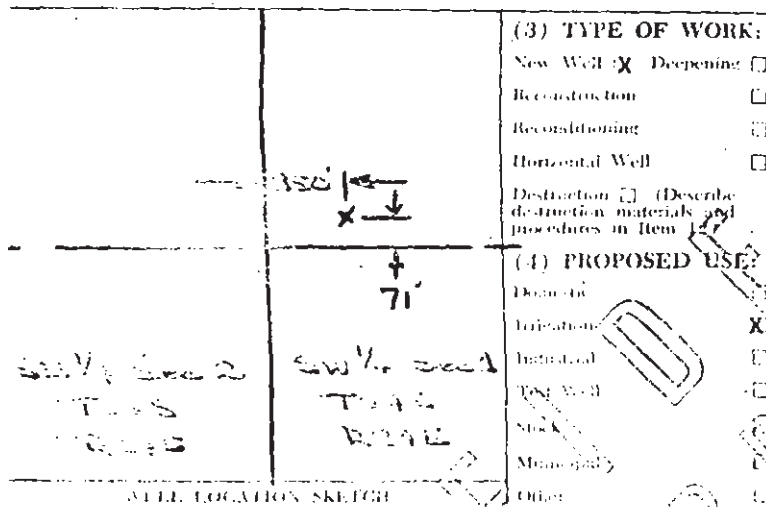
No. 49066 29/29-16

Office of Intent No. 159690 Local Permit No. or Date 5/20/82

State Well No. Other Well No.

1) OWNER: Name Superior Farming Company Address P.O. Box 9999 Bakersfield, CA 93389 2) LOCATION OF WELL: County Tulare Owner's Well Number 010-13A Well address if different from above SW corner of the NW 1/4 Township 24S Range 24E Section 16 Distance from lines, roads, railroads, fences, etc. 3 3/4 miles west of Earlimart, CA and 1 1/2 miles south of the Alpaugh-Ducor Road; Avenue 56.

(12) WELL LOG: Total depth 1405 ft. Depth of completed well 1382 ft. from ft. to ft. Formation (Describe by color, character, size or material) 0 - 50 Conductor 50 - 70 70% sand, 30% clay 70 - 80 50% sand, 50% clay 80 - 90 Sand 90 - 130 Brown Clay 130 - 170 80% sand, 20% sandy brown clay 170 - 190 Hard brown clay 190 - 210 90% brown clay 20% sand 210 - 220 50% clay, 50% sand 220 - 230 Soft brown clay 230 - 240 Sandy gray clay 240 - 250 90% sand, 10% clay 250 - 260 50% sandy gray clay, 50% sand 260 - 270 70% sandy gray clay, 30% sand 270 - 280 50% sandy gray clay, 50% sand 280 - 350 Gray clay 350 - 360 Gray sandy clay 360 - 390 70% sandy blue clay, 30% sand 390 - 400 60% sandy gray clay, 40% fine sand 400 - 410 Sandy gray clay 410 - 420 80% sandy gray clay, 20% sand 420 - 440 100% gray clay 440 - 480 100% soft blue clay 480 - 490 50% gray clay, 50% sand 490 - 500 70% gray clay, 30% sand 500 - 510 100% soft blue clay 510 - 520 Hard blue clay 520 - 530 50% sand, 50% blue clay 530 - 540 100% fine sand 540 - 550 100% clay 550 - 560 70% sand, 30% clay 560 - 570 50% sand, 50% blue & gray clay 570 - 600 100% sand 600 - 610 100% brown clay 610 - 620 100% sand 620 - 630 95% brown & blue clay, 5% sand 630 - 650 100% brown & blue clay 650 - 660 70% soft brown clay, 30% sand



7) EQUIPMENT: Motor, Drive, Pulley, etc. 8) CASING INSTALLED: Steel, Pipe, etc. 9) WELL SEAL: Bentonite Pellets

10) WATER LEVELS: Depth of first water, if known Unknown Standing level after well completion 207'

11) WELL TESTS: Was well test made? Yes X No [] If yes, by whom? Driller Type of test Pump [] Bailer [] Air lift [] Depth to water at start of test 207 ft. At end of test 241 ft. Discharge 2500 gal/min at 12 hours. Water temperature N/A Chemical analysis made? Yes [] No X If yes, by whom? As electric log made? Yes X No [] If yes, attach copy to this report

7) GRAVEL PACK: Birdseye 28" 1400 450 8) SIFTER/SCREENS: RM - FF Type of perforation or size of screen From ft. To ft. Sift size 640 760 3/32 760 1382 3/32 Reduction & comp. sect. 610 - 620 100% sand 620 - 630 95% brown & blue clay, 5% sand 630 - 650 100% brown & blue clay 650 - 660 70% soft brown clay, 30% sand Work started 5-24-1982 Completed 6-10-1982

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: Layne C. Knoll (Well Driller) NAME: Layne-Western Company, Inc. (Person, firm, or corporation) (Type or printed) Address: P.O. Box 3216 City: Bakersfield, CA Zip: 93385 License No. 407409 Date of this report: July 6, 1982

TRIPPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

Page ___ of ___

Owner's Well No. **18E**

No. **489856**

Date Work Began **7-15-91**, Ended **7-17-91**

Local Permit Agency **Tulare**

Permit No. **2 369745** Permit Date **7-12-91**

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

ORIENTATION (\angle) VERTICAL HORIZONTAL ANGLE (SPECIFY)
DEPTH TO FIRST WATER (Ft.) BELOW SURFACE

WELL OWNER
Name **Angiola Water Dist.**
Mailing Address **10015 Yucca, 10015 Utica Ave.**
CITY **Corcoran, CA** STATE ZIP

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain size, color, etc.</i>
Ft.	to Ft.	
0	4	Top Soil
4	9	clay
9	15	sand
15	21	clay
21	37	sand
37	39	clay
39	42	sand
42	63	clay
63	74	sand
74	85	clay
85	91	sand
91	97	clay
97	101	sand
101	105	clay
105	125	sand
125	131	clay
131	142	sand
142	176	clay
176	196	sand
196	222	clay
222	228	sand
228	244	clay
244	250	sand
250	256	clay
256	262	sand
262	270	clay
270	274	sand
274	277	clay
277	281	sand
281	294	clay
294	298	sand
298	301	clay
301	310	sand
310	316	clay
316	336	sand
336	347	clay
347	355	sand
355	400	clay
400	408	sand
408	411	clay
411	426	sand
426	431	clay
431	435	sand
435	440	clay
440	452	sand
452	669	clay
669	716	sand
716	722	clay
722	731	sand
731	747	clay
747	765	sand
765	771	clay
771	775	sands
775	800	clay
800	807	sand
807	820	clay
820	825	sand
825	830	clay
830	852	sand
852	863	clay
863	868	clay

WELL LOCATION
Address **Ave 112 1/2 mi W of Rd 56-200 ft S.**
City **Corcoran**
County **Tulare**
APN Book **Echoe** Page **78** Parcel **233-240-03**
Township **22S** Range **23 E** Section **26**
Latitude **NORTH** Longitude **WEST**

LOCATION SKETCH NORTH SOUTH
WEST EAST
ACTIVITY (\angle)
 NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
PLANNED USE(S) (\angle)
___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
 Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD **Reverse** FLUID **Natural**
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.

TOTAL DEPTH OF BORING **960** (Feet)
TOTAL DEPTH OF COMPLETED WELL **930** (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING(S)					ANNULAR MATERIAL					
		TYPE (\angle)				MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE		
Blank	Screen	Conductor	Fill Pipe									Cement (\angle)
0-50	38		X			steel	30	1/4				Conductor
0-560	30	X				steel	16	5/16				5/16x4
560-580	30					Compression section	18/16	5/16				Tablets
580-930	30	X				louver	16	5/16	.070			5/16x4

- ATTACHMENTS (\angle)
- ___ 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 **Grabow Well Drilling Inc.**
(PERSON OR FIRM OR CORPORATION) (PRINT OR TYPE)
ADDRESS **12522 9th Ave. Hanford, CA 93230** CITY STATE ZIP
Signed _____ DATE SIGNED **8-1-91** 289490 C-57 LICENSE NUMBER

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page _____ of _____
 Owner's Well No. 18E Continued
 Date Work Began _____, Ended _____
 Local Permit Agency _____
 Permit No. _____ Permit Date _____

No. **489857**

GEOLOGIC LOG			WELL OWNER																																				
ORIENTATION (∠) _____ VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)			Name <u>Angiola Water Dist (continued)</u>																																				
DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE			Mailing Address _____																																				
DESCRIPTION			CITY _____ STATE _____ ZIP _____																																				
Describe material, grain size, color, etc.			WELL LOCATION																																				
<table border="1"> <thead> <tr> <th colspan="2">DEPTH FROM SURFACE</th> <th rowspan="2">DESCRIPTION</th> </tr> <tr> <th>Ft.</th> <th>to Ft.</th> </tr> </thead> <tbody> <tr><td>863</td><td>868</td><td>sand</td></tr> <tr><td>868</td><td>874</td><td>clay</td></tr> <tr><td>874</td><td>879</td><td>sand</td></tr> <tr><td>879</td><td>890</td><td>clay</td></tr> <tr><td>890</td><td>902</td><td>sand</td></tr> <tr><td>902</td><td>912</td><td>clay</td></tr> <tr><td>912</td><td>920</td><td>sand</td></tr> <tr><td>920</td><td>930</td><td>clay</td></tr> <tr><td>930</td><td>938</td><td>sand</td></tr> <tr><td>938</td><td>960</td><td>clay</td></tr> </tbody> </table>			DEPTH FROM SURFACE		DESCRIPTION	Ft.	to Ft.	863	868	sand	868	874	clay	874	879	sand	879	890	clay	890	902	sand	902	912	clay	912	920	sand	920	930	clay	930	938	sand	938	960	clay	Address _____	
DEPTH FROM SURFACE		DESCRIPTION																																					
Ft.	to Ft.																																						
863	868	sand																																					
868	874	clay																																					
874	879	sand																																					
879	890	clay																																					
890	902	sand																																					
902	912	clay																																					
912	920	sand																																					
920	930	clay																																					
930	938	sand																																					
938	960	clay																																					
			City _____																																				
			County _____																																				
			APN Book _____ Page _____ Parcel _____																																				
			Township _____ Range _____ Section _____																																				
			Latitude _____ Longitude _____																																				
			DEG. MIN. SEC. NORTH DEG. MIN. SEC. WEST																																				
			LOCATION SKETCH																																				
			NORTH _____																																				
			SOUTH _____																																				
			EAST _____																																				
			WEST _____																																				
			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) _____																																				
			Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.																																				
			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.																																				
TOTAL DEPTH OF BORING _____ (Feet)																																							
TOTAL DEPTH OF COMPLETED WELL _____ (Feet)																																							

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING(S)					ANNULAR MATERIAL						
		TYPE (∠)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE	CEMENT (∠)	BENTONITE (∠)	FILL (∠)	FILTER PACK (TYPE/SIZE)		
Ft. to Ft.		BLANK	SCREEN	CONDUCTOR	FILL PIPE								

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 _____ (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED),

ADDRESS _____ CITY _____ STATE _____ ZIP _____

Signed Debra E. Anderson DATE SIGNED _____

WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED _____ C-57 LICENSE NUMBER _____

22/23-23

CAL 17-54

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

WELL SCHEDULE

CALIFORNIA

AREA: Palmdale

DATE: 12-11, 1957 Well No. 22/23-2341

REG. BY: R.L.B. [unclear] Other No. South Hill H 145

SOURCE OF DATA: ... Other No. ...

1. LOCATION: Map ... Photo 5-4522a

2. OWNER: South Hill Farms Address ...

FORMER OWNER: ... Tenant ...

DRILLER: ... Address ...

3. TOPOGRAPHY: Plains ft; how obtained ...; MP ... ft.

4. ALTITUDE: 211 ft; how obtained ...; MP ... ft.

5. TYPE: Dug, cable, rotary, auger, jet ...; Finish ...

6. DEPTH: Rept. 178 1/2 ft; Meas. ... ft; Obstruction ... ft.

7. CASING: Diam. 1 1/2 in. to 5 1/2 ft.; 12 in. to 17 1/2 ft. Type ...

PERFORATIONS: ...

8. AQUIFERS: ... Act. 9, 1958

9. WATER LEVEL: 120.05 ft. Pmpg. meas. ... which is 1.0 ft. above/below ...

Access on North side

10. PUMP: Type ...; Dischg diam. 10 in.; length 25 ft

Power W S E 1100; HP 100; Meter No. 370917

11. YIELD: Flow ... gpm; pump ... gpm, meas, rept, est.

DRAWDOWN: ... ft after ... min pmpg. Specific cap. ...

12. USE: ... Stock, PS, RUI, Ind, Irr, Obs, Destroyed, Unused, Test

13. QUALITY: ... Temp ... °F

TASTE, ODOR, COLOR: ... Sampled ...

14. OTHER DATA: log, analysis, water levels, electric log

15. REMARKS: ...

Well No. 22/23-2341

AE
PLOTTED
FEB 1970

Well No. 22/23-2341

Location: ...

0.45 ft north and 90 ft west of SE corner sec. 33

Remarks: ...

10-70' fld. chd. DTW-138' PERMISSION TO MEASURE PER FOR. WORKING LAND, WHO VERIFIED DEPTH, PERFS & APPROX. DATE DRILLED T.

motor *
1012417

24/24-4

LOCATION NOT CHECKED

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

Do Not Fill In
No. 63276 4E2
State Well No. _____
Other Well No. 245/24-4

STATE OF CALIFORNIA

2427

(1) OWNER:
Name John W. Oglesby
Address 516 West 4th.
Arvin, California

(2) LOCATION OF WELL:
County Tulare Owner's number, if any—
R. F. D. or Street No.
1/2 mile North of the town of
Allensworth and 300 ft. West of
Santa Fe Railway tracks.

(3) TYPE OF WORK (check):
New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other
(5) EQUIPMENT:
Rotary
Cable
Dug Well

(6) CASING INSTALLED:
SINGLE DOUBLE
From ft. to ft. 1 1/2" diam. 1/4" wall
Top to 1,200 ft.
If gravel packed
Diameter of Bore 26" from ft. to ft.
Top to bottom
Type and size of shoe or well ring
Describe joint Butt welded
Size of gravel: 3/8"

(7) PERFORATIONS:
Type of perforator used Machine
Size of perforations 1/8 x 1 cc in., length, by in.
From ft. to ft. 798 ft. to 1,200 ft. Perf. per row 4 Rows per ft. 18

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From _____ ft. to _____ ft.
Method of Sealing _____

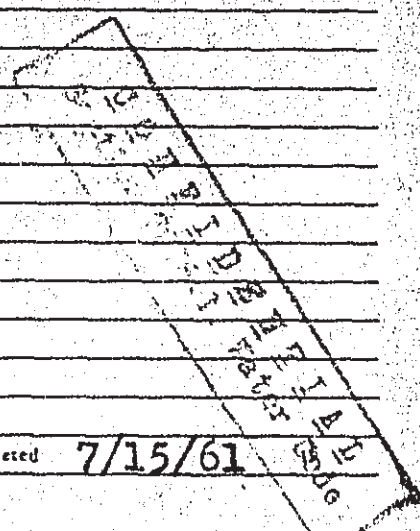
(9) WATER LEVELS:
Depth at which water was first found Unknown ft.
Standing level before perforating _____ ft.
Standing level after perforating _____ ft.

(10) WELL TESTS:
Was a pump test made? Yes No If yes, by whom?
Yield: _____ gal./min. with _____ ft. draw down after _____ hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:
Total depth 1,200 ft. Depth of completed well 1,200 ft.
Formation: Describe by color, character, size of material, and structure.

0 to 35	Sandy Clay Top Soil
35 to 218	Clay
218 to 300	Sandy Clay
300 to 369	Clay
369 to 482	Shale
482 to 487	Sand
487 to 610	Clay
610 to 616	Hard Clay
616 to 630	Sandy Clay
630 to 638	Hard Clay
638 to 787	Clay
787 to 813	Shale
813 to 935	Clay
935 to 995	Sandy Clay
995 to 1015	Clay
1015 to 1025	Sand
1025 to 1089	Clay
1089 to 1104	Hard Shale
1104 to 1178	Clay
1178 to 1200	Shale

DTW = 166 - 11-5-70 JD



Work started 6/27/61 19 _____ Completed 7/15/61

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 Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 High Street
Delano, California
[SIGNED] _____
License No. 148282 Dated January 31, 19 62

24/23 22R2

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

Do Not Fill In
No. 116291

CONTROL BOARD No. _____
(Insert appropriate number)

THE RESOURCES AGENCY OF CALIFORNIA

State Well No. 22R2
Other Well No. 24^S/23^E-22

(1) OWNER:

Name Alpaugh Irrigation District
Address P. O. Box 127
Alpaugh, California

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No. _____
Southeast corner sec 22
township 24S Range 23E
220' N of 75' N/O SE COR.

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

From	ft. to	ft.	Diam.	Gage or Wall	Diameter of Bore	ft. from	ft. to
0	500	16	1/4		25 1/2	ft.	
500	1200	14	1/4				
.16" OD to 14" OD							
Transition Joint Slip							

Type and size of shoe or well ring _____
Describe joint collared w/ fillet weld

(7) PERFORATIONS:

From	ft. to	ft.	Size of perforations	in., length, by	Perf. per row	Rows per ft.
500	1200	2	.100 x 2	6cc	14	

CAUTION:

Sealed? Yes No To what depth _____ ft.

Stratified? Yes No If yes, note depth of strata _____ ft.

(11) WELL LOG:

Total depth	ft.	Depth of completed well	ft.
1205		1205	
Formation: Describe by color, character, size of material, and structure.			
0	ft. to	4	ft. top soil
4	"	35	" sandy clay
35	"	78	" sandy clay
78	"	121	" sandy clay
121	"	329	" sandy clay
329	"	540	" sandy clay
540	"	664	" blue clay
664	"	874	" clay hard
874	"	900	" sandy clay
900	"	904	" sand
904	"	934	" clay
934	"	1058	" shale & clay
1058	"	1146	" hard shale
1146	"	1205	" blue sand

DTW = 244' 10/30/70 TS+JD

CONFIDENTIAL
Water Code Sec. 13752

Work started 10/31/66 19 _____ Completed 11/14/66 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.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 Inyo Street
Delano, California

[SIGNED] [Signature]
Well Driller

License No. 148282 Dated 4/22/67 19 _____

RECEIVED
SAN JOSE
APR 1967

24/23 22R2

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

Do Not Fill In
No. 116291

THE RESOURCES AGENCY OF CALIFORNIA

State Well No. 22R2
Other Well No. 245/23E-22

(1) OWNER:

Name Alpaugh Irrigation District
Address P. O. Box 127
Alpaugh, California

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No.
Southeast corner sec 22 23E 23E
township 24S Range 23E
220' N 75' N / O SE COR.

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE
From 0 ft. to 500 ft. Diam. 16" Gage or Wall 1/4"
500 " 1200 " 14 " 1/4 " top to bottom
16" OD to 14" OD
"Transition" Joint Slip jt.
Type and size of shoe or well ring Describe joint collared w/ fillet weld
If gravel packed Diameter of Bore 25 1/2 ft. to ft. Size of gravel:

(7) PERFORATIONS:

Type of perforator used machine
Size of perforations .100 x 2 in., length, by 6cc in.
From 500 ft. to 1200 ft. 2 Perf. per row 1 1/2 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found unknown ft.
Standing level before perforating ft.
Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:

Total depth 1205 ft. Depth of completed well 1205 ft.
Formation: Describe by color, character, size of material, and structure.
0 ft. to 4 ft. top soil
4 " 35" sandy clay
35 " 78" sandy clay
78 " 121" sandy clay
121 " 329" sandy clay
329 " 540" sandy clay
540 " 664" blue clay
664 " 874" clay hard
874 " 900" sandy clay
900 " 904" sand
904 " 934" clay
934 " 1058" shale & clay
1058 " 1146" hard shale
1146 " 1205" blue sand

DTW = 244' 10/30/70 TS+JG

CONFIDENTIAL
Water Code Sec. 13753

Work started 10/31/66 19 Completed 11/14/66 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.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 174 1/2 Inyo Street
Delano, California

[SIGNED] *W. Whitten* Well Driller
License No. 148282 Dated 4/22/67 19

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN
22S/23E-22 / 3
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. 8104

No. **E072308**

Date Work Began 1/28/2008, Ended 2/1/2008

Local Permit Agency TULARE COUNTY HEALTH DEPT

Permit No. 07-0141 Permit Date 4/9/2007

GEOLOGIC LOG

ORIENTATION (✓)		DRILLING METHOD	FLUID WATER
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		<u>REVERSE</u>	<u>FLUID WATER</u>
DEPTH FROM SURFACE		DESCRIPTION	
Ft.	to Ft.	Describe material, grain, size, color, etc.	
0	5	CLAY TOP SOIL	
5	8	COARSE SAND	
8	12	SILTY BROWN CLAY	
12	16	COARSE SAND	
16	95	SILTY BROWN CLAY	
95	175	SILTY TAN CLAY WITH SAND	
175	285	SILTY BLUE GRAY CLAY WITH SAND	
285	350	SAND WITH SILTY BLUE GRAY CLAY STREAKS	
350	365	SILTY BLUE GRAY CLAY	
365	420	SAND WITH SILTY BLUE GRAY CLAY STREAKS	
420	435	SILTY BLUE GRAY CLAY	
435	458	SAND	
458	500	SILTY BLUE GRAY CLAY	
500	630	SOFT BLUE GRAY CLAY	
630	685	SAND WITH SILTY BLUE GRAY CLAY STREAKS	
685	740	SAND	
740	745	BLUE GRAY CLAY	
745	810	SAND	
810	865	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS	
865	940	BLUE GRAY CLAY WITH SAND STREAKS	
940	995	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS	
995	1035	SAND	
1035	1055	BLUE GRAY CLAY	
1055	1140	BLUE GRAY CLAY WITH SAND STREAKS	
1140	1196	SAND	
1196	1205	BLUE GRAY CLAY	

WELL OWNER

Name ANGIOLA WATER DISTRICT
Mailing Address 944 WHITLEY AVE
CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION

Address .15 MI NOF AVE 112 & 250 WOF HWY 43
City CA
County TULARE
APN Book 291 Page 070 Parcel 010
Township 22 S Range 23 E Section 22
Latitude _____

LOCATION SKETCH NORTH

WEST EAST

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

PLANNED USES (✓)
 WATER SUPPLY
 Domestic Public
 Irrigation Industrial
 MONITORING _____
 TEST WELL _____
 CATHODIC PROTECTION _____
 HEAT EXCHANGE _____
 DIRECT PUSH _____
 INJECTION _____
 VAPOR EXTRACTION _____
 SPARGING _____
 REMEDIATION _____
 OTHER (SPECIFY) _____

_____ SOUTH _____
 Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
 DEPTH OF STATIC WATER LEVEL 320 (Ft.) & DATE MEASURED 4/19/2008
 ESTIMATED YIELD * 1000 (GPM) & TEST TYPE _____
 TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN 30 (Ft.)
 May not be representative of a well's long-term yield.

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)					DEPTH FROM SURFACE	ANNULAR MATERIAL					
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		TYPE	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)	
0	360	28		ACCESS TB	2	SCH 40	0	480	✓				SAND SLURRY
0	400	28	✓	ASTM-135	16	.312	480	1090			✓		SRI#8 SAND
400	510	28	✓	ASTM-135	16	.375							
510	520	28		COMP SEC	16								
520	670	28	✓	ASTM-135	16	.312							
670	850	28	✓	DBL MILLSL	16	.312							

- ATTACHMENTS (✓)**
- Geologic Log
 - Well Construction Diagram
 - Geophysical Log(s)
 - Soil/Water Chemical Analysis
 - 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 EATON DRILLING CO.
 (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
20 WEST KENTUCKY AVE WOODLAND CA 95695
 ADDRESS CITY STATE ZIP
 Signed [Signature] 04/29/08 C57 A HIC - 13378
 WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

Owner's Well No. 8104

Date Work Began 1/28/2008, Ended 2/1/2008

Local Permit Agency TULARE COUNTY HEALTH DEPT

Permit No. 07-0141 Permit Date 4/9/2007

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. **E072308**

DWR USE ONLY -- DO NOT FILL IN

22S/23E-22 13

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓)		DRILLING METHOD	FLUID	WATER
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		REVERSE		
DEPTH FROM SURFACE		DESCRIPTION		
Ft.	to Ft.	Describe material, grain, size, color, etc.		
0	5	CLAY TOP SOIL		
5	8	COARSE SAND		
8	12	SILTY BROWN CLAY		
12	16	COARSE SAND		
16	95	SILTY BROWN CLAY		
95	175	SILTY TAN CLAY WITH SAND		
175	285	SILTY BLUE GRAY CLAY WITH SAND		
285	350	SAND WITH SILTY BLUE GRAY CLAY STREAKS		
350	365	SILTY BLUE GRAY CLAY		
365	420	SAND WITH SILTY BLUE GRAY CLAY STREAKS		
420	435	SILTY BLUE GRAY CLAY		
435	458	SAND		
458	500	SILTY BLUE GRAY CLAY		
500	630	SOFT BLUE GRAY CLAY		
630	685	SAND WITH SILTY BLUE GRAY CLAY STREAKS		
685	740	SAND		
740	745	BLUE GRAY CLAY		
745	810	SAND		
810	865	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS		
865	940	BLUE GRAY CLAY WITH SAND STREAKS		
940	995	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS		
995	1035	SAND		
1035	1055	BLUE GRAY CLAY		
1055	1140	BLUE GRAY CLAY WITH SAND STREAKS		
1140	1196	SAND		
1196	1205	BLUE GRAY CLAY		
TOTAL DEPTH OF BORING 1090 (Feet)				
TOTAL DEPTH OF COMPLETED WELL 1050 (Feet)				

Name ANGIOLA WATER DISTRICT

Mailing Address 944 WHITLEY AVE
CORCORAN CA 93212

CITY STATE ZIP

WELL LOCATION

Address .15 MI NOF AVE 112 & 250' WOF HWY 43

City CA

County TULARE

APN Book 291 Page 070 Parcel 010

Township 22 S Range 23 E Section 22

Latitude _____

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY

Domestic Public

Irrigation Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 320 (Ft.) & DATE MEASURED 4/19/2008

ESTIMATED YIELD * 1000 (GPM) & TEST TYPE _____

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN 30 (Ft.)

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

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)	BLANK	SCREEN	CON-DUCTOR				
850	940	28	✓			ASTM-135	16	.312	
940	960	28		✓		DBL MILLSL	16	.312	.060
960	990	28	✓			ASTM-135	16	.312	
990	1030	28		✓		DBL MILLSL	16	.312	.060
1030	1050	28	✓			ASTM-135	16	.312	

DEPTH FROM SURFACE	ANNULAR MATERIAL				
	TYPE				
Ft. to Ft.	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)	
0	480	✓			SAND SLURRY
480	1090			✓	SRI#8 SAND

ATTACHMENTS (✓)

Geologic Log

Well Construction Diagram

Geophysical Log(s)

Soil/Water Chemical Analysis

Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

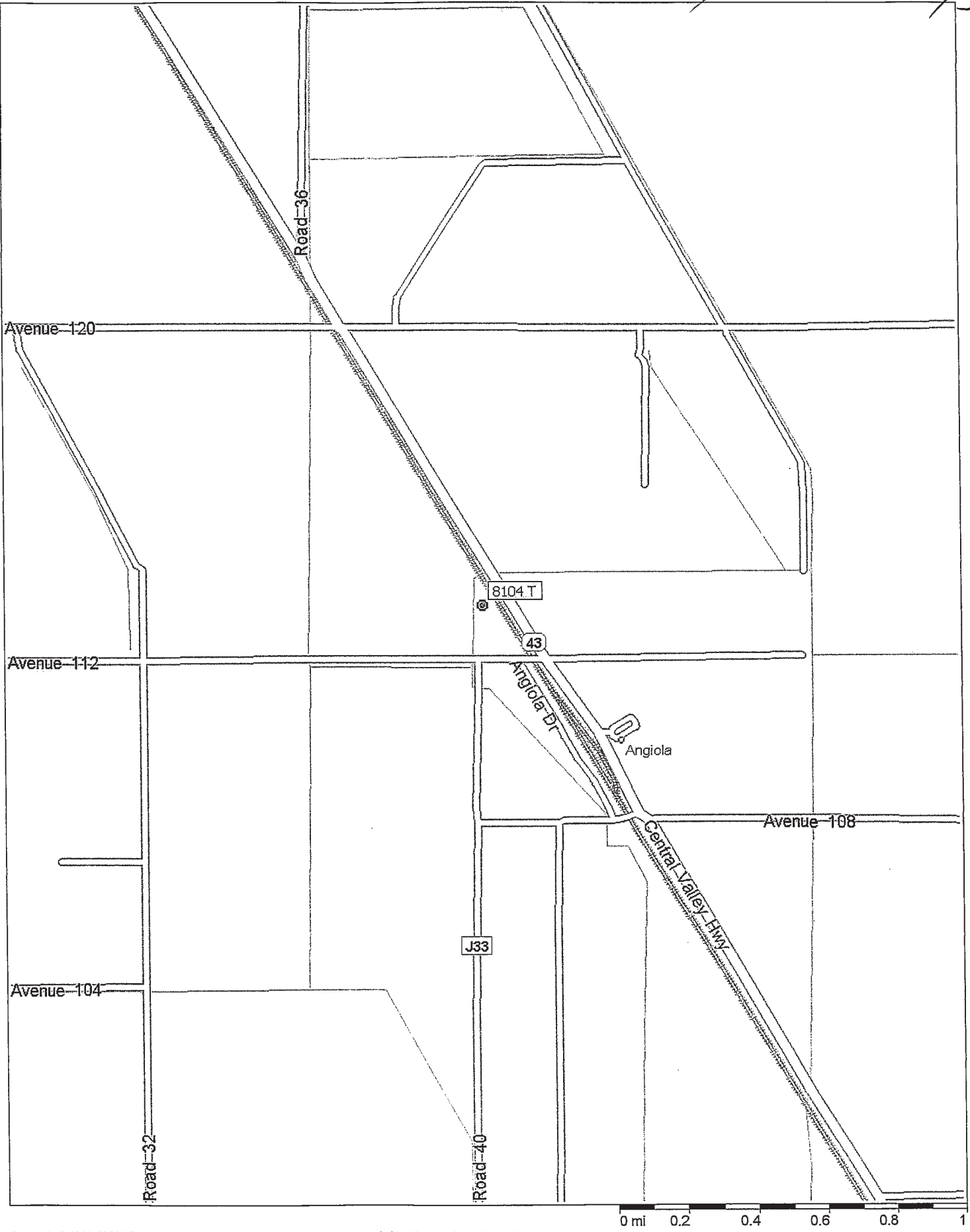
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME EATON DRILLING CO.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 WEST KENTUCKY AVE WOODLAND CA 95695
ADDRESS CITY STATE ZIP

Signed Mark Damion DATE SIGNED 04/29/08 C57 A HIC - 13378
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

22S/23E-22 3/3



W16

File Original with DWR

STATE OF CALIFORNIA WELL COMPLETION REPORT

DWR USE ONLY DC NOT FILL IN

Page 1 of 1

Owner's Well No. Well #16 or Layne Well #2

No. e077033

Date Work Began 5/8/08 Ended _____

Local Permit Agency Tulare County Env Health Services Div

Permit No. 08-0222 Permit Date 5/8/08

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

WELL OWNER

ORIENTATION (X)		DRILLING METHOD	DESCRIPTION
<input checked="" type="checkbox"/> VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)		<u>Reverse Rotary</u>	
DEPTH FROM SURFACE	FL to Ft.		Describe material, grain size, color, etc.
60	260		sand, clay
260	300		clay, sand
300	310		clay, sand, little, gravel
310	320		clay, sand
320	1330		sand, clay

Name Angiola Water District
Mailing Address 944 Whitley Ave Ste A
Corcoran CA 93212
CITY STATE ZIP
WELL LOCATION
Address Ave 112 & Rd 40
City Corcoran CA 93212
County Tulare County STATE ZIP
APN Book 311 Page 020 Parcel 010
Township 23S Range 23E Section 4
Latitude 35 57 26.38 NORTH Longitude 119 29 1.7 WEST
DEG. MIN. SEC. DEG. MIN. SEC.



ACTIVITY (X)
 NEW WELL
 MODIFICATION/REPAIR
 Deepen
 Other (Specify) _____
 DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
WATER SUPPLY
 Domestic _____ Public
 Irrigation _____ Industrial
MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDICATION -
OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads Buildings, Fences, Rivers etc and attach map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER Unknown (Ft.) BELOW SURFACE
DEPTH OF STATIC 321.93 (Ft.) & DATE MEASURED Late July through 8/1/08
WATER LEVEL _____
ESTIMATED YIELD 1685 (GPM) & TEST TYPE pump
TEST LENGTH 57 (Hrs.) TOTAL DRAWDOWN 163.56 (Ft.)
* May not be representative of a well's long-term yield.

DEPTH FROM SURFACE	BORE-HOLE DIA. (inches)	CASING (S)								
		TYPE (-)				MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	
Ft.	to	Ft.	BLANK	SCREEN	CONDUCTOR					FILL PIPE
0	40	36		X			Steel	30	.375	
0	870	26	X				Steel	16	.375	
870	910	26	X				Steel	16	.312	Full Flow .060
910	930	26	X				Steel	16	.375	
930	990	26	X				Steel	16	.312	VMS .060
990	1044	26	X				Steel	16	.375	

DEPTH FROM SURFACE	ANNULAR MATERIAL					
	TYPE					
Ft.	to	Ft.	CE-MENT (X)	BEN-TONITE (X)	FILL (X)	FILTER PACK (TYPE/SIZE)
0	500		X			
500	510					Hole Plug
510	1312				X	Gravel Pack 1/4 X 10

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

CERTIFICATION STATEMENT

1, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
Layne Christensen Company
NAME (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
11001 Etiwanda Ave Fontana CA 92337
ADDRESS CITY STATE ZIP
Signed [Signature] DATE SIGNED 5/28/08 C-57 LICENSE NUMBER _____
DRILLER AUTHORIZED REPRESENTATIVE

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM.

TRIPPLICATE
Owner's Copy

Page 1 of 3

Owner's Well No. G-17 = 6-28

Date Work Began 9/13/2007, Ended 10/9/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0438 Permit Date 9/11/2007

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **E054498**

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.			
LATITUDE		LONGITUDE	
APN/TRS/OTHER			

GEOLOGIC LOG

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain, size, color, etc.</i>
Fl.	to Fl.	
0	10	SANDY BROWN CLAY
10	12	COARSE SAND
12	15	SANDY BROWN CLAY
15	34	SANDY BROWN CLAY & GRAVEL
34	41	COARSE SAND
41	50	BROWN CLAY
50	73	SAND
73	76	GRAVEL
76	85	CLAY
85	92	HARD CLAY
92	104	SOFT CLAY
104	116	SANDY HARD CLAY
116	124	SAND
124	136	HARD CLAY
136	141	SANDY CLAY
141	149	CLAY
149	158	SANDY CLAY
158	183	CLAY
183	194	SAND & GRAVEL
194	199	COARSE SAND
199	209	CLAY
209	235	SAND
241	268	SANDY CLAY
268	310	CLAY
310	332	SANDY CLAY
332	356	SAND & GRAVEL
356	365	SAND
365	371	CLAY
371	377	GRAVEL & COARSE SAND
377	384	CLAY

TOTAL DEPTH OF BORING 1120 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1120 (Feet)

WELL OWNER

Name ANGIOLA WATER DIST.
Mailing Address 944 WHITLEY AVE. SUITE CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION

Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 003
Township 22 S Range 23 E Section 34
Latitude

LOCATION SKETCH

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

PLANNED USES (✓)
 WATER SUPPLY
 — Domestic — Public-Industrial
 Irrigation
 MONITORING —
 TEST WELL —
 CATHODIC PROTECTION —
 HEAT EXCHANGE —
 DIRECT PUSH —
 INJECTION —
 VAPOR EXTRACTION —
 SPARGING —
 REMEDIATION —
 OTHER (SPECIFY) —

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

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

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)	BLANK	SCREEN	CONDUCTOR FILL PIPE				
0	50	44"				STEEL	36"	5/16"	
0	760	30"	✓			STEEL	18"	3/8"	
760	762	30"	✓			STEEL	18" - 16"	3/8"	
762	1122	28"	✓			STEEL	16"	3/8"	.050 SLO

DEPTH FROM SURFACE	ANNULAR MATERIAL TYPE				
		CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	700			✓	1/4 X #8
700	1120			✓	6 x 16 / 1/4 # 1

ATTACHMENTS (✓)

- Geologic Log
- ✓ Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other _____

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
 NAME MYERS BROS. WELL DRILLING, INC.
 (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
 ADDRESS CITY STATE ZIP
 Signed [Signature] DATE SIGNED 10/12/07 548214
 WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

TRIPPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT

DWR USE ONLY -- DO NOT FILL IN

Page 2 of 3

Owner's Well No. G-17

No. **E054498**

Date Work Began 9/13/2007, Ended 10/9/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0438 Permit Date 9/11/2007

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain, size, color, etc.</i>
Fl.	to Fl.	
384	399	COARSE SAND & GRAVEL
399	411	SANDY CLAY
411	416	SAND
416	436	CLAY
436	455	COARSE SAND
455	482	SANDY CLAY
482	547	CLAY
547	553	SAND
553	594	CLAY
594	607	SANDY CLAY
607	663	CLAY
663	672	SANDY CLAY
672	718	CLAY
718	740	SANDY CLAY
740	786	SAND
786	810	SANDY CLAY
810	826	CLAY
826	847	SAND
847	861	COARSE SAND
861	884	SANDY CLAY
884	903	CLAY
903	941	SAND
941	960	CLAY
960	987	COARSE SAND
987	1004	SANDY CLAY
1004	1011	SAND
1011	1025	COARSE SAND
1025	1041	CLAY
1041	1058	SAND
1058	1064	CLAY

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE _____ (SPECIFY)
 DRILLING METHOD REVERSE FLUID _____
 TOTAL DEPTH OF BORING 1120 (Feet)
 TOTAL DEPTH OF COMPLETED WELL 1120 (Feet)

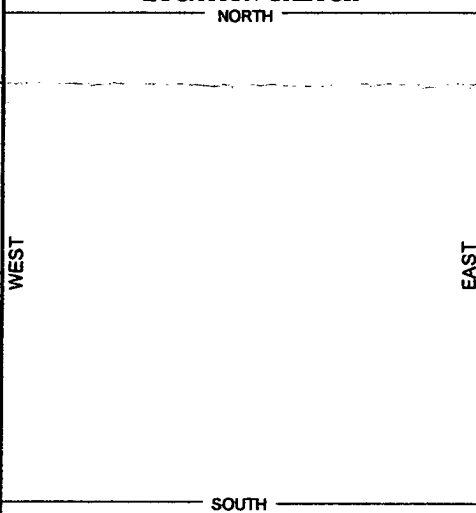
WELL OWNER

Name ANGIOLA WATER DIST.
 Mailing Address 944 WHITLEY AVE. SUITE
CORCORAN CA 93212
 CITY STATE ZIP

WELL LOCATION

Address RD 40 & AVE 112
 City ANGIOLA CA
 County TULARE
 APN Book 291 Page 110 Parcel 003
 Township 22 S Range 23 E Section 34
 Latitude _____

LOCATION SKETCH



- ACTIVITY (✓)
 NEW WELL
 MODIFICATION/REPAIR
 Deepen
 Other (Specify) _____
 DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
 PLANNED USES (✓)
 WATER SUPPLY
 Domestic Public
 Irrigation Industrial
 MONITORING _____
 TEST WELL _____
 CATHODIC PROTECTION _____
 HEAT EXCHANGE _____
 DIRECT PUSH _____
 INJECTION _____
 VAPOR EXTRACTION _____
 SPARGING _____
 REMEDIATION _____
 OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

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

DEPTH FROM SURFACE Fl. to Fl.	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)	BLANK	SCREEN	CON-DUCTOR FILL PIPE				
0 : 50	44"				STEEL	36"	5/16"		
0 : 760	30"	✓			STEEL	18"	3/8"		
760 : 762	30"	✓			STEEL	18" - 16"	3/8"		
762 : 1122	28"	✓			STEEL	16"	3/8"	.050 SLO	

DEPTH FROM SURFACE Fl. to Fl.	ANNULAR MATERIAL			
	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 : 50	✓			SIX SACK
0 : 700			✓	1/4 X #8
700 : 1120			✓	6 x 16 / 1/4 # 1

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other _____

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
 NAME MYERS BROS. WELL DRILLING, INC.
 (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
 ADDRESS CITY STATE ZIP
 Signed _____ DATE SIGNED 10/12/07 548214
 WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

Owner's Well No. G-17

Date Work Began 9/13/2007, Ended 10/9/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0438

Permit Date 9/11/2007

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **E054498**

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE _____ (SPECIFY)

DRILLING METHOD REVERSE FLUID _____

DEPTH FROM SURFACE

Fl.	to	Fl.	DESCRIPTION
1064	1081		COARSE SAND
1081	1100		SANDY CLAY
1100	1118		SAND
1118	1120		CLAY

Describe material, grain, size, color, etc.

TOTAL DEPTH OF BORING 1120 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1120 (Feet)

Name ANGIOLA WATER DIST.

Mailing Address 944 WHITLEY AVE. SUITE
CORCORAN CA 93212

CITY STATE ZIP

WELL LOCATION

Address RD 40 & AVE 112

City ANGIOLA CA

County TULARE

APN Book 291 Page 110 Parcel 003

Township 22 S Range 23 E Section 34

Latitude _____

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR
 Deepen
 Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (FL) BELOW SURFACE

DEPTH OF STATIC _____

WATER LEVEL _____ (FL) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (FL.)

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

DEPTH FROM SURFACE	BORE HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		TYPE (✓)	BLANK	SCREEN	CON-DUCTOR				
0	50	44"				STEEL	36"	5/16"	
0	760	30"	✓			STEEL	18"	3/8"	
760	762	30"	✓			STEEL	18" - 16"	3/8"	
762	1122	28"	✓			STEEL	16"	3/8"	.050 SLO

DEPTH FROM SURFACE	ANNULAR MATERIAL TYPE	TYPE			
		FL	to	Fl.	TYPE/SIZE
0	50	✓			SIX SACK
0	700			✓	1/4 X #8
700	1120			✓	6 x 16 / 1/4 # 1

- ATTACHMENTS (✓)**
- Geologic Log
 - Well Construction Diagram
 - Geophysical Log(s)
 - Soil/Water Chemical Analysis
 - 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 MYERS BROS. WELL DRILLING, INC.

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844

ADDRESS CITY STATE ZIP

Signed _____ DATE SIGNED 10/12/07 548214

WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

Page 1 of 2

Owner's Well No. 3 / E-22 No. e0078570

Date Work Began 5/19/08 Ended 10/3/08

Local Permit Agency Tulare County Environmental Health Division

Permit No. 08-0248 Permit Date 5/19/08

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

WELL OWNER

ORIENTATION (X)	<input checked="" type="checkbox"/> VERTICAL	<input type="checkbox"/> HORIZONTAL	ANGLE _____ (SPECIFY)
DEPTH FROM SURFACE	DRILLING METHOD	Reverse Rotary	FLUID _____
FL to Ft.	DESCRIPTION		
40	60	Sand, pebbles	
60	360	Sand	
360	370	Sand, little clay	
370	380	Sand, Clay	
380	390	Sand, little clay	
390	720	Sand, little clay	
720	880	Clay, sand	
880	1010	Sand, Clay	
1010	1150	Clay, sand	

Name Angiola Water District
Mailing Address 944 Whitley Ave Ste A
Corcoran Ca 93212
CITY STATE ZIP
Address 1.8 Mi E Hwy 43 off Ave 108
City Corcoran Ca 93212
County Tulare County STATE ZIP
APN Book 293 Page 230 Parcel 01
Township 22S Range 23E Section 25
Latitude 35 59 8.66 NORTH Longitude 119 26 30.18 WEST
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH NORTH

ACTIVITY (X)
 NEW WELL
 MODIFICATION/REPAIR
— Deepen
— Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG") _____

PLANNED USES (X)
WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDICATION - OTHER (SPECIFY) _____

Illustrate or Describe Distance Of Well from Roads Buildings, Fences, Rivers etc and attach map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

RECEIVED
OCT 14 2008
By _____

TOTAL DEPTH OF BORING 1160 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1140 (Feet)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER Unknown (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 328.95 (Ft.) & DATE MEASURED 9/30/08-10/3/08

ESTIMATED YIELD 2075 (GPM) & TEST TYPE Step and constant pump

TEST LENGTH 35 (Hrs.) TOTAL DRAWDOWN 74.08 (Ft.)

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

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (inches)	CASING (S)						DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE			
		TYPE (-)	MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	CE-MENT (X)		BEN-TONITE (X)	FILL (X)	FILTER PACK (TYPE/SIZE)	
0 to 40	40		Steel	30	.375		0 to 500	X			8 Sac Sand Slurry	
0 to 640	26	X	Steel	16	.375		500 to 510				Hole Plug	
640 to 700	26	X	Steel	16	.312	.060 Full Flow	510 to 1140			X	1/4 x 10 Greenfield Gravel Pack	
700 to 720	26	X	Steel	16	.375							
720 to 800	26	X	Steel	16	.312	.060 Full Flow						
800 to 860	26	X	Steel	16	.375							

ATTACHMENTS (X)
 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.

Layne Christensen Company
NAME (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

11001 Etiwanda Ave Fontana Ca 92337
ADDRESS CITY STATE ZIP

[Signature] 10/7/08
Signed DATE SIGNED

WELL DRILLER AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER 510011

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

Page 2 of 2

Owner's Well No. 3 / E-22

No. e0078570

Date Work Began 5/19/08 Ended 10/3/08

Local Permit Agency Tulare County Environmental Health Division

Permit No. 08-0248 Permit Date 5/19/08

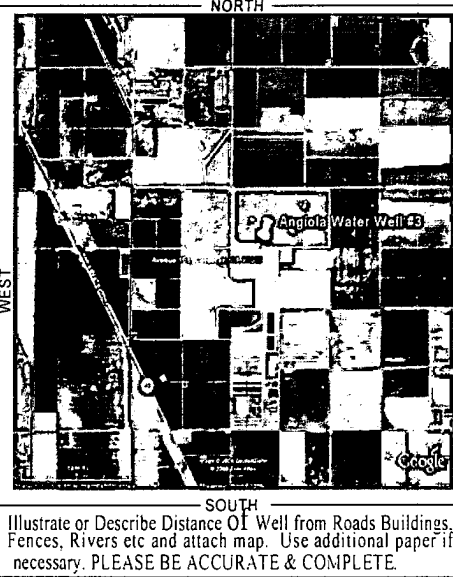
STATE WELL NO./STATION NO., LATITUDE, LONGITUDE, APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (X) VERTICAL HORIZONTAL ANGLE (SPECIFY) DRILLING METHOD Reverse Rotary FLUID Describe material, grain size, color, etc.

WELL OWNER

Name Angiola Water District Mailing Address 944 Whitley Ave Ste A Corcoran Ca 93212 CITY STATE ZIP WELL LOCATION 1.8 Mi E Hwy 43 off Ave 108



ACTIVITY (X) NEW WELL MODIFICATION/REPAIR Deepen Other (Specify) DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG") PLANNED USES (X) WATER SUPPLY Domestic Public Irrigation Industrial MONITORING TEST WELL CATHODIC PROTECTION HEAT EXCHANGE DIRECT PUSH INJECTION VAPOR EXTRACTION SPARGING REMEDIATION - OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL DEPTH TO FIRST WATER Unknown (Ft.) BELOW SURFACE DEPTH OF STATIC WATER LEVEL 328.95 (Ft.) & DATE MEASURED 9/30/08-10/3/08 ESTIMATED YIELD 2075 (GPM) & TEST TYPE Step and constant pump TEST LENGTH 35 (Hrs.) TOTAL DRAWDOWN 74.08 (Ft.) * May not be representative of a well's long-term yield.

Table with columns: DEPTH FROM SURFACE, BORE-HOLE DIA., CASING (S) TYPE, MATERIAL / GRADE, OUTSIDE DIAMETER, GAUGE OR WALL THICKNESS, SLOT SIZE, ANNULAR MATERIAL TYPE, CE-MENT, BEN-TONITE, FILL, FILTER PACK (TYPE/SIZE)

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

CERTIFICATION STATEMENT 1, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief. Layne Christensen Company NAME ADDRESS 11001 Etiwanda Ave Fontana Ca 92337 Signed DATE SIGNED 10/7/08 STATE ZIP 510011 C-57 LICENSE NUMBER

Owner's Well No. E-21

Date Work Began 10/27/2007, Ended 11/16/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0479

Permit Date 10/2/2007

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **E062799**

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

ORIENTATION (✓)			DRILLING METHOD			DESCRIPTION		
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)			<input checked="" type="checkbox"/> REVERSE <input type="checkbox"/> FLUID _____			Describe material, grain, size, color, etc.		
DEPTH FROM SURFACE		Ft. to Ft.	DESCRIPTION					
0	10			SANDY BROWN CLAY				
10	13		MEDIUM SAND					
13	28		SANDY BROWN CLAY					
28	37		MEDIUM SAND					
37	50		SANDY BROWN CLAY					
50	67		CLAY					
67	94		FINE SAND					
94	107		CLAY					
107	111		SAND					
111	146		CLAY					
146	164		SANDY CLAY					
164	192		SAND					
192	207		SANDY CLAY					
207	239		SAND					
239	268		CLAY					
268	304		SANDY CLAY					
304	309		SAND					
309	332		CLAY					
332	351		SAND					
351	356		SANDY CLAY					
356	401		SAND					
401	426		SANDY CLAY					
426	447		SAND					
447	454		CLAY					
454	470		SAND					
470	492		SANDY CLAY					
492	596		CLAY					
596	616		SANDY CLAY					
616	633		CLAY					
633	643		SAND					
TOTAL DEPTH OF BORING <u>1220</u> (Feet)								
TOTAL DEPTH OF COMPLETED WELL <u>1200</u> (Feet)								

WELL OWNER

Name ANGIOLA WATER DIST.

Mailing Address 944 WHITLEY AVE. SUITE
CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION

Address AVE 108. & HWY 43

City ANGIOLA CA

County TULARE

APN Book 293 Page 230 Parcel 001

Township 22 S Range 23 E Section 25

Latitude _____

DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

NORTH SOUTH WEST EAST

Handwritten: Ave 108, Hwy 43, Rd 56, 1100'

ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY

Domestic Public

Irrigation Industrial

MONITORING _____

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDICATION _____

OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

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.

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)					
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	
0 to 50	44"	BLANK	STEEL	34"	5/16"		
0 to 640	28"	SCREEN	STEEL	16"	3/8"		
640 to 1200	28"	CONDUCTOR	STEEL	16"	5/16"	.060 DBL	

DEPTH FROM SURFACE	ANNULAR MATERIAL TYPE			
	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 50	✓			SIX SACK
0 to 600			✓	1/4
600 to 1220			✓	6 X 16

ATTACHMENTS (✓)

Geologic Log

Well Construction Diagram

Geophysical Log(s)

Soil/Water Chemical Analysis

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 MYERS BROS. WELL DRILLING, INC.

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844

ADDRESS CITY STATE ZIP

Signed Carl Marshall DATE SIGNED 11/26/07 C-57 LICENSE NUMBER 548214

WELL DRILLER/AUTHORIZED REPRESENTATIVE

Owner's Well No. E-21

Date Work Began 10/27/2007, Ended 11/16/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0479

Permit Date 10/2/2007

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. **E062799**

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓)		DRILLING METHOD	FLUID	DESCRIPTION
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE _____ (SPECIFY)		<u>REVERSE</u>	_____	Describe material, grain, size, color, etc.
DEPTH FROM SURFACE	Ft. to Ft.			
643	668	SANDY CLAY		
668	677	CLAY		
677	694	SAND		
694	703	CLAY		
703	716	SANDY CLAY		
716	738	SAND		
738	743	CLAY		
743	760	SANDY CLAY		
760	794	SAND		
794	799	CLAY		
799	811	SANDY CLAY		
811	863	SAND		
863	882	CLAY		
882	910	SAND		
910	932	CLAY		
932	941	SAND		
941	962	SANDY CLAY		
962	991	SAND		
991	1002	CLAY		
1002	1013	SANDY CLAY		
1013	1018	CLAY		
1018	1026	SAND		
1026	1063	SANDY CLAY		
1063	1091	SAND		
1091	1099	CLAY		
1099	1126	SAND		
1126	1150	CLAY		
1150	1164	SANDY CLAY		
1164	1176	SAND		
1176	1220	CLAY		
TOTAL DEPTH OF BORING <u>1220</u> (Feet)				
TOTAL DEPTH OF COMPLETED WELL <u>1200</u> (Feet)				

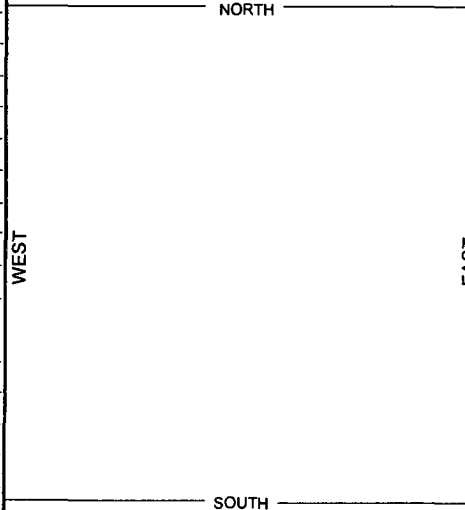
WELL OWNER

Name ANGIOLA WATER DIST.
Mailing Address 944 WHITLEY AVE. SUITE
CORCORAN CA 93212
CITY STATE ZIP

WELL LOCATION

Address AVE 108. & HWY 43
City ANGIOLA CA
County TULARE
APN Book 293 Page 230 Parcel 001
Township 22 S Range 23 E Section 25
Latitude _____

LOCATION SKETCH



ACTIVITY (✓)

NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify) _____

— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
— Domestic — Public
 Irrigation — Industrial
MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDICATION _____
OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
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.

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	ANNULAR MATERIAL				
		TYPE (✓)	BLANK	SCREEN	CON-DUCTOR					FILL PIPE	TYPE			
0 to 50	44"					STEEL	34"	5/16"						
0 to 640	28"	✓				STEEL	16"	3/8"					SIX SACK	
640 to 1200	28"	✓				STEEL	16"	5/16"	.060 DBL				1/4	
600 to 1220													6 X 16	

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- 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 MYERS BROS. WELL DRILLING, INC.

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD.

ADDRESS

HANFORD

CITY

CA

STATE

93230-4844

ZIP

Signed _____

WELL DRILLER/AUTHORIZED REPRESENTATIVE

11/26/07

DATE SIGNED

548214

C-57 LICENSE NUMBER

Appendix C

Groundwater Level Field Measurement Form



Appendix D

Chalk/Tape Groundwater Level Measurement



Appendix E

Quality Assurance Project Plan



ELEMENT 1: TITLE AND APPROVAL SHEETS**Draft Tule Basin Water Quality Coalition**

Surface Water and Groundwater Monitoring Plan
Quality Assurance Program Plan

Revision
July 1, 2019

Approvals

R.L. Schafer, RCE, RAE Tule Basin Water Quality Coalition Program Coordinator	Date
---	------

David De Groot, RCE 4Creeks, Inc. Project Manager, Technical Lead	Date
---	------

Michelle Parker R.L Schafer & Associates Quality Assurance Manager, Laboratory Coordinator	Date
--	------

Belinda C. Vega, Laboratory Director BSK Associates Laboratory Program Manager	Date
--	------

Draft Tule Basin Water Quality Coalition

Surface Water Monitoring Plan
Quality Assurance Program Plan

Revision
July 1, 2019

Approvals, cont.

David Sholes, Non-Point Source/AG Planning Date
California Regional Water Quality Control Board
QAPP Review

Renee Spears, Quality Assurance Officer Date
State Water Resources Control Board
QAPP Review

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APPENDICES

Appendix A: Sample Forms

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