

**Prepared for** 

# County of Colusa and County of Glenn

May 2018









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Prepared for

# The County of Colusa and County of Glenn

Project No. 277-16-16-06

7/18/18

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# List of Acronyms and Abbreviations

BMO Basin Management Objective
BMP Best Management Practices

Caltrans California Department of Transportation

CASGEM California's Statewide Groundwater Elevation Monitoring Program

CCR California Code of Regulations
CDEC California Data Exchange Center

CV-SALTS Central Valley Salinity Alternatives for Long-Term Sustainability

DDW Division of Drinking Water

DQO Data Quality Objective

DTSC Department of Toxic Substances Control

DTW Depth to Water

DWR Department of Water Resources

EC Electrical Conductivity

GAMA Groundwater Ambient Monitoring and Assessment

GAR Groundwater Quality Assessment Report

GCID Glenn-Colusa Irrigation District

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GMP Groundwater Management Plan

GPS Global Positioning System

GSA Groundwater Sustainability Agency

GSP Groundwater Sustainability Plan

GWE Groundwater Elevation

ILRP Irrigated Lands Regulatory Program

InSAR Interferometric Synthetic Aperture Radar

maf Million Acre-Feet

JPL Jet Propulsion Laboratory

Monitoring Network BMP Monitoring Network and Identification of Data Gaps Best

Management Practices

Monitoring Protocols BMP Monitoring Protocols, Standards, and Sites Best Management

**Practices** 

NAD 83 North American Datum of 1983

NASA National Aeronautics and Space Administration

NAVD 88 North American Vertical Datum of 1988

NCWA Northern California Water Association

NGS National Geodetic Survey

NOAA National Oceanic and Atmospheric Administration

NWIS National Water Information System

PCE Tetrachloroethylene

RD 108 Reclamation District No. 108

RPE Reference Point Elevation

SGMA Sustainable Groundwater Management Act

SWRCB State Water Resources Control Board

TDS Total Dissolved Solids

μg/L Microgram per Liter

USBR U.S. Bureau of Reclamation

USEPA U.S. Environmental Protection Agency

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USGS U.S. Geological Survey

WDL Water Data Library



#### **EXECUTIVE SUMMARY**

The Sustainable Groundwater Management Act (SGMA) requires groundwater basins of medium or higher priority that are not designated to be in critical overdraft to reach sustainability by 2042. Establishing monitoring networks for data collection in support of the six indicators of sustainability is critical to understanding the current conditions of the groundwater basin and surrounding area and to monitor effects of implemented groundwater projects with regard to basin objectives. The six sustainability indicators are:

- 1. Chronic lowering of groundwater levels;
- 2. Reduction in groundwater storage;
- 3. Seawater intrusion;
- 4. Degradation of groundwater quality;
- 5. Land subsidence; and
- 6. Depletion of interconnected surface waters.

This report provides an evaluation of the existing monitoring networks and programs in the portions of the Sacramento Valley Groundwater Basin that are overlain by the Counties of Colusa and Glenn. The groundwater subbasins that comprise the Sacramento Valley Groundwater Basin within Colusa and Glenn Counties include the entirety of the Colusa Subbasin and portions of the Corning and West Butte Subbasins. Existing groundwater level, groundwater quality, land subsidence, and surface water monitoring programs were evaluated using criteria listed in the California Department of Water Resources (DWR) SGMA Groundwater Sustainability Plan (GSP) Regulations and DWR's Best Management Practices (BMPs) for the Sustainable Management of Groundwater documentation. The networks were evaluated based on the criteria to identify potential data gaps that would limit the sufficiency of the networks to provide representative data for assessing sustainability for five of the six sustainability indicators. The sixth sustainability indicator, seawater intrusion, is neither occurring nor anticipated to occur within the Colusa Subbasin or the portions of the Corning and West Butte Subbasins within the study area. The 2018 Draft Basin Prioritization study by DWR found that the Colusa, Corning, and West Butte Subbasins have not exhibited any impacts of saline intrusion within the past 20 years. Evaluation of seawater intrusion was, therefore, determined unnecessary for the purposes of this study.

In cases where data gaps were identified, existing monitoring locations not currently included in the evaluated monitoring networks were assessed to fill data gaps. If no suitable existing monitoring sites were available, new monitoring sites were recommended for construction.

## **ES-1 Basin Conditions**

A summary of the current basin conditions with regard to groundwater levels, groundwater storage, groundwater quality, land subsidence, and surface waters connected to groundwater is presented in Chapter 2 of this report.

**Groundwater Levels.** Groundwater within the study area flows predominately eastward from the margins of the Sacramento Valley toward the Sacramento River and southward towards the Sacramento-San Joaquin Delta. Groundwater pumping has led to cones of depression that disrupt the regional groundwater flow trends. Recently, changes in land use and multiple-year droughts



(from 2007 to 2009 and 2012 to 2016) have led to increased groundwater pumping. These changes in groundwater pumping have created new cones of depression and enlarged existing cones of depression. Groundwater levels have recovered somewhat since the most recent multiple-year drought, but impacts from pumping are still evident near and west of the Glenn County communities of Orland and Artois, and in the southern part of the study area near the Colusa County communities of Williams, Arbuckle, and College City.

**Groundwater Storage.** The potential for groundwater storage to a depth of 200 feet is approximately 14.9 million acre-feet (maf) within the study area. Of this estimated amount, approximately 13 maf is within the Colusa Subbasin (DWR, 2006). Groundwater storage within the study area is probably greater than 14.9 maf, because potable storage extends to the base of freshwater, which is deeper than 200 feet throughout most of the study area.

Groundwater Quality. Groundwater quality concerns include locally elevated salinity, adjusted sodium absorption ratio, nitrate, manganese, and calcium. Salinity concentrations could potentially impact agricultural practices within both counties. Elevated boron within Colusa County has already impacted agricultural practices. Drinking water concerns within Glenn County include nitrate and hexavalent chromium. Drinking water concerns within Colusa County include salinity, iron, manganese, arsenic, and increasing concentrations of pesticides. An existing tetrachloroethylene (PCE) plume near Orland (referred to as the Orland Dry Cleaner site) extends approximately two miles from the source location in Glenn County.

Land Subsidence. Land subsidence has been observed and measured near Arbuckle in Colusa County, and Orland in Glenn County. Benchmark surveys conducted by DWR and county staff indicate a decline in land surface elevation of as much as two feet between 2008 and 2016 at one benchmark north of Arbuckle (Ehorn, 2016). Repeat surveys of benchmarks in Glenn County indicated small amounts of land subsidence southwest of Orland. DWR repeated the survey of all benchmarks in spring 2017, but data from the 2017 repeat survey are not yet available. Preliminary analysis of the repeat survey data suggests that the subsidence occurring near Arbuckle and Orland could be inelastic, or permanent.

**Interconnected Surface Water.** Connectivity between surface waters and groundwater has not been well established in the study area. Further study, which could include analysis using integrated surface water - groundwater models, and construction and monitoring of nested multiple completion monitoring wells near surface water gages, is needed to better understand the interaction between surface and groundwater.

# **ES-2 Groundwater Level Monitoring**

Existing groundwater level monitoring programs within the study area include the U.S. Geological Survey (USGS) National Water Information System (NWIS) database, DWR Water Data Library (WDL) database, California's Statewide Groundwater Elevation Monitoring Program (CASGEM), and the current groundwater monitoring networks within Colusa and Glenn County. These County-specific networks were evaluated with regard to compliance with the SGMA regulations and BMPs and representativeness of the area in which the well is located. Specifically, the wells were evaluated for availability of well construction information, well type (dedicated for observation or used for water supply), number of completions (monitoring capability in single or multiple, discrete aquifer zones), proximity to surface waters, location, principal aquifers monitored and accessibility.



Data gaps within the county-specific groundwater monitoring well networks were identified using two criteria: reliability of the monitoring site for groundwater monitoring of principal aquifers and spatial distribution of the monitoring locations. The data gaps identified within the groundwater level monitoring network are:

- Four well sites are potentially unusable due to collapsed casing. Three of these four sites are in Colusa County, and one is in Glenn County. Construction information is not available for two of the wells with collapsed casing.
- Three additional wells are active pumping wells and are not screened in a single aquifer. All three of these wells are located in Colusa County.

# **ES-3 Groundwater Quality Monitoring**

Existing groundwater quality monitoring database systems and programs with coverage in the study area include the USGS NWIS database, DWR WDL database, State Water Resources Control Board (SWRCB) Division of Drinking Water public water system database, GeoTracker and the GeoTracker Groundwater Ambient Monitoring and Assessment Program (GAMA), Central Valley Salinity Alternatives for Long-Term Sustainability Program (CV-SALTS), Irrigated Lands Regulatory Program (ILRP), and the Glenn County water quality monitoring network.

The SGMA groundwater quality monitoring network has not yet been formally defined, however, groundwater quality data collected under existing regulatory programs may be sufficient for SGMA compliance. The Sacramento Valley Water Quality Coalition in coordination with Northern California Water Association (NCWA) is currently in the process of defining their groundwater quality trend monitoring network sites for compliance with ILRP requirements. The California Rice Commission, who also manages lands within the study area, has already defined their groundwater quality trend monitoring network for ILRP compliance. The Counties of Colusa and Glenn may consider coordinating with the Sacramento Valley Water Quality Coalition and NCWA during development of the ILRP groundwater quality monitoring network, with the goal of using data collected under the ILRP for SGMA compliance.

# **ES-4 Seawater Intrusion Monitoring**

The study area is located approximately 30 miles from the legal Sacramento-San Joaquin River Delta boundary, and even farther from the brackish delta estuaries. Additionally, the 2018 Draft Basin Prioritization study by DWR found that the Colusa, Corning, and West Butte Subbasins have not exhibited any impacts of saline intrusion within the past 20 years. As such, seawater intrusion is neither occurring nor anticipated to occur within the Colusa Subbasin or the study area portions of the Corning and West Butte Subbasins. Evaluation of existing seawater intrusion programs was, therefore, determined unnecessary for the purposes of this study.

## **ES-5 Land Subsidence Monitoring**

Existing land subsidence monitoring programs and datasets within the study area include satellite-based Interferometric Synthetic Aperture Radar (InSAR) surveys, continuous Global Positioning System (GPS) benchmarks, DWR extensometers, and the Sacramento Valley-Height Modernization Project benchmarks. InSAR survey data are available online, but require processing to be of use in



the study area. The National Aeronautics and Space Administration (NASA) and participating consulting firms have conducted land subsidence studies in the study area using the InSAR data. Data from the continuous GPS stations are available online, however there are only two stations within the study area, both in Colusa County. Neither of the continuous GPS stations are located where significant land subsidence has been historically observed. There are five DWR extensometers within the study area: two in Colusa County and three in Glenn County. The Sacramento Valley Height-Modernization Project benchmarks are located such that the entire study area is well represented, with the exception of the southwestern most portion of the Colusa Subbasin, near the northern extent of the Capay Hills. Repeat surveys of the benchmarks must be done periodically. The last repeat survey was conducted in spring 2017, but the results are not yet publicly available.

Land subsidence has been observed near Orland in Glenn County and Arbuckle in Colusa County. Up to approximately two feet of land subsidence has been measured near Arbuckle based on various studies using InSAR data and County-specific repeat surveys of existing Sacramento Valley benchmarks. There are no extensometers installed in the vicinity of Arbuckle, and the existing benchmarks have been surveyed too infrequently to adequately quantify land subsidence. The DWR report on the 2017 repeat survey is anticipated to provide more insight regarding the permanency of the land subsidence.

# **ES-6 Surface Water Monitoring**

Existing surface water monitoring programs and datasets within the study area include the USGS NWIS database, the DWR WDL, and the California Data Exchange Center (CDEC). The NWIS and WDL contain information regarding stream flows and river stages. The CDEC database contains stream flows and/or river stage data and U.S. Bureau of Reclamation (USBR) reservoir records, including releases, flows, and stage. All of the USGS, DWR, and CDEC stations are included in the surface water monitoring network.

#### **ES-7 Conclusions and Recommendations**

Conclusions and recommendations for each of the networks are provided below. These conclusions and recommendations are preliminary and should be reevaluated and updated as the applicable Groundwater Sustainability Agencies (GSAs) progress with preparation and implementation of GSPs for the Sacramento Valley groundwater subbasins underlying Colusa and Glenn Counties, and as new information becomes available.

**Groundwater Level Monitoring Network.** The current groundwater level monitoring networks were judged to be sufficient for SGMA compliance with several recommended improvements and modifications:

1. Four existing monitoring wells with potentially collapsed casing should be inspected and repaired or properly destroyed, depending on the results of the inspection. No data gaps were identified as a result of the potential loss of one of these wells (Glenn County). Two of the potentially damaged wells could be replaced with a single new recommended multiple completion well near Arbuckle. This new well should be collocated with an extensometer and should be constructed regardless of the status of the two potentially collapsed wells. The fourth well, located north of Williams, should be replaced with an existing groundwater monitoring well, if the collapse is confirmed.



- 2. Two existing monitoring wells should be added to the Colusa and Glenn County monitoring networks to improve monitoring capability north of Stony Creek within the Corning Subbasin, and west of Williams near the western margin of the Colusa Subbasin.
- 3. Additional monitoring wells may be needed to provide improved spatial coverage in areas of localized groundwater decline to the west of the Glenn County communities of Orland and Artois, and in the southern part of the study area near the Colusa County communities of Arbuckle and College City.

Groundwater Quality Monitoring Network. Groundwater quality data collected under existing regulatory programs may be sufficient for SGMA compliance. The Sacramento Valley Water Quality Coalition in coordination with NCWA is currently in the process of defining its groundwater quality trend monitoring network sites. The California Rice Commission has already defined their groundwater quality trend monitoring network for ILRP compliance. The Counties of Colusa and Glenn should consider coordinating with the Sacramento Valley Water Quality Coalition, NCWA, and the California Rice Commission in the establishment and ongoing evaluation of these groundwater quality monitoring network sites with the goal of using data collected under the ILRP for SGMA compliance. The Counties of Colusa and Glenn should also consider using groundwater quality data collected through other ongoing regulatory programs, such as the State Water Resources Division of Drinking Water regulation of municipal supplies and County regulation of small public supply systems, for SGMA compliance.

**Subsidence Monitoring Network.** Land subsidence has been observed in the area around Arbuckle in Colusa County, and additional small amounts of land subsidence have been reported southwest of Orland in Glenn County. A new extensometer should be constructed at the same location as the proposed new multiple completion monitoring well near Arbuckle. Both counties should participate in ongoing subsidence programs such as the Sacramento Valley Height-Modernization Project.

**Surface Water Monitoring Network.** Both counties should use existing surface water monitoring programs and data to the extent possible for SGMA compliance. The need for additional monitoring should be reevaluated as needed during preparation of GSPs, to support preparation of water budgets and development of numerical flow models. This should be done at a regional scale in cooperation with neighboring subbasins.



#### 1.0 INTRODUCTION

The Sustainable Groundwater Management Act (SGMA) requires groundwater basins of medium or higher priority that are not designated to be in critical overdraft to reach sustainability by 2042. Establishing monitoring networks for data collection in support of the six sustainability indicators is critical to understanding the current conditions of the groundwater basin and surrounding area and to monitor effects of implemented groundwater projects with regard to basin objectives. The six sustainability indicators are:

- 1. Chronic lowering of groundwater levels;
- 2. Reduction in groundwater storage;
- 3. Seawater intrusion;
- 4. Degradation of groundwater quality;
- 5. Land subsidence; and
- 6. Depletion of interconnected surface waters.

This report assesses the adequacy of existing county groundwater monitoring networks to sufficiently support SGMA compliance within the Counties of Colusa and Glenn, identifies potential data gaps in the existing monitoring networks, and makes preliminary recommendations to remedy the data gaps.

Groundwater Sustainability Agencies (GSAs) were established within the Counties of Colusa and Glenn after the grant agreements were executed. The Counties are committed to working with the GSAs to develop Groundwater Sustainability Plans (GSPs) for the subbasins. The GSAs within the Counties are the Colusa Groundwater Authority, the Glenn Groundwater Authority, the Glenn County GSA, Reclamation District 1004, Reclamation District 2106, Western Canal Water District, and the Corning Sub-Basin GSA. The monitoring networks are a compilation of monitoring stations that are located within the regulatory boundaries of these GSAs.

# 1.1 Authority & Scope

This report was prepared primarily as part of the scope of work defined in the County of Colusa's Proposition 1 Stressed Basins Grant administered by the California Department of Water Resources (DWR) under Grant Agreement #4600011469. Some of the tasks scoped under the County of Colusa grant agreement overlapped with tasks included in the scope of work defined for the County of Glenn's Proposition 1 Stressed Basin Grant (Grant Agreement #4600011470). The Counties of Colusa and Glenn have agreed to conduct cooperative basin-wide SGMA planning. The monitoring network assessment and recommendations listed in this report therefore include coverage of the Sacramento Valley groundwater subbasins within both counties. Costs associated with the work benefitting both counties were divided between the individual grants, while costs directly attributable to a specific county were allocated to the county receiving the benefit of the work.

The scope of work for the County of Colusa grant agreement included three tasks:

1. Assessment of the reliability and representativeness of the current Colusa County groundwater level monitoring network, including identification of data gaps within the network;



- 2. Assessment of other existing monitoring sites for potential inclusion in the Colusa County groundwater level monitoring network to supplement or replace current network wells; and
- 3. Assessment of the need for additional groundwater level monitoring wells.

The work included in this report was expanded to include the groundwater level monitoring network within Glenn County and the evaluation of existing groundwater quality, land subsidence, and surface water monitoring networks within both counties.

Tasks defined in the County of Glenn grant agreement that are addressed in this report include the compilation, review, and analysis of data gaps for the existing groundwater and surface water monitoring sites as needed to support development of a water budget and hydrogeologic conceptual model for Glenn County. The Glenn County Preliminary Water Budget Development report was written by Davids Engineering in cooperation with West Yost Associates (Davids Engineering, 2018) and the Hydrogeologic Conceptual Model Report was written by West Yost Associates in cooperation with Davids Engineering (West Yost, 2018).

# 1.2 Report Organization

This report is organized as follows:

- Summary of Current Basin Conditions Provides a summary description of groundwater levels, groundwater storage, groundwater quality, land subsidence, and interconnected surface waters
- Monitoring Networks Provides an assessment of the current monitoring networks
  with regard to requirements defined in Title 23 of the California Code of Regulations
  (CCR) and DWR's Best Management Practices (BMPs) for the Sustainable
  Management of Groundwater documentation for each monitoring network, current
  monitoring protocols and frequencies, and existing available networks, including
  identification of data gaps
- Conclusions and Recommendations
- References

# 1.3 Study Area

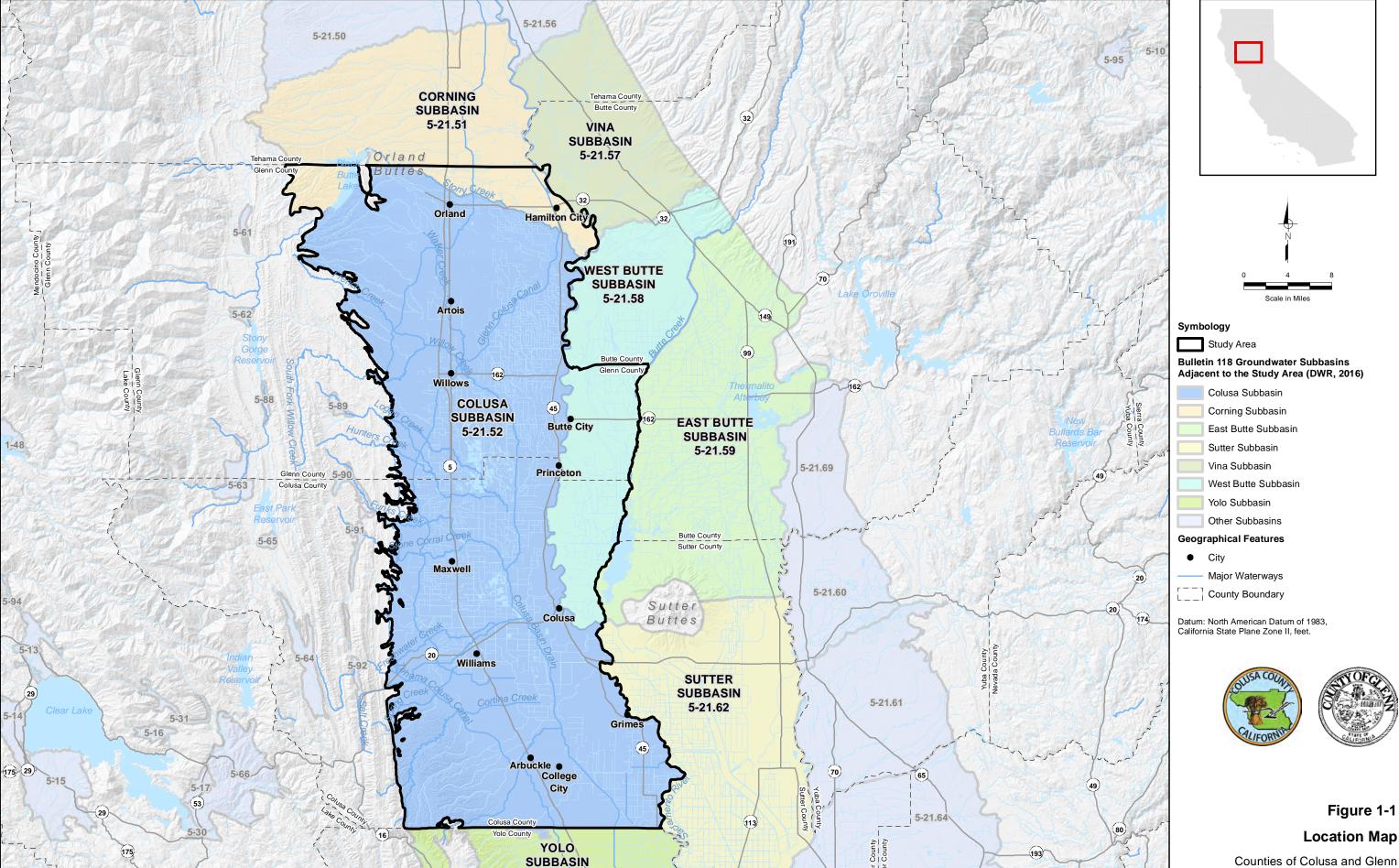
Figure 1-1 shows the study area, which is comprised of the high and medium priority groundwater basins, as defined by DWR within Colusa and Glenn Counties, northern Sacramento Valley, California. The groundwater basins underlying the study area include the entirety of the Colusa Subbasin (5-21.52), the southernmost portions of the Corning Subbasin (5-21.51), and the southern portion of the West Butte Subbasin (5-21.58). Groundwater subbasins adjacent to, but not overlain by the study area, include the Vina Subbasin (5-21.57), East Butte Subbasin (5-21.59), Sutter Subbasin (5-21.62), and Yolo Subbasin (5-21.67). These subbasins are all part of the Sacramento Valley Groundwater Basin (DWR, 2006).

# DAVIDS ENGINEERING, INC.

# **Monitoring Network Assessment Report**

The Counties of Colusa and Glenn encompass approximately 2,500 square miles in north central California, 1,300 square miles of which are within the study area. The Sacramento River bounds the eastern edge of the Colusa Subbasin, and Butte Creek bounds the eastern edge of the West Butte Subbasin. The northern boundary of the West Butte Subbasin within the study area is the Glenn-Butte County line. The western extent of the study area is bounded by the Klamath/North Coast Range, where additional small, low priority groundwater basins are located. The Colusa-Corning Subbasin divide follows the channel of Stony Creek, where it exists south of the Glenn-Tehama County line. The study area includes a large portion of the Black Butte Lake, which marks the boundary between the Corning and Colusa Subbasins. The northern extent of the study area cuts through the Corning Subbasin and is defined by the Glenn-Tehama County line; the southern extent of the study area is defined by the Colusa-Yolo County line.

Primary urban areas within the study area include the incorporated Cities of Orland, Willows, Colusa, and Williams and the communities of Hamilton City, Artois, Butte City, Princeton, Maxwell, Arbuckle, Grimes and College City. Interstate 5 and State Route 45 traverse the study area north to south while State Routes 20, 32, and 162 are the primary west to east thoroughfares.



5-21.67

Sonoma County

**Location Map** 

Counties of Colusa and Glenn Monitoring Network Assessment Report



#### 2.0 SUMMARY OF CURRENT BASIN CONDITIONS

#### 2.1 Groundwater Levels

Appendix A1 contains groundwater elevation contour maps for spring and autumn of calendar years 2006, 2015, and 2017 (Figures A1-1 through A1-6). Most of the wells used in contouring have screened depths greater than 100 feet and represent groundwater levels in the semiconfined to confined part of the aquifer system. The groundwater level data from DWR's Water Data Library (WDL) were filtered to include data points that were representative of the seasonal high and low. Where multiple data points coincided spatially, the intermediate/middle depth data was used. Appendix A2 contains hydrographs for wells screened at varying depths throughout the study area (Figures A2-1 through A2-59). Groundwater within the study area flows predominately eastward from the margins of the Sacramento Valley toward the Sacramento River and southward towards the Sacramento-San Joaquin Delta. The regional groundwater flow trends are typified by groundwater conditions in 2006, as shown on Figures A1-1 and A1-2.

Groundwater pumping has led to cones of depression that disrupt the regional groundwater flow trends. Changes in land use and multiple-year droughts (from 2007 to 2009 and 2012 to 2016) have led to increased groundwater pumping. These changes in groundwater pumping have created new cones of depression and enlarged existing cones of depression. Figures A1-3 and A1-4 show the groundwater elevations throughout the study area for spring and summer 2015, which was the culmination of several dry years. As seen on these figures, the regional groundwater gradient and direction were affected by cones of depression in areas of heavy groundwater pumping. Impacts to the regional groundwater flow gradient are most evident near the towns of Artois, Glenn County and Williams, Colusa County.

Groundwater elevations throughout the study area declined over the prolonged dry period after 2006 but recovered somewhat in 2017 (Figures A1-5 and A1-6). Figure 2-1 depicts a groundwater elevation change map that compares spring 2006 to spring 2017 conditions; negative change in groundwater elevation indicates a decrease in the seasonal groundwater elevations from 2006 to 2017, which correlates to an increase in the seasonal depth to water. The primary areas with groundwater declines are in the northwestern part of the study area near and west of the Glenn County communities of Orland and Artois, and in the southern part of the study area near the Colusa County communities of Williams, Arbuckle, and College City (Figure 2-1).

## 2.2 Groundwater Storage

DWR Bulletin 118 estimates the unconfined to semi-confined groundwater aquifer storage capacity within the Colusa Subbasin to be approximately 13 million acre-feet (maf) (DWR, 2006). Approximately 1.8 maf of storage capacity was estimated within the upper 200 feet of the Corning Subbasin and 2.8 maf within the West Butte Subbasin (of which an approximate 1.9 maf occurs within the Corning and West Butte Subbasins portions of the study area) (DWR, 2004, 2006). The entire study area, including the entire Colusa Subbasin and the portions of the Corning and West Butte Subbasins in the study area, contains approximately 14.9 maf of groundwater storage to a depth of 200 feet.



The potential for groundwater storage is not exclusive to the upper 200 feet of the subsurface material. Fresh groundwater storage extends to the base of freshwater, which occurs at depths greater than 200 feet in most of the study area; the total groundwater storage capacity within the study area is, therefore, greater than 14.9 maf. Additional study of the subsurface is required to quantify the total fresh groundwater storage capacity within the study area.

#### 2.3 Seawater Intrusion

The study area is located approximately 30 miles from the legal Sacramento-San Joaquin River Delta boundary, and even farther from the brackish delta estuaries. Additionally, the 2018 Draft Basin Prioritization study by DWR found that the Colusa, Corning, and West Butte Subbasins have not exhibited any impacts of saline intrusion within the past 20 years. As such, seawater intrusion is neither occurring nor anticipated to occur in the study area.

# 2.4 Groundwater Quality

The groundwater within the study area is predominantly calcium and magnesium bicarbonate water (DWR, 2004, 2006). Increased sodium content has been observed near the Sutter Buttes, resulting in localized occurrences of mixed sodium bicarbonate waters south of Princeton, near Williams, Colusa, Grimes, and Arbuckle and south towards Yolo County (DWR, 2006).

Historical groundwater quality concerns within the Colusa Subbasin include local elevated levels of electrical conductivity (EC) and total dissolved solids (TDS), adjusted sodium absorption ratio, boron, nitrate, and manganese (DWR, 2006; Wood Rodgers, 2008). In addition to the historical water quality concerns within the Colusa Subbasin, the portions of the Corning and West Butte Subbasins within the study area have also experienced localized elevated calcium concentrations (DWR, 2004, 2006). Groundwater quality data managed by the U.S. Geological Survey (USGS) indicates elevated levels of boron, nitrate, EC, and manganese in these areas (USGS, 2018).

Recent groundwater quality concerns within the Colusa Subbasin include salinity, boron, nitrate, arsenic, heavy metals, and hexavalent chromium. High concentrations of sodium, chloride, and sulfate, all of which are related to salinity (TDS and EC) have been observed south of Maxwell and could negatively impact agricultural applications (Reclamation District No. 108 [RD 108], 2008; CH2MHILL, 2016). Elevated concentrations of boron reported by Glenn-Colusa Irrigation District (GCID) within Colusa County have already impacted agricultural practices (GCID, 1995). In contrast, boron concentrations measured in select groundwater wells within Glenn County have not exceeded the United States Environmental Protection Agency (USEPA) agricultural water quality goal for boron of 750 micrograms per liter (μg/L) (USEPA, 1986; USGS, 2018). Elevated salinity levels throughout much of Colusa County, nitrates near Orland and Willows, arsenic near Grimes, and iron and manganese near Williams and Colusa are of concern with regard to Division of Drinking Water standards (CH2MHILL, 2016). Additionally, drinking water supply wells near Willows, Glenn County, have experienced high concentrations of hexavalent chromium (California Water Service, 2016). Pesticides have been detected within groundwater supply wells at concentrations that do not exceed the drinking water standards (CH2MHILL, 2013).



There are also several active groundwater contaminant cleanup sites in the study area. These mostly include leaky storage tanks and unauthorized releases of contaminants such as total petroleum hydrocarbons, nitrate, pesticides and herbicides. The largest contamination site is the Orland Dry Cleaner site, a tetrachloroethylene (PCE) plume within the Colusa Subbasin that extends approximately two miles southeast of the source location in Orland, Glenn County (Department of Toxic Substances Control [DTSC], 2018; State Water Resources Control Board [SWRCB], 2018).

#### 2.5 Land Subsidence

Land subsidence can cause structural damage to foundations, roads, bridges, and other infrastructure. The change in topography can also impact surface water flows by reducing conveyance capacity and potentially changing flow gradients within canals, natural streams, and floodplains.

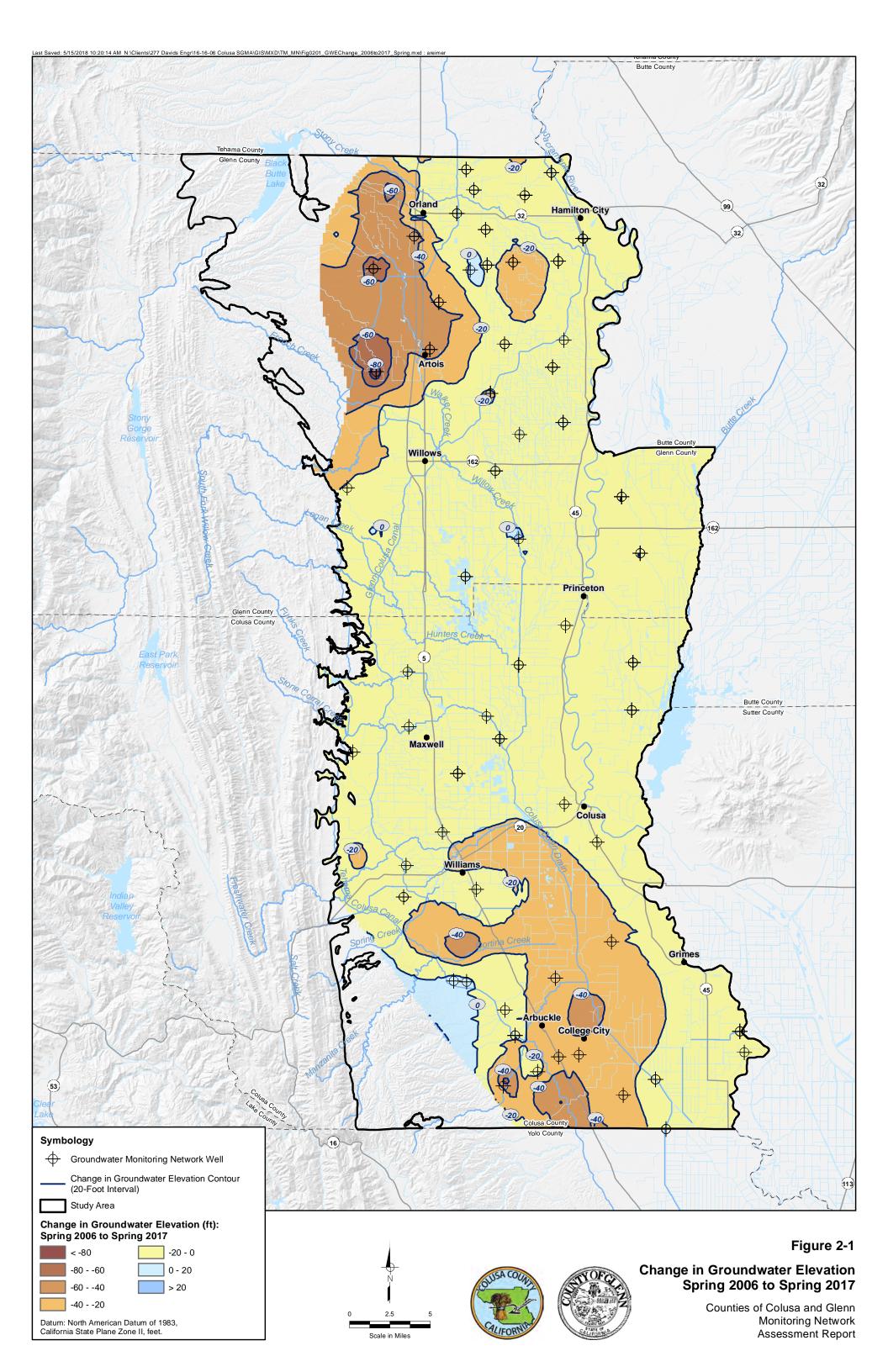
Land subsidence has been observed and measured within the Colusa Subbasin of the study area. Damage to infrastructure as a result of land subsidence has been observed and reported in the Arbuckle area of Colusa County. A 2015 National Aeronautics and Space Administration (NASA) report reported recent isolated land subsidence of approximately five inches west of Arbuckle (Farr et. al., 2015). Data from a repeat survey of the Sacramento Valley Height-Modernization Project benchmarks near Arbuckle by DWR and county staff indicate a decline in land surface elevation of as much as two feet between 2008 and 2016 at one benchmark north of Arbuckle (Ehorn, 2016). Land subsidence is not exclusive to the Colusa County portion of the study area; repeat survey of benchmarks in Glenn County indicated small amounts of land subsidence southwest of Orland (Ehorn, 2016). Sacramento Valley benchmarks were re-surveyed in 2017, however, data from the survey is not yet available (California GIS Council, 2017). Preliminary analysis of the repeat survey data suggests that the subsidence occurring near Arbuckle and Orland could be inelastic, or permanent. The DWR report on the 2017 survey is anticipated to provide more insight regarding the permanency of the land subsidence.

Extensometer measurements have also recorded ground displacement in the Colusa Subbasin. Appendix B contains a map of the extensometer locations (Figure B-1) and historical ground displacement measured within extensometers in the study area (Figures B-2 through B-6). Seasonal displacements of  $\pm 0.3$  inches have been recorded in these extensometers. Maximum displacement of approximately 1 inch has been observed northeast of Artois, Glenn County. No subsidence has been reported within the Corning or West Butte Subbasin portions of the study area (DWR, 2014).

In addition to impacts to infrastructure and surface water flows, land subsidence may also negatively impact groundwater storage capacity; however, it is yet to be determined if the subsidence measured within the study area has measurably impacted storage capacity.

#### 2.6 Interconnected Surface Water

Connectivity between surface waters and groundwater has not been well established in the study area. Further study, which could include analysis using integrated surface water - groundwater models, and construction and monitoring of nested multiple completion wells near surface water gages, is needed to better understand the interaction between surface and groundwater.





#### 3.0 MONITORING NETWORKS

Monitoring networks are required to better understand and evaluate changing conditions within the groundwater, surface water, and land surface systems. To optimize data collection and analysis, the network should be easily accessible, be spatially and temporally relatable to other monitoring networks, be sufficient for demonstrating spatial and temporal trends, and be representative of actual conditions.

# 3.1 Preliminary Monitoring Network Objectives

Title 23 Section §354.34b of the California Code of Regulations (23 CCR §354.34(b)) states that the monitoring network objectives shall be implemented to:

- (1) "Demonstrate progress toward achieving measurable objectives described in the [Groundwater Sustainability] Plan.
- (2) Monitor impacts to the beneficial uses or users of groundwater.
- (3) Monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds.
- (4) Quantify annual changes in water budget components."

Preliminary monitoring network objectives for the study area were designed to address the requirements of five sustainability indicators (not including seawater intrusion, the sixth sustainability indicator) in support of the future measurable objectives. The overarching goals of the different monitoring networks are to (1) characterize current and historical conditions within the groundwater, surface water, and land surface systems, and (2) evaluate future impacts of implemented GSP projects on the availability and quality of the study area's water supply.

The preliminary monitoring network objectives are to characterize:

- Groundwater availability and flow properties;
- Aquifer parameters;
- Surface water availability and relationship with groundwater;
- Ephemeral and intermittent stream flow and duration;
- Quality of surface water and groundwater; and,
- Extent and rate of land subsidence.



# 3.2 Groundwater Level Monitoring

## 3.2.1 Requirements

The groundwater monitoring network should be dense enough to sufficiently represent spatial and temporal trends through the basin, as described below:

- Spatial densities should sufficiently represent both lateral and vertical extents of the groundwater basin.
  - The quantity and density of groundwater monitoring wells should be sufficient to evaluate overall static groundwater conditions for each principal aquifer and sufficiently support evaluation of impacts from implemented GSP projects and management actions.
  - The quantity and density of groundwater monitoring wells shall be sufficient to evaluate groundwater conditions for the basin and any GSP-defined management areas (23 CCR §354.34(d)).
- Groundwater monitoring network shall be designed such that the sustainability indicators are adequately covered, not just over the entire basin, but also within any specific GSP-defined management areas (23 CCR §354.34(d)). The sustainability indicators supported by the groundwater level monitoring network include:

# — Chronic lowering of groundwater levels

 23 CCR §354.34(c)(1) specifies that the groundwater monitoring network shall be able to represent the seasonal occurrence, flow direction, and hydraulic gradients of groundwater within and between the principal aquifers and surface waters.

# Reduction in groundwater storage

 Data from the groundwater monitoring network should be sufficient to enable calculations of annual changes in groundwater storage over time (Monitoring Network BMP, DWR, 2016).

# — Depletion of interconnected surface water

• The groundwater monitoring network shall be able to represent the seasonal occurrence, flow direction, and hydraulic gradients of groundwater between the principal aquifers and surface waters (23 CCR §354.34(c)(6)). According to the Monitoring Network BMP (DWR, 2016), shallow groundwater monitoring wells should be within close proximity to connected streams to enable characterization of the groundwater levels adjacent to connected stream channels. The groundwater monitoring network should extend perpendicular and parallel to the stream flow and be monitored on a frequency to capture seasonal pumping conditions (DWR, 2016).



- The Monitoring Network BMP states that the groundwater monitoring network should be able to provide data sufficient to:
  - Represent the unconfined and confined principal aquifers.
  - Support evaluation of Data Quality Objectives (DQOs); for example, impacts to groundwater from injection projects.
  - Support delineation of groundwater depressions, recharge areas, and conditions at basin boundaries.
- Groundwater level monitoring frequencies shall be capable of representing:
  - Short-term, seasonal, and long-term trends (minimum of twice-annually to represent seasonal high and low groundwater conditions) per 23 CCR §354.34(c)(1)(b)).
  - Groundwater conditions, as necessary, to evaluate the progress of GSP implementation (23 CCR §354.34(a)).

In accordance with the Monitoring Network and Identification of Data Gaps Best Management Practices (Monitoring Network BMP) documentation (DWR, 2016), groundwater monitoring network sites should be:

- Dedicated groundwater monitoring wells, if possible, with known construction characteristics.
  - Water supply wells may be used temporarily, if needed.
  - Water supply wells should be screened within a single water bearing unit.
  - Care should be taken to ensure static water levels have been recovered prior to data measurement.
- Aquifer-specific. Monitoring wells shall have depth-dependent screened intervals to sufficiently enable characterization of the groundwater table or potentiometric head for each principal aquifer (23 CCR §354.34(c)(1)).
- Designed considering nearby pumping wells.

Monitoring sites shall include the following information (23 CCR §352.4(a) through (c)), tabulated in Appendix C):

- Unique station identifier and California's Statewide Groundwater Elevation Monitoring Program (CASGEM) ID;
- Site description, well location (North American Datum of 1983 [NAD 83], latitude and longitude decimal degrees to five decimal places);
- Well use, well status, well type;
- Elevation of ground surface (accurate to 0.1 feet North American Datum of 1988 [NAVD 88]);
- Elevation and description of reference point (accurate to 0.5 feet NAVD 88);

11

Well construction:



- Borehole and total well depth;
- Well completion report ID;
- Identification of principal aquifers;
- Geophysical logs and other relevant information, if any;
- Monitoring type;
- Measurement(s) taken;
- Monitoring frequency; and
- Description of standards used to install or construct the monitoring site.

# 3.2.2 Monitoring Protocols

# 3.2.2.1 Methodology

The Monitoring Protocols, Standards, and Sites Best Management Practices (Monitoring Protocols BMP, DWR, 2016) recommends the following monitoring conditions:

- Groundwater levels should be measured from a pre-established and recorded reference point.
  - The reference point elevations (RPE) need to have been surveyed to the NAVD 88, feet and shall be accurate to within 0.5 feet, at a minimum (23 CCR §352.4(a)(4), tabulated in Appendix C).
- Groundwater levels should be measured using approved measurement equipment. Equipment should be operated and maintained in accordance with the manufacturer's instruction.
- When well caps are removed, signs of pressure release should be noted. If pressure
  release is noted, an appropriate time should be allowed for the water surface to
  equilibrate to aquifer conditions. Multiple measurements may be taken to ensure
  equilibration has been reached.
  - Site-specific procedures should be developed for wells under pressure, including flowing artesian wells.
- Questionable measurements should be appropriately noted at time of monitoring.
- All salient conditions should be recorded at time of monitoring.
- Water levels shall be measured to the nearest 0.1 foot, at a minimum (23 CCR §352.4(a)(3), tabulated in Appendix C). Measurements to the nearest 0.01 feet are preferred and should be used if the equipment allows.
  - Groundwater elevations (GWE) are calculated as the RPE minus measured depth to water (DTW).
  - All measurements should be in units of feet, tenths of feet, and hundredths of feet.



- Water level equipment should be decontaminated after each use.
- Measurements should be collected from all monitoring sites within as short a time period as possible; in general, one to two weeks is acceptable. All data should be entered into the data management system as soon as possible.

## Recorded information should include:

- Well ID:
- Data and time (24-hour time format);
- Field staff name/ID;
- RPE;
- Height of reference point relative to ground surface at time of measurement;
- DTW;
- GWE; and
- Comments regarding salient observations of nearby pumping, weather conditions, well conditions, etc.

In addition to manual measurements, pressure transducers connected to data loggers may be used to monitor groundwater levels (DWR, 2016). Pressure transducers should be installed in conjunction with manual depth to water measurements; it is recommended that groundwater elevations be calculated after data have been downloaded to prolong the battery life of the unit. The Monitoring Protocols BMP identifies the following requirements when using data loggers:

- All transducers should be installed, operated, and maintained in accordance with the manufacturer's specifications.
- The well ID, cable serial number, pressure transducer serial number, range, accuracy, and type (vented or non-vented) should be recorded.
  - Unvented pressure transducers should be corrected for barometric pressure with continuous data from a barometric transducer.
- Groundwater levels should be recorded to the nearest 0.1 foot, at a minimum.
- The pressure transducers should be assessed to ensure the unit is capable of recording data sufficient to support DQOs. Instrument drift due to groundwater conditions, battery life, and storage capacity should be taken into consideration when groundwater elevations are being calculated.
- Manual groundwater levels should be measured to maintain data logger integrity.

# 3.2.2.2 Frequency

Manual water level measurements shall be collected twice annually, at a minimum, to ensure seasonal trends are well accounted for (23 CCR §354.34(c)(1)(B)). Manual measurements for all network wells should be collected in October and March per the Monitoring Network BMP (DWR, 2016), unless more frequent measurements are required to support DQOs.



#### 3.2.3 Existing Groundwater Monitoring Programs

Both counties currently have wells included in the state-wide CASGEM program. Glenn County also has a Basin Management Objective (BMO) groundwater level monitoring well network. Colusa County's current groundwater monitoring network consists of wells originally identified in its Groundwater Management Plan (GMP), but has since been revised. These and other existing groundwater monitoring programs are described in more detail in the following sections. Proposed new groundwater monitoring sites were evaluated based on existing sites from DWR and USGS groundwater monitoring networks, and recommendations from County staff.

Table 3-1 lists existing groundwater level monitoring programs with publicly available data and their respective websites.

Table	3-1. Existing Groundwa	ater Monitoring Programs
Groundwater Monitoring Network	Responsible Agency	Website
National Water Information System (NWIS)	U.S. Geological Survey (USGS)	https://waterdata.usgs.gov/nwis
Water Data Library (WDL)	California Department of Water Resources (DWR)	http://wdl.water.ca.gov/waterdatalibrary/
California's Statewide Groundwater Elevation Monitoring Program (CASGEM)	California DWR	https://www.casgem.water.ca.gov/
County-Specific Groundwater Level Monitoring Programs	County of Colusa & County of Glenn	Colusa County: http://countyofcolusa.org/index.aspx?NID=660  Glenn County: http://www.countyofglenn.net/committee/water-advisory-committee/management-plan

## 3.2.3.1 USGS National Water Information System

USGS manages the data for groundwater elevation sites throughout the country. The sites are measured either discretely (via field methods) or continuously (via time series data logging). All of the USGS water level data are housed on their publicly-available National Water Information System (NWIS) website. Active monitoring wells included within the USGS NWIS database are located within the Colusa Subbasin and the portion of the West Butte Subbasin in the study area.

## 3.2.3.2 DWR Water Data Library

DWR provides groundwater level data for wells throughout the State. Most of the wells are agriculture irrigation supply wells. The data are publicly available via the DWR WDL website. Active monitoring wells included within the DWR WDL database are located throughout the Colusa Subbasin and the portions of the Corning and West Butte Subbasins in the study area.



#### 3.2.3.3 CASGEM Wells

The State's CASGEM program (authorized by Senate Bill X7-6 and enacted in 2009) is a collaborative tool for reporting and sharing groundwater elevations throughout the State. Under CASGEM, self-declared Monitoring Entities are responsible for submitting a groundwater monitoring plan to monitor all or part of a groundwater basin, such that long-term and seasonal trends in groundwater levels can be assessed.

The Counties of Colusa and Glenn currently have active monitoring wells listed under CASGEM for monitoring groundwater levels within the Colusa, Corning, and West Butte Subbasins. DWR monitors the CASGEM wells within both counties. Some of these wells are included in the current groundwater monitoring network, which is evaluated in Section 3.2.4 of this report. Groundwater level measurements from voluntary wells are also managed via the CASGEM database. Voluntary wells are monitored by volunteer monitoring entities located within both Colusa and Glenn Counties in the Colusa Subbasin and the portions of the Corning and West Butte Subbasins in the study area. Voluntary wells tend to have unknown well construction.

## 3.2.3.4 Other County-Specific Groundwater Level Monitoring Networks

Colusa County adopted a GMP in 2008. Glenn County adopted a GMP in 2000, adopted a set of groundwater BMOs in 2001, and revised their GMP in 2012. Both Counties defined BMOs as preventing long-term depletion of groundwater in storage, maintaining groundwater supply for agricultural and domestic use, and preventing lowering of groundwater levels, land subsidence, and degradation in water quality (Glenn County, 2012; Wood Rodgers, 2008). Colusa County defined an additional BMO as preserving surface water flows and wetland habitat. Both Counties currently have groundwater monitoring networks in place to support pursuit of their BMOs: Colusa County's groundwater monitoring network and Glenn County's BMO wells.

In addition to their BMO wells, Glenn County also has a dedicated groundwater monitoring network that includes a mix of selected CASGEM, BMO, and other observation wells that are not used for water supply purposes, but are instead dedicated to the monitoring of groundwater conditions. Glenn County's dedicated groundwater monitoring network wells and Colusa County's groundwater monitoring network wells were evaluated in Section 3.2.4 of this report.

## 3.2.4 Groundwater Monitoring Network Assessment

The groundwater monitoring wells evaluated herein and shown on Figures 3-1 and 3-2 are a combination of the Colusa County groundwater monitoring network wells and the Glenn County dedicated groundwater monitoring network wells (that is, Glenn County wells that are not used for any purpose other than observation). For the Glenn County wells, these exclude the BMO water supply wells and the wells included in the Glenn County annual water quality monitoring program discussed in Section 3.3.3 of this report. The Colusa County groundwater monitoring network, on the other hand, does include active water supply wells as part of the County's groundwater level monitoring program. Many of the Colusa County groundwater monitoring network wells and the Glenn County dedicated groundwater monitoring programs listed in Table 3-1. The evaluation discussed herein, however, was conducted solely on the Colusa County groundwater monitoring network wells.

# DAVIDS ENGINEERING, INC.

# **Monitoring Network Assessment Report**

Colusa and Glenn Counties' groundwater monitoring network wells are shown on Figure 3-1. These wells were identified by County staff as being part of each County's groundwater monitoring network and include some wells that are part of existing CASGEM and BMO well programs in addition to other County-identified groundwater monitoring wells within each County.

The County of Colusa currently has 54 completions in 31 wells and the County of Glenn currently has 86 completions in 28 wells. All but one of these wells are currently included in the CASGEM program. Table 3-2 contains the entire current groundwater monitoring network with State well numbers, CASGEM IDs, well completion report IDs, well status and type, location information, reference point information, construction, principal aquifer designations, and assessment categories. Well completion reports for the current groundwater monitoring network wells, if available, are included in Appendix D.

										Table 3-	2. Ground	water Monito	ring Network We	lls									
																				Ass	essmen	t Category	
No.	County	State Well Number	CASGEM <sup>(a)</sup> Station ID	Well Completion Report ID	Latitude, decimal degrees	Longitude, decimal degrees	Datum	Well Use	Well Status (active, inactive, other)	Well Type (single, clustered, nested, other)	Ground Surface Elevation, feet	Reference Point Elevation, feet	Reference Point Description	Borehole Depth, feet, bgs <sup>(b)</sup>	Completed Well Depth, feet, bgs	Screen Intervals, feet, bgs	Total Length of Screen, feet	Casing Diameter, inches	Primary Aquifer	Existing Monitoring Network	Non-Pumping Well	Nested Well Proximity to Surface Water <sup>(c)</sup>	Popological Popolo
1	Colusa	12N01E06D002	16330	DWR, 2001 <sup>(d)</sup>	38.92490	-121.91400	NAD 83 <sup>(e)</sup>	Observation	active	nested	27.94	26.76	top of casing	1020	729	710-720	10	2	Tehama	х	х	x x >	Local Well LCB-4 Deep.
2	Colusa	12N01E06D003	33886	DWR, 2001	38.92490	-121.91400	NAD 83	Observation	active	nested	27.94	30.32	top of casing	1020	505	485-495	10	2	Tehama		х		Local Well LCB-4 Middle.
3	Colusa	12N01E06D004	16331	DWR, 2001	38.92490	-121.91400	NAD 83	Observation	active	nested	27.94	30.72	top of casing	1020	298	275-285	10	2	Tehama	Х	x x	x x >	Local Well LCB-4 Shallow.  Approximate screen or open hole 136-158
4	Colusa	13N01E11A001	18534	2865	38.99371	-121.82401	NAD 83	Domestic	active	single	31.8	32.8	top of casing	158	145	136	22	8	Alluvium	х	<b>(</b> -	- x	feet (Roy Hull, DWR, 2017) <sup>(f)</sup> .
5	Colusa	13N01W07G001	36246	2868	38.99161	-122.01411	NAD 83	Irrigation	active	single	90.47	90.47	plug at top of casing, west side	180	180	108-180	72	12	Alluvium	х	к -	-   -   >	
6	Colusa	13N01W13P001	18549	DWR, 2001	38.96935	-121.92587	NAD 83	Observation	active	nested	32.23	33.52	top of casing	1000	885	865-875	10	2	Tehama	х	х х	x x >	Local Well LCB-1 Deep.
7	Colusa	13N01W13P002	25159	DWR, 2001	38.96935	-121.92587	NAD 83	Observation	active	nested	32.23	34.58	top of casing	1000	480	410-420	16	2	Tehama	х	х х	x x >	Local Well LCB-1 Middle.
8	Colusa	13N01W13P003	36248	DWR, 2001	38.96935	-121.92587	NAD 83	Observation	active	nested	32.23	35.49	top of casing	1000	355	450-456 271-278	7	2	Tehama	Y	, x	x x ,	k Local Well LCB-1 Shallow.
9	Colusa	13N01W13P003	16357	40376	38.95531	-121.92387	NAD 83	Irrigation	active	single	60.46	61.16	not provided	236	236	196-236	40	12	Tehama		-		C USBR <sup>(g)</sup> well.
10	Colusa	13N02W04G001	16366	2738D	39.00881	-122.08771	NAD 83	Observation	caved?	cluster	188.81	189.01	not provided	852	505	350-470	120	4	Tehama	х	x x		- Well caved; depth not recorded.
11	Colusa	13N02W04G003	31897	2738B	39.00881	-122.08771	NAD 83	Observation	caved?	cluster	188.81	189.01	not provided	310	310	110-252	142	4	Tehama	х	х х	- x	- Well caved; depth tagged at 187 feet.
12	Colusa	13N02W04G004	16494	2738A	39.00881	-122.08771	NAD 83	Observation	caved?	cluster	188.81	188.81	not provided	193	193	1-193	192	4	Alluvium	х	к х	- x	- Well caved; depth tagged at 90 feet.
13	Colusa	13N02W12L001	31899	115408	38.98981	-122.03751	NAD 83	Irrigation	active	single	135.49	135.99	not provided	778	NA <sup>(h)</sup>	NA	NA	NA	Tehama	-	-   -	>	USBR well.
14	Colusa	13N02W15J001	39884	77457	38.97631	-122.06161	NAD 83	Domestic	active	single	212.52	213.02	hole in plate	362	362	270-362	92	8	Tehama	х	<b>(</b> -	>	í ·
15	Colusa	13N02W20H002	25005	423344	38.96341	-122.10091	NAD 83	Domestic	active	single	342.58	343.58	not provided	320	320	200-260 300-320	80	5	Tehama	х	K -	-   -   >	(
16	Colusa	14N01E35P001	38718	E0109311A	39.01241	-121.82906	NAD 83	Observation	active	nested	46.88	48.74	not provided	1540	1039	985-995	10	2.5	Tehama	х	к х	x x >	(
17	Caluan	14N01E35P002	24655	E0400244B	20.04044	101 00000	NAD 02	Observation	a ativo	manta d	46.88	48.36	mat musicida d	1540	700	545-555	30	2.5	Tahama		x x		
17	Colusa	14N01E35P002	24000	E0109311B	39.01241	-121.82906	NAD 83	Observation	active	nested	40.88	48.36	not provided	1540	736	610-620 695-705	30	2.5	Tehama	×	x   x	X X X	
18	Colusa	14N01E35P003	24656	E0109311C	39.01241	-121.82906	NAD 83	Observation	active	nested	46.88	48	not provided	1540	275	135-145 215-225	20	2.5	Alluvium, Tehama	х	х х	x x >	(
19	Colusa	14N01E35P004	24657	E0109311D	39.01241	-121.82906	NAD 83	Observation	active	nested	46.88	47.62	not provided	1540	71	50-60	10	2.5	Alluvium	х	х х	x x >	(
				USGS <sup>(i)</sup> Well									top of casing, under										_
20	Colusa	14N01W04K003	18554	Log	39.09301	-121.97671	NAD 83	Irrigation	inactive	single	37.43	37.43	pump base, northwest side	73	73	46-70	24	16	Alluvium	х	× -	>	USBR well.
21	Colusa	14N02W13N001	18563	3027	39.06021	-122.04111	NAD 83	Irrigation	active	single	62.45	62.45	not provided	392	392	104-392	288	14	Alluvium, Tehama	х	K -	- x	USBR well.
22	Colusa	14N02W29J001	18566	44455	39.03171	-122.09911	NAD 83	Irrigation	active	single	162.5	162.5	not provided	924	412	119-143 152-158 176-182 198-208 215-239 264-276 307.5-319.5 334.5-349.5	109	12	Tehama	x	κ -	- x >	(
23	Colusa	14N03W14Q003	32324	20032	39.05761	-122.15861	NAD 83	Irrigation	active	single	172.52	172.52	open hole in pump base	704	685	390-480 500-590 614-685	251	16	Tehama	х	к -	- x	(
24	Colusa	14N03W24C001	16691	72290	39.05691	-122.14351	NAD 83	Domestic	active	single	172.51	172.81	not provided	320	312	292-312	20	8	Tehama	-	k -	-   -   >	USBR well. Records indicate the well is 160 feet deep (Roy Hull, DWR, 2017).
25	Colusa	15N01W05G001	14309	12982	39.18261	-121.99351	NAD 83	Domestic	active	single	47.42	48.82	not provided	140	140	75-140	65	8	Alluvium	х	κ -	>	Well is either screened or open hole after 75 feet.
26	Colusa	15N02W19E001	14319	71038	39.14011	-122.13251	NAD 83	Irrigation	inactive	single	87.46	88.11	top of casing	334	334	162-182 198-206 262-274 290-294 310-334 30-130	72	14	Alluvium, Tehama Alluvium,	x	х		k Irrigation well with no pump installed.
27	Colusa	15N03W08Q001	NA	492125	39.16139	-122.21378	NAD 83	Irrigation	NA	single	NA	NA	NA	360	350	250-350	200	16	Tehama	Х		x x >	:
28	Colusa	15N03W20Q001	38293	802508C	39.13302	-122.21647	NAD 83	Observation	active	nested	128.56	130.32	top of short casing	620	424	370-410	40	2.5	Tehama		х х		×
29	Colusa	15N03W20Q002	24470	802508B	39.13302	-122.21647	NAD 83	Observation	active	nested	128.56	130.66	top of middle casing	620	170	130-160	30	2.5	Tehama	Х		X X X	:
30	Colusa	15N03W20Q003	38294	802508A	39.13302	-122.21647	NAD 83	Observation	active	nested	128.56	131	top of tall casing	620	82	30-80	50	2.5	Alluvium	x		x x x	•
31	Colusa Colusa	16N02W05B001 16N02W05B002	25511 25512	726832C 726832B	39.27527 39.27527	-122.10568 -122.10568	NAD 83 NAD 83	Observation Observation	active active	nested nested	65 65	66.91 65.55	top of casing not provided	986 986	797 535	730-750 462-472	20 10	2.5	Tehama Tehama	+	-	x x x	
	Janua		20012	. 200020	55.21 521		, 12 00	2.2301 Valio11	201110			1 00.00	provided	1 000	1 000	.52 112		2.0	L	1^1	^	^   /	

										Table 3-	2. Ground	water Monito	ring Network We	lls									
																				Asse	ssment	Category	
									Well Status	Well Type	Ground									Aonitoring Network	ping Well	Well ty to Surface Water <sup>(c)</sup>	
			0.00=(3)	Well	Latitude,	Longitude,			(active,	(single,	Surface			Borehole	Completed	Screen	Total Length	Casing		ing M vn Co	Pum	ed Well imity to	
No.	County	State Well Number	CASGEM <sup>(a)</sup> Station ID	Completion Report ID	decimal degrees	decimal degrees	Datum	Well Use	inactive, other)	clustered, nested, other)	Elevation, feet	Reference Point Elevation, feet	Reference Point  Description	Depth, feet, bgs <sup>(b)</sup>	Well Depth, feet, bgs	Intervals, feet, bgs	of Screen, feet	Diameter, inches	Primary Aquifer	Exist	Non-	Nest	Notes
33	Colusa	16N02W05B003	38669	726832A	39.27527	-122.10568	NAD 83	Observation	active	nested	65	66.34	not provided	986	301	174-184 246-256	20	2.5	Tehama	х х	x	x x	(
34	Colusa	16N02W25B002	33868	Owner's Log	39.21651	-122.03121	NAD 83	Domestic	active	single	55.42	55.42	not provided	274	274	254-274	20	8	Tehama	х х	1-	- x	Construction and lithology information provided by owner.
35	Colusa	16N03W14H003	24683	E0116237D	39.24391	-122.15401	NAD 83	Observation	active	nested	65.7	68.5	top of tallest	1500	1481	1370-1380 1410-1420	20	2.5	Tehama	х х	х	x x >	Artesian flowing well.
36	Colusa	16N03W14H004	24684	E0116237C	39.24391	-122.15401	NAD 83	Observation	active	nested	65.7	68.21	top of second tallest	1500	1236	1140-1150 1170-1180	20	2.5	Tehama	х х	х	x x >	
37	Colusa	16N03W14H005	37673	E0116237B	39.24391	-122.15401	NAD 83	Observation	active	nested	65.7	67.91	top of second shortest	1500	775	720-730	10	2.5	Tehama	х х	х	x x >	
38	Colusa	16N03W14H006	24685	E0116237A	39.24391	-122.15401	NAD 83	Observation	active	nested	65.7	67.68	top of shortest	1500	378	295-305	10	2.5	Tehama	хх	x	x x >	
39	Colusa	16N03W35N002	16301	37	39.19141	-122.17191	NAD 83	Domestic	caved?	single	75.47	76.47	not provided	500	403	NA	NA	4	NA		-	- x	Well caved; depth tagged at 20 feet. Well  Completion Report claims well casing was pulled due to silt.
40	Colusa	16N04W02P001	16308	77484	39.26291	-122.27541	NAD 83	Stock	active	single	162.53	163.03	not provided	203	203	112-203	91	8.625	Tehama	хх	1-1	- x >	pulled due to Silt.
41	Colusa	17N01W10A001	25258	E0109199D	39.34374	-121.95194	NAD 83	Observation	active	nested	64.28	67.53	not provided	1420	828	770-780 790-800	20	2.5	Tehama	хх	х	x x >	(
42	Colusa	17N01W10A002	24658	E0109199C	39.34374	-121.95194	NAD 83	Observation	active	nested	64.28	67.07	not provided	1420	475	380-390 415-425	20	2.5	Tehama	хх	х	x x >	(
43	Colusa	17N01W10A003	24659	E0109199B	39.34374	-121.95194	NAD 83	Observation	active	nested	64.28	66.82	not provided	1420	204	148-158	10	2.5	Alluvium	хх	x	x x >	(
44	Colusa	17N01W10A004	24660	E0109199A	39.34374	-121.95194	NAD 83	Observation	active	nested	64.28	66.43	not provided	1420	117	88-98	10	2.5	Alluvium	хх	x	x x >	(
45	Colusa	17N01W27A001	24441	E0122768C	39.30099	-121.95300	NAD 83	Observation	active	nested	66.61	68.98	not provided	1500	581	430-440 500-510	20	2.5	Tehama		x	x x x	(
46	Colusa	17N01W27A002	24980	E0122768B	39.30099	-121.95300	NAD 83	Observation	active	nested	66.61	68.63	not provided	1500	285	260-270	10	2.5	Tehama	хх	_ ^ _	x x >	<u>(                                    </u>
47 48	Colusa Colusa	17N01W27A003 17N02W09H002	24981 25514	E0122768A 726866A	39.30099 39.34170	-121.95300 -122.08377	NAD 83 NAD 83	Observation Observation	active active	nested nested	66.61	68.28 69.36	not provided top of casing	1500 940	203 806	160-170 779-800	10 21	2.5	Alluvium Tehama	x x	X	x x x	,
49	Colusa	17N02W09H003	25761	726866B	39.34170	-122.08377	NAD 83	Observation	active	nested	67	68.54	top of southernmost casing	940	578	470-480 510-520	20	2.5	Tehama	x x		x x >	
50	Colusa	17N02W09H004	25515	726866C	39.34170	-122.08377	NAD 83	Observation	active	nested	67	68.78	top of northernmost casing	940	302	250-260	10	2.5	Tehama	хх	х	x x >	(
51	Colusa	17N02W30J002	16960	57983	39.29541	-122.12121	NAD 83	Domestic	active	single	63.43	63.43	not provided	182	159	157-159	2	6	Tehama	хх	1-1	>	(
52	Colusa	17N03W08R001	39127	49451	39.33521	-122.21241	NAD 83	Domestic	active	single	107.46	108.46	not provided	151	130	125-130	5	6	Alluvium	хх	1-1	- x >	(
53	Colusa	17N03W32H001	35475	93568	39.28610	-122.21046	NAD 83	Domestic	active	single	100.47	102.47	not provided	140	112	68-72 104-112	12	6.625	Alluvium	хх	-	>	
54	Colusa	18N02W36B001	16914	177869	39.37721	-122.02981	NAD 83	Irrigation	abandoned	single	75.4	76	square hole in disk blade atop well	455	410	88-128 195-225	170	18 18 16	Alluvium, Tehama		:   -	- x	( )
55	Glenn	18N01W02E001	25506	726833A	39.44187	-121.94344	NAD 83	Observation	active	nested	78.5	80.89	top of lowest PVC	760	739	240-340 719-729	10	2	Tuscan C	хх	x	x x >	(
56	Glenn	18N01W02E002	38317	726833B	39.44187	-121.94344	NAD 83	Observation	active	nested	78.5	81.3	top of middle PVC	760	470	450-460	20	2	Tehama		х		
57	Glenn	18N01W02E003	25507	726833C	39.44187	-121.94344	NAD 83	Observation	active	nested	78.5	81.37	top of tallest PVC	760	130	110-120	10	2	Alluvium			x x >	
58	Glenn	18N02W18D001	24953	E045412	39.42083	-122.14578	NAD 83	Observation	active	nested	82.43	83.03	top of shortest PVC top of second shortest	1200	1000	975-985 620-630	10	2.5	Tuscan A	1 1		x x x	
59 60	Glenn	18N02W18D002 18N02W18D003	38201 24992	E045412 E045412	39.42083 39.42083	-122.14578 -122.14578	NAD 83 NAD 83	Observation	active	nested	83.43	83.43 84.03	PVC top of second tallest	1200 1200	700 530	670-680 510-520	10	2.5	Tuscan C Tehama			x x x	
								Observation	active	nested			PVC		530								
61	Glenn	18N02W18D004	38358	E045412	39.42083	-122.14578	NAD 83	Observation	active	nested	85.43	84.43	top of tallest PVC	1200	266	246-256	10	2.5	Tehama			x x >	
62	Glenn	19N01W22D004 19N01W22D005	24496 24497	816274A 816274B	39.49271 39.49271	-121.96481 -121.96481	NAD 83	Observation	active	nested	87.38 87.38	89.68 89.87	top of shortest casing top of second shortest		800 540	780-790 520-530	10	2.5	Tuscan C			x x x	
64	Glenn	19N01W22D005 19N01W22D006	38357	816274B 816274C	39.49271	-121.96481	NAD 83 NAD 83	Observation Observation	active	nested	87.38	90.18	casing top of second tallest	820	540 360	340-350	10	2.5	Tuscan C Tuscan,			x x x	
65	Glenn	19N01W22D006	24498	816274C 816274D	39.49271	-121.96481	NAD 83	Observation	active	nested	87.38	90.18	casing top of tallest casing	820	100	80-90	10	2.5	Tehama Alluvium			x x x	
66	Glenn	19N01W22D007	25762	726952	39.49271	-121.96481	NAD 83	Observation	active	nested	108.36	120	top of tallest casing	1000	939.7	856-876	20	2.5	Tehama		X		
67	Glenn	19N02W08Q001	25763	726952	39.51595	-122.11143	NAD 83	Observation	active	nested	108.36	109.38	westernmost	1000	228	208-218	10	2.5	Tehama			x x >	
68	Glenn	19N02W08Q003	25764	726952	39.51596	-122.11143	NAD 83	Observation	active	nested	108.36	109.56	piezometer easternmost	1000	97	77-87	10	2.5	Tehama	хх	x	x x >	
L			1		l	1l		<u> </u>				I	piezometer	I	I				1				

										Table 3-	2. Ground	water Monito	ring Network We	lls									
																				Asses	sment	Category	
				Well	Latitude,	Longitude,			Well Status (active,	Well Type (single,	Ground Surface			Borehole	Completed	Screen	Total Length	Casing		ng Monitoring Network n Construction	Oumping Well	mity to Surface Water <sup>(c)</sup>	
No.	County	State Well Number	CASGEM <sup>(a)</sup> Station ID	Completion Report ID	decimal	decimal	Datum	Well Use	inactive, other)	clustered, nested, other)	Elevation, feet	Reference Point Elevation, feet	Reference Point  Description	Depth, feet, bgs <sup>(b)</sup>	Well Depth, feet, bgs	Intervals,	of Screen, feet	Diameter, inches	Primary Aquifer	xistii	Jon-F	roxir	Notes
69	Glenn	19N02W33K001	19793	581475	degrees 39.45469	degrees -122.08402	NAD 83	Irrigation	active	single	87.41	87.11	top of western	300	260	feet, bgs 160-260	100	16	Tehama	т х		v	Notes
70	Glenn	19N04W14M002	25787	816220	39.50037	-122.28269	NAD 83	Observation	active	single	185.83	187.83	sounding pipe top of casing	366	65	45-55	10	2.5	Alluvium	x x	v	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Local Well GCAB303-1.
71	Glenn	20N02W11A001	17170	3669	39.60922	-122.04491	NAD 83	Observation	active	nested	125.40	125.90	top of board on northernmost piezometer	700	90	70-90	20	1.5	Modesto	x x		- x	Eddai Weii GCAB303-1.
72	Glenn	20N02W11A002	17171	3669	39.60922	-122.04491	NAD 83	Observation	active	nested	125.40	125.90	top of board on southernmost piezometer	700	160	140-160	20	1.5	Tehama	x x	x >	- x	
73	Glenn	20N02W11A003	35614	3669	39.60922	-122.04491	NAD 83	Observation	active	nested	125.40	125.90	top of board on middle piezometer	700	510	490-510	20	1.5	Tehama	x x	x >	- x	
74	Glenn	20N02W18R005	23986	801448	39.58552	-122.11701	NAD 83	Observation	active	nested	131.38	132.45	top of lowest casing	1020	1000	920-930 970-980	20	2	Tuscan AB	хх	x >	x x	
75	Glenn	20N02W18R006	23987	801448	39.58552	-122.11701	NAD 83	Observation	active	nested	131.38	132.98	top of second lowest casing	1020	675	635-655	20	2	Tehama	хх	x >	xx	
76	Glenn	20N02W18R007	24259	801448	39.58552	-122.11701	NAD 83	Observation	active	nested	131.38	133.43	top of second highest casing	1020	545	450-460 515-526	20	2	Tehama	хх	x >	x x	
77	Glenn	20N02W18R008	23988	801448	39.58552	-122.11701	NAD 83	Observation	active	nested	131.38	133.97	top of highest casing	1020	201	140-150 170-180	20	2	Modesto	хх	x >	x x	
78	Glenn	20N02W25F001	23989	782025	39.55949	-122.03263	NAD 83	Observation	active	nested	102.20	105.56	top of lowest casing	1000	980	940-960	20	2	Tehama	х х	x >	- x	Artesian flowing well; Data logger installed August 2016.
79	Glenn	20N02W25F002	23990	782025	39.55949	-122.03263	NAD 83	Observation	active	nested	102.20	105.86	top of second lowest casing	1000	490	420-430 460-470	20	2	Tehama	х х	x >	- x	Artesian flowing well.
80	Glenn	20N02W25F003	25519	782025	39.55950	-122.03263	NAD 83	Observation	active	nested	102.20	104.58	top of second highest casing	1000	280	190-200 250-260	20	2	Tehama	x x	x >	- x	
81	Glenn	20N02W25F004	23991	782025	39.55949	-122.03263	NAD 83	Observation	active	nested	102.20	105.10	top of highest casing	1000	85	55-65	10	2	Tehama	хх	x >	x	
82	Glenn	20N02W33B001	17174	3686	39.54846	-122.08307	NAD 83	Observation	active	single	105.41	107.01	bottom of box	326	320	100-120 200-320	20 120	6	Tehama	x x	х -	x x	
83	Glenn	20N03W07E001	37860	E057712D	39.60475	-122.24962	NAD 83	Observation	active	nested	179.17	180.83	top of lowest casing	1400	1030	984-1014	30	2	Tehama	хх	x >	x x	
84	Glenn	20N03W07E002	24329	E057712C	39.60476	-122.24962	NAD 83	Observation	active	nested	179.17	181.06	top of second lowest casing	1400	656	616-636	20	2	Tehama	хх	x >	x x	
85	Glenn	20N03W07E003	24330	E057712B	39.60475	-122.24962	NAD 83	Observation	active	nested	179.17	181.47	top of second highest casing	1400	505	380-410 465-485	50	2	Tehama		x >		
86	Glenn	20N03W07E004	37861	E057712A	39.60475	-122.24962	NAD 83	Observation	active	nested	179.17	181.75	top of highest casing	1400	138	118-128	10	2	Tehama		x >		
87	Glenn	21N02W01F001	38535	726740	39.70439	-122.03830	NAD 83	Observation	active	nested	160.88	162.13	top of lowest casing	600	578	547-557	10	2	Tuscan C	x x			
88 89	Glenn Glenn	21N02W01F002 21N02W01F003	24205 39954	726740A 726741	39.70439 39.70439	-122.03830 -122.03830	NAD 83 NAD 83	Observation Observation	active active	nested nested	160.83	162.28 162.84	top of lowest casing	600 125	318 124	297-307 109-119	10	2	Tehama Modesto			- x	
90	Glenn	21N02W01F004	40029	726741	39.70439	-122.03830	NAD 83	Observation	active	nested	161.92	163.22	top of highest casing		75	55-65	10	2	Modesto	x x			
91	Glenn	21N02W04G002	24993	E044112	39.70333	-122.09103	NAD 83	Observation	active	nested	178.41		top of shortest casing		948	928-938	10	2	Tuscan B			x x	
92	Glenn	21N02W04G003	24994	E044112	39.70333	-122.09103	NAD 83	Observation	active	nested	178.41	180.51	top of second shortest casing	1200	713	674-684 693-703	20	2	Tuscan C	хх	x >	x x	
93	Glenn	21N02W04G004	38359	E044112	39.70333	-122.09102	NAD 83	Observation	active	nested	178.41	180.31	top of second tallest casing	1200	289	165-175 270-280	20	2	Tehama	хх	x >	x x	
94	Glenn	21N02W04G005	24995	E044112	39.70333	-122.09102	NAD 83	Observation	active	nested	178.41	181.16	top of tallest casing	1200	77	57-67	10	2	Modesto	хх	x >	x x	
95	Glenn	21N02W05M001	39676	801406	39.70082	-122.12076	NAD 83	Observation	active	nested	188.93	190.43	top of shortest casing	520	473	442-452	10	2	Tehama	хх	x >	: - x	
96	Glenn	21N02W05M002	36588	801406	39.70082	-122.12076	NAD 83	Observation	active	nested	188.93	190.91	top of middle casing	520	153	122-132	10	2	Tehama, Modesto	хх	x >	- x	
97	Glenn	21N02W05M003	23996	801406	39.70082	-122.12076	NAD 83	Observation	active	nested	188.93	191.33	top of tallest casing	520	75	44-54	10	2	Modesto	хх	x >	x	
98	Glenn	21N02W33M001	38536	726724	39.62970	-122.10045	NAD 83	Observation	active	nested	149	151.60	top of 4" casing	1020	974.2	869-890	21	4	Tuscan AB	хх	X >	- x	
99	Glenn	21N02W33M002	24206	726724	39.62970	-122.10045	NAD 83	Observation	active	nested	149	151.26	top of shortest 2" casing	1020	571.1	540-550	10	2	Tuscan C	хх	x >	- x	
100	Glenn	21N02W33M003	24207	726724	39.62970	-122.10045	NAD 83	Observation	active	nested	149	151.49	top of tallest 2" casing	1020	171.1	140-150	10	2	Tehama	хх	x >	- x	
101	Glenn	21N02W36A002	21239	315494	39.63341	-122.03194	NAD 83	Observation	active	single	135.39	136.29	top of chip board inside casing	155	145	120-140	20	6	Tehama	x x	х -	- x	
102	Glenn	21N03W01R002	25232	726894	39.69624	-122.14048	NAD 83	Observation	active	single	203.32	206.77	bottom of hole cut in casing	1530	255	235-245	10	2	Tehama	х х	х -	- x	Local Well OAWD-Mon Well.

										Table 3-	-2. Ground	water Monito	ring Network We	lls									
																				Asses	sment	t Category	
No.	County	State Well Number	CASGEM <sup>(a)</sup> Station ID	Well Completion Report ID	Latitude, decimal degrees	Longitude, decimal degrees	Datum	Well Use	Well Status (active, inactive, other)	Well Type (single, clustered, nested, other)	Ground Surface Elevation, feet	Reference Point Elevation, feet	Reference Point Description	Borehole Depth, feet, bgs <sup>(b)</sup>	Completed Well Depth, feet, bgs	Screen Intervals, feet, bgs	Total Length of Screen, feet	Casing Diameter, inches	Primary Aquifer	Existing Monitoring Network Known Construction	Non-Pumping Well	Nested Well Proximity to Surface Water <sup>(c)</sup> Accessible and Usable	Notes
103	Glenn	21N03W23D001	23992	801404	39.66720	-122.17735	NAD 83	Observation	active	nested	204.76	205.89	top of shortest casing	420	393.5	363-373	10	2	Tehama	x x	х	x - x	
104	Glenn	21N03W23D002	25233	801404	39.66720	-122.17734	NAD 83	Observation	active	nested	204.76	206.43	top of middle casing	420	191.5	142-152 160-170	20	2	Modesto	х х	х	x - x	
105	Glenn	21N03W23D003	23993	801404	39.66720	-122.17735	NAD 83	Observation	active	nested	204.76	206.93	top of tallest casing	420	93.5	42-72	30	2	Modesto	x x	х	x - x	
106	Glenn	21N03W34Q002	25789	816224	39.62472	-122.18714	NAD 83	Observation	active	nested	166.65	167.07	top of shortest casing	1020	980	930-960	30	2	Tehama	x x	х	x - x	
107	Glenn	21N03W34Q003	25234	816224	39.62472	-122.18714	NAD 83	Observation	active	nested	166.65	167.38	top of middle casing	1020	710	620-630 650-660 680-690	30	2	Tehama	x x	x	x - x	
108	Glenn	21N03W34Q004	25790	816224	39.62472	-122.18714	NAD 83	Observation	active	nested	166.65	167.63	top of tallest casing	1020	80	60-70	10	2	Alluvium	x x	х	x - x	
109	Glenn	21N04W12A003	38716	E0103388	39.69716	-122.25330	NAD 83	Observation	active	nested	247.50	250.12	top of tallest casing	1080	1070	955-975 1030-1050	40	2	Tehama	x x	х	x x x	
110	Glenn	21N04W12A004	24650	E0103388	39.69717	-122.25330	NAD 83	Observation	active	nested	247.50	249.62	top of shortest casing	1080	660	520-530 590-600 630-640	30	2	Tehama	x x	x	x x x	
111	Glenn	21N04W12A001	24000	726739	39.69717	-122.25330	NAD 83	Observation	abandoned	nested	247.88	249.38	top of piezometer	640	629	598-608	10	2	Tehama	x x			Local Well Big W-Deep.
112	Glenn	21N04W12A002	25725	726739	39.69716	-122.25330	NAD 83	Observation	active	nested	247.88	249.88	top of tallest casing	640	278	247-257 859-879	10	2	Tehama	x x	X	X X X	
113	Glenn	22N01W29N001	24651	E0103616A	39.72445	-122.00943	NAD 83	Observation	active	nested	146.25	150.95	top of tallest casing	1210	1156	990-1010 1116-1135 549-559	59	2	Tuscan	x x	x	x - x	
114	Glenn	22N01W29N002	37700	E0103616B	39.72477	-122.00969	NAD 83	Observation	active	nested	146.25	150.68	top of second tallest casing	1210	661	595-605 631-641 189-199	30	2	Tuscan, Tehama	x x	х	x x x	
115	Glenn	22N01W29N003	24652	E0103616C	39.72459	-122.00960	NAD 83	Observation	active	nested	146.25	149.99	top of second shortest casing	1210	400	255-265 320-330 370-380	40	2	Tehama	x x	х	x x x	
116	Glenn	22N01W29N004	38717	E0103616D	39.72477	-122.00965	NAD 83	Observation	active	nested	146.25	149.06	top of shortest casing	1210	109	89-99	10	2	Modesto	x x	х	x x x	
117	Glenn	22N02W01N001	24999	E038764A	39.78358	-122.04619	NAD 83	Observation	active	nested	159.21	161.07	top of shortest casing	1100	1060	810-820 1040-1050	20	2	Tuscan AB	x x	х	x x x	
118	Glenn	22N02W01N002	38362	E038764B	39.78358	-122.04619	NAD 83	Observation	active	nested	159.21	161.31	top of second shortest casing	1100	720	700-710	10	2	Tehama & Tuscan BC	х х	х	x x x	
119	Glenn	22N02W01N003	25000	E038764C	39.78358	-122.04619	NAD 83	Observation	active	nested	159.21	161.50	top of second tallest casing	1100	380	210-220 360-370	20	2	Tuscan C, Tehama	хх	х	х х х	
120	Glenn	22N02W01N004	25001	E038764D	39.78358	-122.04619	NAD 83	Observation	active	nested	159.21	161.65	top of tallest casing	1100	90	70-80	10	2	Alluvium	хх	х	x x x	
121	Glenn	22N02W15C002	38316	726790	39.76352	-122.07727	NAD 83	Observation	active	nested	189.30	192.37	top of second tallest casing	880	844	760-780	20	4	Tuscan A	x x	х	x - x	
122	Glenn	22N02W15C003	25235	726789	39.76352	-122.07727	NAD 83	Observation	active	nested	189.30	192.01	top of shortest casing	880	401	370-380	10	2	Tuscan B	x x	х	x - x	
123	Glenn	22N02W15C004	25769	726789	39.76352	-122.07727	NAD 83	Observation	active	nested	189.30	192.25	top of second shortest casing	880	241	210-220	10	2	Tehama	x x	х	x - x	
124	Glenn	22N02W15C005	25505	726789	39.76352	-122.07727	NAD 83	Observation	active	nested	189.30	192.71	top of tallest casing	880	91	60-70	10	2	Modesto	x x	х	x - x	
125	Glenn	22N02W18C001	24996	E044014	39.76821	-122.13644	NAD 83	Observation	active	nested	223.44	224.64	top of shortest casing	1200	1049	840-850 900-910 989-999 1019-1029	40	2.5	Tuscan A	x x	x	x x x	
126	Glenn	22N02W18C002	38360	E044014	39.76821	-122.13644	NAD 83	Observation	active	nested	224.44	224.84	top of second shortest casing	1200	455	414-434	20	2.5	Tuscan BC	хх	х	x x x	
127	Glenn	22N02W18C003	24997	E044014	39.76821	-122.13643	NAD 83	Observation	active	nested	225.44	225.54	top of second tallest	1200	185	165-175	10	2.5	Tehama	хх	х	x x x	
128	Glenn	22N02W18C004	24998	E044014	39.76821	-122.13643	NAD 83	Observation	active	nested	226.44	225.94	casing top of tallest casing	1200	75	55-65	10	2.5	Modesto	хх	х	x x x	
129	Glenn	22N02W30H002	25726	726922	39.73252	-122.12306	NAD 83	Observation	active	nested	204.43	205.22	top of shortest casing	920	900	850-880	30	2	Tuscan C	x x	х	x x x	
130	Glenn	22N02W30H003	25727	726922	39.73252	-122.12304	NAD 83	Observation	active	nested	204.43	205.77	top of middle casing	920	275	130-140 150-160 250-260	30	2	Tehama, Modesto	x x	х	x x x	
131	Glenn	22N02W30H004	38609	726922	39.73253	-122.12304	NAD 83	Observation	active	nested	204.43	206.43	top of tallest casing	920	80	45-55 60-70	20	2	Tehama, Modesto	хх	х	x x x	

										Table 3-	-2. Ground	water Monito	ring Network We	lls									
																				Ass	essment	Category	
No.	County	State Well Number	CASGEM <sup>(a)</sup> Station ID	Well Completion Report ID	Latitude, decimal degrees	Longitude, decimal degrees	Datum	Well Use	Well Status (active, inactive, other)	Well Type (single, clustered, nested, other)	Ground Surface Elevation, feet	Reference Point Elevation, feet	Reference Point Description	Borehole Depth, feet, bgs <sup>(b)</sup>	Completed Well Depth, feet, bgs	Screen Intervals, feet, bgs	Total Length of Screen, feet	Casing Diameter, inches	Primary Aquifer	Existing Monitoring Network	Known Construction Non-Pumping Well	Nested Well Proximity to Surface Water <sup>(6)</sup> Accessible and Usable	Notes
132	Glenn	22N03W01R001	25508	726839A	39.78664	-122.14545	NAD 83	Observation	active	nested	226.04	228.17	top of shortest casing	515	490	470-480	10	2	Tuscan C	х	хх	x - x	
133	Glenn	22N03W01R002	25509	726839B	39.78664	-122.14545	NAD 83	Observation	active	nested	226.04	228.53	top of middle casing	515	290	270-280	10	2	Tehama	х	хх	x - x	
134	Glenn	22N03W01R003	38319	726839C	39.78664	-122.14545	NAD 83	Observation	active	nested	226.04	229.04	top of tallest casing	515	80	60-70	10	2	Modesto	х	хх	x - x	
135	Glenn	22N03W24E001	25236	726923A	39.74717	-122.15597	NAD 83	Observation	active	nested	230.51	231.70	top of shortest casing	860	840	800-820	20	2	Tehama	х	хх	x x x	
136	Glenn	22N03W24E002	38667	726923B	39.74717	-122.15597	NAD 83	Observation	active	nested	230.51	231.93	top of middle casing	860	195	130-150 170-180	30	2	Modesto	х	хх	x x x	
137	Glenn	22N03W24E003	25758	726923C	39.74717	-122.15597	NAD 83	Observation	active	nested	230.51	232.41	top of tallest casing	860	70	50-60	10	2	Modesto	х	хх	x x x	
138	Glenn	22N03W28P001	24702	801439A	39.72617	-122.20604	NAD 83	Observation	active	nested	258.22	259.49	top of shortest casing	500	421	390-400	10	2	Tehama	х	х	x x x	
139	Glenn	22N03W28P002	23998	801439B	39.72617	-122.20603	NAD 83	Observation	caved?	nested	258.22	259.97	top of middle casing	500	311	270-290	20	2	Tehama	х	хх	х х -	Well potentially caved. Data logger trapped down hole.
140	Glenn	22N03W28P003	24703	801439C	39.72618	-122.20604	NAD 83	Observation	active	nested	258.22	260.52	top of tallest casing	500	71	30-50	20	2	Alluvium	х	х х	х х х	

<sup>(</sup>a) California's Statewide Groundwater Elevation Monitoring Program (CASGEM). (b) Below ground surface (bgs).

(i) U.S. Geological Survey (USGS).

<sup>(</sup>c) Monitoring sites located within 200 feet of an existing water channel or water body.
(d) California Department of Water Resources (DWR), 2001, Lower Colusa Basin Conjunctive Use Investigation: Monitoring Network Completion Report, June 1999. (DWR, 2001)
(e) Latitude and longitude values are in North American Datum of 1983 (NAD 83), decimal degrees.
(f) Email correspondance from Roy Hull, DWR North Region Office, received NOvember 16, 2017. (Roy Hull, DWR, 2017)
(g) U.S. Bureau of Reclamation (USBR).
(h) NA denotes field where data was not unknown or unavailable.



Table 3-3 lists the criteria for evaluating the groundwater monitoring wells within the current groundwater monitoring network. These criteria were identified given the groundwater monitoring network requirements discussed in the Monitoring Network BMP and 23 CCR §354.34.

Table 3-3. Assessment C	ategories of the Groundwater Monitoring Network Wells
Characteristic	Importance
Known Construction Characteristics	Known well construction characteristics will enable evaluation of groundwater conditions at specific depths, for principal aquifers. Examples of construction characteristics include borehole depth, screened intervals, and the presence of seals within the annular fill.
Nested Multiple Completion Wells	Nested multiple completion wells allow the measurement of water levels at different depths within the aquifer system. Typically, confinement of the aquifers increases with depth. Multiple completion wells can provide insight into how the aquifer system is connected and allow estimates of vertical gradients and vertical hydraulic conductivity to be made. The different aquifers at depth are discussed in the preliminary hydrogeologic conceptual model report, a partner document to this report (West Yost, 2018).
Non-Dedicated Monitoring Wells	Pumping causes cones of depression that impact the water levels at and near the pumping well. Pumping water levels are not indicative of the static condition of the aquifer system and can skew estimates of groundwater storage. Pumping wells included in the groundwater monitoring network should be verified as inactive when measurements are made.
Proximity to Streams and Interconnected Surface Waters	Wells, specifically multiple completion wells, near streams or interconnected surface waters are useful for evaluating the interaction between surface water and the groundwater aquifer. Vertical hydraulic gradients from wells near stream gages can provide insight regarding the direction of flow into or away from the surface water feature.
Lateral and Vertical Density	To characterize groundwater levels throughout the entire groundwater subbasin, accessible monitoring sites should be spatially distributed throughout the area of interest. Not only should the monitoring sites be distributed laterally, but their screened intervals should also be set at depths that correspond to the hydrogeologic formations and principal aquifer systems that comprise the groundwater subbasin.
Accessibility and Usability	The monitoring sites need to be easily accessible by field staff. Additionally, well completions should be clear down-hole to allow access of water level measuring equipment.

**Known Construction.** All of the wells listed in Table 3-2 have known well construction, with the exception of two wells. Colusa County monitoring well 13N02W12L001 is a U.S. Bureau of Reclamation (USBR) well; no well construction is available in the well completion report but USBR may have additional information regarding the well construction characteristics. Colusa County monitoring well 16N03W35N002 is reported to have been destroyed or caved in; the well completion report states that the well casing was pulled due to issues with silt. These wells may prove to be undesirable for inclusion in the current groundwater monitoring network since they may potentially represent mixed groundwater conditions between two principal aquifers or may be unusable. These wells are near other groundwater monitoring network wells, therefore no data gaps were identified given the potential exclusion of these two wells from the current groundwater monitoring network.



**Nested Multiple Completion Wells.** Of the 59 groundwater monitoring sites (140 separate completions) shown on Figure 3-1 and listed in Table 3-2, over 30 are nested multiple completion wells. These nested wells are screened at discrete depths up to a maximum depth of 1,180 ft below ground surface. The nested wells enable measurement of vertical head gradients between the three principal aquifers within the study area: the unconfined alluvial aquifer and the semi-confined to confined aquifer systems of the Tehama and Tuscan Formations (West Yost, 2018). Additionally, the nested wells located near major unlined surface water conveyance systems will enable characterization of the interaction between the surface water and groundwater systems. The current groundwater monitoring network contains wells that provide a lateral and vertical density sufficient to enable characterization of groundwater within the principal aquifers.

Non-Dedicated Monitoring Wells. The vast majority of the active domestic, irrigation, and stock wells included in the current groundwater monitoring network are located in Colusa County. The Monitoring Network BMP allows the temporary inclusion of water supply wells in the groundwater monitoring network if the wells are screened within a single water-bearing unit. Of these wells, three were identified to be perforated in more than one principal aquifer, based on preliminary analysis of the depth to base of Quaternary alluvium. These three wells are 18N02W36B001 (near Princeton), 15N03W08Q001 (west of Williams), and 14N02W13N001 (north of Arbuckle). These wells may prove to be undesirable for inclusion in the current groundwater monitoring network, since they may potentially represent mixed groundwater conditions between two principal aquifers. The potential data gap stemming from this analysis is discussed more in Section 3.2.5.

**Proximity to Streams and Interconnected Surface Waters.** The study area is bounded and traversed by irrigation canals and drains, as well as perennial, ephemeral, and intermittent streams. Many of the surface waters are near wells included in the current groundwater monitoring network, except for the surface waters contained within the Colusa National Wildlife Refuge, east of Williams, as seen on Figure 3-1. There are no current County-identified groundwater monitoring wells near the Colusa National Wildlife Refuge.

Lateral and Vertical Density. The current groundwater monitoring network has a density of approximately 2.9 completions per 100 square miles in the Quaternary alluvium, approximately 5.9 completions per 100 square miles in the Tehama Formation, and approximately 9.1 completions per 100 square miles in the Tuscan Formation. Well densities per principal aquifer were calculated based on the lateral extent of the aquifer (for example, the Quaternary alluvium aquifer laterally covers about 1,090 square miles of the study area while the Tuscan aquifer laterally covers approximately 208 square miles of the study area). These densities are sufficient to evaluate regional groundwater level trends throughout the study area, in accordance with the Monitoring Network BMP (DWR, 2016). Additionally, there are enough depth-specific wells located throughout the study area to evaluate groundwater elevation trends, groundwater storage, connectivity, and aquifer characteristics with depth, between principal aquifers and the surface water system.

**Accessibility.** The wells listed in Table 3-2 were identified by County staff and should be accessible for field investigations. However, this assessment identified six completions within four wells that may be unusable due to caved-in or collapsed casings. These include 13N02W04G001, -003, -004, 13N02W12L001, 16N03W35N002, and 22N03W28P002. Of these four wells, two are listed as having insufficient well construction information available. The potential data gap stemming from this analysis is discussed more in Section 3.2.5.



#### 3.2.5 Data Gaps in Groundwater Monitoring Network

23 CCR §354.38(b) defines data gaps as occurring where there is an insufficient number of monitoring sites, insufficient monitoring frequency, or unreliable monitoring sites. Data gaps can also occur when collected data are of insufficient quality or quantity to support evaluation of the sustainability indicators (Monitoring Network BMP).

The current groundwater monitoring network was assessed based on requirements listed in the Monitoring Network BMP and 23 CCR §354.34. Spatial or temporal density and quality of monitoring sites were then assessed to identify potential data gaps. Data gaps within the current groundwater monitoring network were evaluated for all criteria and identified for two categories:

- 1. Usability of the monitoring site due to:
  - a. Potential cave-ins
  - b. Wells screened across multiple water-bearing units and principal aquifers
- 2. Spatial distribution of monitoring sites with regard to:
  - a. Presence near a surface water body
  - b. Full lateral and vertical extent of coverage

# 3.2.6 Proposed Actions to Address Data Gaps

## 3.2.6.1 Proposed Addition of Existing Wells

Figure 3-2 shows the current Colusa County and Glenn County groundwater monitoring networks. Potentially unusable monitoring sites are identified on Figure 3-2 along with potential locations for new wells and proposed existing wells that may be added to the current network. All of the identified existing wells are part of one of the existing groundwater monitoring programs listed in Table 3-1. Existing wells proposed to be added to the Counties' groundwater level monitoring networks are listed in Table 3-4.

Table 3-4. Existing Wells Proposed to be Added to the Groundwater Monitoring Network

State Well Number	Location	Existing Groundwater Monitoring Network	Rationale for Selection									
15N04W11G001	Colusa County	DWR WDL <sup>(a)</sup>	Expand lateral monitoring network coverage towards basin's western margin.									
16N03W35M001	Colusa County	DWR WDL	Replacement for potentially unreliable site: similar location and construction characteristics as the potentially unreliable site.									
22N03W05F002 Glenn County DWR WDL Expand lateral monitoring network coverage near Stony Creek.												
(a) California Departn												



#### 3.2.6.2 Proposed New Wells

Colusa County staff identified three potential locations on County-owned sites for one new multiple completion monitoring well and extensometer based on evaluation of lowered groundwater levels and land subsidence in the Arbuckle area. These three-proposed new groundwater monitoring site locations are shown on Figure 3-2. Of the three potential sites, the site located within Arbuckle has been identified by County staff to be the most potentially beneficial for monitoring groundwater levels and land subsidence in the Arbuckle area per sustainability indicators (23 CCR §354.34(c)).

If data collected from the groundwater monitoring network are deemed insufficient to enable monitoring of the groundwater in accordance with sustainability indicator needs, locations for additional new monitoring sites may be evaluated.

## 3.2.6.3 Additional Proposed Actions

It is recommended that a field survey be conducted of all current groundwater monitoring network sites to verify latitude and longitude coordinates, well depths, ground surface elevations, reference point elevations, and descriptions in accordance with the requirements described in 23 CCR §352.4(a) through (c) (Appendix C). Monitoring frequencies should also be verified for compliance with requirements set forth in 23 CCR §354.34(c)(1)(B).

# 3.3 Groundwater Quality Monitoring

## 3.3.1 Requirements

The groundwater quality monitoring network shall be designed such that the sustainability indicators are adequately covered not just over the entire basin, but also within any specific GSP-defined Management Areas. The only sustainability indicator supported by the groundwater quality monitoring network is the degradation of water quality. The groundwater quality monitoring network shall be designed to collect sufficient spatial and temporal data from each principal aquifer to enable determination of groundwater quality trends and to address known water quality issues (23 CCR §354.34(c)(4)).

In accordance with the Monitoring Network BMP (DWR, 2016), data collected from the groundwater quality monitoring network should be sufficient to:

- Enable definition of the three-dimensional extent of impact;
- Enable mapping of transient water quality degradation;
- Facilitate assessment of groundwater quality impacts to beneficial uses and users;
- Enable evaluation of management practice impacts to groundwater quality degradation;
- Support evaluation of DQOs.



Groundwater quality monitoring events should occur twice-annually (correlating with seasonal highs and lows) but may be more frequent, as needed, per the Monitoring Network BMP (DWR, 2016). The Monitoring Network BMPs state that:

- Where regulated plumes exist, monitoring should coincide with regulatory monitoring.
- Where unregulated groundwater quality issues occur, monitoring should be consistent with the degree of groundwater use in the impacted area.

Monitoring sites shall include the following information (23 CCR §352.4(a) through (c), tabulated in Appendix C):

- Unique station identifier, CASGEM ID;
- Site description, well location (NAD 83, latitude and longitude decimal degrees to five decimal places);
- Well use, well status, well type;
- Elevation of ground surface (accurate to 0.1 feet NAVD 88);
- Elevation and description of reference point (accurate to 0.5 feet NAVD 88);
- Well construction;
- Borehole and total well depth;
- Well completion report ID;
- Identification of principal aquifers;
- Geophysical logs and other relevant information, if any;
- Monitoring type;
- Measurement(s) taken;
- Monitoring frequency; and
- Description of standards used to install the monitoring site.

#### 3.3.2 Monitoring Protocols

In accordance with the Monitoring Protocols BMP (DWR, 2016), all water quality analyses should be performed by a State Environmental Laboratory Accreditation Program certified laboratory. Additionally, analytical methods should be similar to those used by other existing groundwater quality programs within the basin for comparative purposes.



Groundwater quality sampling protocols should follow USGS National Field Manual for the Collection of Water Quality Data (Wilde, 2005) in accordance with the Monitoring Protocols BMP (DWR, 2016). Groundwater sampling protocols should ensure that:

- Groundwater quality data are collected from the correct location, accurate and reproducible, and represent conditions consistent with the DQOs;
- Salient data are recorded; and
- All data are handled such that integrity is maintained.

The Monitoring Protocols BMP defines the following standardized protocols:

- Prior to sampling, the appropriate laboratory should be notified and scheduled, the
  appropriate sampling bottles and equipment should be obtained, and sample
  preservation requirements and hold times should be confirmed.
- All groundwater monitoring network wells should have a unique identifier posted on the well housing or casing.
- Samples from pumping wells should be collected near the wellhead.
- All sampling equipment and ports should be free of contaminants and decontaminated between sampling locations.
- Groundwater elevations should be measured.
- Wells not equipped with low-flow sampling taps should be purged prior to sampling
  to ensure sampling is of ambient groundwater conditions and not borehole storage
  conditions. Typically, three casing volumes purged is adequate.
- If purging or pumping causes a well to be evacuated, allow 90 percent recovery prior to sampling.
- Field parameters should be collected coincident with each sample. Field parameters should include pH, EC, and temperature, at a minimum. Field instruments should be calibrated daily.
- Sample containers should be labeled prior to sampling. Sample labels should include sample ID, sample date and time, sample personnel, sample location, preservatives, analyte, and analytical method.
- Samples should be collected under laminar flow conditions.
- Samples should be collected according to appropriate standards. The sample collection procedure should reflect the type of analysis being performed and the DQOs.
- Samples should be preserved at the time of sampling. Samples should be filtered, as appropriate.
- Samples should be chilled after collection to prevent degradation.



- Chain of custody forms should be used to track procession of the samples.
- Analytical laboratories should utilize reporting limits that are equal to or less than the applicable DQOs or regional water quality objectives and screening levels.

#### 3.3.3 Existing Groundwater Quality Monitoring Programs

Table 3-5 lists the groundwater quality monitoring networks with publicly available data and their respective websites.

Table 3-5. Existing Groundwater Quality Monitoring Programs						
Groundwater Monitoring Network	Responsible Agency	Website				
National Water Information System (NWIS)	U.S. Geological Survey (USGS)	https://waterdata.usgs.gov/nwis				
Water Data Library (WDL)	California Department of Water Resources (DWR)	http://wdl.water.ca.gov/waterdatalibrary/				
Public Water Agencies and Municipalities	State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW)	https://sdwis.waterboards.ca.gov/PDWW/				
GeoTracker and GeoTracker Groundwater Ambient Monitoring and Assessment (GAMA) Programs	SWRCB	http://geotracker.waterboards.ca.gov/ http://geotracker.waterboards.ca.gov/gama/				
Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS)	Central Valley Salinity Coalition	Not Available <sup>(a)</sup>				
Irrigated Lands Regulatory Program (ILRP)	Central Valley Regional Water Quality Control Board	http://ceden.waterboards.ca.gov/AdvancedQueryTool				
Glenn County Annual Water Quality Sampling Program	County of Glenn	http://www.countyofglenn.net/committee/water-advisory-committee/water-quality (a)				
(a) Groundwater quality data are not available online.						



#### 3.3.3.1 USGS NWIS

The USGS manages groundwater quality sites throughout the country, which measure assorted water quality parameters either discretely or continuously. All the USGS water quality data are housed on their publicly-available NWIS web interface. Active monitoring wells included within the USGS NWIS database are located within the Colusa Subbasin and portions of the West Butte Subbasin in the study area.

#### 3.3.3.2 DWR WDL

The California DWR monitors groundwater quality throughout the State. The data are made publicly available via their WDL website. DWR also provides study-area-specific water quality downloads on request. Active monitoring wells included within the DWR WDL database are located throughout the Colusa Subbasin and portions of the Corning, and West Butte Subbasins in the study area.

#### 3.3.3.3 SWRCB Division of Drinking Water

The SWRCB Division of Drinking Water (DDW) maintains water quality records and schedules for public water systems. Public water systems can include municipalities, schools, large farms, and other similar agencies or businesses that provide water for human consumption. Public drinking water systems test regularly for regulated drinking water contaminants, as specified in Title 22 of the CCR, and report the test results to the SWRCB DDW.

#### 3.3.3.4 SWRCB GeoTracker and GeoTracker GAMA

The SWRCB GeoTracker website manages data for groundwater contamination sites that require or may potentially require cleanup. These sites and facilities include permitted facilities and active cleanup sites.

GeoTracker for Groundwater Ambient Monitoring and Assessment Program (GAMA) was developed in response to the Groundwater Quality Monitoring Act in 2001 (Assembly Bill 599). GeoTracker GAMA integrates groundwater quality data from multiple ambient groundwater monitoring sites into a single, publicly available website application. Participating GAMA wells can be found throughout the portions of the Colusa, Corning, and West Butte Subbasins within the study area.

#### 3.3.3.5 Central Valley Salinity Alternatives for Long-Term Sustainability Program

The Central Valley Salinity Alternatives for Long-Term Sustainability Program (CV-SALTS) was initiated in 2006 via a joint effort by the SWRCB, Central Valley Regional Water Quality Control Board, and stakeholders within the Central Valley. CV-SALTS is managed by the Central Valley Salinity Coalition and aims to develop and implement a comprehensive salinity and nitrate management program throughout the entirety of California's Central Valley. The CV-SALTS monitoring network is based primarily on wells currently included in other existing programs.



#### 3.3.3.6 Irrigated Lands Regulatory Program

The Irrigated Lands Regulatory Program (ILRP) is a Regional Water Quality Control Board regulatory program that aims to prevent degradation of water quality due to agricultural discharge. ILRP was initiated in 2003 specifically for surface water impairment; the program was expanded to include impairments to groundwater in 2012. There are two ILRP coalitions within the study area: California Rice Commission and the Sacramento Valley Water Quality Coalition. Both of these coalitions compile groundwater quality assessment reports (GARs) by utilizing data from the DWR WDL, USGS NWIS, GeoTracker and GeoTracker GAMA, other state and federally managed networks, and local irrigation, domestic, private, municipal, and industrial wells (CH2MHILL, 2013; CH2MHILL, 2016).

#### 3.3.3.7 Glenn County Annual Water Quality Sampling Program

Glenn County has a network of 46 wells that are tested annually for general parameters, including temperature, pH, and EC. The network is comprised mostly of domestic and irrigation wells that are located within the portions of the Colusa, Corning, and West Butte Subbasins within the study area.

#### 3.3.4 Groundwater Quality Monitoring Network

Groundwater quality monitoring networks have not yet been formally defined, however, groundwater quality data collected under existing regulatory programs, specifically the ILRP, may be sufficient for SGMA compliance. The California Rice Commission has identified their ILRP groundwater quality trend network from active USGS-managed wells within and surrounding the California Rice Commission management area (CH2MHILL, 2016). Ten of these wells are within the Colusa Subbasin of the study area and three wells are within the West Butte Subbasin of the study area. The Sacramento Valley Water Quality Coalition in coordination with Northern California Water Association (NCWA) is currently in the process of defining their ILRP groundwater quality trend monitoring network sites.

#### 3.3.5 Data Gaps in Groundwater Quality Monitoring Network

Four potential data gaps have been identified within the proposed ILRP groundwater quality monitoring networks:

- 1. The existing California Rice Commission groundwater quality monitoring network does not provide sufficient monitoring for nitrate northwest of Willows, Glenn County (CH2MHILL, 2016). This data gap impacts both the Tehama and relatively-shallow Quaternary aquifer systems within the Colusa Subbasin.
- 2. The current California Rice Commission groundwater monitoring plan to collect groundwater quality samples every two years may not be sufficient to satisfy the requirements set forth in the Monitoring Network BMP (DWR, 2016).
- 3. The existing California Rice Commission groundwater monitoring network is laterally limited to the extents of the rice ponds within the study area. It is possible that the lateral extent of the Sacramento Valley Water Quality Coalition groundwater quality monitoring network may not satisfy the spatial requirements set forth in 23 CCR §354.34(c) and the Monitoring Network BMPs (as discussed in Sections 3.3.1 and 3.3.2 of this report). This would impact the principal aquifers within the study area portions of the Colusa, Corning, and West Butte Subbasins.



4. It is possible that the monitoring networks defined by the Sacramento Valley Water Quality Coalition and the California Rice Commission may not be sufficient to adequately allow identification of upwelling or intrusion of deeper brackish/connate waters into the freshwater aquifer systems. This would impact the principal aquifers within the study area portions of the Colusa, Corning, and West Butte Subbasins.

#### 3.3.6 Proposed Actions to Address Data Gaps

Groundwater quality data collected under existing regulatory programs may be sufficient for SGMA compliance. The Sacramento Valley Water Quality Coalition in coordination with NCWA is currently in the process of defining its groundwater quality trend monitoring network sites. The California Rice Commission, who also manages lands within the study area, has already defined their groundwater quality trend monitoring network for ILRP compliance. The Counties of Colusa and Glenn should consider coordinating with the Sacramento Valley Water Quality Coalition, NCWA, and the California Rice Commission in the establishment and ongoing evaluation of these groundwater quality monitoring network sites with the goal of using data collected under the ILRP for SGMA compliance. The Counties of Colusa and Glenn should also consider using groundwater quality data collected through other ongoing regulatory programs, such as the SWRCB DDW regulation of municipal supplies and County regulation of small public supply systems, for SGMA compliance.

#### 3.4 Seawater Intrusion

The study area is located approximately 30 miles from the legal Sacramento-San Joaquin River Delta boundary, and even farther from the brackish delta estuaries. Additionally, the 2018 Draft Basin Prioritization study by DWR found that the Colusa, Corning, and West Butte Subbasins have not exhibited any impacts of saline intrusion within the past 20 years. As such, seawater intrusion is neither occurring nor anticipated to occur within the Colusa, Corning, or West Butte Subbasins within the study area.

#### 3.5 Land Subsidence Monitoring

#### 3.5.1 Requirements

The land subsidence network shall be designed such that the sustainability indicators are adequately covered, not just over the entire basin, but also within any specific GSP-defined Management Areas. The only sustainability indicator supported by the land subsidence monitoring network is land subsidence. The land subsidence monitoring network shall be designed to enable the characterization of the rate and extent of subsidence by providing consistent, accurate, and reproducible results (23 CCR §354.34(c)(5); DWR, 2016).

Monitoring sites shall include the following information (23 CCR §352.4(a) through (b), tabulated in Appendix C):

- Unique station identifier;
- Site description;
- Monitoring type;
- Measurement(s) taken;



- Monitoring frequency;
- Location (NAD 83, latitude and longitude decimal degrees to five decimal places);
- Elevation of ground surface (accurate to 0.1 feet NAVD 88);
- Elevation and description of reference point (accurate to 0.5 feet NAVD 88);
- Description of standards used to install the monitoring site.

#### 3.5.2 Monitoring Protocols

The following land subsidence monitoring protocols have been established by DWR (DWR, 2016):

- Levelling surveys should follow standards defined in the California Department of Transportation's (Caltrans) Surveys Manual (Caltrans, assorted dates).
- Continuous global positioning system (GPS) surveys should follow standards defined in the Caltrans Surveys Manual.
- Extensometer instruments should be installed, calibrated, and maintained per the manufacturer's instructions.
- Interferometric Synthetic Aperture Radar (InSAR) surveys should be obtained via interpretative reports for specific regions. Raw data files may be obtained and processed instead, if needed.

Land surface should be recorded to an accuracy of 0.1 feet, at a minimum, relative to NAVD 88, in accordance with the requirements described in 23 CCR §352.4(a)(3) (tabulated in Appendix C).



#### 3.5.3 Existing Subsidence Monitoring Programs

Table 3-6 lists the existing land subsidence monitoring networks and data sets with publicly available data, and their respective websites.

Table 3-6. Existing Land Subsidence Monitoring Programs				
Subsidence Monitoring Network	Responsible Agency	Website		
Interferometric Synthetic Aperture Radar (InSAR) Surveys <sup>(a)</sup>	European Space Agency; Japanese Space Exploration Agency; Italian Space Agency; Canadian Space Agency; German Aerospace Center; National Aeronautics and Space Administration (NASA) Jet Propulsion Laboratory (JPL)	http://www.esa.int/ESA http://global.jaxa.jp/ http://www.asi.it/en http://www.asc-csa.gc.ca/eng/ http://www.dlr.de/dlr/en/desktopdefault.aspx/tabid- 10002/ https://data.cnra.ca.gov/dataset/nasa-jpl-insar- subsidence		
Continuous Global Positioning System (GPS) Benchmarks	National Geodetic Survey; UNAVCO; Berkeley Seismological Laboratory	https://www.ngs.noaa.gov/NGSDataExplorer/# http://www.unavco.org/data/data.html http://seismo.berkeley.edu/networks/index.html		
Extensometers California Department of Water Resources (DWR)		http://wdl.water.ca.gov/groundwater/landsubsidence/LS monitoring.cfm		
Sacramento Valley Height- Modernization Project	California DWR Northern District & U.S. Bureau of Reclamation	Not Available <sup>(b)</sup>		

<sup>(</sup>a) The InSAR sources currently house unprocessed raw survey data but not interpretative reports for specific regions. Some of the reports using InSAR to study subsidence specific to California can be found on DWR's website: <a href="http://wdl.water.ca.gov/groundwater/landsubsidence/LSmonitoring.cfm">http://wdl.water.ca.gov/groundwater/landsubsidence/LSmonitoring.cfm</a>

#### 3.5.3.1 InSAR Surveys

InSAR is a satellite-based method of mapping changes in land surface elevation. InSAR surveys have been conducted over the Central Valley, with the focus being the western edge of the San Joaquin Valley. Land subsidence studies using InSAR satellite surveys that include the entire study area except for the western-most edge of the Colusa and Corning Subbasins have been conducted by NASA and the California Institute of Technology (Farr et.al., 2015).

<sup>(</sup>b) Sacramento Valley Height-Modernization project data are not available online. The 2008 survey report can be found at: <a href="http://wdl.water.ca.gov/groundwater/docs/DWR\_USBR\_Sacramento\_Valley\_Subsidence\_Report\_2008.pdf">http://wdl.water.ca.gov/groundwater/docs/DWR\_USBR\_Sacramento\_Valley\_Subsidence\_Report\_2008.pdf</a>



#### 3.5.3.2 Continuous GPS Benchmarks

The National Oceanic and Atmospheric Administration (NOAA) National Geodetic Survey (NGS) website compiles some of the publicly available information regarding benchmarks with and without GPS survey results. These sites include continuous GPS sites with data available via UNAVCO, formerly known as the University NAVSTAR Consortium, and the Berkeley Seismological Laboratory as well as survey benchmarks. NGS has also started a program called "GPS on Benchmarks" to provide higher spatial resolution to their existing benchmark grid.

Figure 3-3 shows the locations of the continuous GPS benchmarks near the study area. There are two continuous GPS stations within the study area (both within the Colusa Subbasin of Colusa County). Three additional stations are located near the study area, two of which are west of the Colusa Subbasin (in both Colusa and Glenn Counties), and one located east of the study area in the Sutter Buttes (Sutter County).

#### 3.5.3.3 DWR Extensometers

Extensometers are installed in wells or boreholes and can detect changes in the thickness of the sediment surrounding the well due to compaction or expansion. There are five extensometers installed throughout the study area, all of which are managed by DWR. The extensometers are shown on Figure 3-3. All five extensometers are set at a depth greater than 700 feet and so measure subsidence impacts of both the shallow Quaternary alluvial aquifer and portions of the deeper Tehama and Tuscan Formation aquifers. Four of the extensometers are located within the Colusa Subbasin (two each in Colusa and Glenn Counties) and measure expansion/compression of the alluvial and Tehama Formation aquifer systems. One extensometer is located within the Corning Subbasin (Glenn County), where the Tehama and Tuscan Formation aquifer systems intermix. This extensometer measures expansion/compression of the Quaternary alluvial and Tehama/Tuscan Formation aquifer systems.

#### 3.5.3.4 Sacramento Valley Height-Modernization Project Monitoring Network

DWR and USBR jointly manage the Sacramento Valley Height-Modernization Project, which aims to characterize land subsidence due to groundwater withdrawal within the Sacramento Valley via survey benchmarks and continuous GPS stations. The Glenn County benchmarks were surveyed in 2004. Initial survey of the complete valley-wide network was conducted in 2008 (Table 3-6). Repeat surveys of select benchmarks in Glenn County and near Arbuckle in Colusa County were conducted in 2015 and 2016, respectively (Ehorn, 2016). Results from a repeat survey of Sacramento Valley benchmarks conducted in 2017 are not yet available (California GIS Council, 2017).

The Sacramento Valley Height-Modernization Project Monitoring Network benchmarks are shown on Figure 3-3. The benchmarks are located such that the entire study area is well represented, with the exception of the southwestern portion of the Colusa Subbasin, near the northern end of the Capay Hills.



#### 3.5.4 Land Subsidence Monitoring Network

Table 3-7 lists the benchmarks, continuous GPS stations, and extensometers included in the land subsidence monitoring network. Figure 3-3 shows these locations relative to the study area.

#### 3.5.5 Data Gaps in Land Subsidence Monitoring Network

The only identified data gap within the land subsidence monitoring network concerns the observed land subsidence near Arbuckle, Colusa County. There is no extensometer installed in the vicinity of Arbuckle and the existing benchmarks are currently surveyed too infrequently to adequately quantify inelastic land subsidence.

#### 3.5.6 Proposed Actions to Address Data Gaps

#### 3.5.6.1 Proposed Benchmarks

No additional benchmarks are recommended at this time.

#### 3.5.6.2 Proposed Extensometers

Colusa County staff identified three potential locations on County-owned sites for a new multiple completion monitoring well and collocated extensometer, based on evaluation of lowered groundwater levels and land subsidence. These three sites are shown on Figure 3-3. Of the three potential sites, the site located within Arbuckle has been identified by County staff to be the most potentially beneficial for monitoring groundwater levels and land subsidence in the Arbuckle area, per sustainability indicators (23 CCR §354.34(c)).

If data collected from the land subsidence monitoring network is deemed insufficient to enable estimation of the rate and extent of land subsidence in accordance with sustainability indicator needs, increased repeat survey frequency of existing benchmarks or the installation of new benchmarks or extensometers may be recommended.

#### 3.5.6.3 Additional Proposed Actions

The counties should evaluate future DWR benchmark repeat survey results as they are made available. Ongoing studies using InSAR data should also be reviewed as they are published.

#### 3.6 Surface Water Monitoring

#### 3.6.1 Requirements

The surface water monitoring network should be designed such that the sustainability indicators are adequately covered not just over the entire basin, but also within any specific GSP-defined Management Areas. The only sustainability indicator supported by the surface water monitoring network is the depletion of interconnected surface water. The surface water monitoring network shall be designed to characterize spatial and temporal changes between interconnected waters such that depletions from surface waters caused by groundwater extraction can be calculated (23 CCR §354.34(c)(6); DWR, 2016).

Table 3-7. Land Subsidence Monitoring Network Extensometers and Benchmarks

County	Station ID	Latitude	Longitude	Datum	Site Type
Colusa	16N02W05B001	39.27527	-122.10568	NAD 83 <sup>(a)</sup>	Extensometer <sup>(b)</sup>
Colusa	17N02W09H002	39.34170	-122.08377	NAD 83	Extensometer
Glenn	19N02W08Q001	39.51596	-122.11143	NAD 83	Extensometer
Glenn	21N02W33M001	39.62970	-122.10045	NAD 83	Extensometer
Glenn	22N02W15C002	39.76352	-122.07727	NAD 83	Extensometer
Colusa	P269	38.99953	-122.35455	NAD 83	Continuous GPS Benchmark <sup>(c)</sup>
Colusa	P270	39.24377	-122.05520	NAD 83	Continuous GPS Benchmark
Colusa	P272	39.14548	-121.93406	NAD 83	Continuous GPS Benchmark
Glenn	P336	39.52808	-122.43047	NAD 83	Continuous GPS Benchmark
Sutter	SUTB	39.20583	-121.82058	NAD 83	Continuous GPS Benchmark
Butte	7MIL	39.63631	-121.90997	NAD 83	Benchmark <sup>(d)</sup>
Butte	B109	39.53803	-121.90831	NAD 83	Benchmark
Butte	BCEX	39.57706	-121.90831	NAD 83	Benchmark
Butte	FARM	39.79686	-121.98742	NAD 83	Benchmark
Butte	FREX	39.66553	-121.92506	NAD 83	Benchmark
Butte	MERI	39.75321	-121.93846	NAD 83	Benchmark
Butte	NLD7	39.36214	-121.86808	NAD 83	Benchmark
Butte	NLD8	39.55158	-121.84047	NAD 83	Benchmark
Butte	WLMS	39.50361	-121.85653	NAD 83	Benchmark
Colusa	TC22	39.05000	-122.15000	NAD 83	Benchmark
Colusa	TC23	39.01000	-122.09000	NAD 83	Benchmark
Colusa	COLI	39.18514	-121.99461	NAD 83	Benchmark
Colusa	D850	39.14268	-122.21725	NAD 83	Benchmark
Colusa	DELE	39.27528	-122.10558	NAD 83	Benchmark
Colusa	DLP2	39.19113	-122.17126	NAD 83	Benchmark
Colusa	DODG	39.37739	-122.02070	NAD 83	Benchmark
Colusa	F200	39.31920	-122.19154	NAD 83	Benchmark
Colusa	FINK	39.25828	-122.19148	NAD 83	Benchmark
Colusa	GORD	39.40956	-122.00997	NAD 83	Benchmark
Colusa	GRNO	39.05664	-121.96914	NAD 83	Benchmark
Colusa	H62U	39.12059	-122.29094	NAD 83	Benchmark
Colusa	HAHN	39.08068	-122.09838	NAD 83	Benchmark
Colusa	HARB	39.24734	-122.03128	NAD 83	Benchmark
Colusa	HPKN	39.21772	-122.08883	NAD 83	Benchmark
Colusa	JRM4	38.92774	-121.84330	NAD 83	Benchmark
Colusa	LAUX	39.24547	-121.95867	NAD 83	Benchmark
Colusa	LONE	39.17702	-122.07852	NAD 83	Benchmark
Colusa	LUSA	38.97056	-122.02556	NAD 83	Benchmark
Colusa	NLD6	39.11442	-122.01828	NAD 83	Benchmark
Colusa	PTNM	39.33181	-121.95453	NAD 83	Benchmark
Colusa	SECO	39.02883	-122.06393	NAD 83	Benchmark
Colusa	SR65	39.31529	-122.03400	NAD 83	Benchmark
Colusa	STEG	39.34150	-122.08425	NAD 83	Benchmark
Colusa	T644	39.13183	-122.13209	NAD 83	Benchmark
Colusa	W850	39.37778	-122.24806	NAD 83	Benchmark
Colusa	WAYN	38.99358	-121.95819	NAD 83	Benchmark
Colusa	WHEA	39.07662	-121.89427	NAD 83	Benchmark
Colusa	WILK	38.99058	-121.86709	NAD 83	Benchmark
Colusa	WBND	39.04187	-121.83686	NAD 83	Benchmark
Glenn	1122	39.51501	-121.93004	NAD 83	Benchmark
Glenn	1500	39.46406	-121.92539	NAD 83	Benchmark

Table 3-7. Land Subsidence Monitoring Network Extensometers and Benchmarks

Glenn         2085         39.74664         -122.12269         NAD 83         B           Glenn         2966         39.79034         -122.22586         NAD 83         B           Glenn         6064         39.39964         -122.28803         NAD 83         B           Glenn         A107         39.58564         -122.40492         NAD 83         B           Glenn         ADOB         39.39075         -121.95015         NAD 83         B           Glenn         AGUI         39.72608         -122.24058         NAD 83         B	Site Type enchmark enchmark enchmark enchmark enchmark enchmark
Glenn         2966         39.79034         -122.22586         NAD 83         B           Glenn         6064         39.39964         -122.28803         NAD 83         B           Glenn         A107         39.58564         -122.40492         NAD 83         B           Glenn         ADOB         39.39075         -121.95015         NAD 83         B           Glenn         AGUI         39.72608         -122.24058         NAD 83         B	enchmark enchmark enchmark enchmark
Glenn         6064         39.39964         -122.28803         NAD 83         B           Glenn         A107         39.58564         -122.40492         NAD 83         B           Glenn         ADOB         39.39075         -121.95015         NAD 83         B           Glenn         AGUI         39.72608         -122.24058         NAD 83         B	enchmark enchmark enchmark
Glenn         A107         39.58564         -122.40492         NAD 83         B           Glenn         ADOB         39.39075         -121.95015         NAD 83         B           Glenn         AGUI         39.72608         -122.24058         NAD 83         B	enchmark enchmark
Glenn         ADOB         39.39075         -121.95015         NAD 83         B           Glenn         AGUI         39.72608         -122.24058         NAD 83         B	enchmark
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Glenn OWEN 39.46565 -122.24895 NAD 83 B	enchmark
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Glenn PROV 39.52184 -122.08860 NAD 83 B	enchmark
Glenn PMPR 39.78431 -122.04597 NAD 83 B	enchmark
Glenn Q107 39.52422 -122.23729 NAD 83 B	enchmark
Glenn S106 39.71978 -122.54948 NAD 83 B	enchmark
Glenn U107 39.53084 -122.32621 NAD 83 B	enchmark
Glenn V380 39.78232 -122.29498 NAD 83 B	enchmark
Glenn VIOL 39.76637 -122.07760 NAD 83 B	enchmark
Glenn W215 39.79579 -122.54653 NAD 83 B	enchmark
Glenn WALK 39.52420 -122.16497 NAD 83 B	enchmark
Glenn WILD 39.71269 -121.96469 NAD 83 B	enchmark
Glenn WILL 39.43593 -122.07612 NAD 83 B	enchmark
Glenn WILN 39.57084 -122.19379 NAD 83 B	enchmark
	enchmark

#### **Table 3-7. Land Subsidence Monitoring Network Extensometers and Benchmarks**

County	Station ID	Latitude	Longitude	Datum	Site Type
Tehama	271F	39.83394	-122.08514	NAD 83	Benchmark
Tehama	N852	39.80959	-122.17255	NAD 83	Benchmark
Yolo	DRAI	38.92529	-121.91457	NAD 83	Benchmark
Yolo	X200	38.90576	-121.98328	NAD 83	Benchmark

<sup>(</sup>a) Latitude and longitude values are in North American Datum of 1983 (NAD 83), decimal degrees.

<sup>(</sup>b) Extensometers within the study area are installed within intervals from approximately 700-800 ft, bgs.

<sup>(</sup>c) Continuous global positioning system (GPS) benchmark.

<sup>(</sup>d) Benchmarks are those listed for the Sacramento Valley Height Modernization Project within the Counties of Colusa and Glenn and within other Counties near the study area boundary.



In accordance with the Monitoring Network BMP (DWR, 2016) and 23 CCR §354.34(c)(6), data collected from the surface water monitoring network shall be sufficient to:

- Characterize flow conditions including surface water discharge, stage, and baseflows.
- Identify locations and flow periods of ephemeral and intermittent stream channels, if any. The Monitoring Network BMPs state that monitoring of ephemeral or intermittent streams should be conducted annually or as appropriate to characterize flow changes (DWR, 2016).
- Identify temporal trends due to localized, regional, and seasonal surface water discharge and groundwater extraction impacts.
- Identify and collect information necessary to evaluate adverse effects to the beneficial use of surface water.
- Support evaluation of DQOs.

Stream gages should be located along stream reaches with known groundwater connection, per the Monitoring Network BMP (DWR, 2016). Locations should account for surface water diversions and return flows, if necessary. According to the Monitoring Network BMP (DWR, 2016), surface water discharge monitoring should be accompanied by groundwater level monitoring within shallow wells. The requirements specific to the shallow groundwater monitoring wells are discussed in Section 3.2.1 of this report.

Monitoring sites shall include the following information (23 CCR §352.4(a) through (b), tabulated in Appendix C):

- Unique station identifier;
- Site description (NAD 83, latitude and longitude decimal degrees to five decimal places);
- Monitoring type;
- Measurement(s) taken;
- Monitoring frequency;
- Location:
- Elevation of ground surface (accurate to 0.1 feet NAVD 88);
- Elevation and description of reference point (accurate to 0.5 feet NAVD 88); and
- Description of standards used to install the monitoring site.

#### 3.6.2 Monitoring Protocols

According to the Monitoring Protocols BMP (DWR, 2016), streamflow measurements should be collected, analyzed, and reported in accordance with procedures defined in the USGS Water Supply Paper 2175, volumes 1 and 2 (Rantz, 1982). This methodology is currently being used for both DWR and USGS existing surface water monitoring networks.

Surface water flows shall be recorded in cubic feet per second and surface water elevations shall be recorded in feet with a minimum accuracy of 0.1 feet relative to NAVD 88, in accordance with the requirements described in 23 CCR §352.4(a) (tabulated in Appendix C). Water volumes shall be reported in acre-feet.

#### 3.6.3 Existing Surface Water Monitoring Programs

Table 3-8 lists the existing surface water monitoring networks with publicly available data and their respective websites.

Table 3-8. Existing Surface Water Monitoring Programs					
Surface Water Monitoring Network	Responsible Agency	Surface Water Monitoring Type	Website		
National Water Information System (NWIS)	U.S. Geological Survey (USGS)	Discharge	https://waterdata.usgs.gov/nwis		
Water Data Library (WDL)	California Department of Water Resources (DWR)	Discharge	http://wdl.water.ca.gov/waterdatalibrary/		
California Data Exchange Center (CDEC)	California DWR & U.S. Bureau of Reclamation (USBR)	Discharge; Reservoir Conditions	http://cdec.water.ca.gov/cdecstation2/ https://www.usbr.gov/		

#### 3.6.3.1 Existing Surface Water Discharge Monitoring Locations

The USGS NWIS and DWR WDL contain information regarding stream flows and river stages. The California Data Exchange Center (CDEC) database contains stream flows and/or river stage data. There are two gages that measure flows into and out of the Black Butte Reservoir, which separates the Corning and Colusa Subbasins (Figure 3-4). There is one stream gage west of the Colusa Subbasin in Glenn County along South Fork Willow Creek and six stream gages along the Sacramento River, which flows along the eastern boundary the Colusa Subbasin. There is one gage on the Sacramento River, bounding the Corning Subbasin. There are two stream gages along Butte Creek (bounding the eastern extent of the West Butte Subbasin). One gage is located in Butte County, upstream of the study area, and the other is farther downstream in Colusa County.

#### 3.6.3.2 Existing Reservoir Monitoring Locations

The USBR monitors reservoir conditions at Black Butte Reservoir, Stony Gorge Reservoir, and East Park Reservoir and flow conditions at Rainbow Dam. Much of this information is included in the CDEC database, but can also be found on the USBR website (Table 3-8) or requested from USBR staff. Rainbow Dam is located in Colusa County, west of the Colusa Subbasin, and regulates flows into the East Park Reservoir. Discharge from East Park Reservoir flows downstream, northward into Stony Gorge Reservoir, which discharges flows towards Black Butte Reservoir (Figure 3-4).



#### 3.6.4 Surface Water Monitoring Network

Table 3-9 lists the current surface water monitoring network. These station locations are shown on Figure 3-4 and include all of the active stream gages and monitoring sites managed by CDEC, DWR, USBR, and USGS within and surrounding the study area.

#### 3.6.5 Data Gaps in Surface Water Monitoring Network

The temporal changes in ephemeral and intermittent stream stage and flow within the study area may not be sufficiently addressed by the existing surface water monitoring network to the extent required by 23 CCR §354.34(c).

Colusa Basin Drain outflows from the Colusa Subbasin are not currently monitored, and historical monitoring records for Colusa Basin Drain outflows from the Colusa Subbasin are not available within the CDEC, NWIS, and WDL databases.

#### 3.6.6 Proposed Actions to Address Data Gaps

The major perennial surface waters that bound and intersect the study area impact not only the groundwater subbasins within the study area, but also the groundwater subbasins adjacent to the study area (Figure 1-1). Surface water monitoring, particularly as related to streamflow depletion, should therefore be addressed at a regional scale. The GSAs within Colusa and Glenn Counties should undertake surface water monitoring network data gap assessment and remediation in collaboration with neighboring GSAs.

Additionally, existing stream and drainage reports should be evaluated for additional information on the timing, stage and magnitude of flows in ephemeral and intermittent streams in the study area. If necessary, site visits should be conducted to address requirements for monitoring of ephemeral and intermittent streams, per 23 CCR §354.34(c)(6).

DWR is reportedly in the process of evaluating the adequacy of existing stream gages to support SGMA implementation. As a result of this effort, it is anticipated that DWR will identify data gaps and develop recommendations regarding the existing stream gage networks. Actions proposed by DWR, if any, should be taken into consideration by the GSAs.

If data collected from the surface water monitoring network are deemed insufficient to enable characterization of the surface water-groundwater interconnection or if data gaps are identified via simulations from a well-calibrated integrated model, locations for additional new monitoring sites should be evaluated.

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Table 3-9. Surface Water	r Monitoring	<b>Network Stream</b>	n Gages
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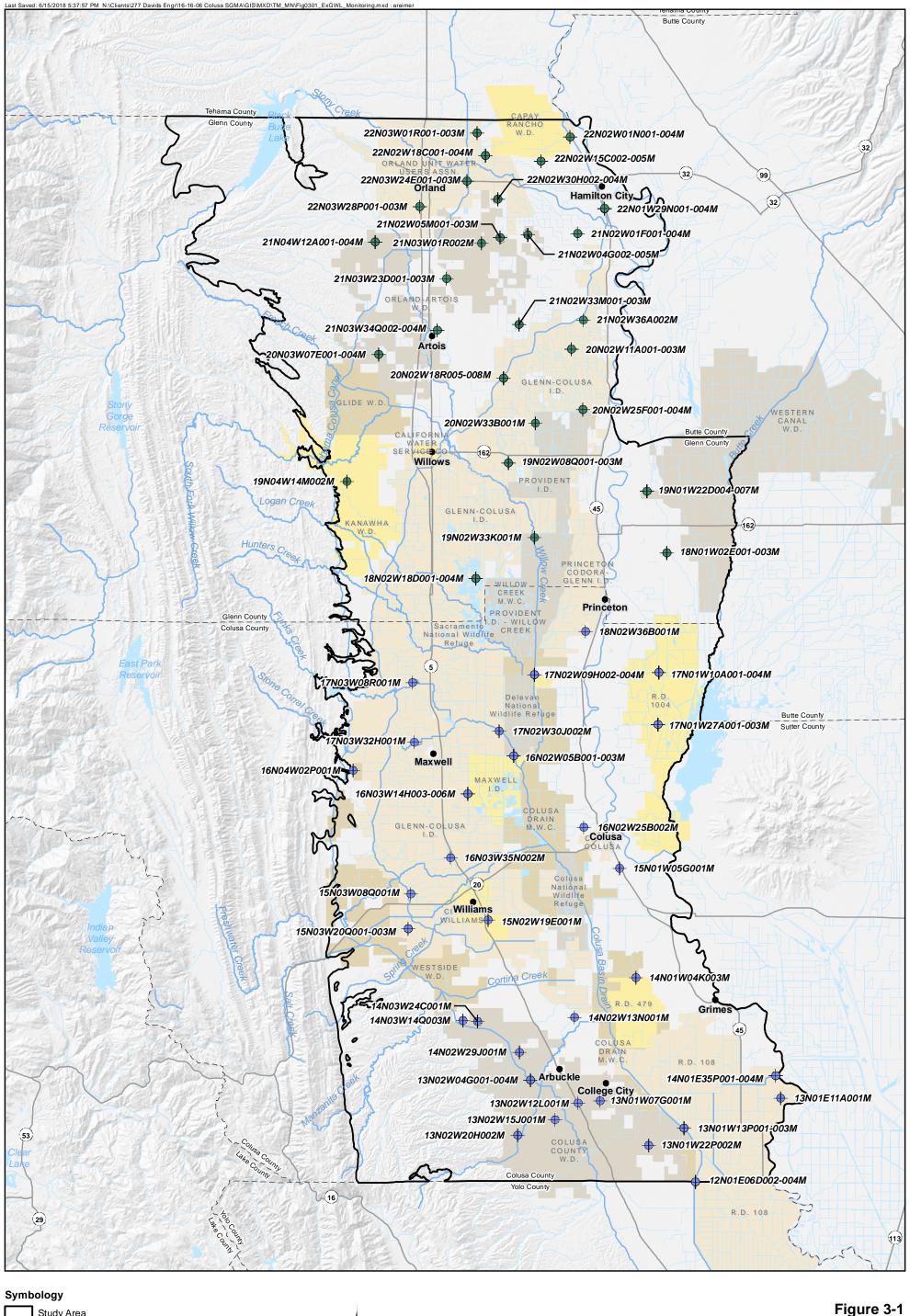
County	Station ID	Station Name	Latitude (a)	Longitude	Site Type	Source
Colusa	BTG	Butte Creek at Colusa/Gridley Road	39.361801	121.892662	Stage	CDEC (b)
Butte	BWC	Butte Creek near Western Canal	39.555721	121.83651	Discharge (c)	CDEC
Colusa	A02967	Butte Slough at Outfall Gates near Colusa	39.195161	121.936567	Stage	WDL (d)
Sutter	A02972	Butte Slough near Meridian	39.171474	121.901649	Discharge	WDL
Colusa	A02976	Colusa Basin Drain at Highway 20	39.195512	122.060517	Discharge	WDL
Colusa	A02981	Colusa Weir Spill to Butte Basin near Colusa	39.23682	121.99476	Discharge	WDL
Colusa	A00647	Freshwater Creek at Leesville Road near Williams	39.129339	122.30993	Discharge	WDL
Colusa	MPS	Meridian Pumps	39.148	121.918	Discharge	CDEC
Colusa	A02986	Moulton Weir Spill to Butte Basin near Princeton	39.33821	122.022627	Stage	WDL
Colusa	BTC; A02500	Sacramento River at Butte City	39.45784	121.99416	Discharge	CDEC; WDL
Colusa	11389500	Sacramento River at Colusa	39.214057	122.000251	Discharge	USGS
Glenn	HMC; A02630	Sacramento River at Hamilton City	39.750925	121.997877	Discharge	CDEC; WDL
Glenn	ORD; A02570	Sacramento River at Ord Ferry	39.628132	121.993182	Discharge	CDEC; WDL
Colusa	TIS	Sacramento River at Tisdale Weir	39.02644	121.822083	Discharge	CDEC
Colusa	11390500	Sacramento River below Wilkins Slough near Grimes	39.009974	121.823398	Discharge	USGS
Glenn	WCF	South Fork Willow Creek near Fruto	39.541538	122.390045	Stage	CDEC
Tehama	BBQ	Stony Creek below Black Butte Dam	39.8186	122.3239	Stage	CDEC
Glenn	SCG	Stony Creek near Grizzly Flat (County Road 200A)	39.73181	122.413997	Discharge	CDEC

<sup>(</sup>a) Latitude and longitude are reported in North American Datum of 1983 (NAD 83), decimal degrees.

<sup>(</sup>b) California Data Exchange Center (CDEC).

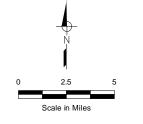
<sup>(</sup>c) The term "Discharge" means that stream flows are reported. If no flows are reported but stream stage is, then the term "Stage" is used.

<sup>(</sup>d) California Department of Water Resources (DWR) Water Data Library (WDL).

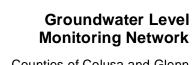


## Symbology Study Area Groundwater Monitoring Network Colusa County Wells Glenn County Wells Datum: North American Datum of 1983,

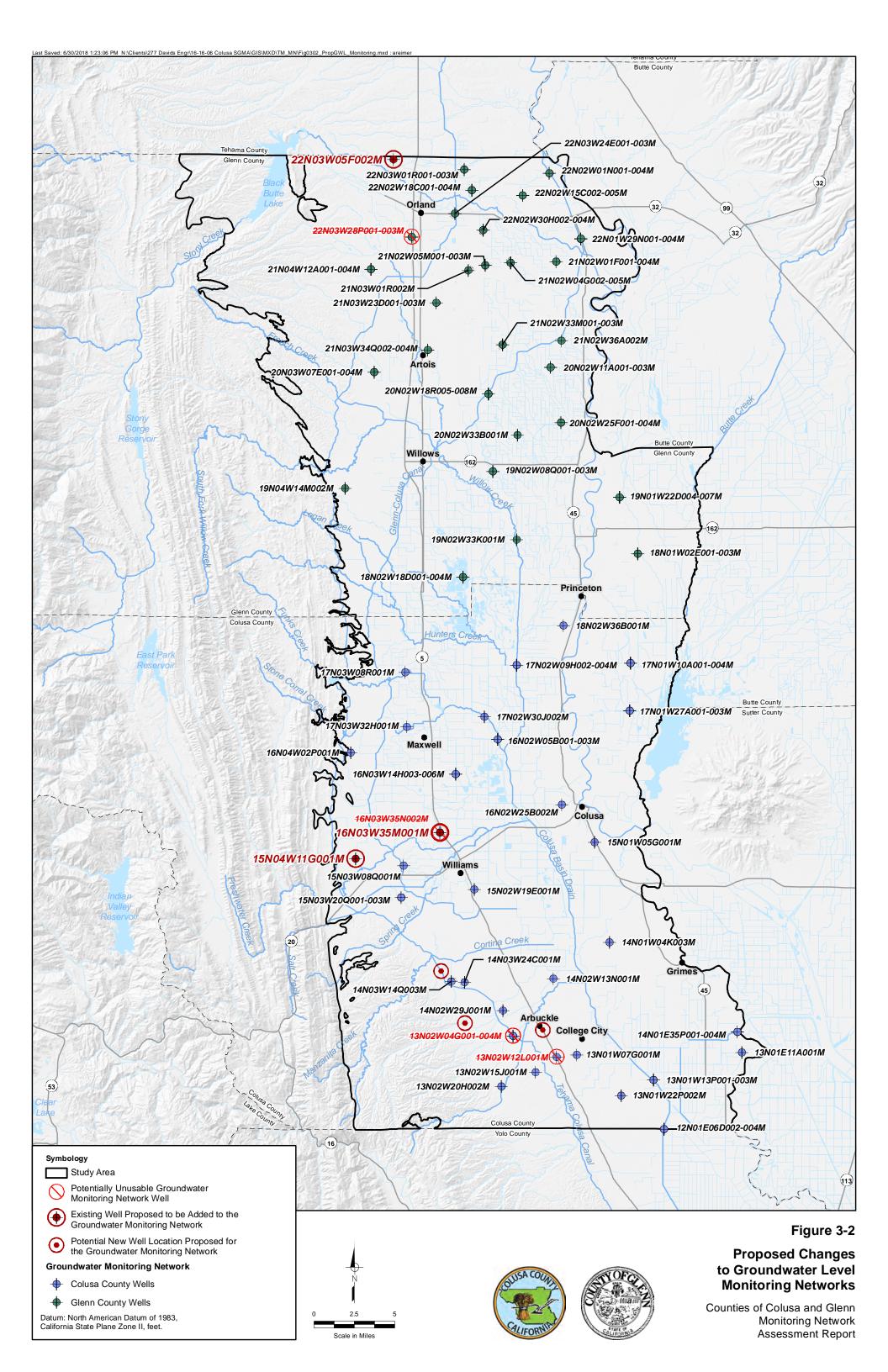
California State Plane Zone II, feet.

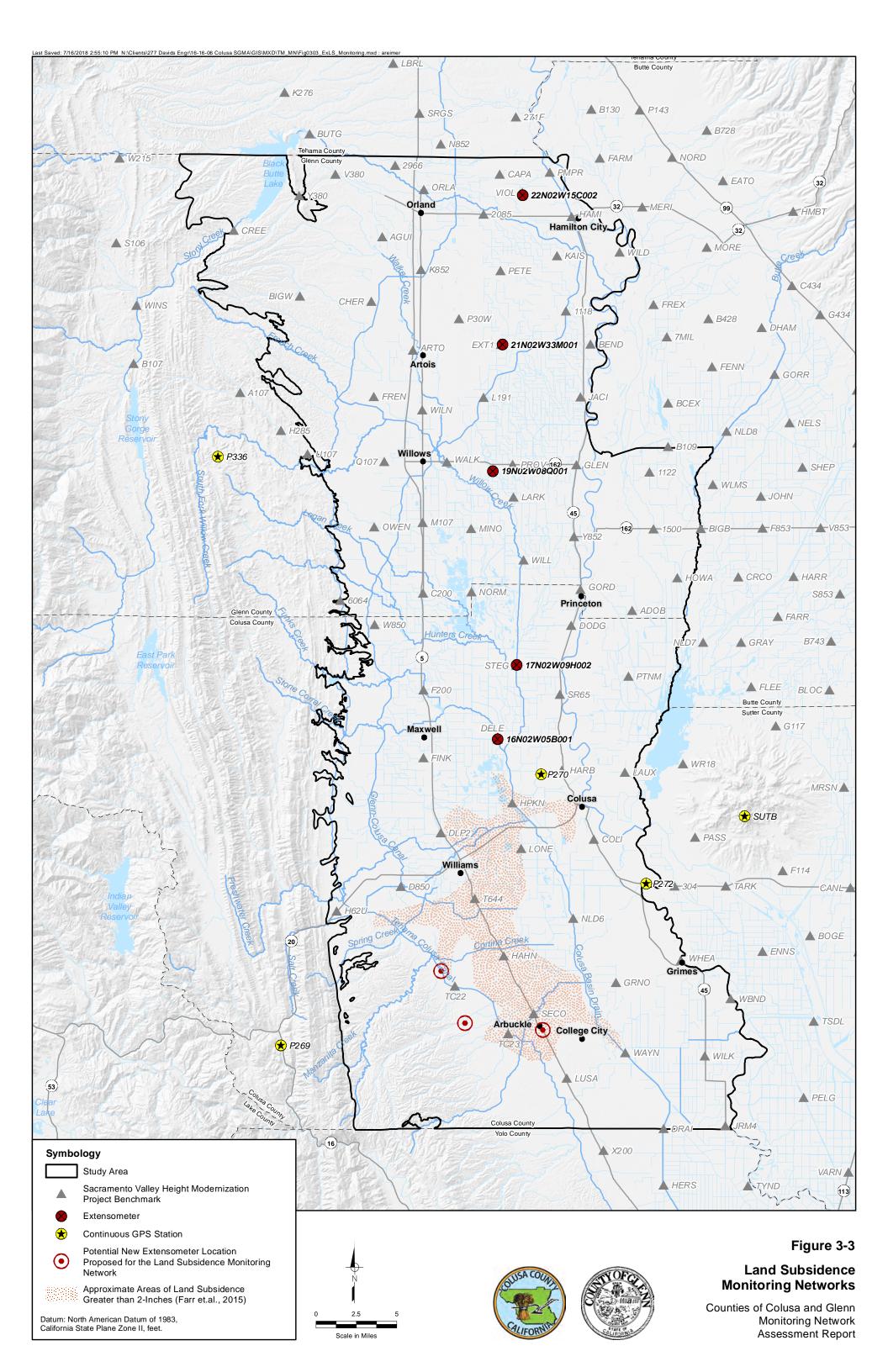


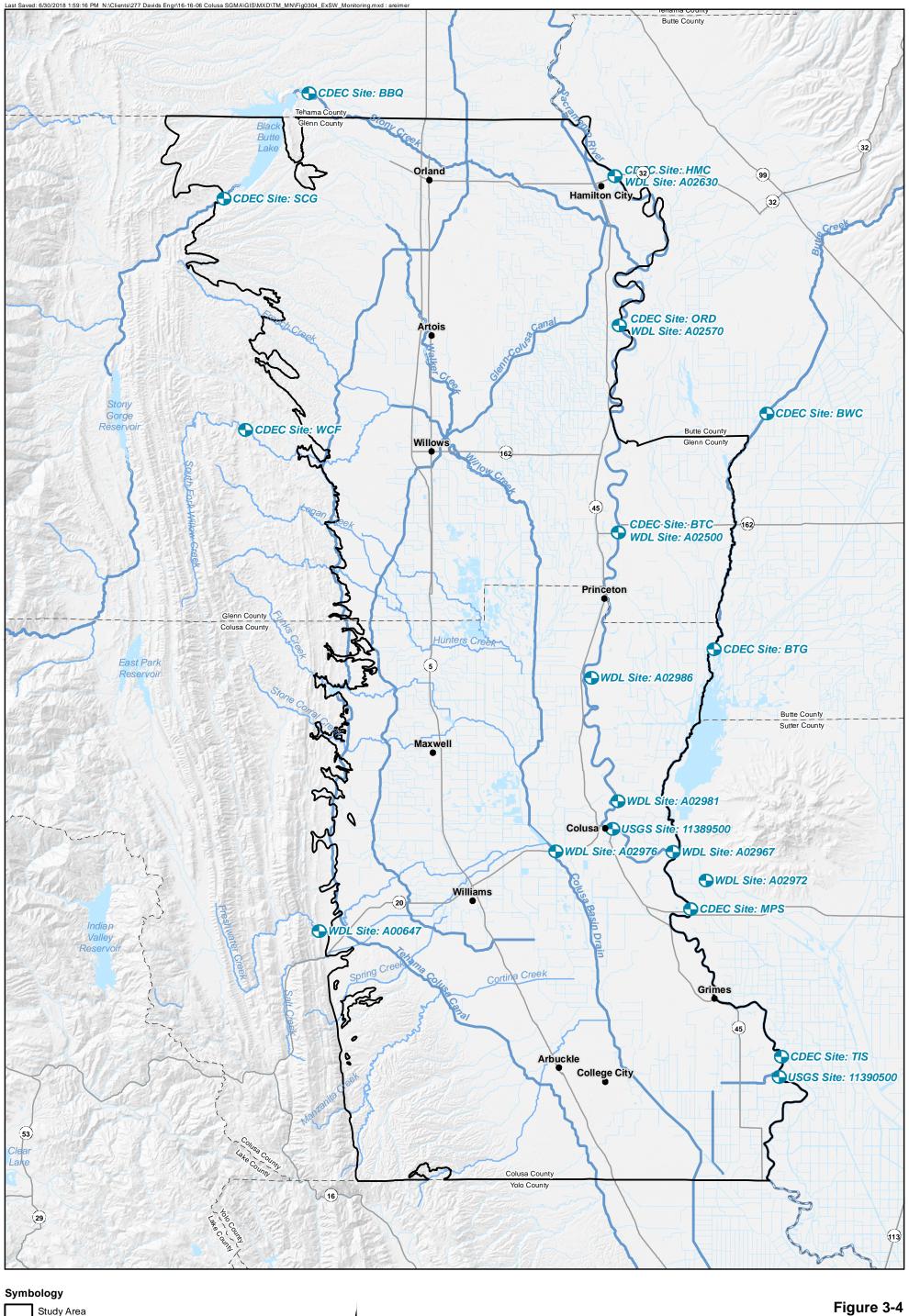




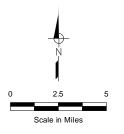
Counties of Colusa and Glenn Monitoring Network Assessment Report







# Symbology Study Area Surface Water Monitoring Stream Gage Datum: North American Datum of 1983, California State Plane Zone II, feet.







Surface Water Monitoring Networks

Counties of Colusa and Glenn Monitoring Network Assessment Report



#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

This report provides an evaluation of the monitoring networks in the Sacramento Valley groundwater subbasins, overlain by the Counties of Colusa and Glenn, including the entire Colusa Subbasin and portions of the Corning and West Butte Subbasins. Existing groundwater level, groundwater quality, land subsidence, and surface water monitoring programs were evaluated using criteria listed in DWR's SGMA GSP Regulations and DWR's Monitoring Network BMP. The networks were evaluated based on the criteria to identify potential data gaps that would limit the sufficiency of the networks to provide representative data for assessing sustainability for five of the six sustainability indicators. The sixth sustainability indicator, seawater intrusion, is neither occurring nor anticipated to occur within the portions of the Colusa, Corning, and West Butte Subbasins within the study area and evaluation of seawater intrusion was, therefore, determined unnecessary for the purposes of this study.

In cases where data gaps were identified, existing monitoring locations not currently included in the evaluated monitoring networks were assessed to fill data gaps. If no suitable existing monitoring sites were available, new monitoring sites were recommended for construction. Conclusions and recommendations for each of the networks are provided below. These conclusions and recommendations are preliminary and will be reevaluated and updated as the Counties' and GSAs' progress with preparation and implementation of GSPs for the Sacramento Valley groundwater subbasins underlying their boundaries, and as new information becomes available.

**Groundwater Level Monitoring Network.** The current groundwater level monitoring networks were judged to be sufficient for SGMA compliance with several recommended improvements and modifications:

- 1. Additional monitoring wells may be needed to provide improved spatial coverage in areas of localized groundwater drawdown to the west of the Glenn County communities of Orland and Artois, and in the southern part of the study area near the Colusa County communities of Arbuckle and College City. One multiple completion monitoring well is recommended for construction near Arbuckle.
- 2. Existing monitoring well 22N03W05F002 should be added to the Glenn County monitoring network to provide additional monitoring capability near the northern edge of the county, within the Corning Subbasin.
- 3. Existing monitoring well 16N03W35M001 should be added to the Colusa County monitoring network to replace the potentially damaged well 16N03W35N002.
- 4. Existing monitoring well 15N04W11G001 should be added to the Colusa County monitoring network to extend the network coverage westwards towards the basin margin.
- 5. Existing Colusa County monitoring wells 13N02W04G001, -003, -004, 13N02W12L001, 16N03W35N002, and Glenn County monitoring well 22N03W28P002 may have collapsed casing and should be inspected and repaired or properly destroyed, depending on the results of the inspection. All of these wells are located within the Colusa Subbasin.





Groundwater Quality Monitoring Network. Groundwater quality degradation in the study area is limited and appears to be adequately addressed under existing and planned monitoring programs. Groundwater quality data collected under existing regulatory programs may be sufficient for SGMA compliance. The Sacramento Valley Water Quality Coalition in coordination with NCWA is currently in the process of defining their groundwater quality monitoring network sites. The California Rice Commission, who also manages lands within the study area, has already defined their groundwater quality trend monitoring network for ILRP compliance. The Counties of Colusa and Glenn should consider coordinating with the Coalition, NCWA, and the California Rice Commission in the establishment and ongoing evaluation of these groundwater quality monitoring network sites with the goal of using data collected under the ILRP for SGMA compliance. The Counties should also consider using groundwater quality data collected through other ongoing regulatory programs such as the SWRCB DDW regulation of municipal supplies and County regulation of small public supply systems for SGMA compliance.

**Subsidence Monitoring Network.** Land subsidence has been observed in the area around Arbuckle in Colusa County, and additional small amounts of land subsidence have been reported southwest of Orland in Glenn County. Preliminary analysis of repeat survey data suggests that the subsidence occurring near Arbuckle and Orland could be inelastic, or permanent. The DWR report on the 2017 repeat survey is anticipated to provide more insight regarding the permanency of the land subsidence. Construction of a new extensometer located at the site of the proposed new multiple completion monitoring well near Arbuckle is recommended to supplement data from existing extensometers and benchmarks within the study area. The Counties should also participate in ongoing subsidence programs such as the Sacramento Valley Height-Modernization Project.

**Surface Water Monitoring Network.** The Counties should use existing surface water monitoring programs and data to the extent possible for SGMA compliance. The need for additional monitoring should be reevaluated as needed during preparation of GSPs to support preparation of water budgets and development of numerical flow models. This should be done at a regional scale in cooperation with neighboring subbasins.



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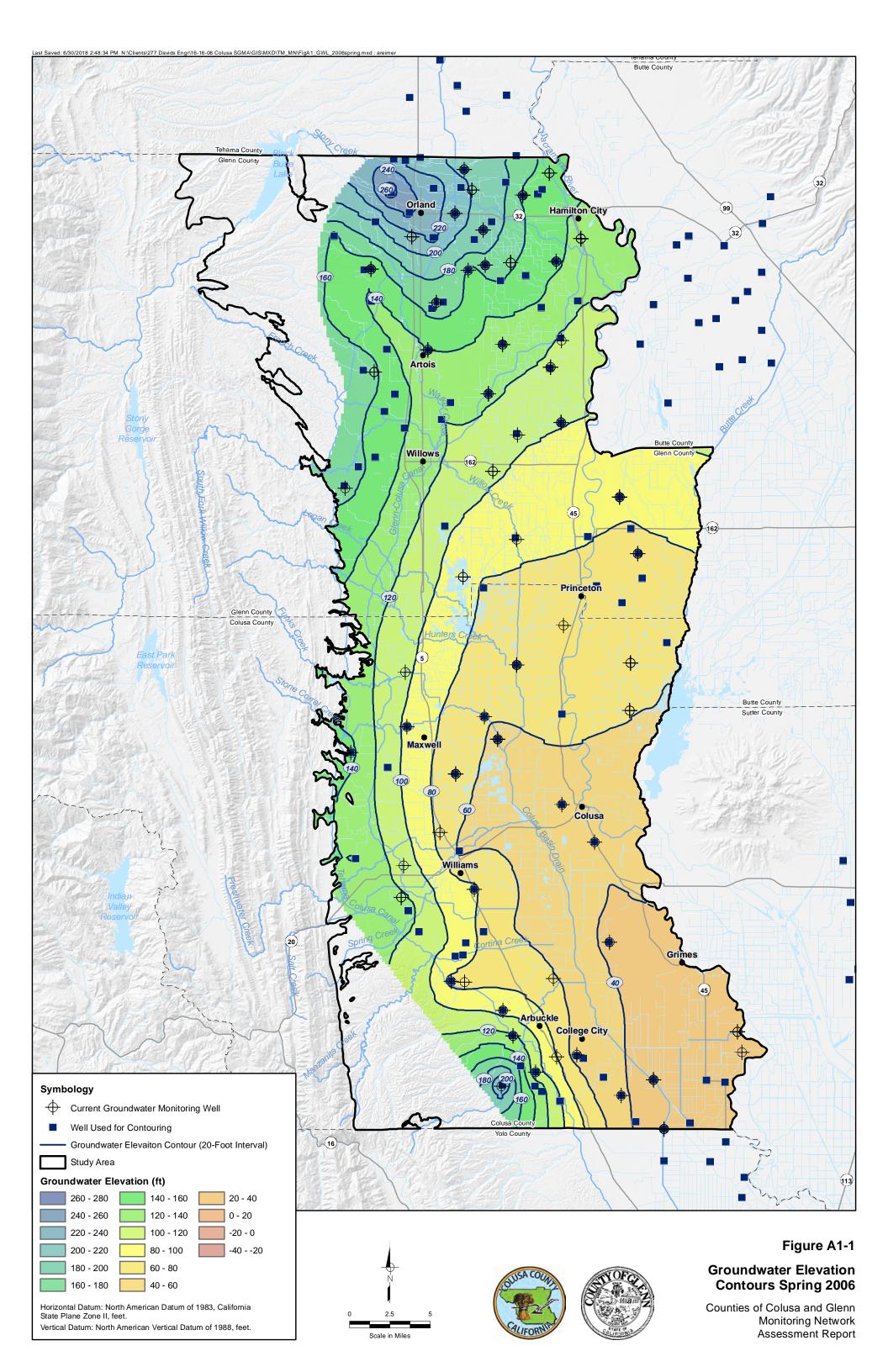
### **APPENDIX A**

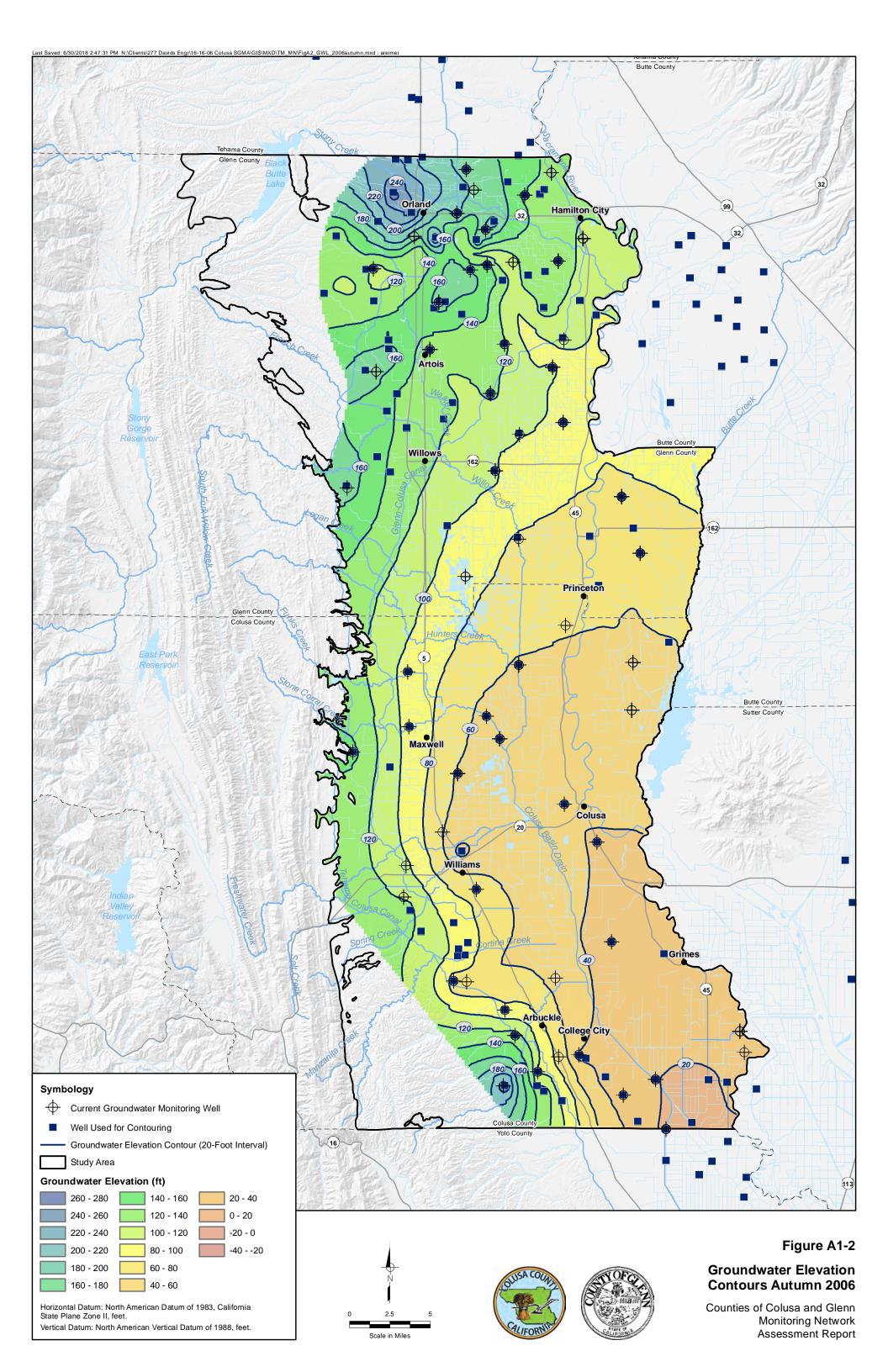
## Groundwater Elevation Contours and Hydrographs

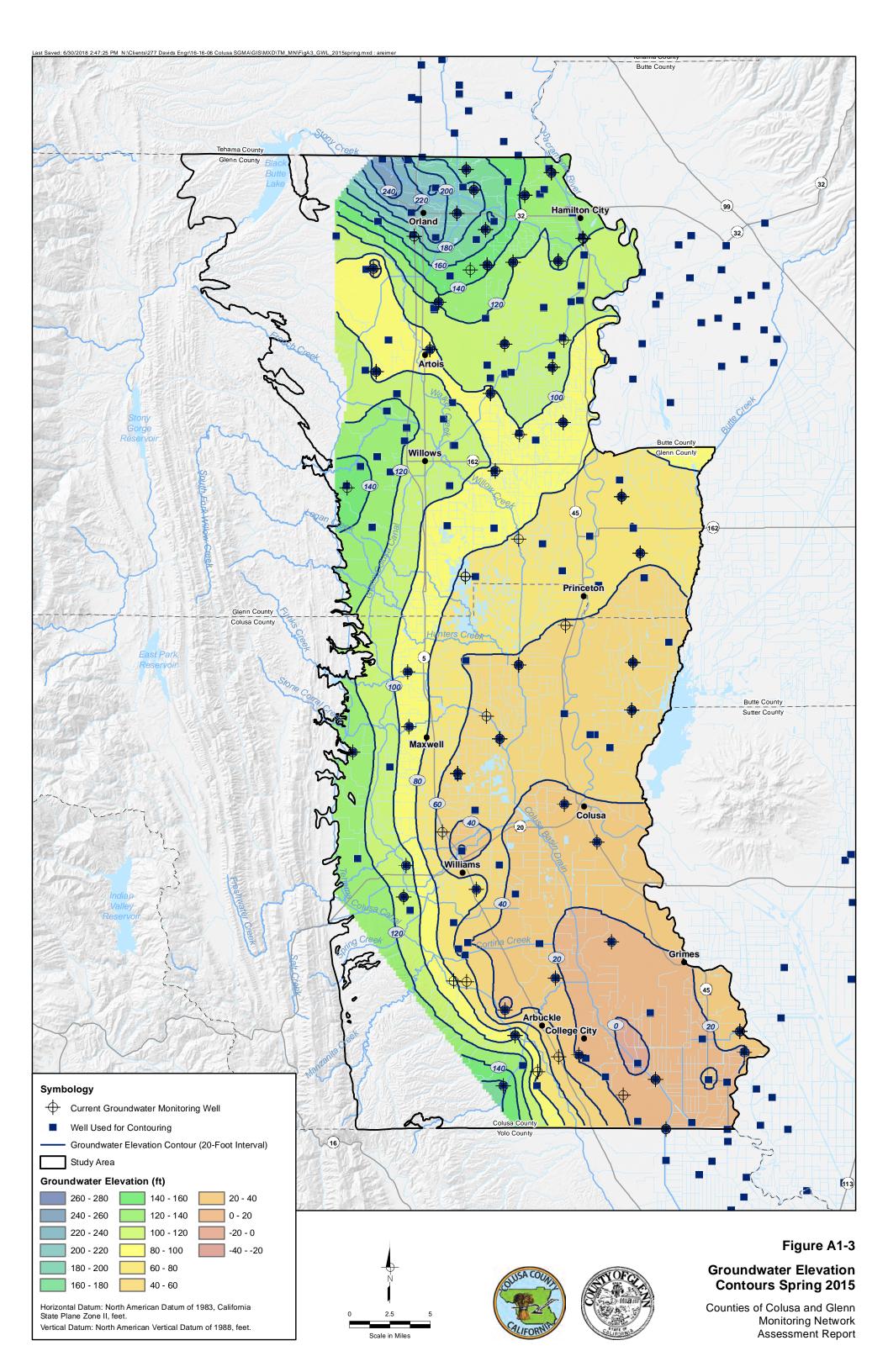
Appendix A1. Groundwater Elevation Contours
Appendix A2. Hydrographs for Groundwater Monitoring Network
Wells

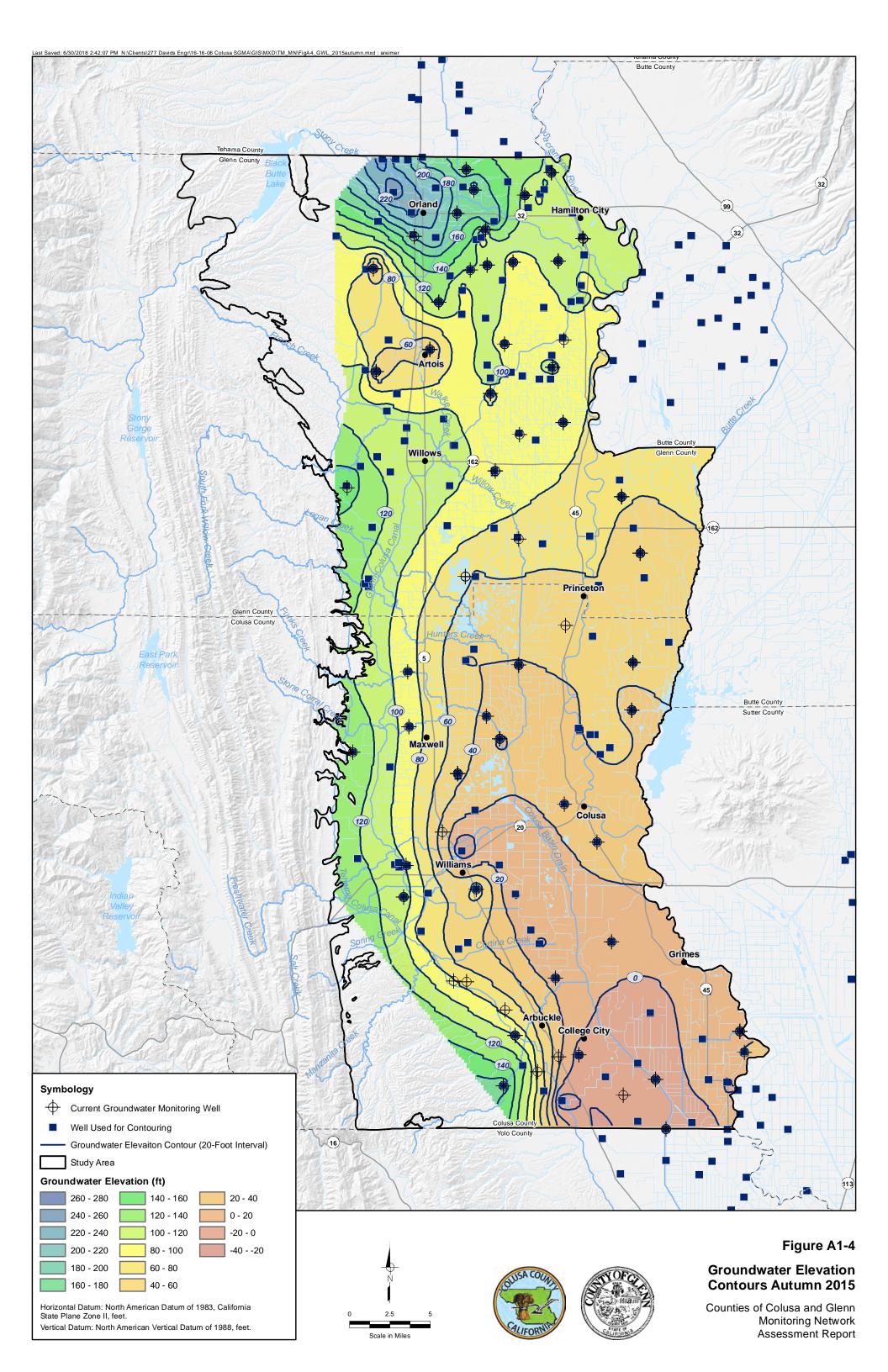
## **APPENDIX A1**

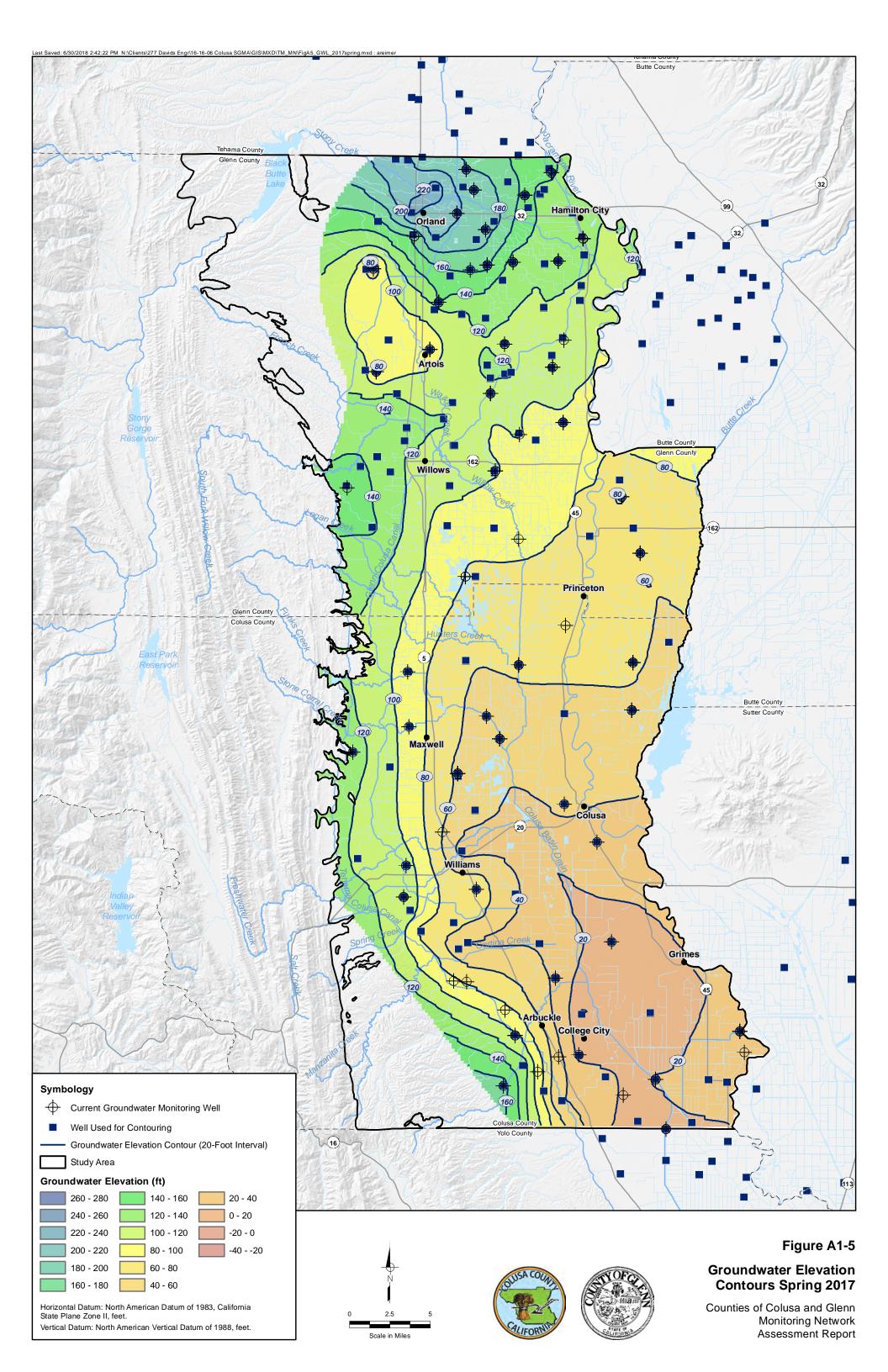
Groundwater Elevation Contours

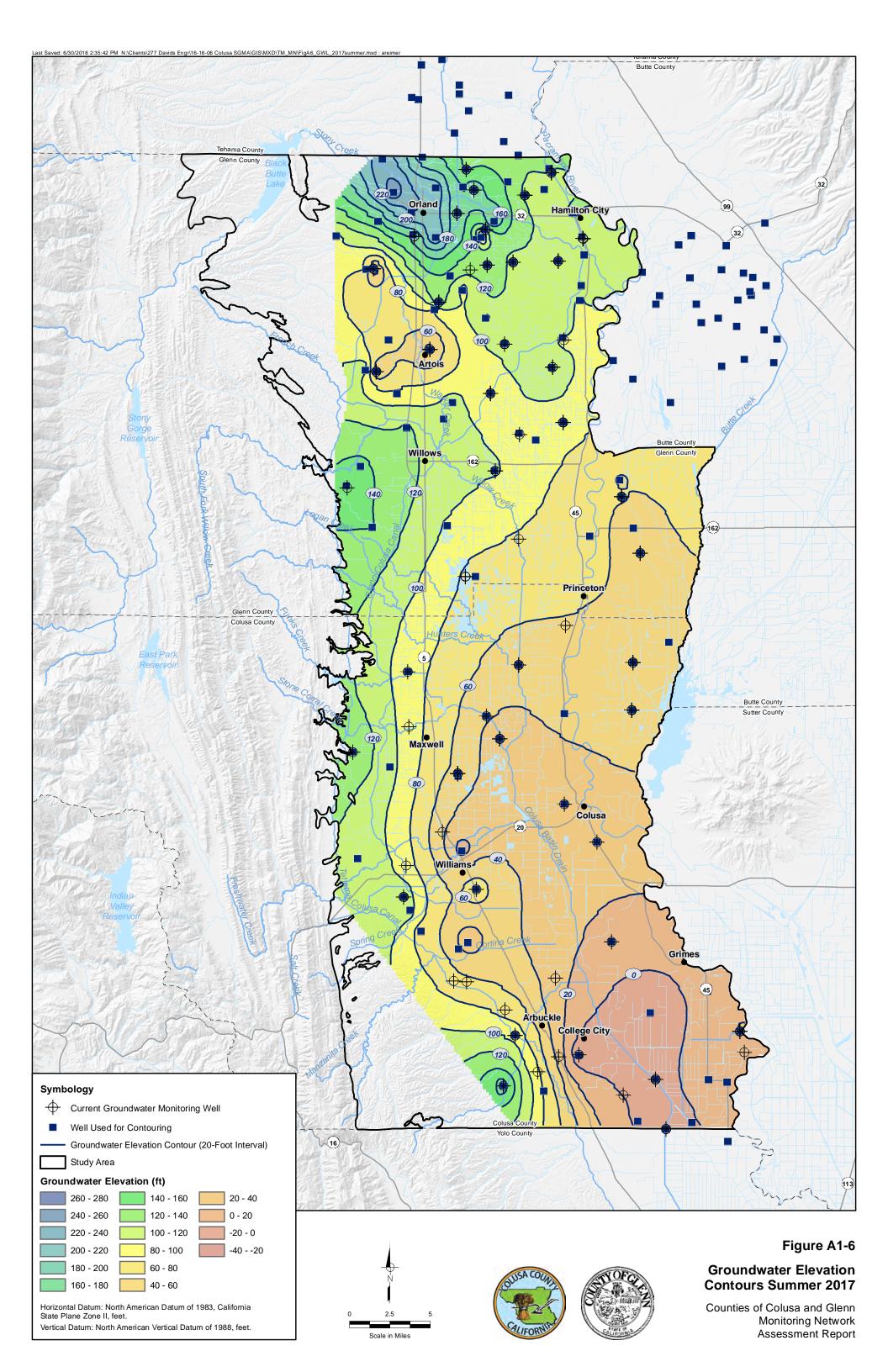






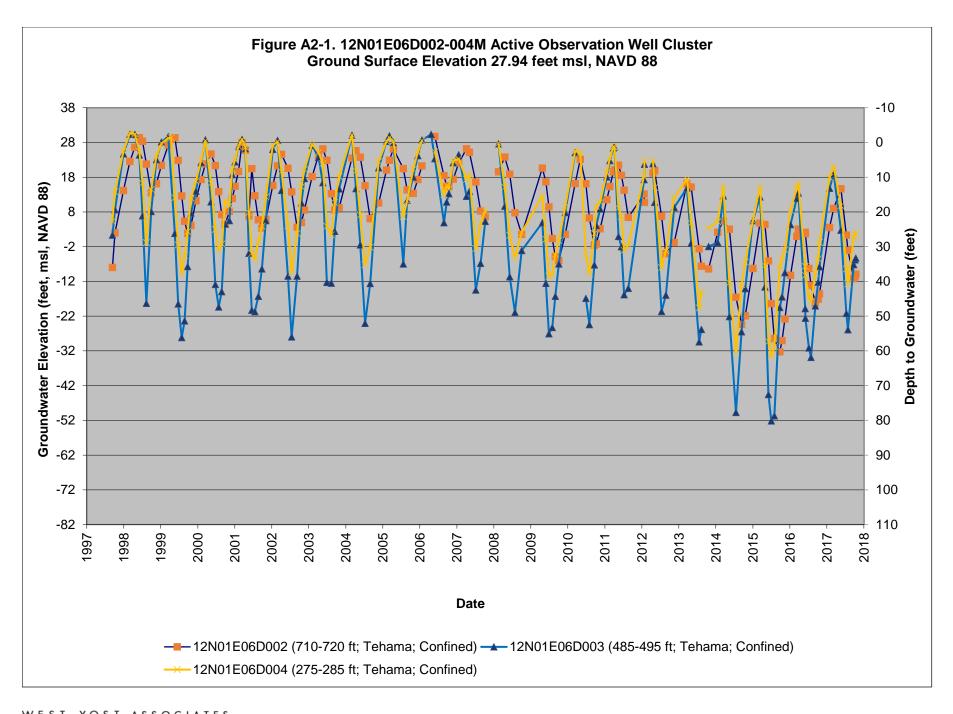


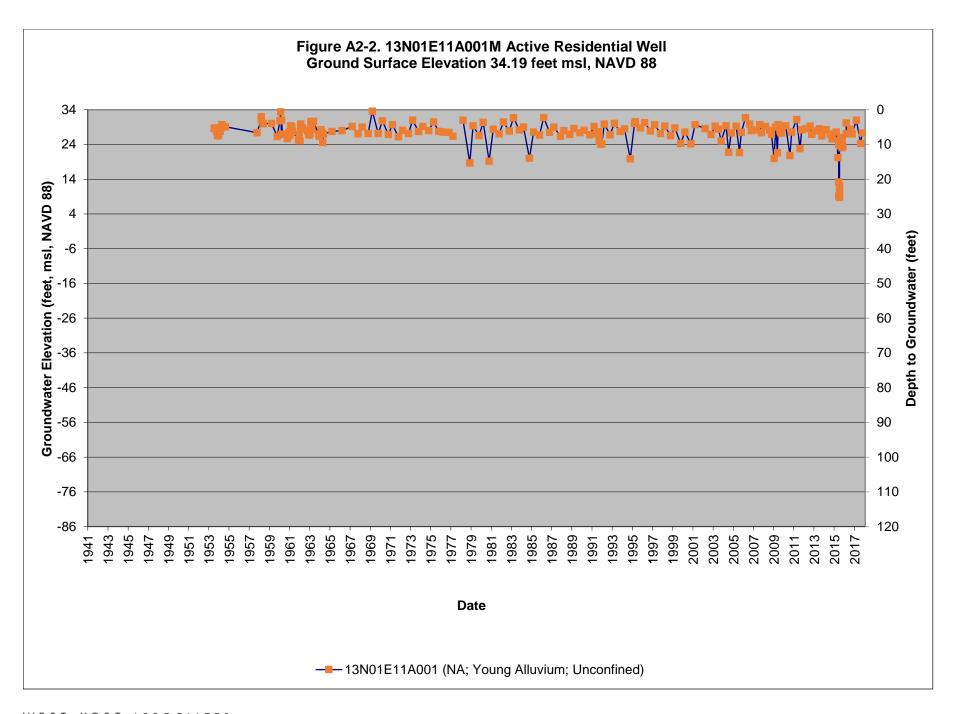


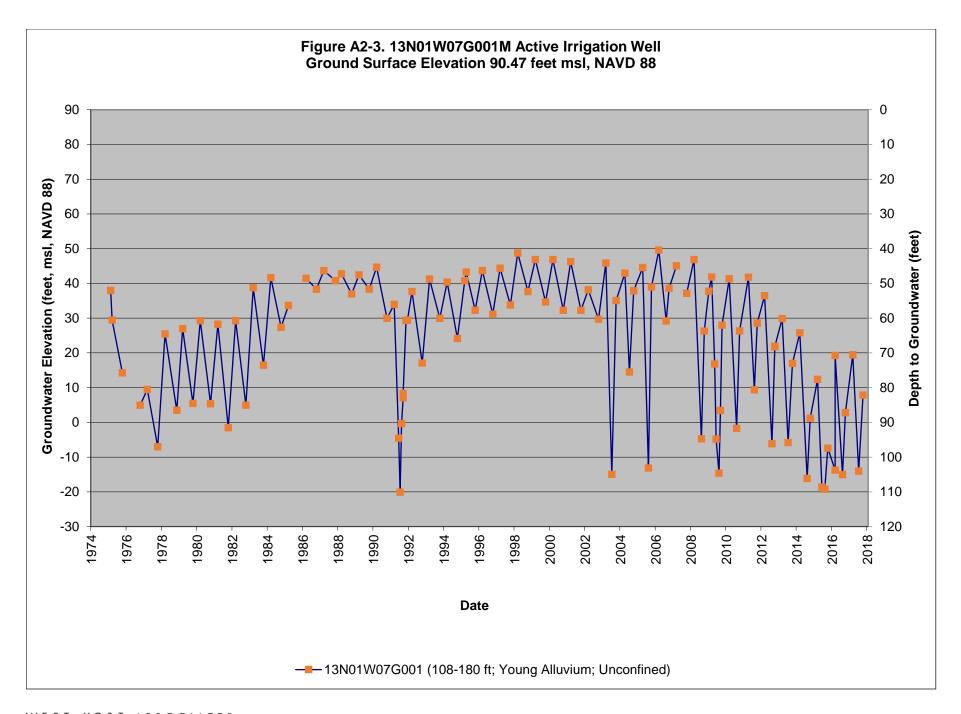


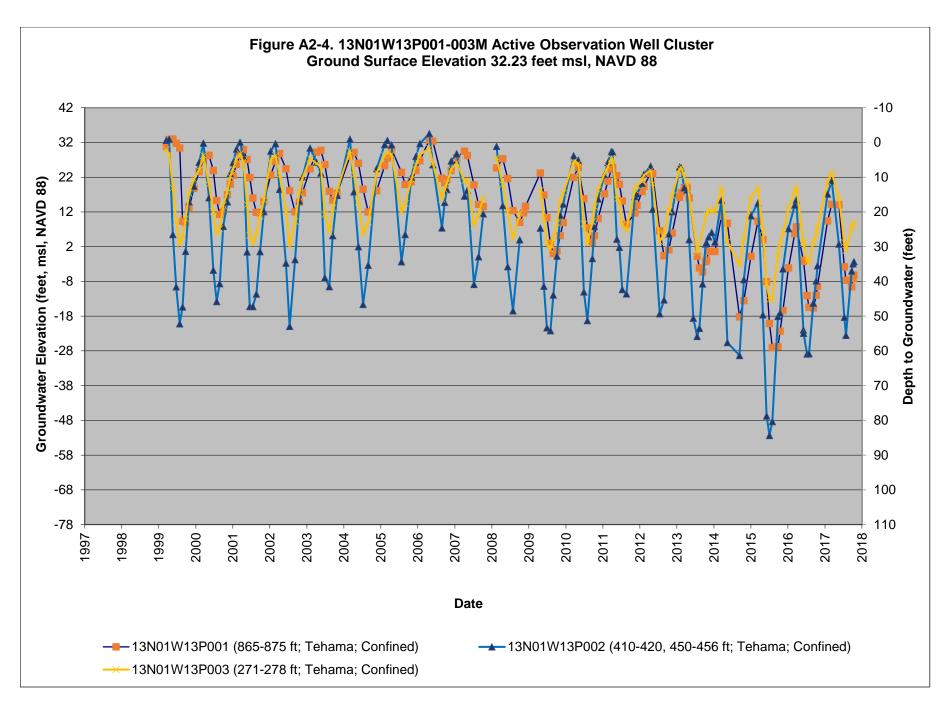
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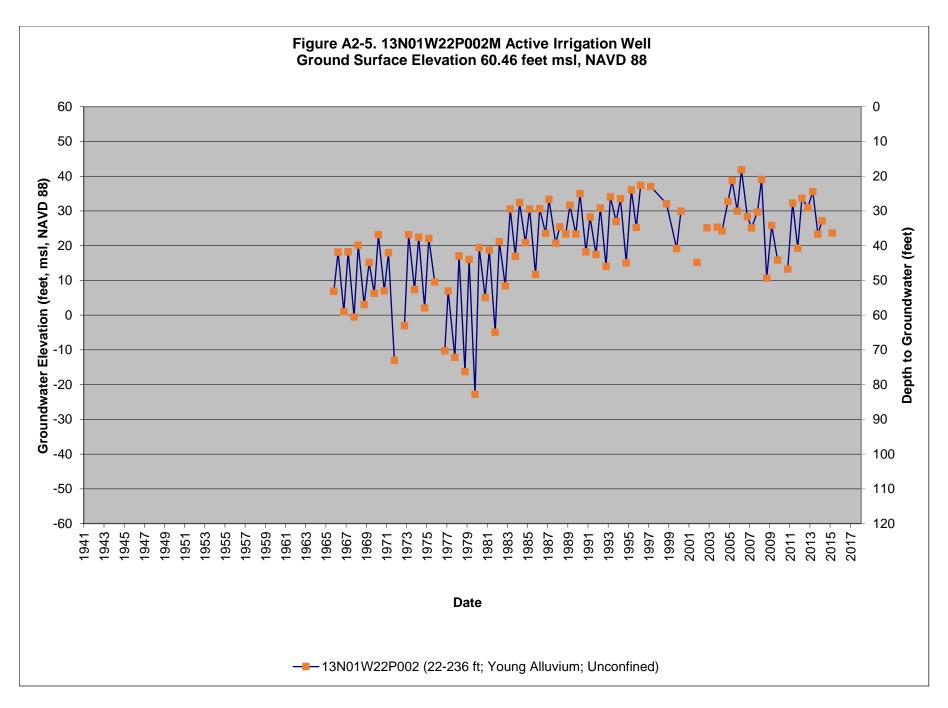
Hydrographs for Groundwater Monitoring Network Wells

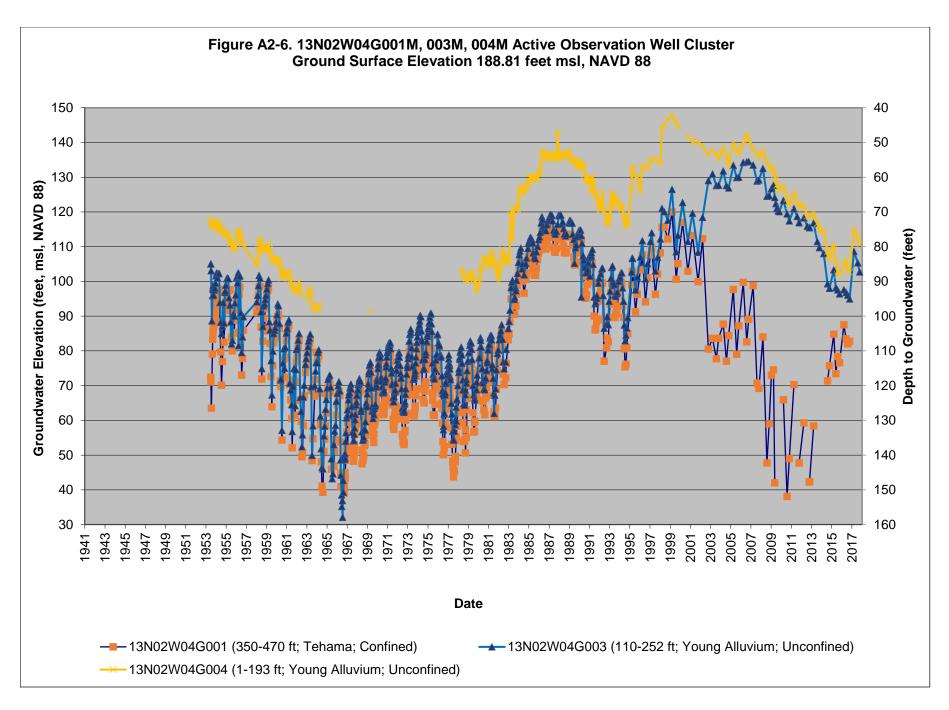


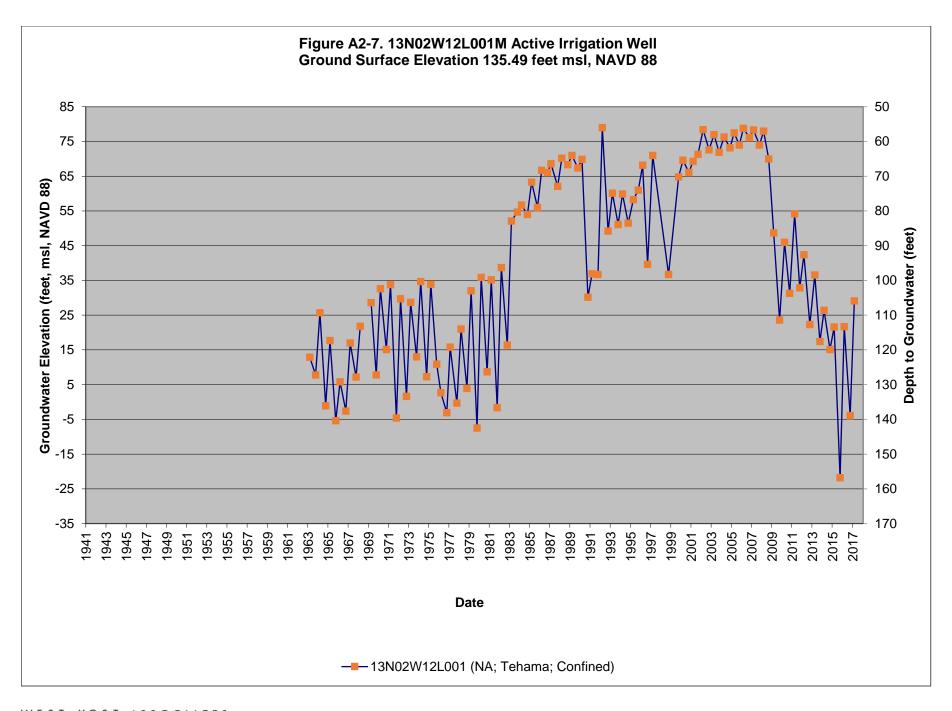


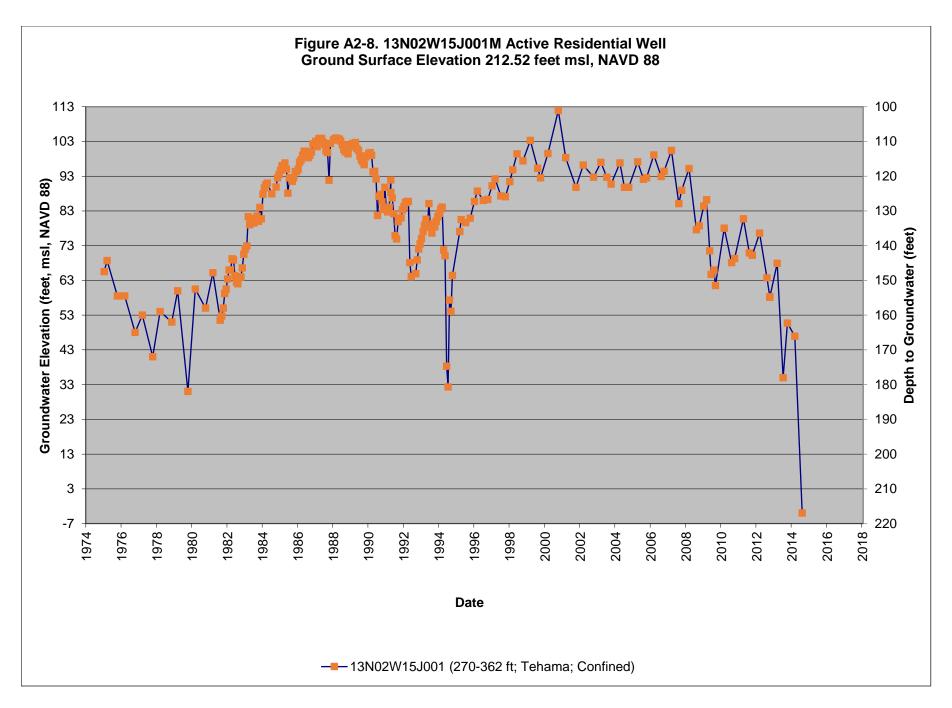


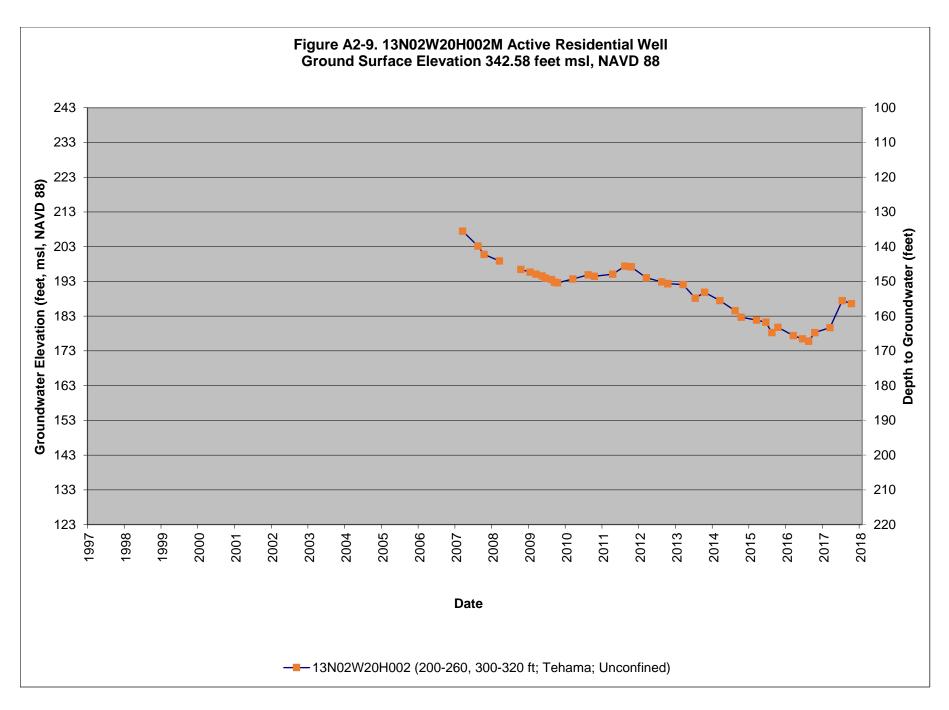


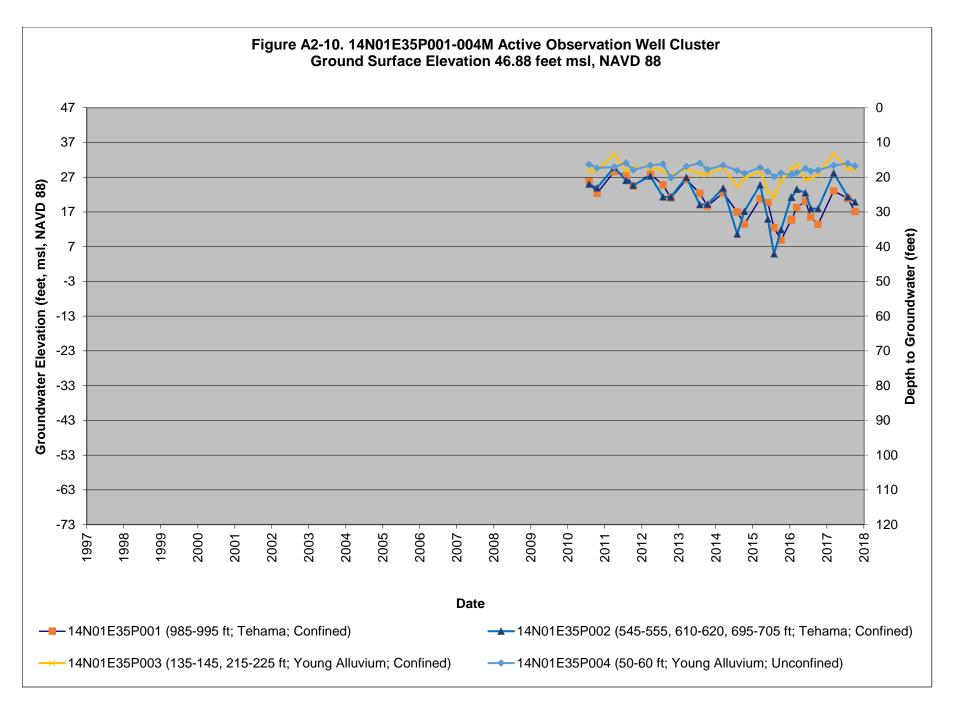


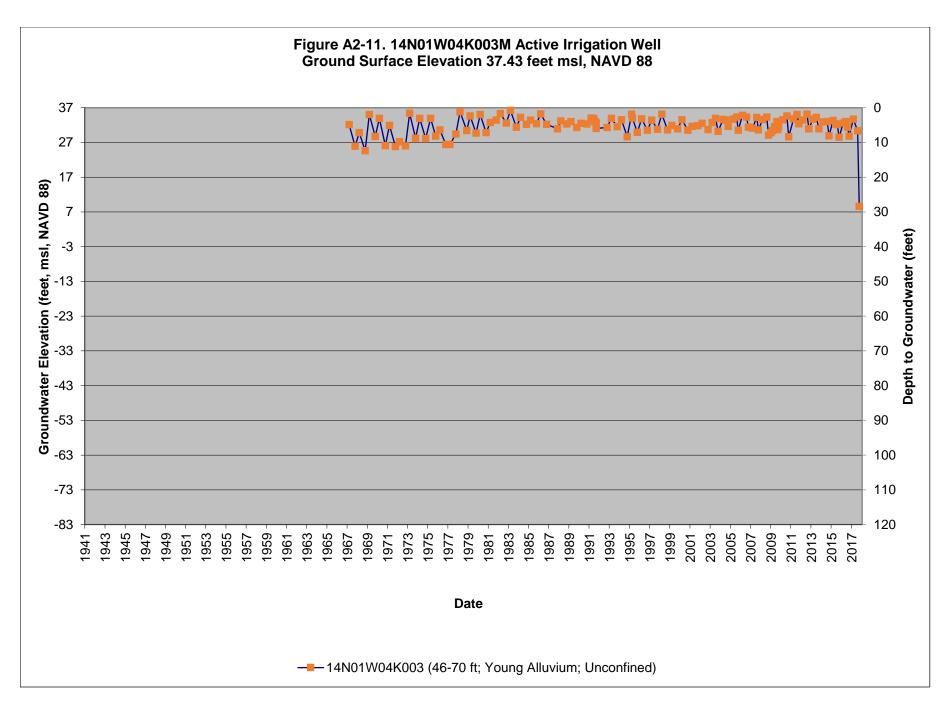


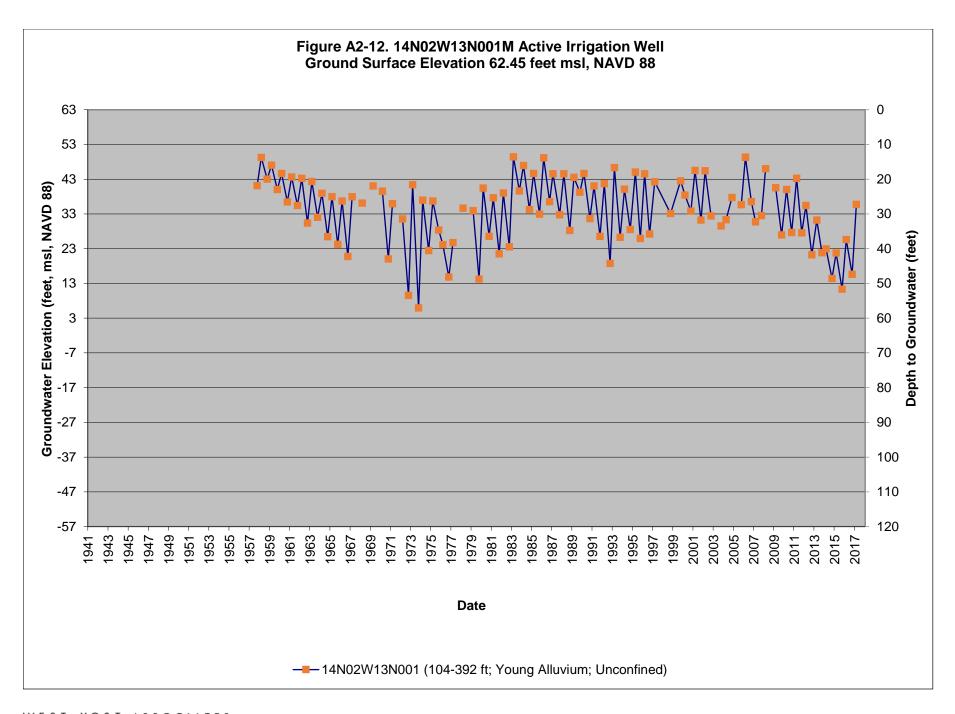


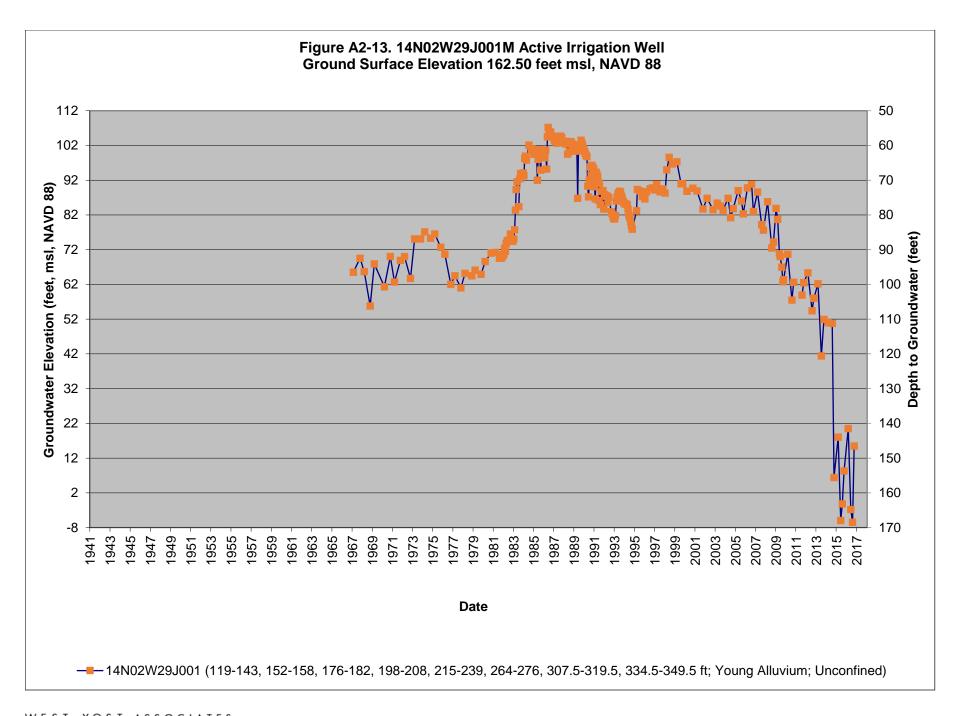


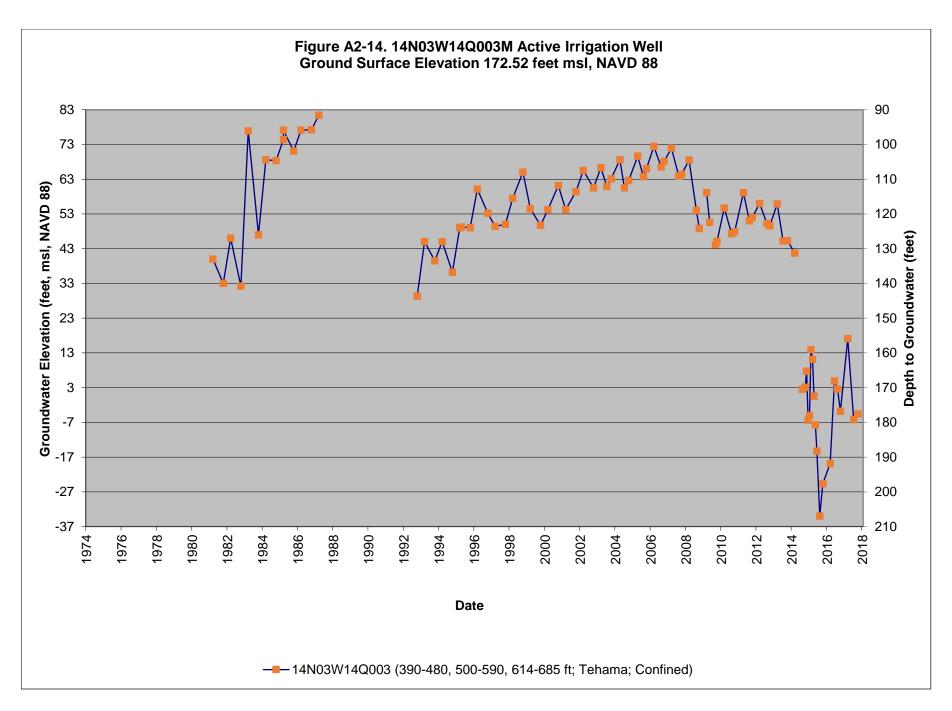


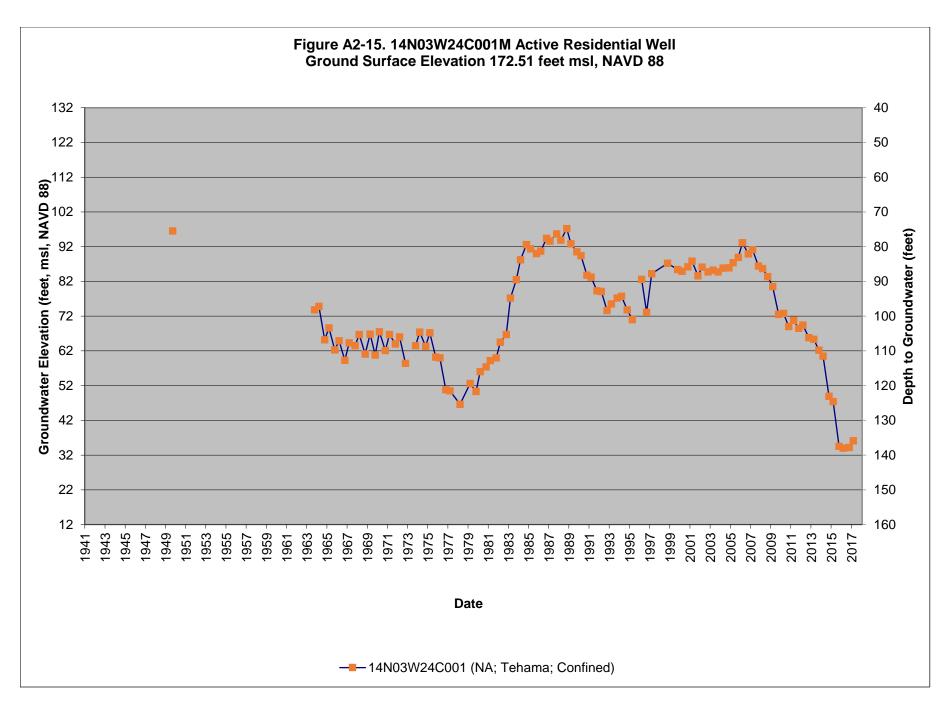


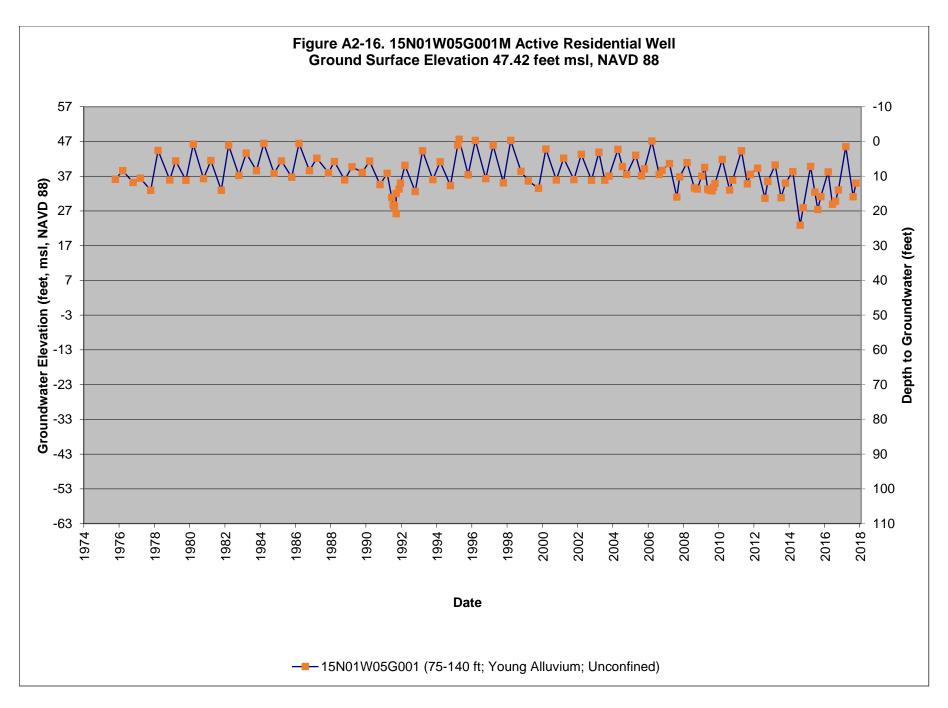


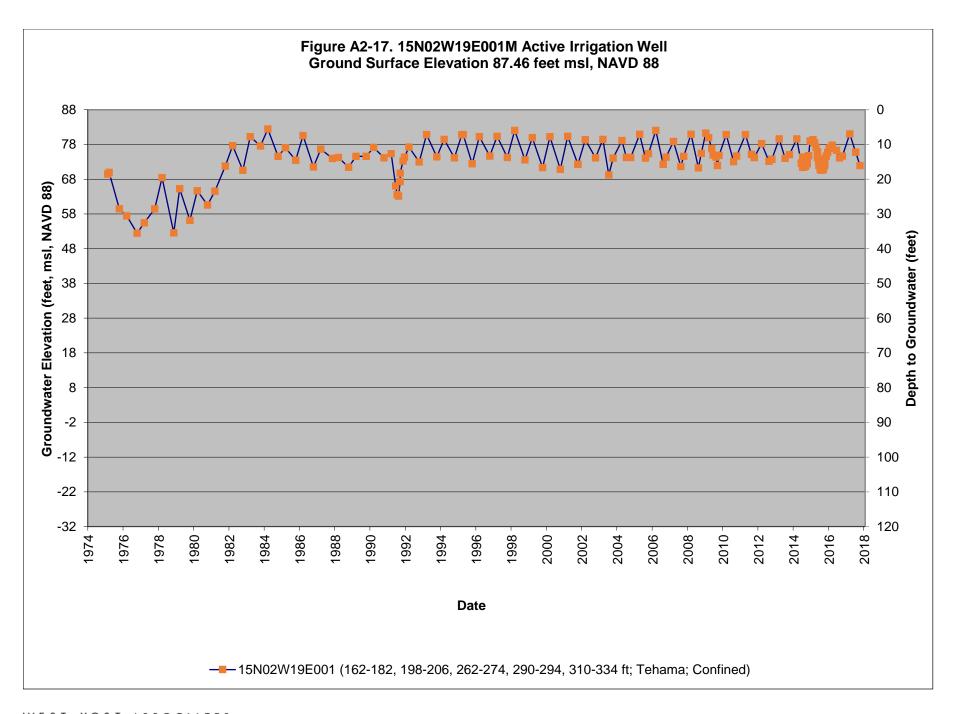


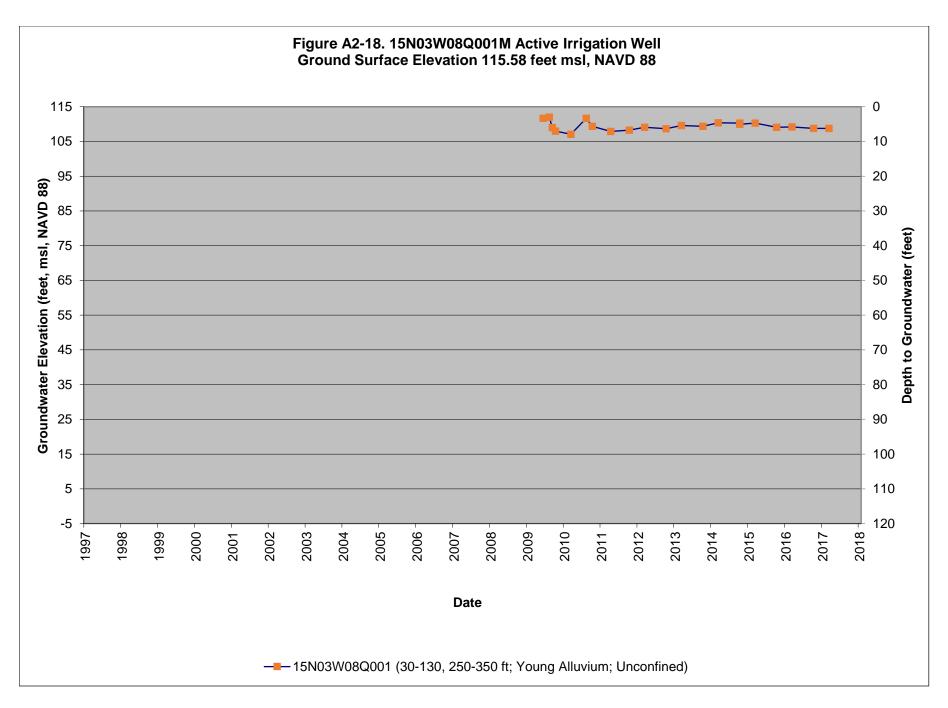


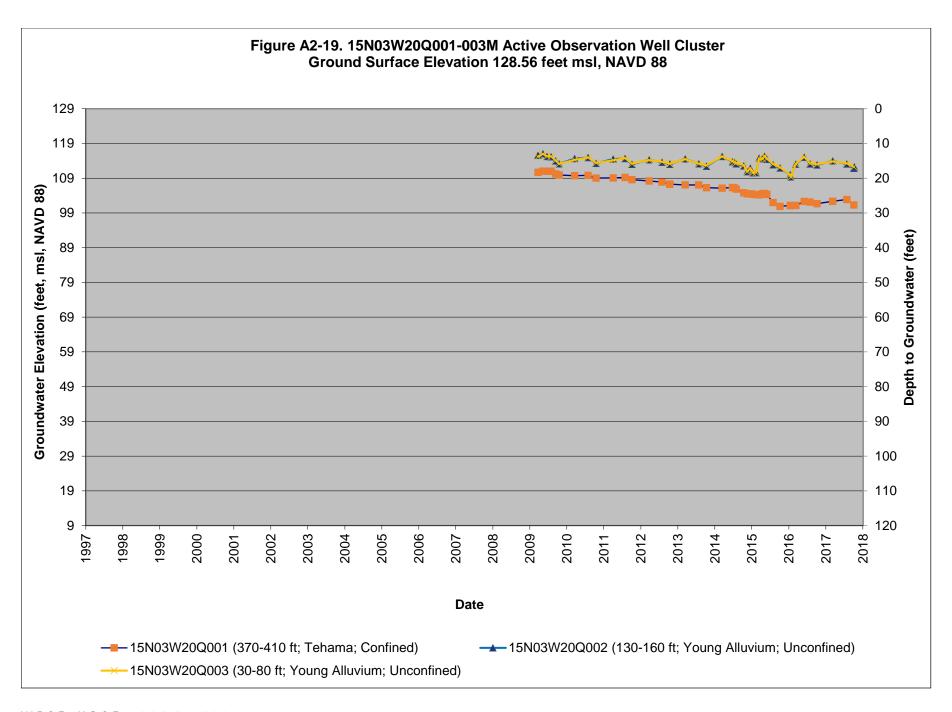


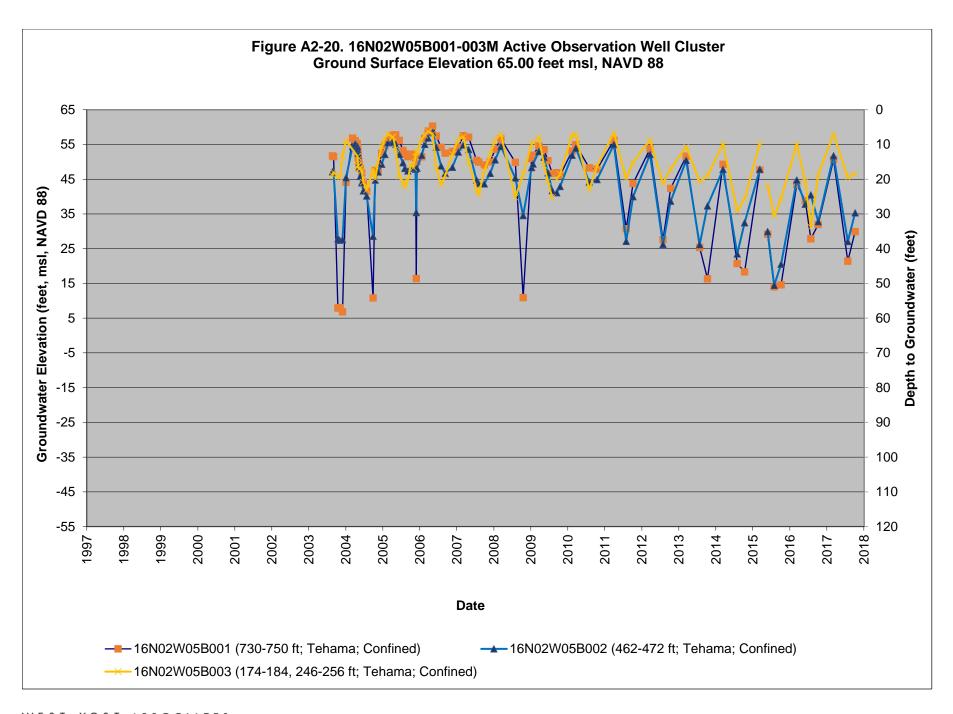


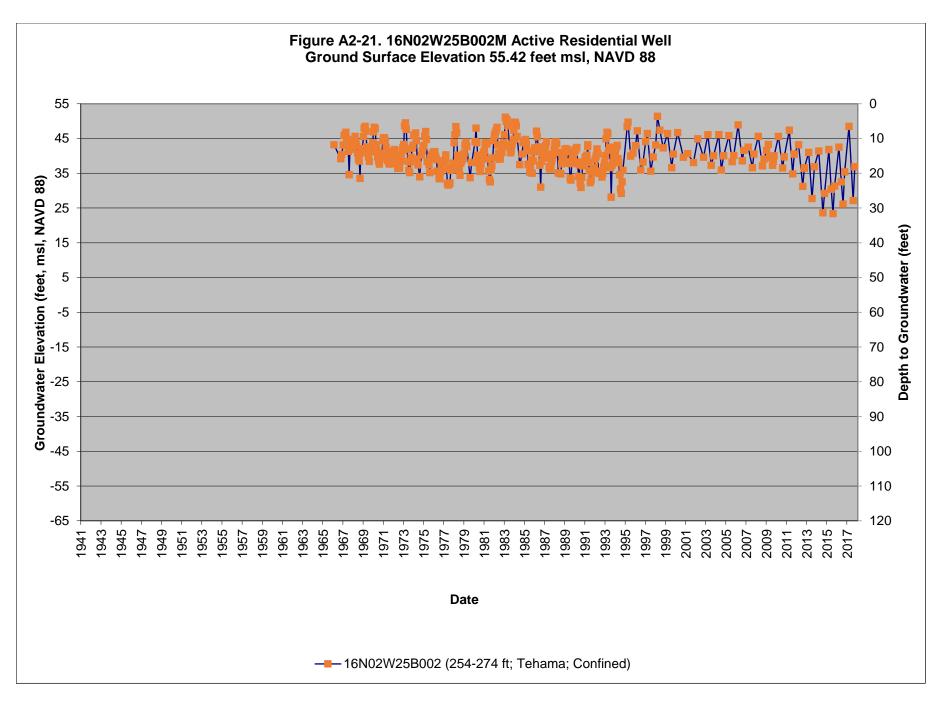


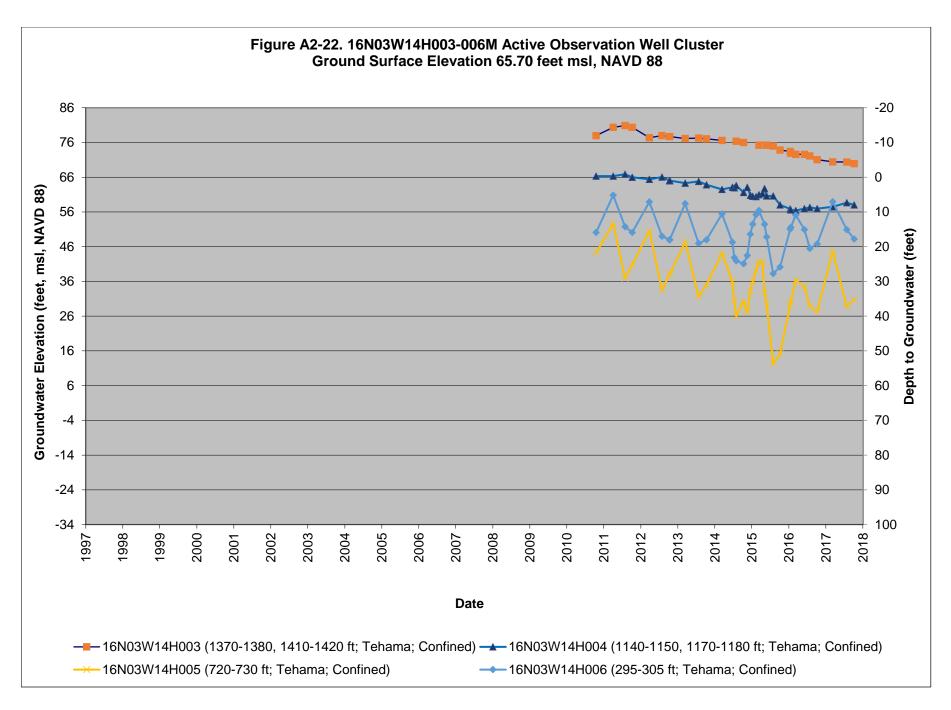


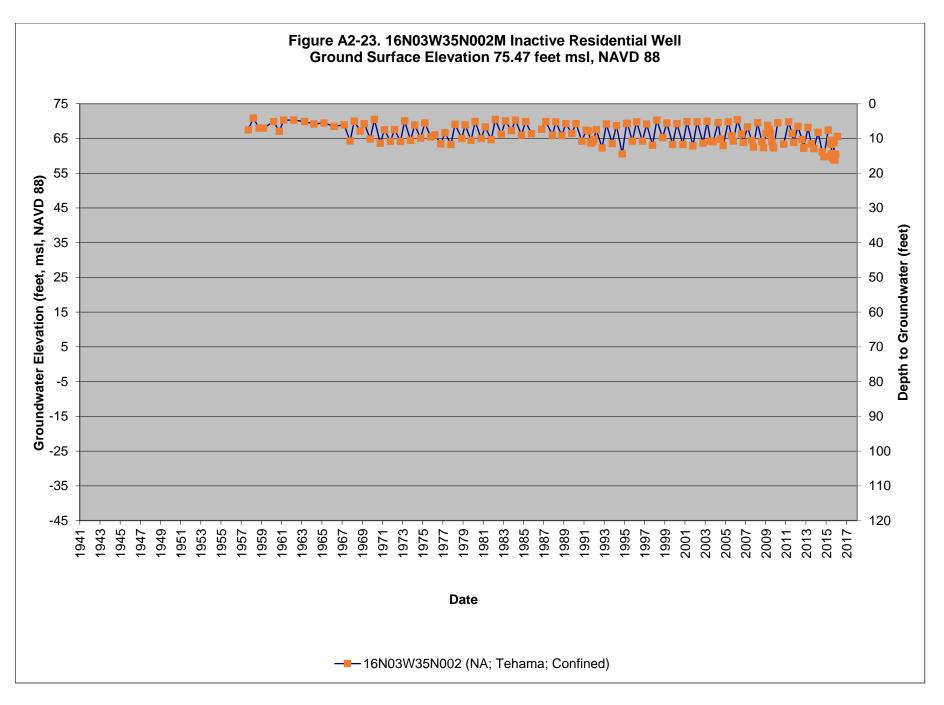


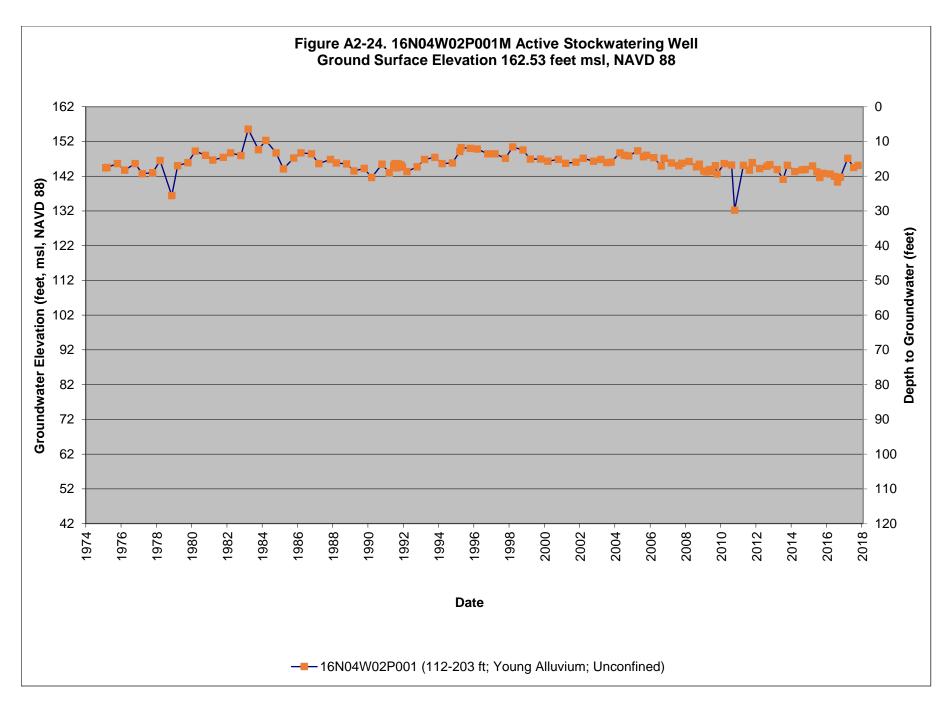


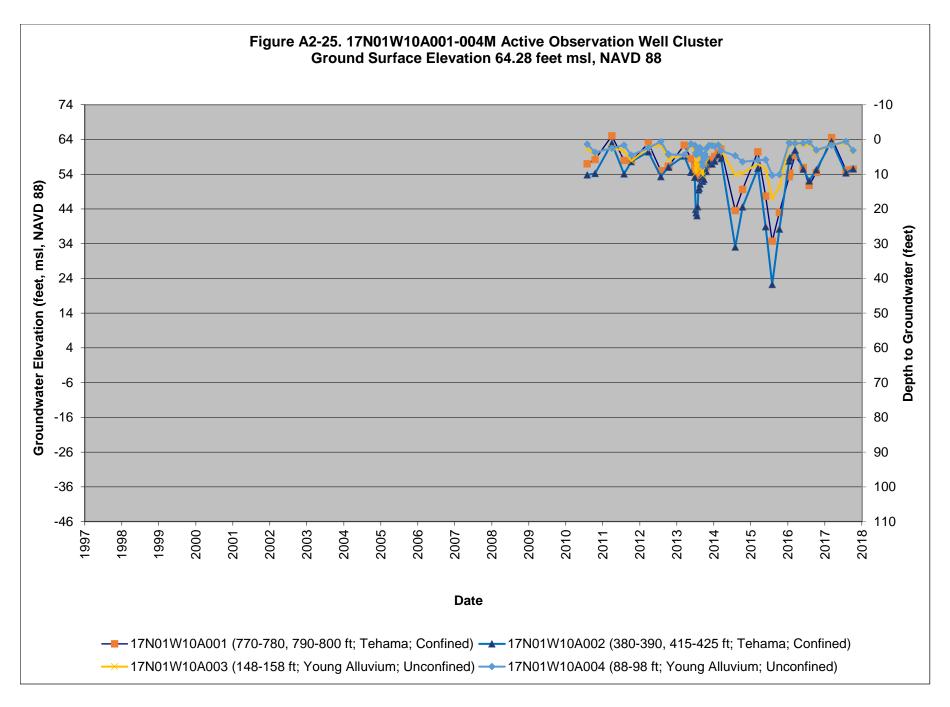


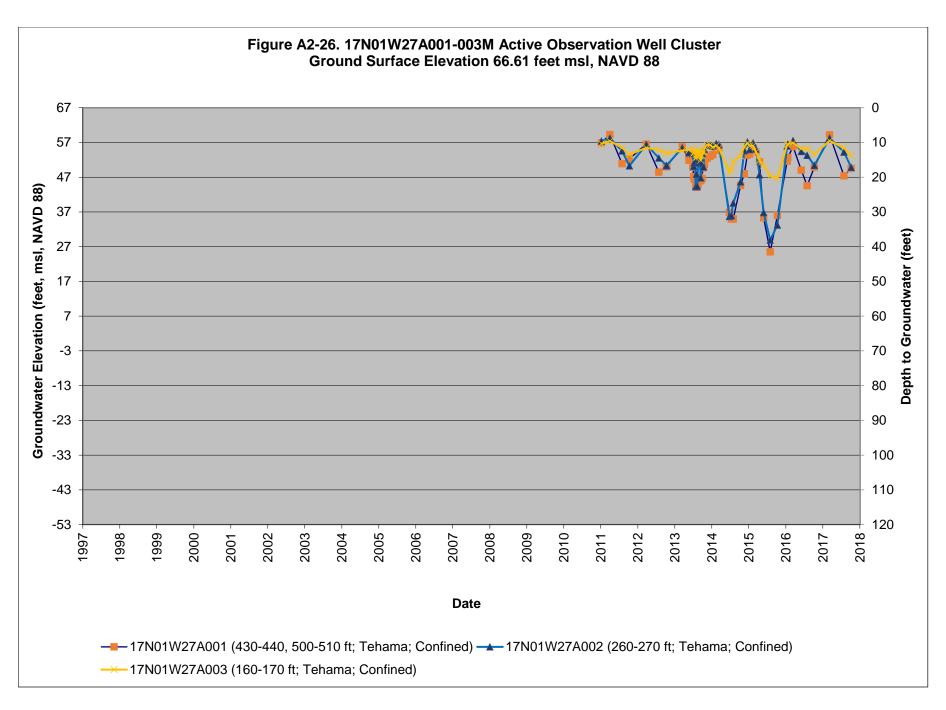


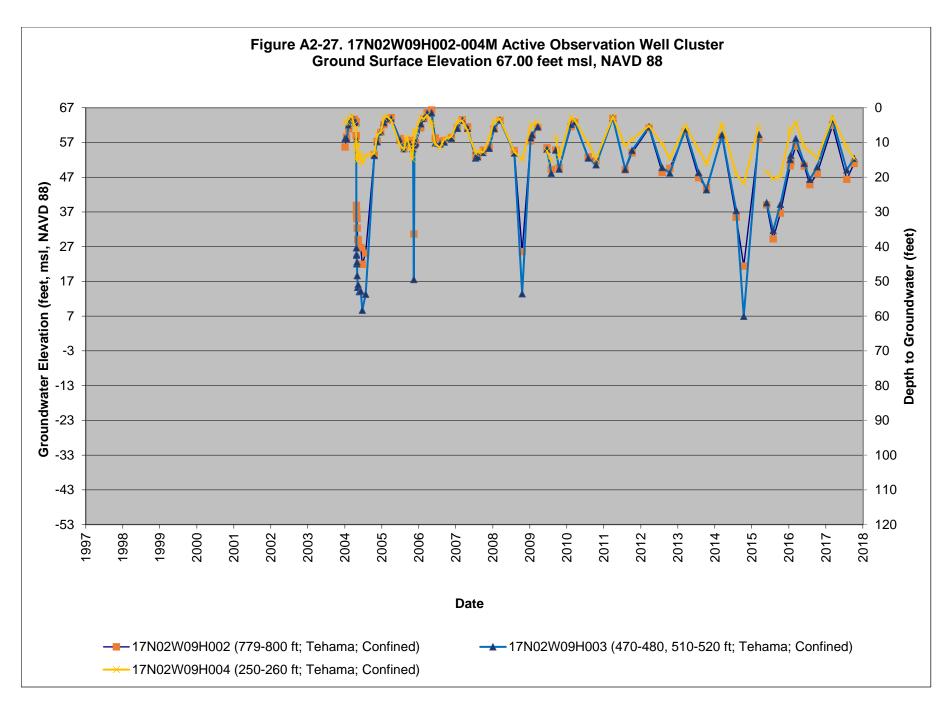


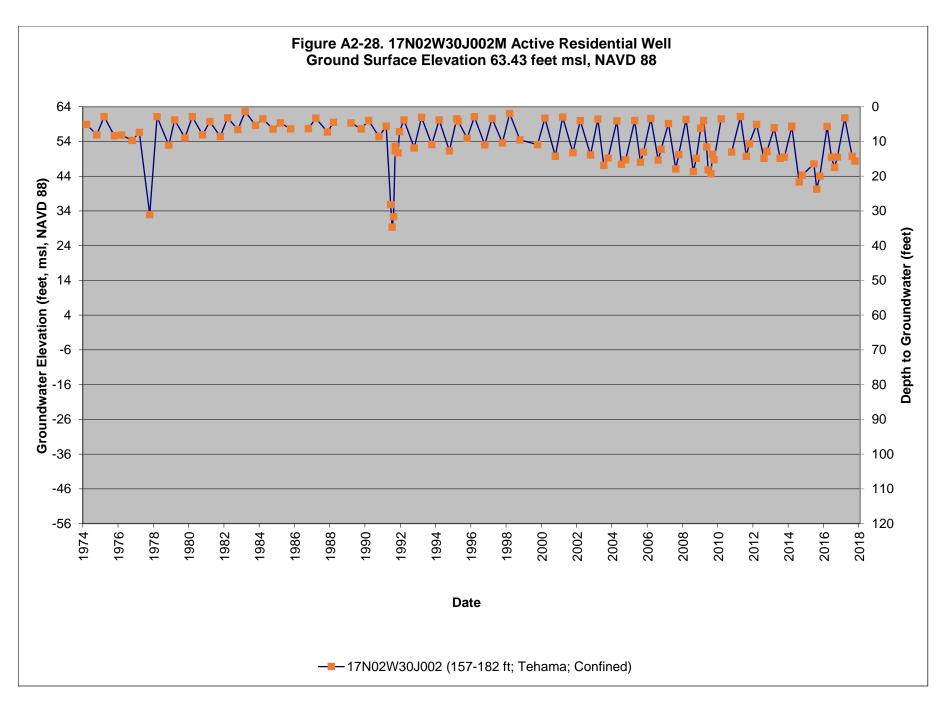


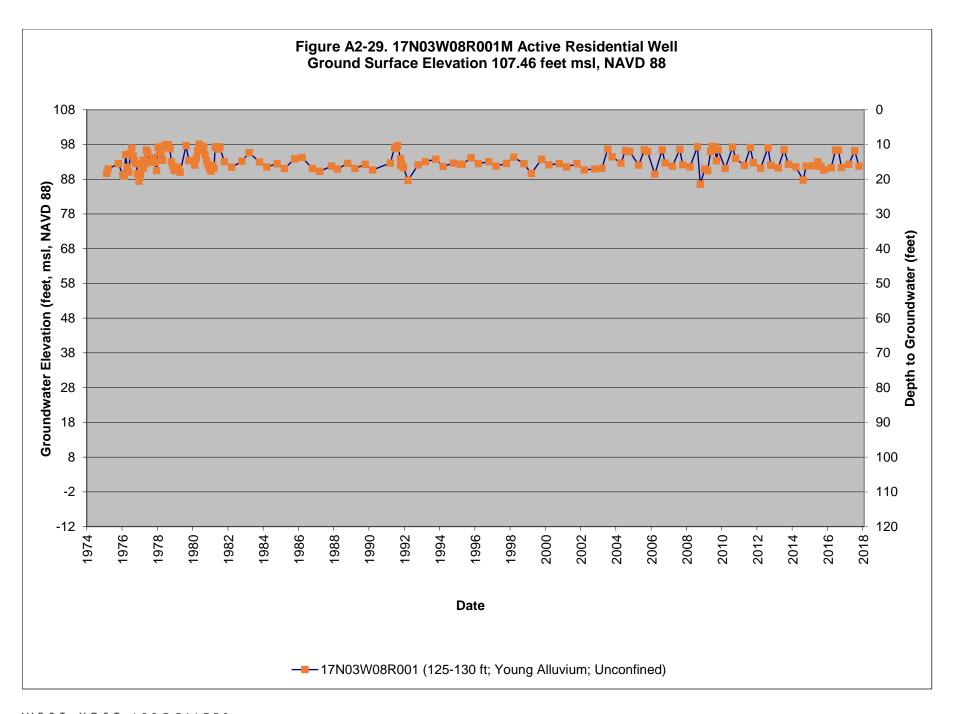


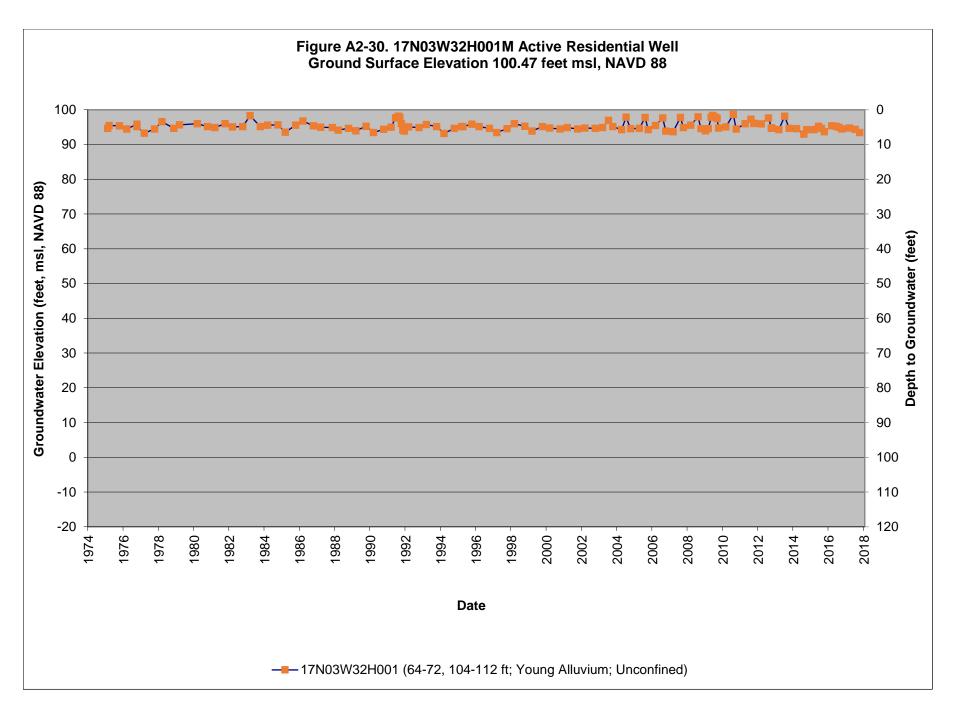


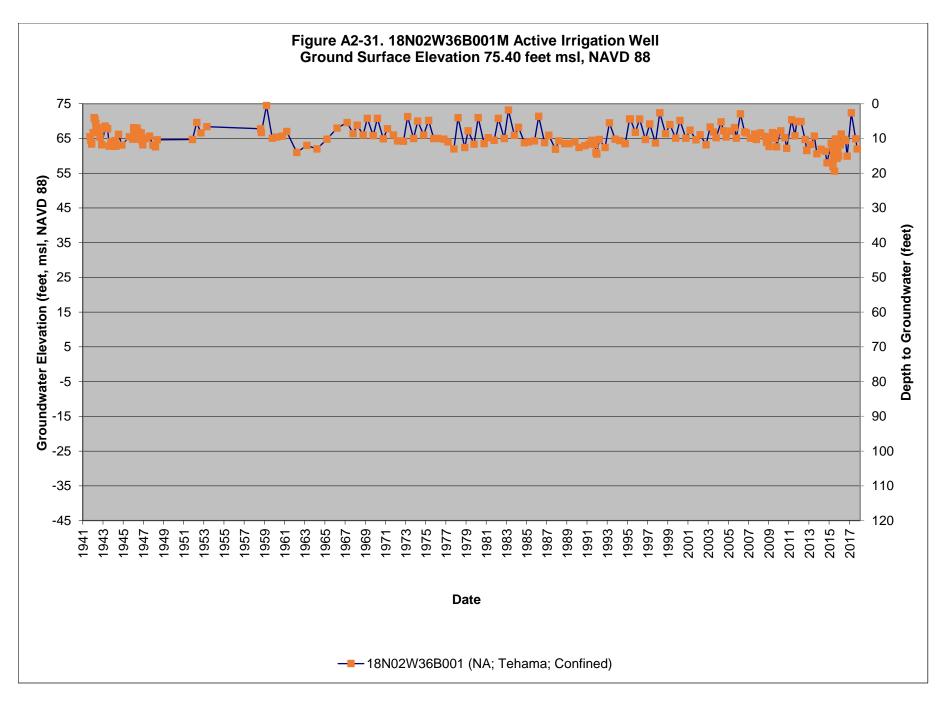


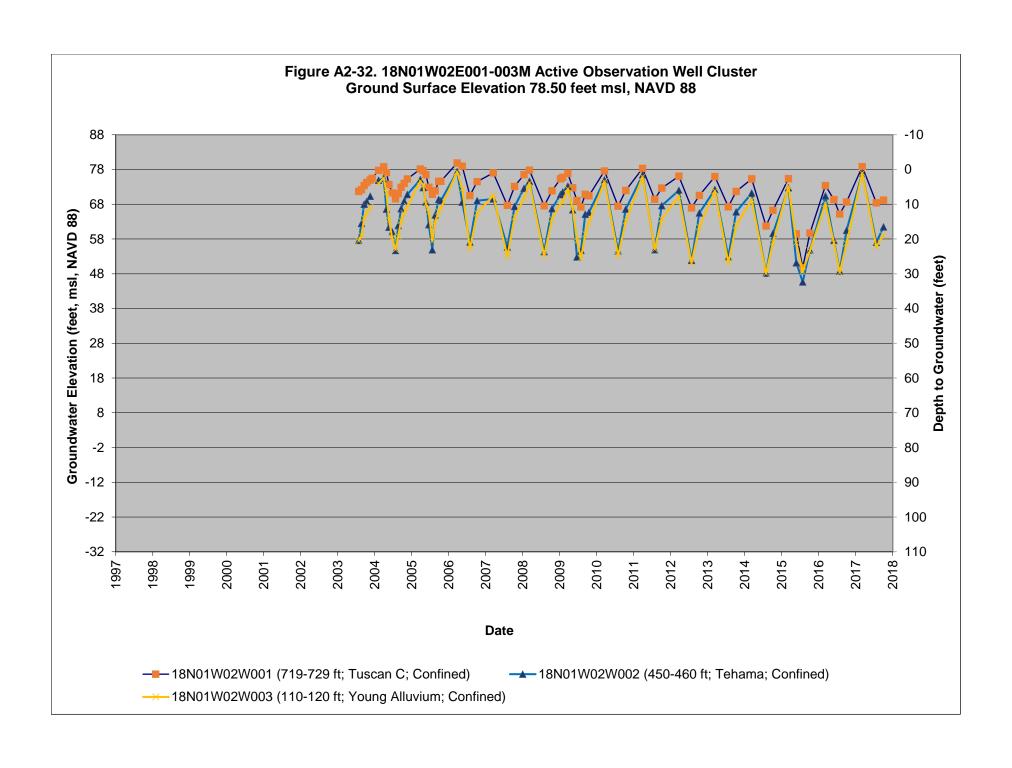


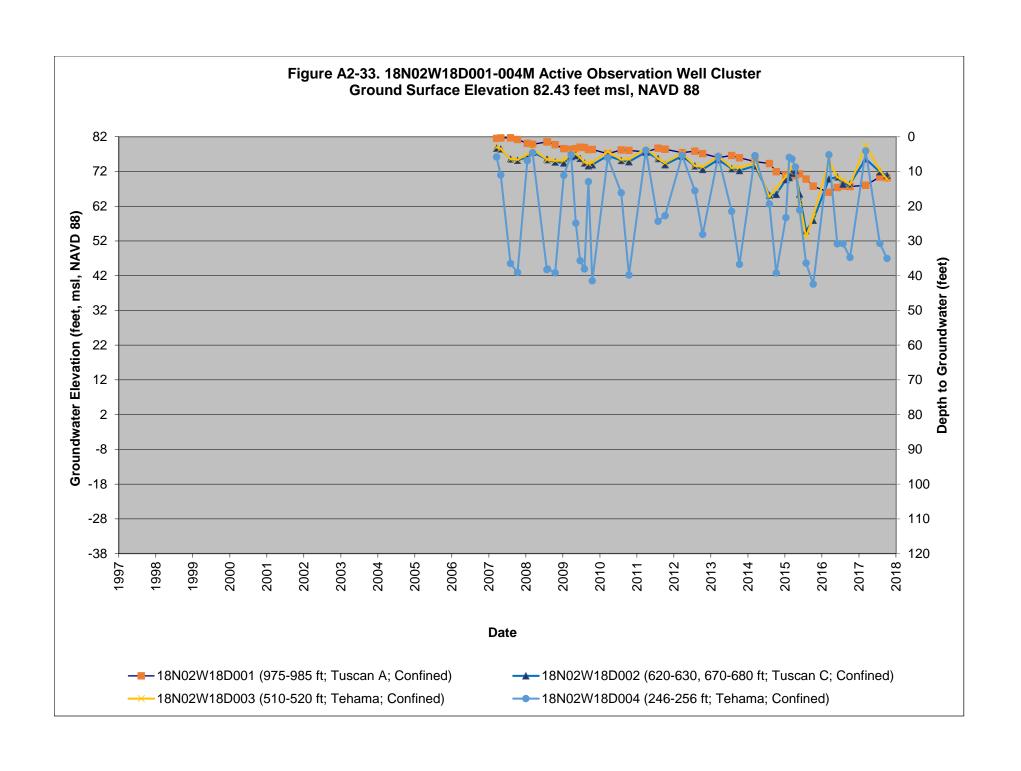


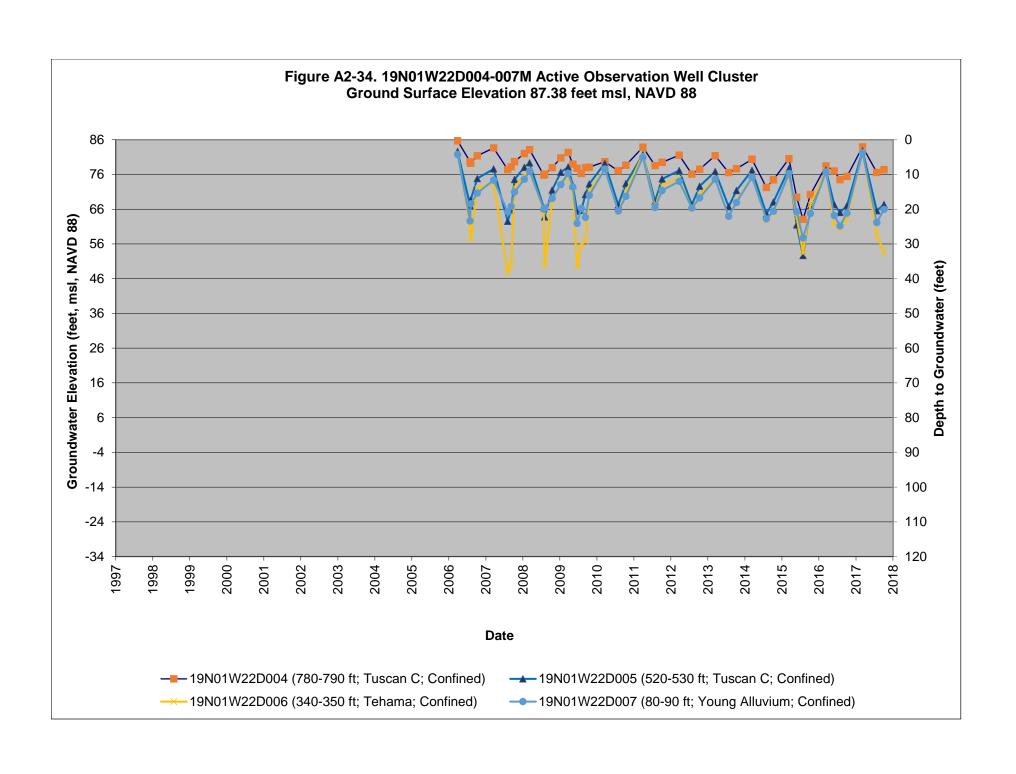


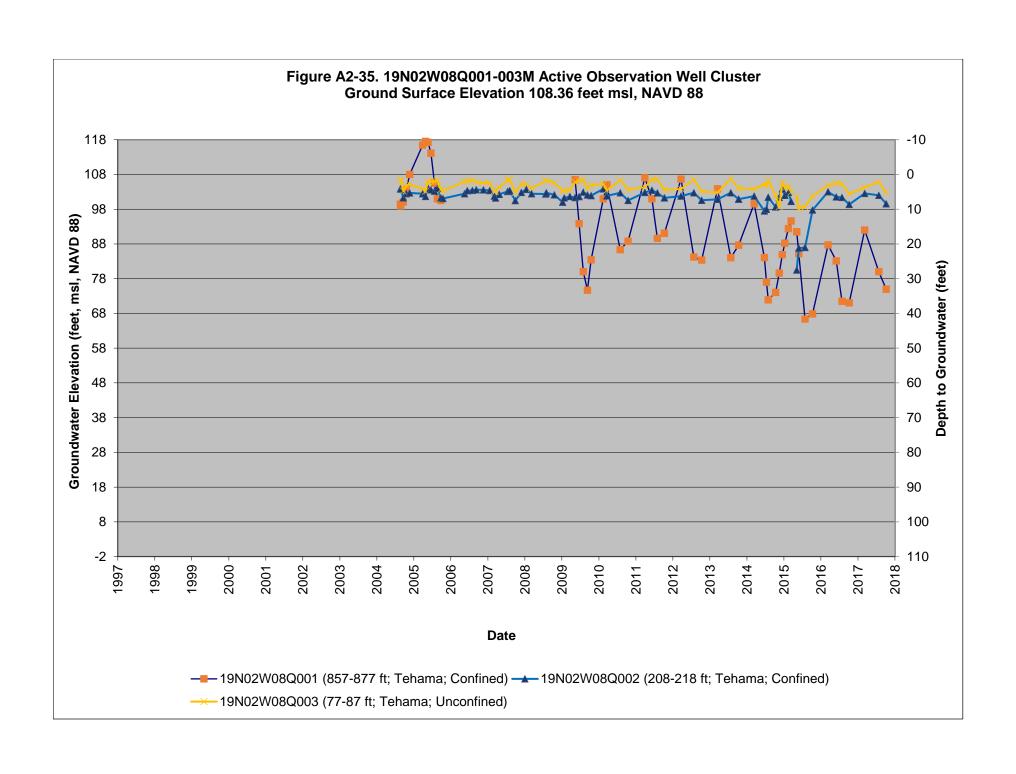


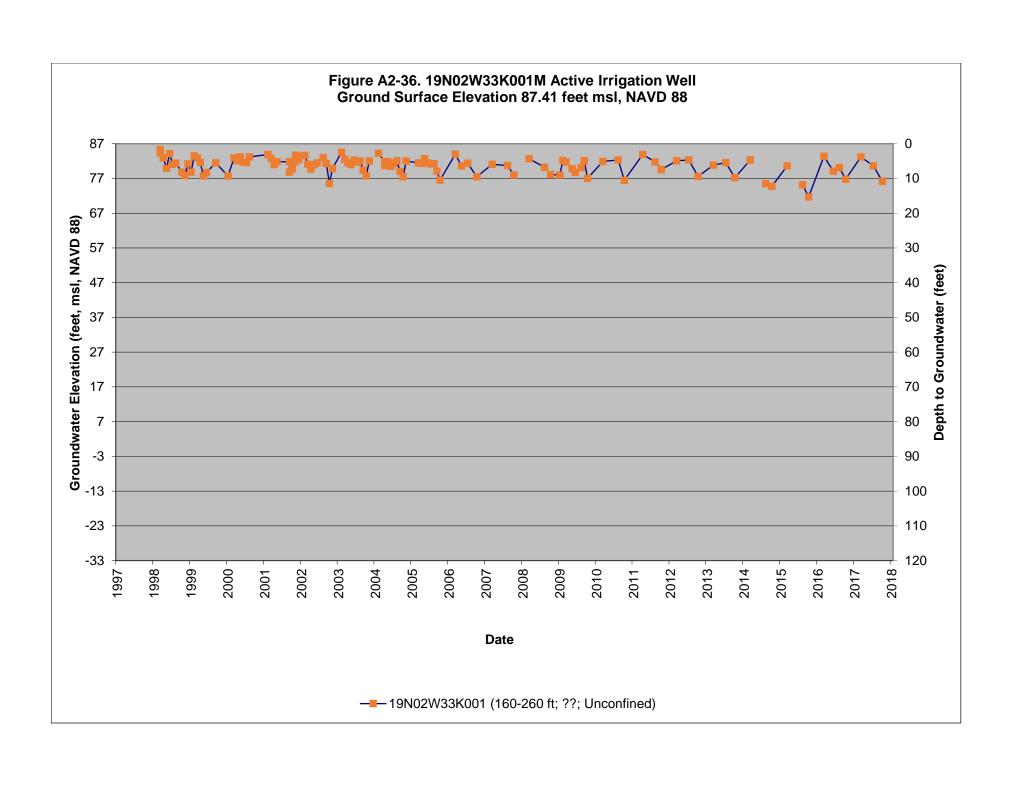


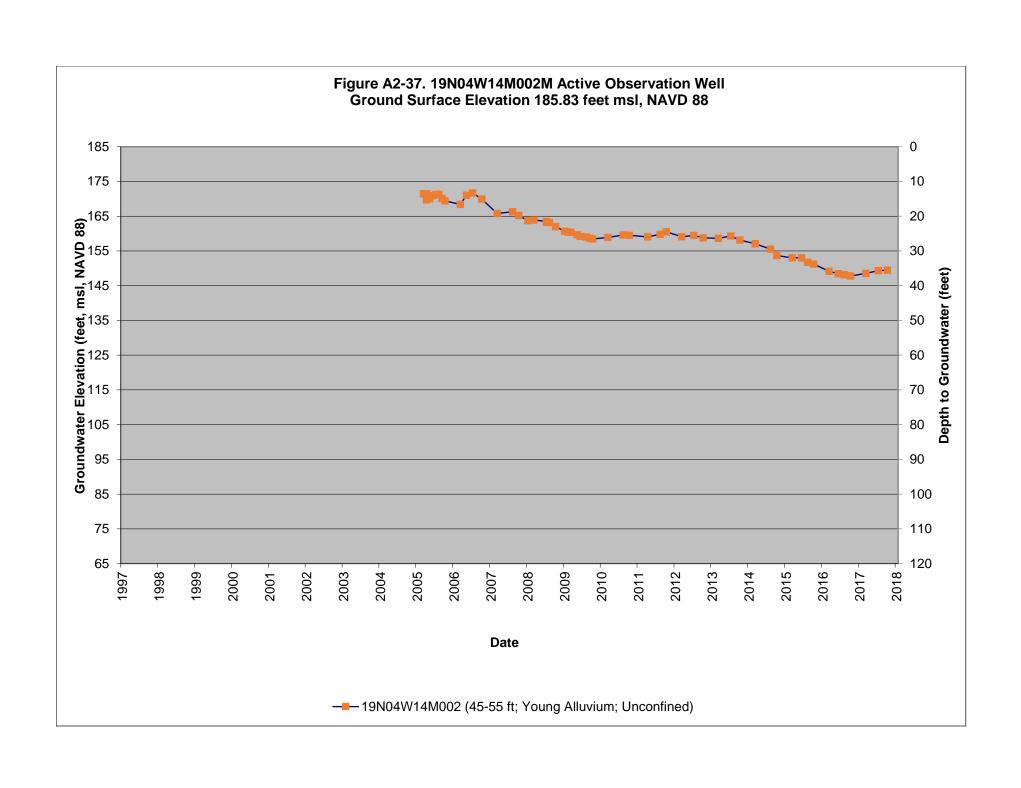


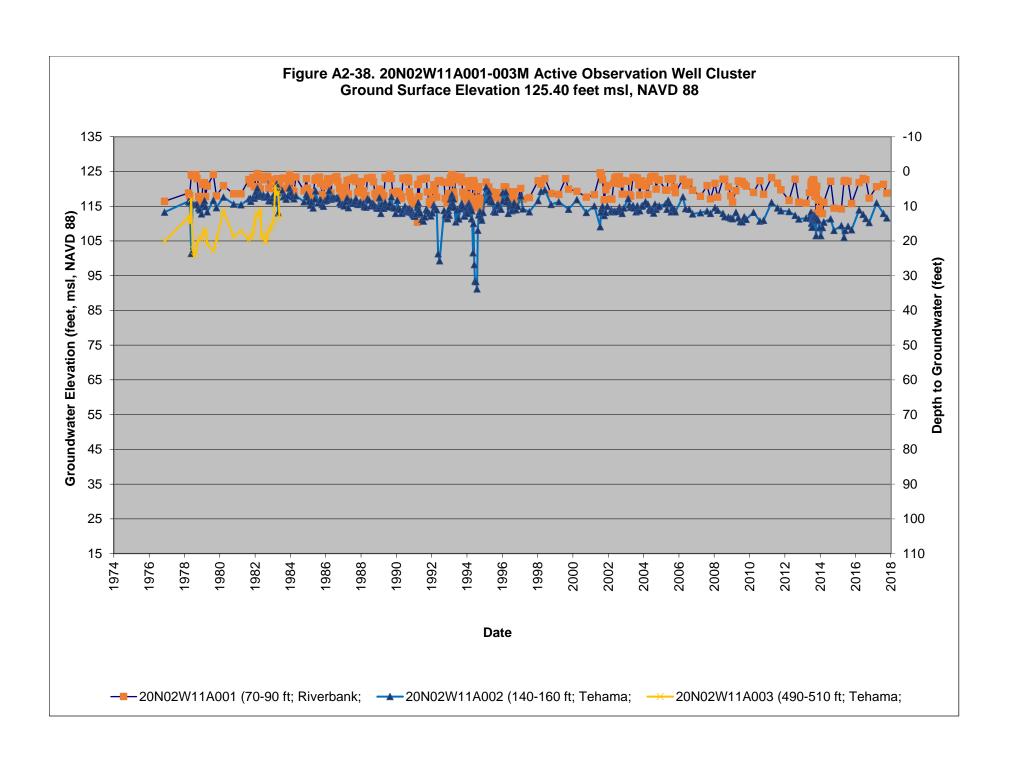


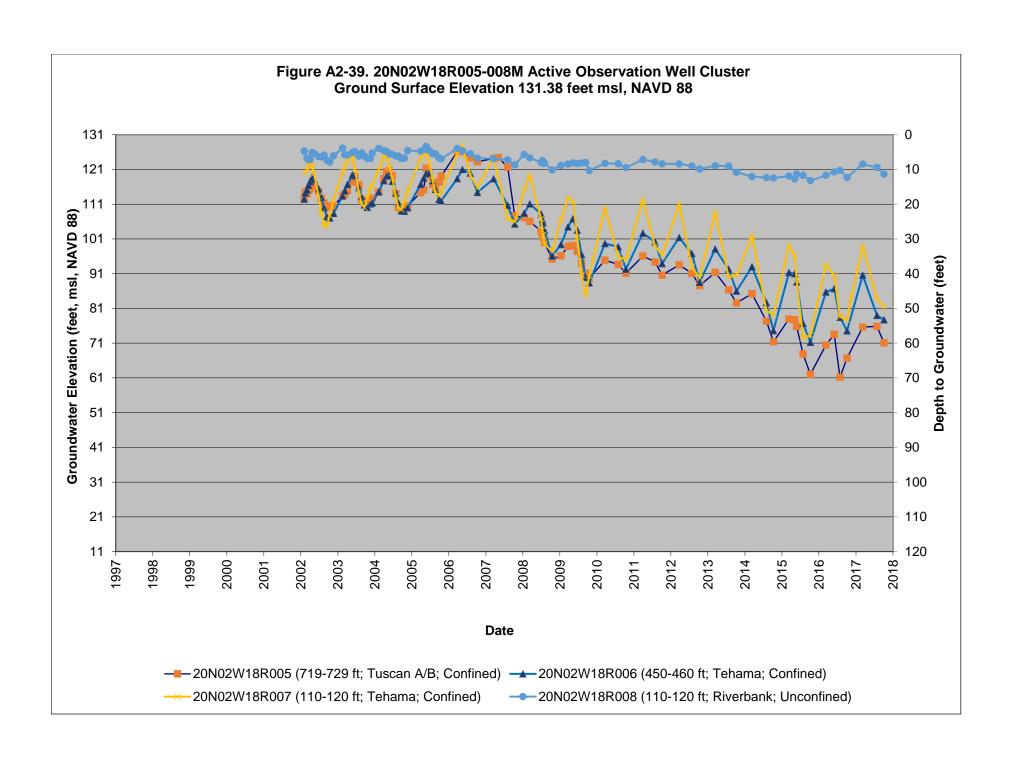


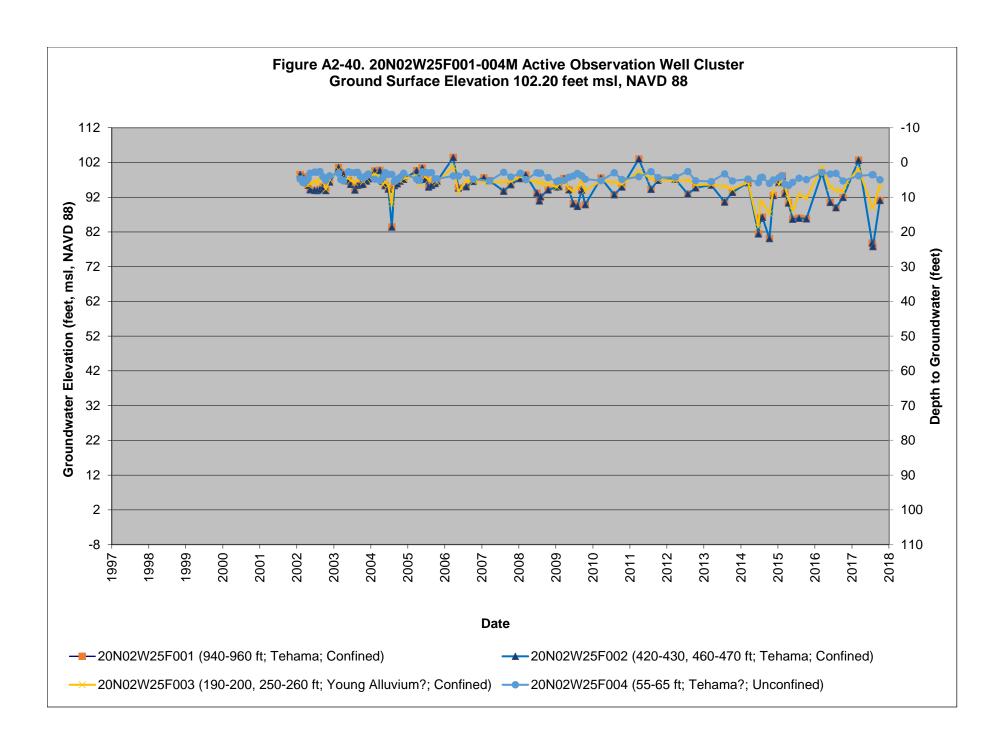


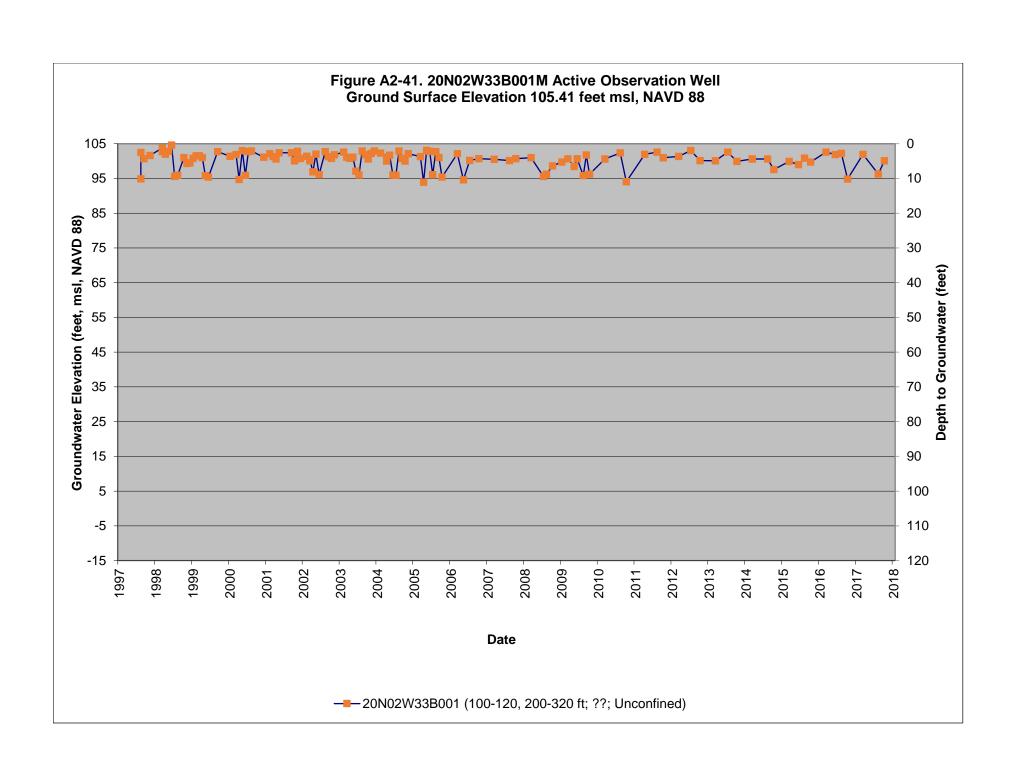


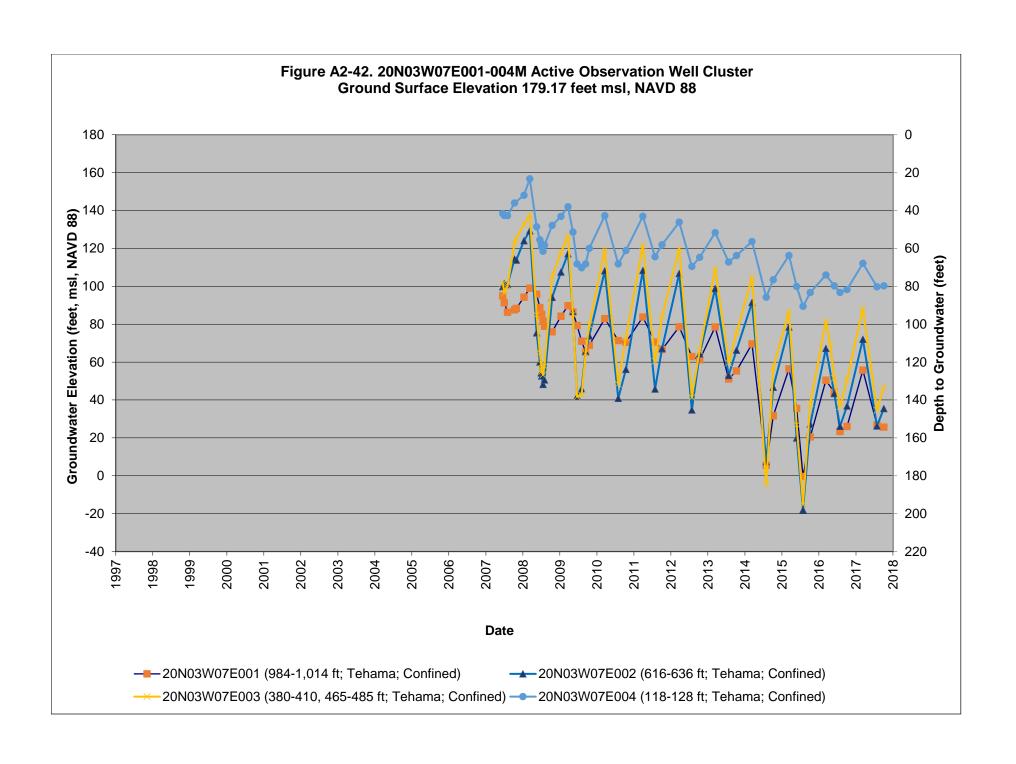


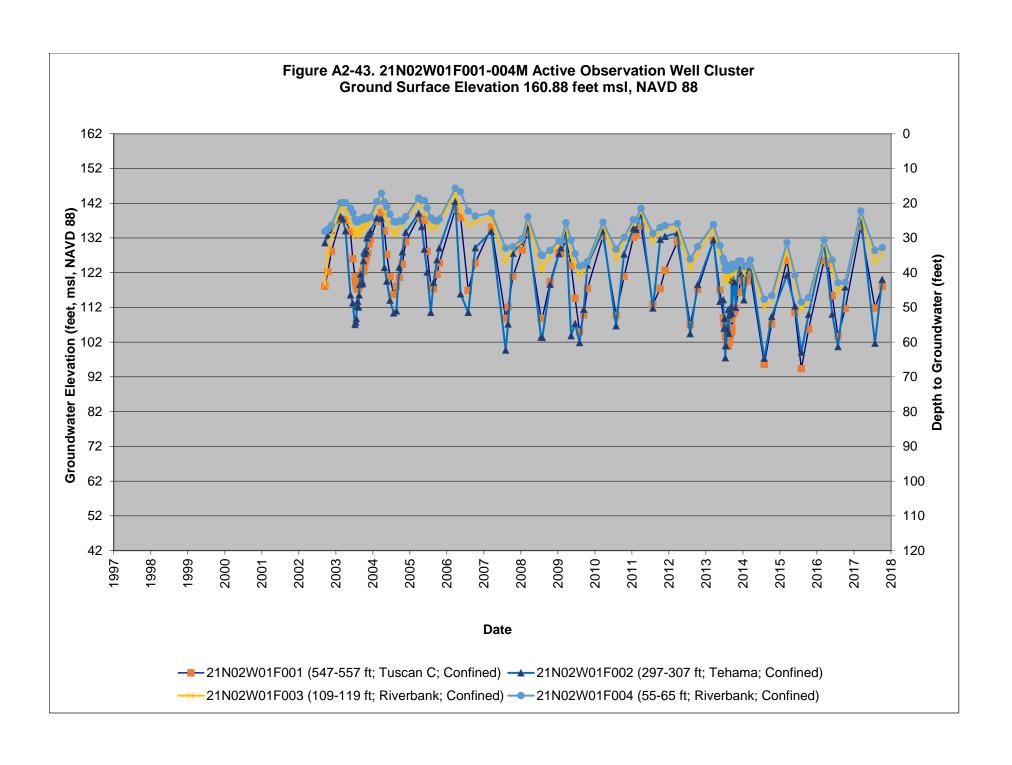


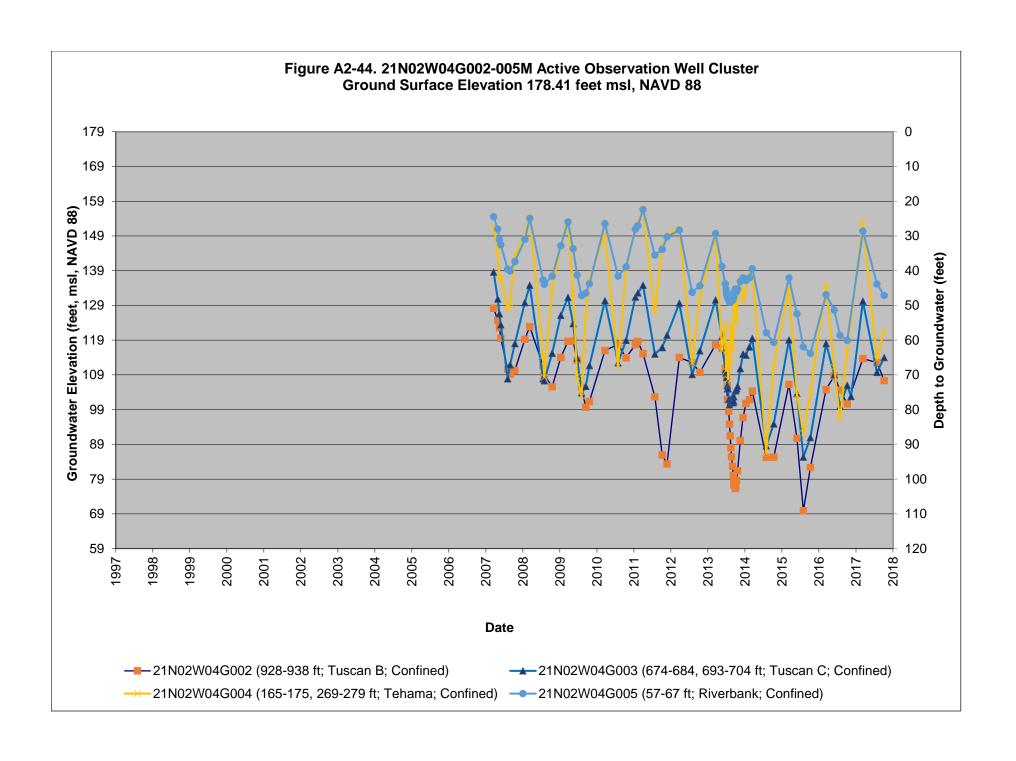


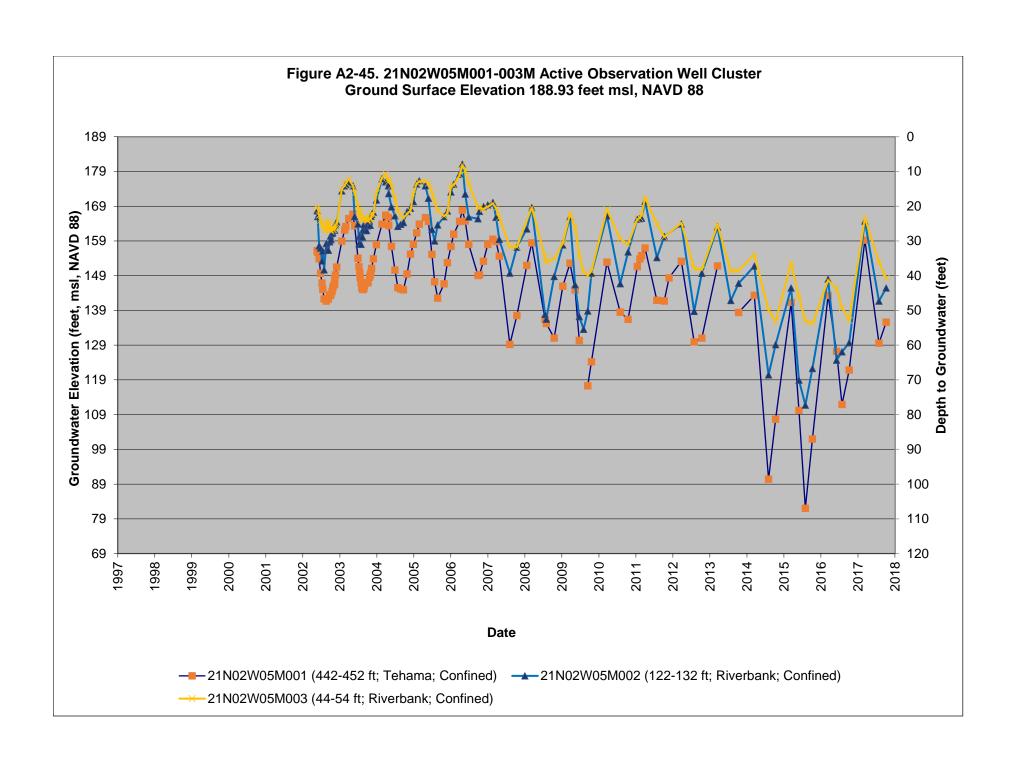












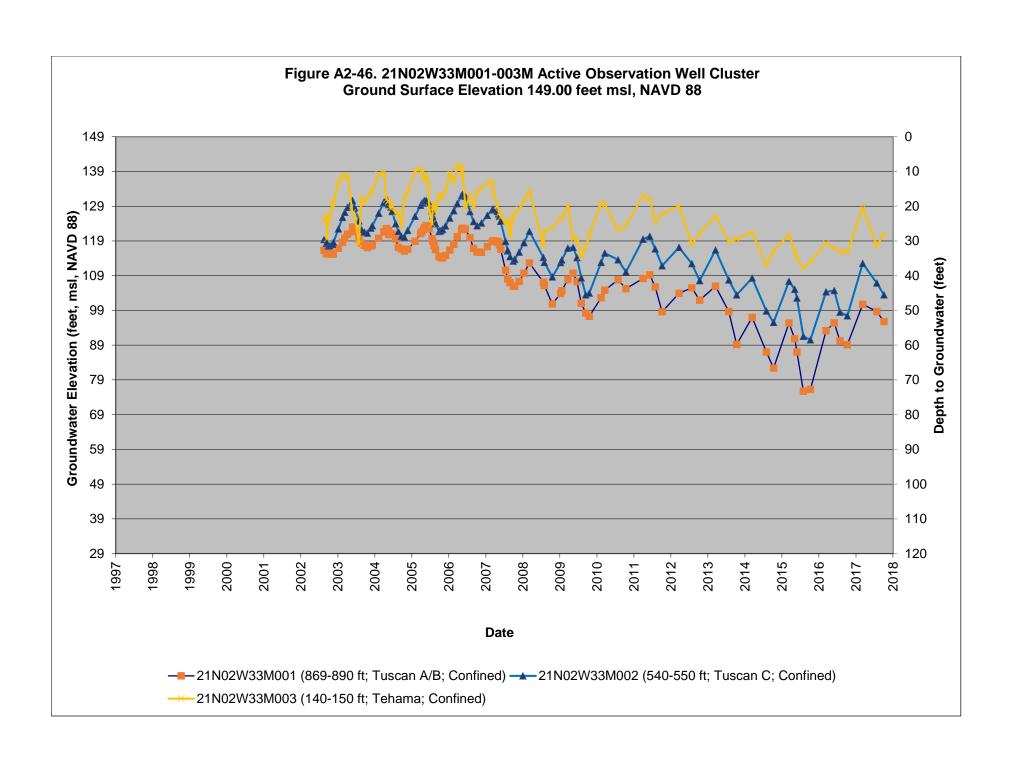
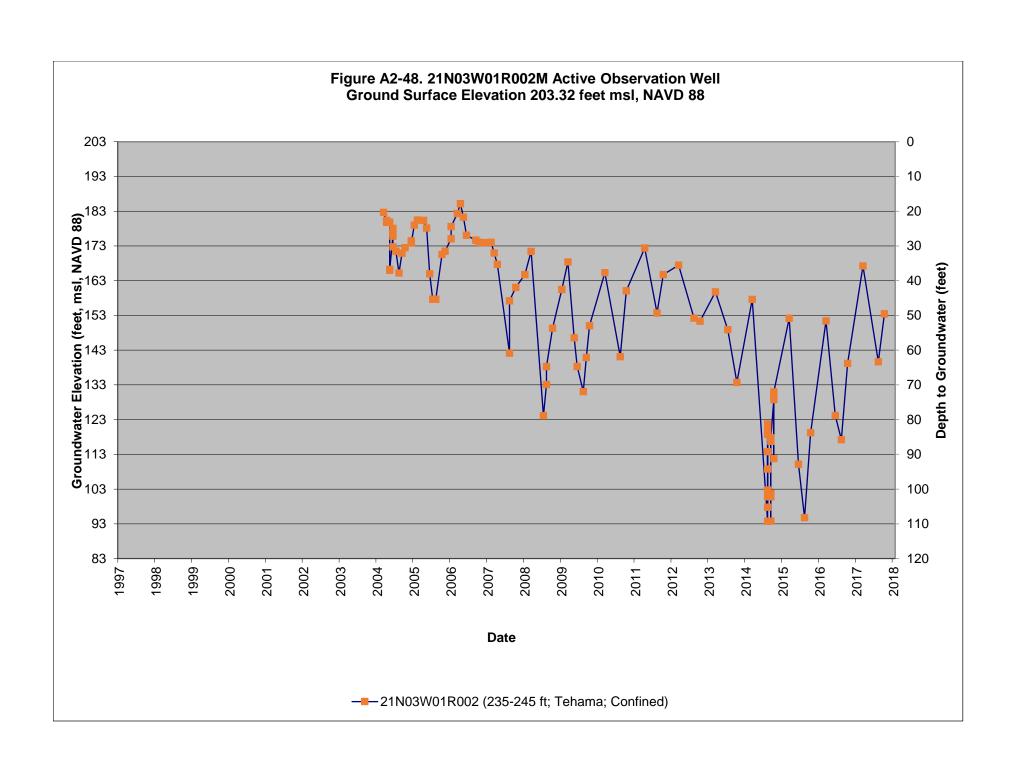
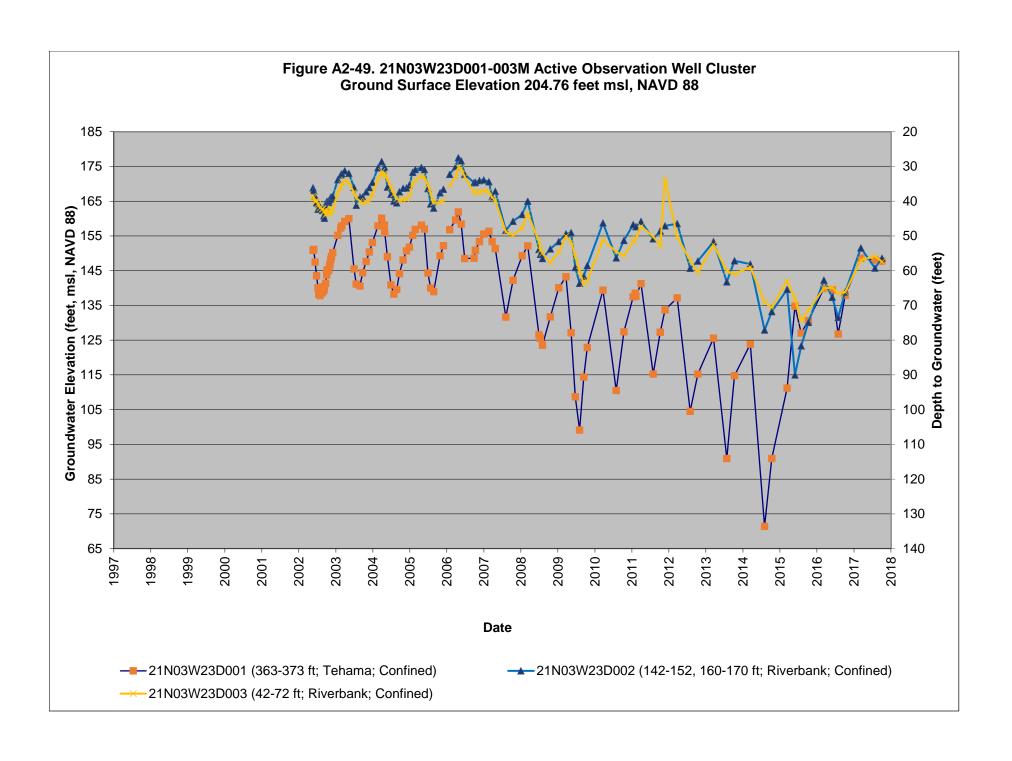
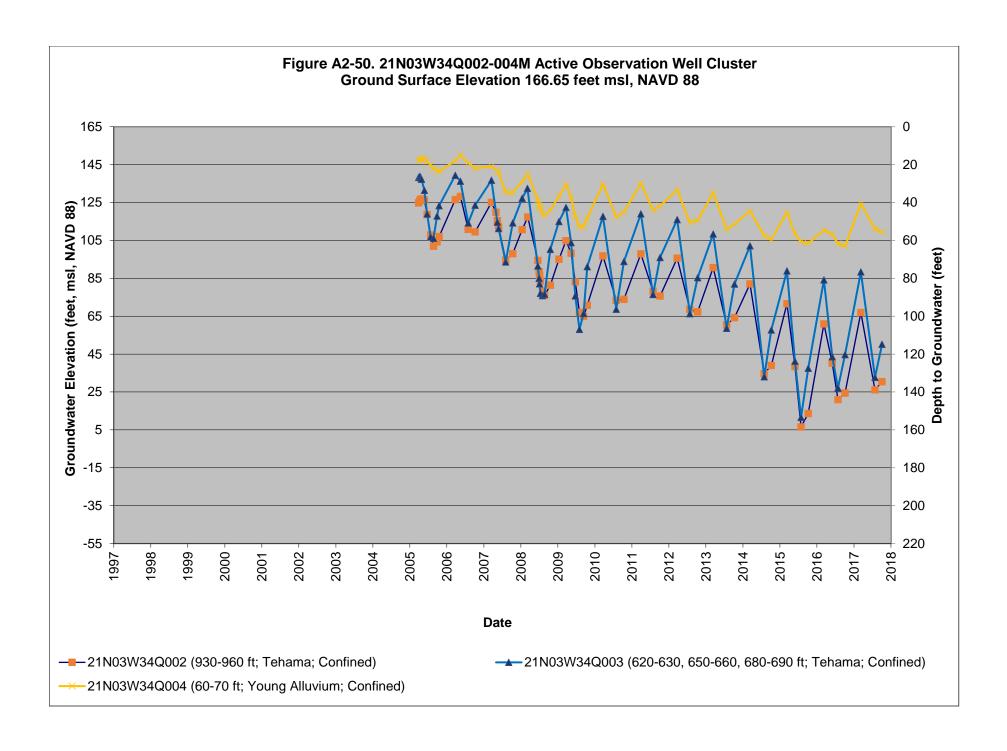
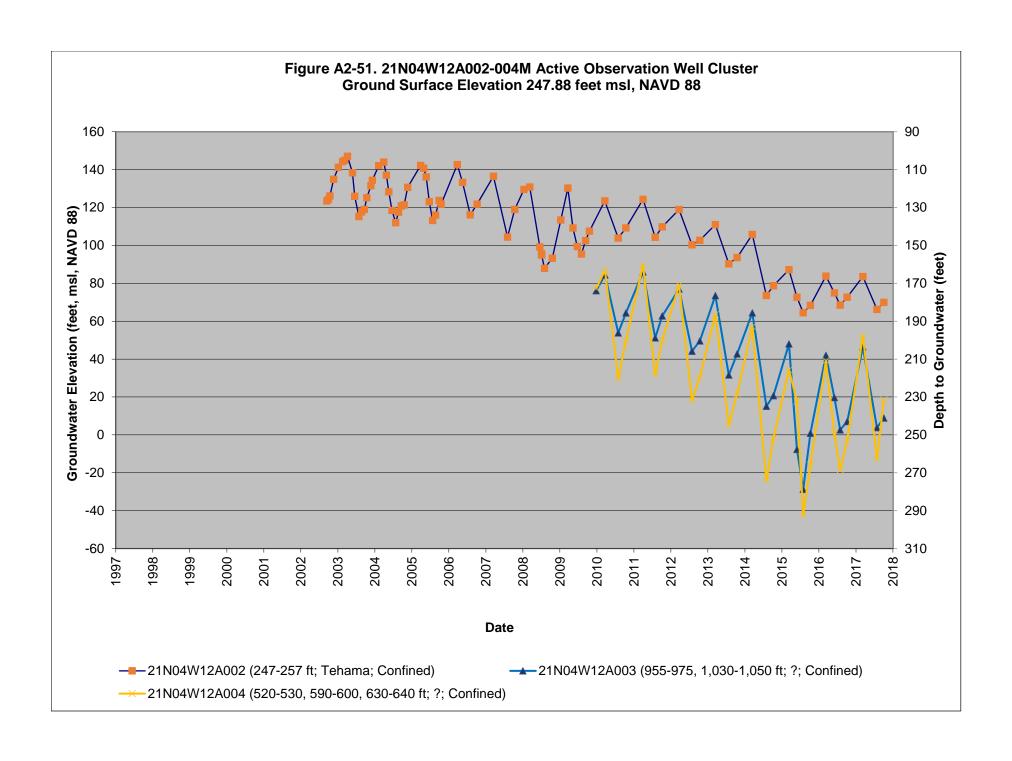


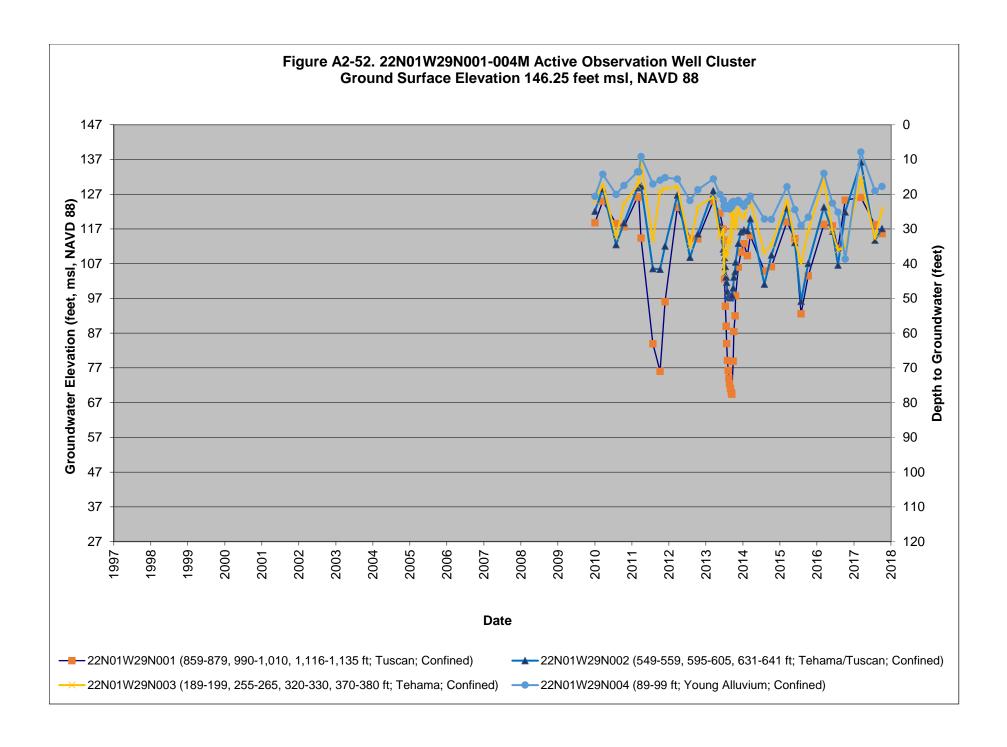
Figure A2-47. 21N02W36A002M Active Observation Well Ground Surface Elevation 135.39 feet msl, NAVD 88 116 Depth to Groundwater (feet) Date ---21N02W36A002 (120-140 ft; ??; ??)

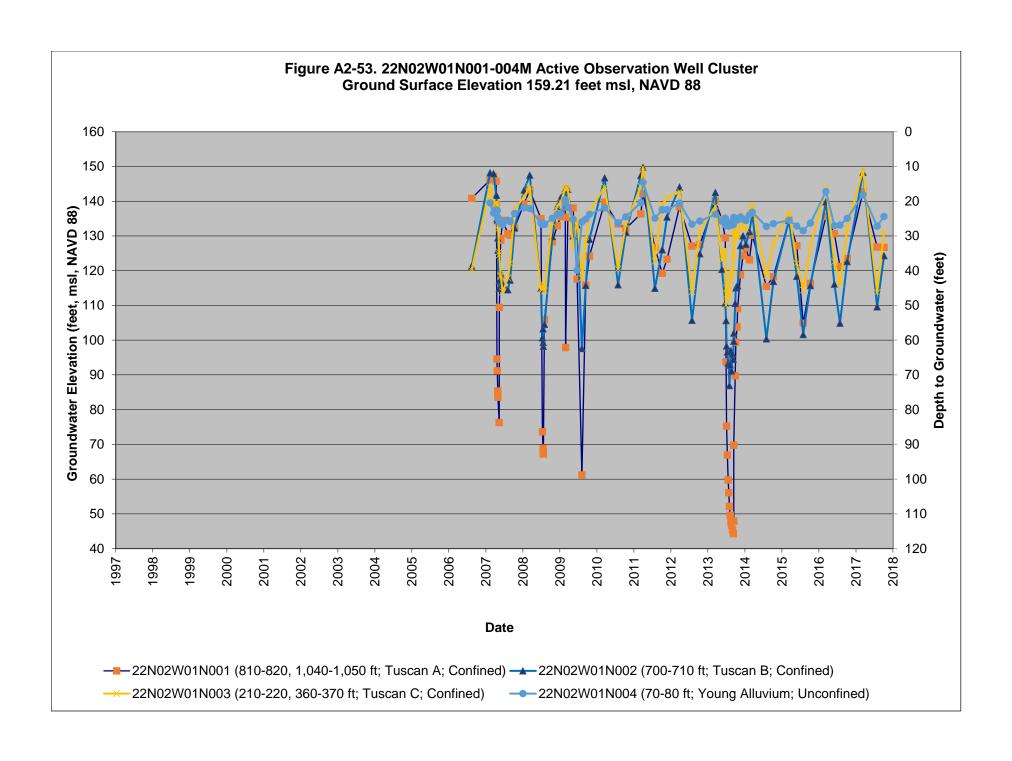


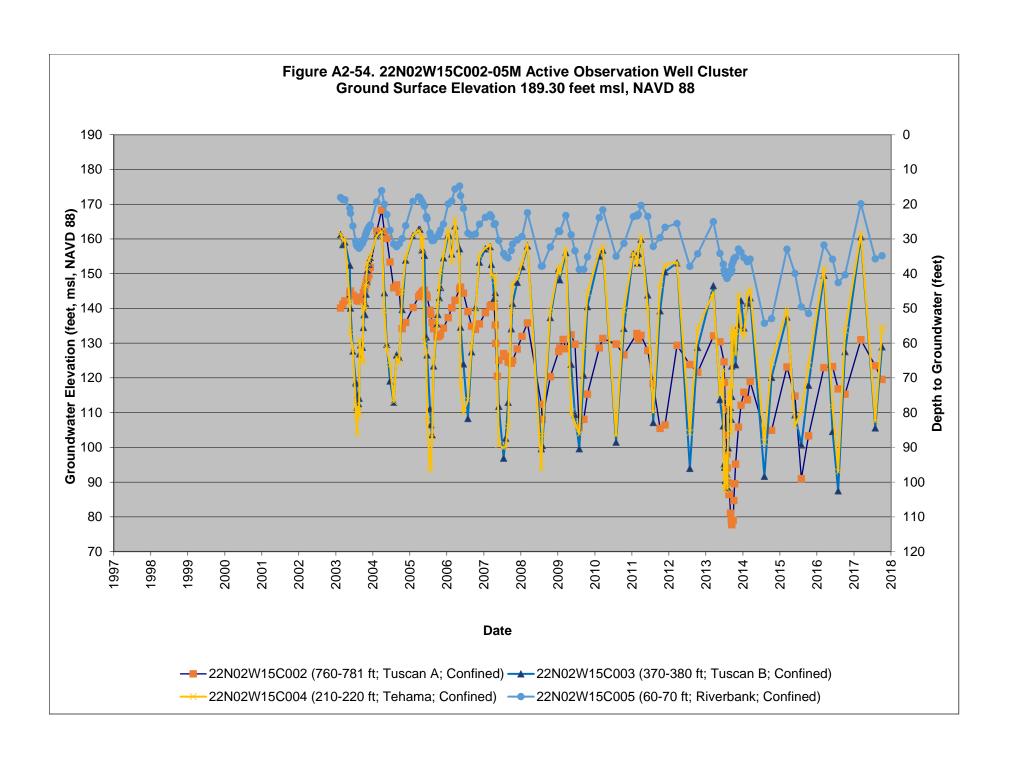


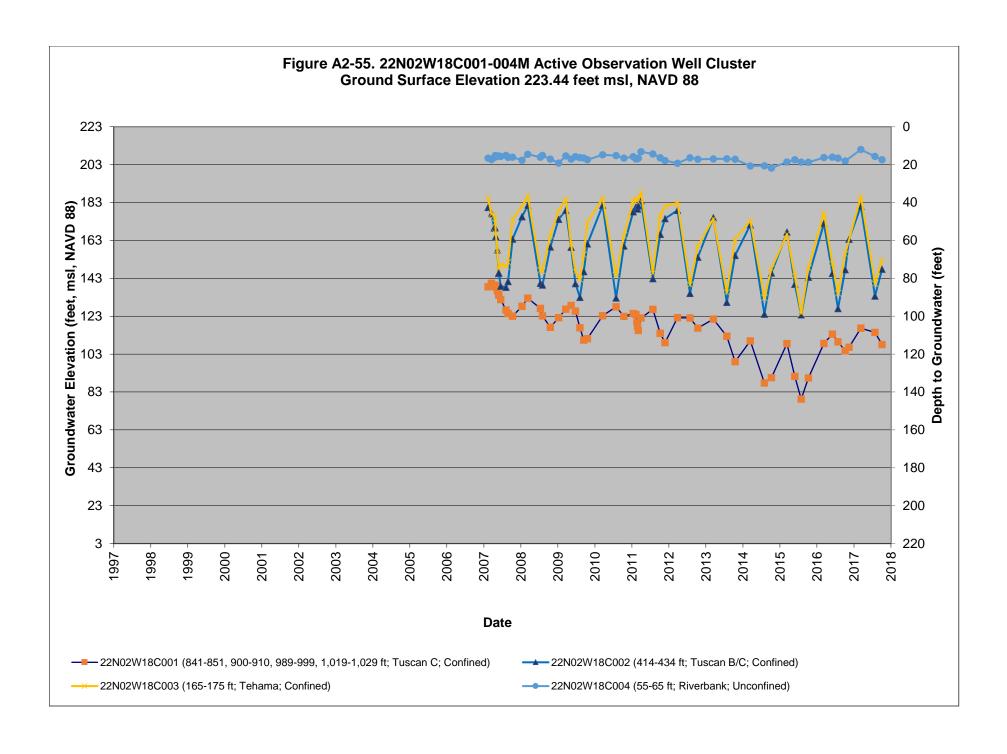


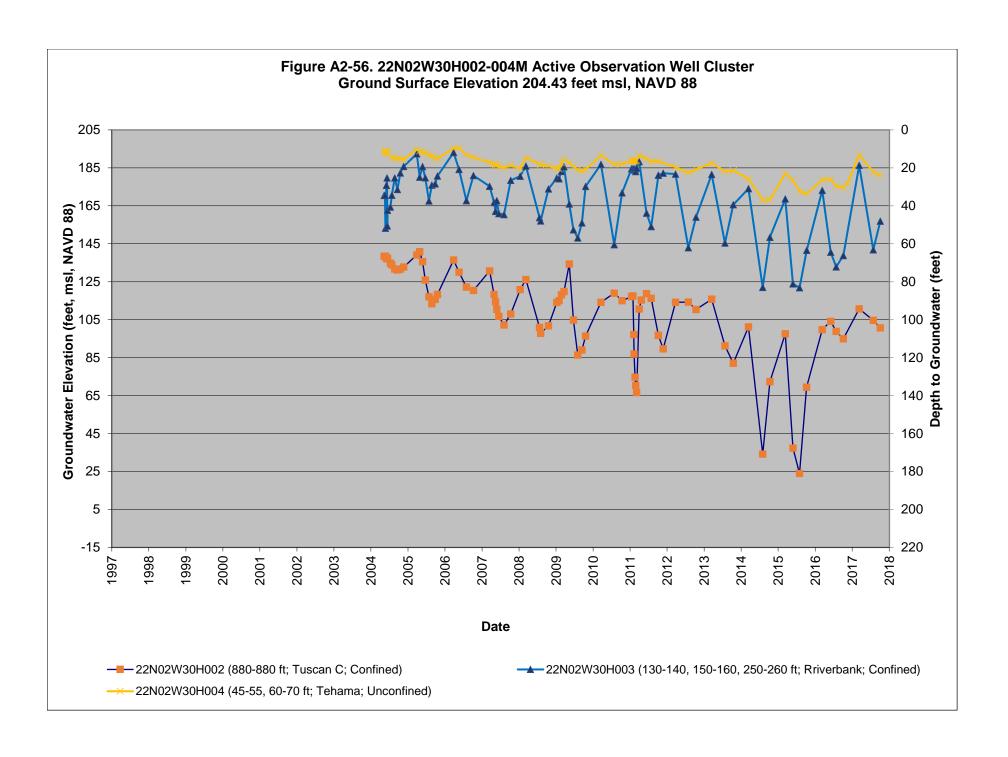


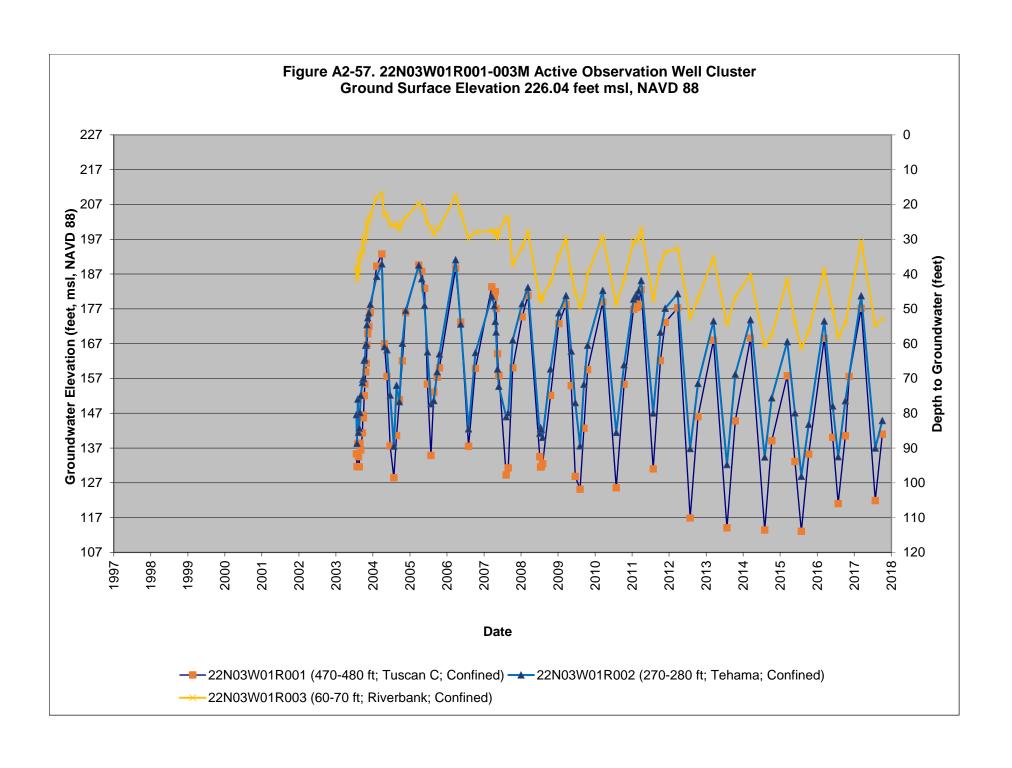


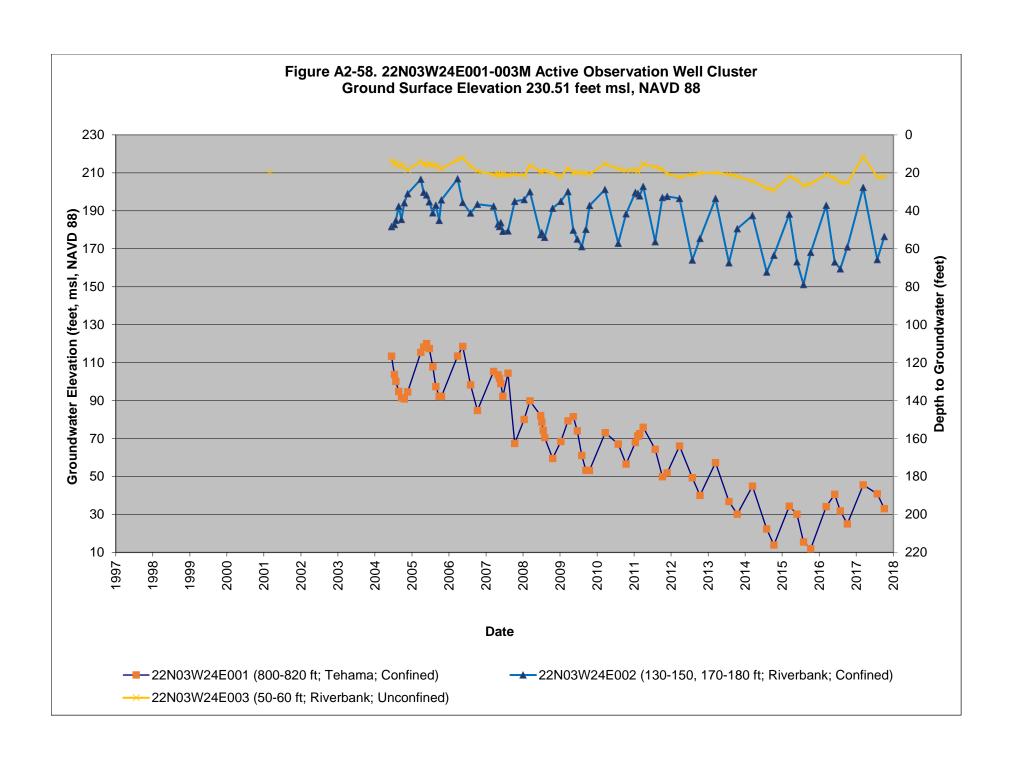


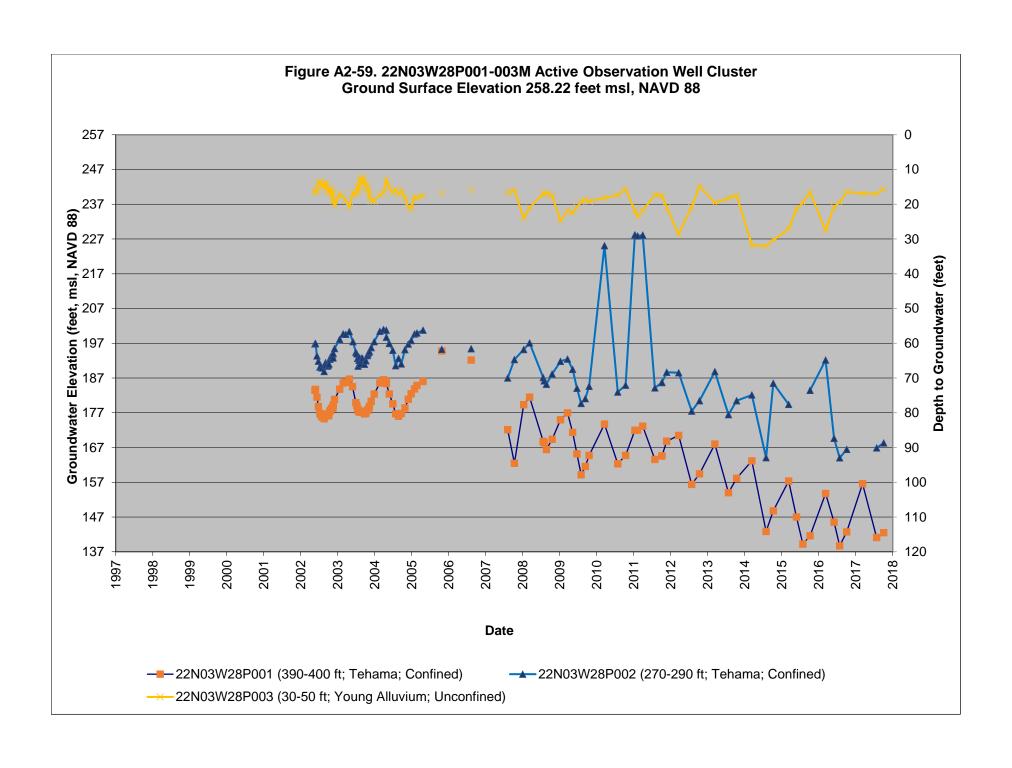






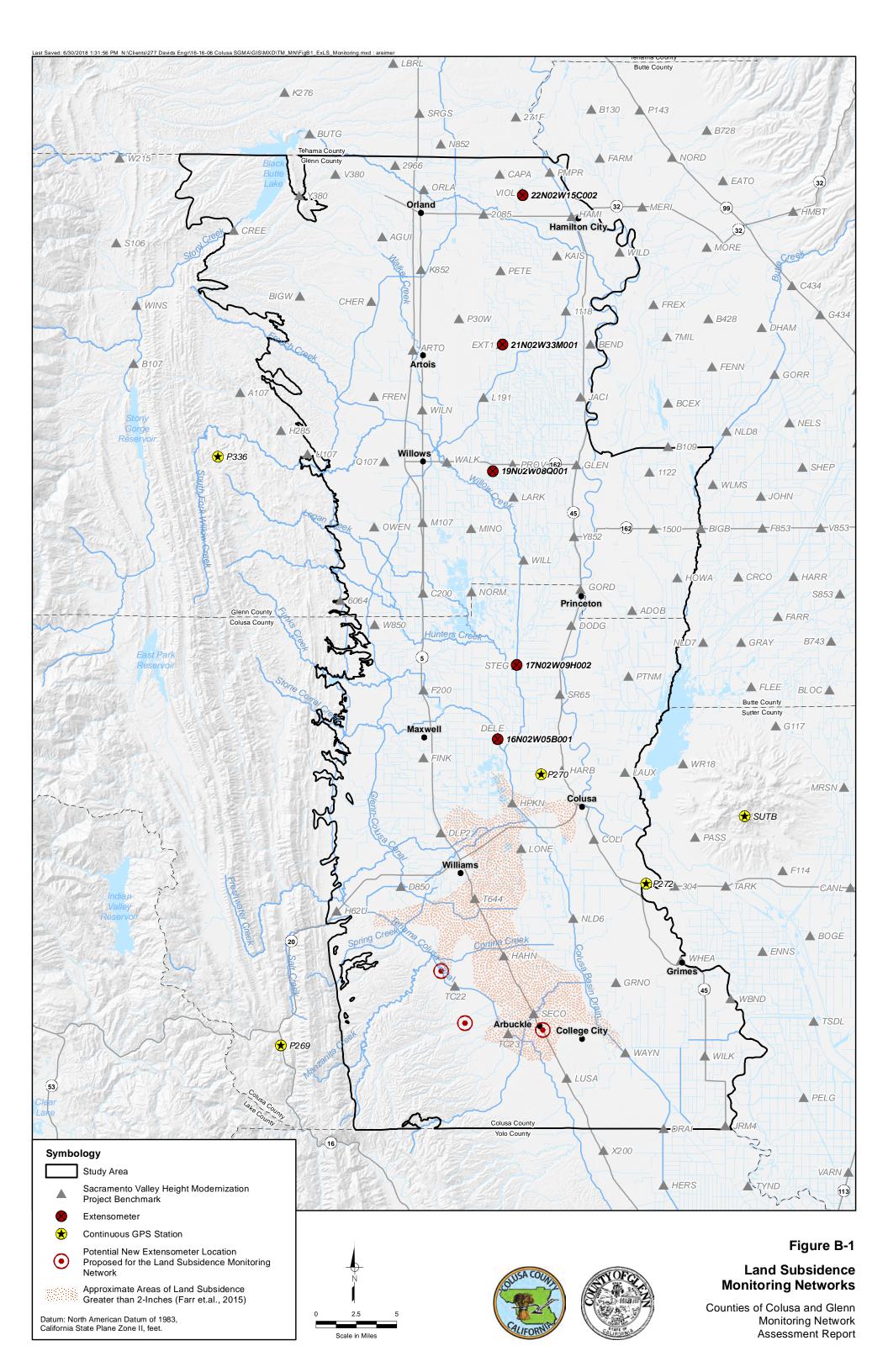






### **APPENDIX B**

**Extensometer Measurements** 



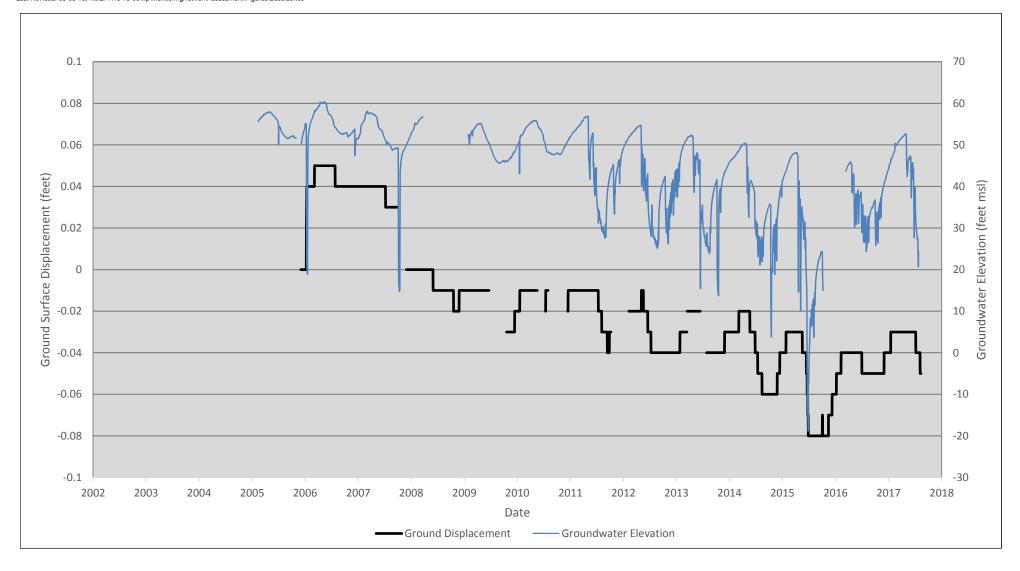


Figure B-2



Land Subsidence from Extensometer 16N02W05B001M

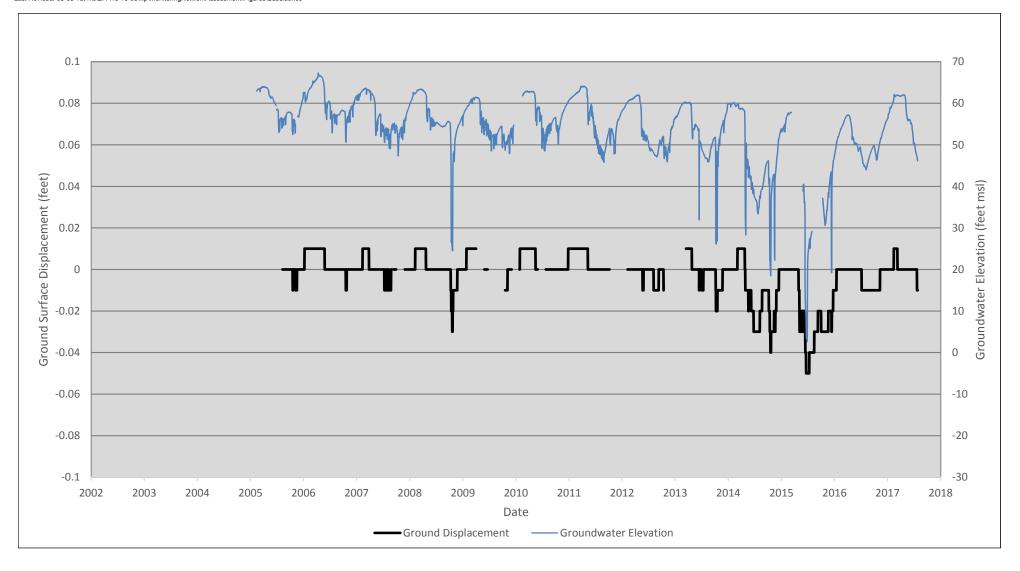


Figure B-3



#### Land Subsidence from Extensometer 17N02W09H002M

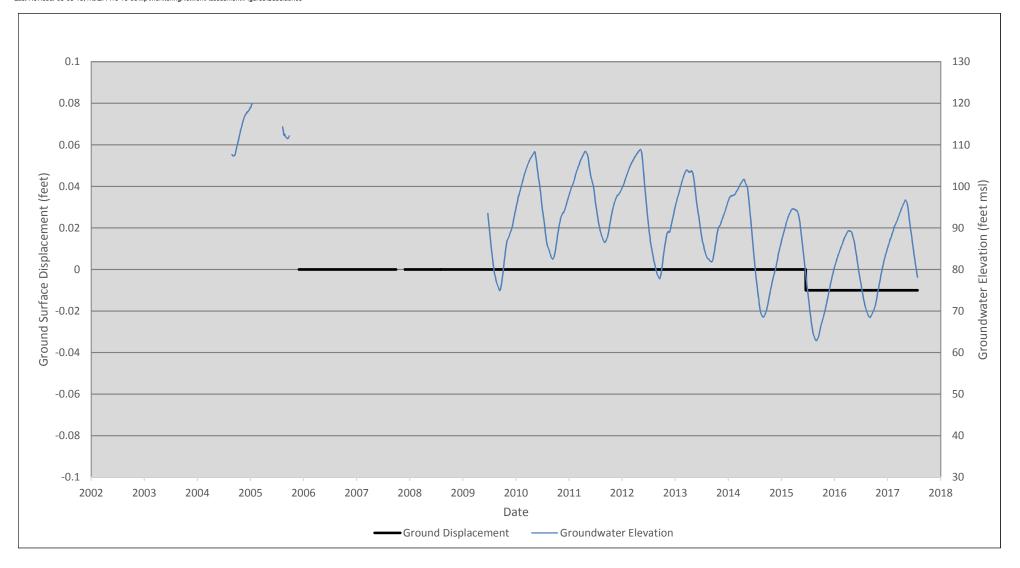


Figure B-4





Land Subsidence from Extensometer 19N02W08Q001M

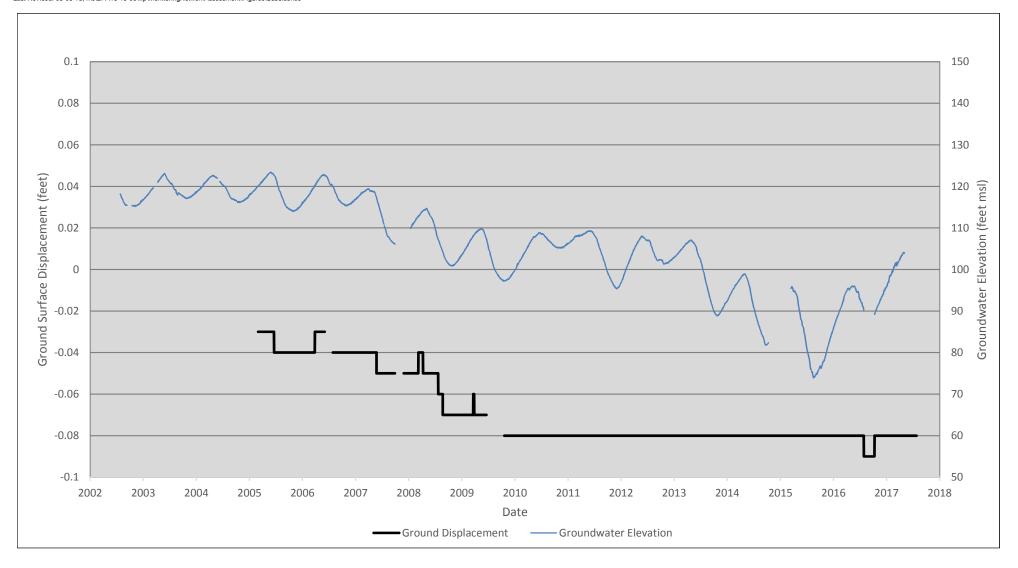


Figure B-5



# Land Subsidence from Extensometer 21N02W33M001M

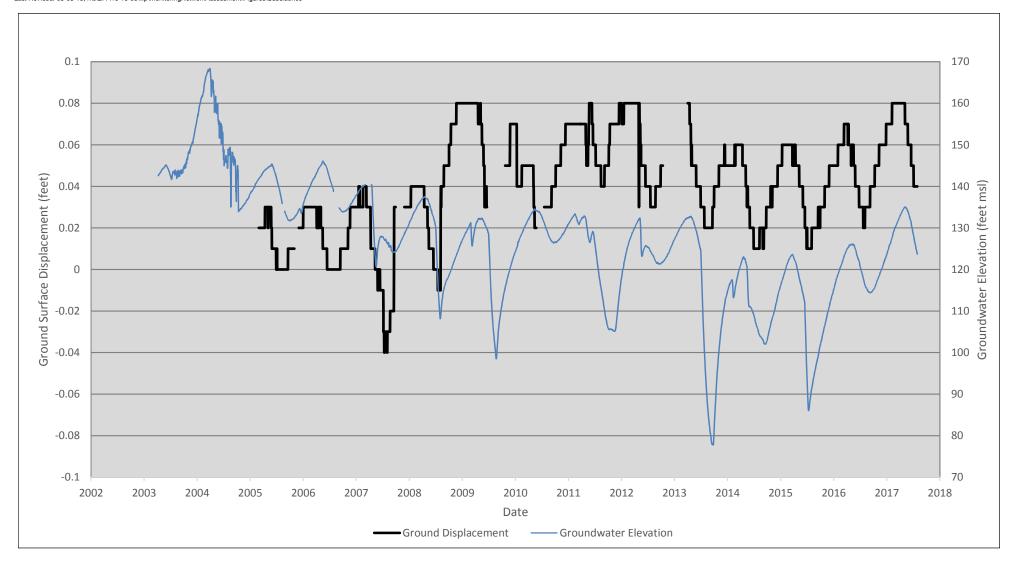


Figure B-6



## Land Subsidence from Extensometer 22N02W15C002M

### **APPENDIX C**

Emergency Regulation Reporting Standards

#### ARTICLE 3. Technical and Reporting Standards

#### § 352. Introduction to Technical and Reporting Standards

This Article describes the monitoring protocols, standards for monitoring sites, and other technical elements related to the development or implementation of a Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2. Water Code.

#### § 352.2. Monitoring Protocols

Each Plan shall include monitoring protocols adopted by the Agency for data collection and management, as follows:

- (a) Monitoring protocols shall be developed according to best management practices.
- (b) The Agency may rely on monitoring protocols included as part of the best management practices developed by the Department, or may adopt similar monitoring protocols that will yield comparable data.
- (c) Monitoring protocols shall be reviewed at least every five years as part of the periodic evaluation of the Plan, and modified as necessary.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728.2, 10729, and 10733.2, Water Code.

#### § 352.4. Data and Reporting Standards

- (a) The following reporting standards apply to all categories of information required of a Plan, unless otherwise indicated:
  - (1) Water volumes shall be reported in acre-feet.
  - (2) Surface water flow shall be reported in cubic feet per second and groundwater flow shall be reported in acre-feet per year.
  - (3) Field measurements of elevations of groundwater, surface water, and land surface shall be measured and reported in feet to an accuracy of at least 0.1 feet relative to NAVD88, or another national standard that is convertible to NAVD88, and the method of measurement described.
  - (4) Reference point elevations shall be measured and reported in feet to an accuracy of at least 0.5 feet, or the best available information, relative to NAVD88, or another national standard that is convertible to NAVD88, and the method of measurement described.
  - (5) Geographic locations shall be reported in GPS coordinates by latitude and longitude in decimal degree to five decimal places, to a minimum accuracy of 30 feet, relative to NAD83, or another national standard that is convertible to NAD83.
- (b) Monitoring sites shall include the following information:

- (1) A unique site identification number and narrative description of the site location.
- (2) A description of the type of monitoring, type of measurement taken, and monitoring frequency.
- (3) Location, elevation of the ground surface, and identification and description of the reference point.
- (4) A description of the standards used to install the monitoring site. Sites that do not conform to best management practices shall be identified and the nature of the divergence from best management practices described.
- (c) The following standards apply to wells:
  - (1) Wells used to monitor groundwater conditions shall be constructed according to applicable construction standards, and shall provide the following information in both tabular and geodatabase-compatible shapefile form:
    - (A) CASGEM well identification number. If a CASGEM well identification number has not been issued, appropriate well information shall be entered on forms made available by the Department, as described in Section 353.2.
    - (B) Well location, elevation of the ground surface and reference point, including a description of the reference point.
    - (C) A description of the well use, such as public supply, irrigation, domestic, monitoring, or other type of well, whether the well is active or inactive, and whether the well is a single, clustered, nested, or other type of well.
    - (D) Casing perforations, borehole depth, and total well depth.
    - (E) Well completion reports, if available, from which the names of private owners have been redacted.
    - (F) Geophysical logs, well construction diagrams, or other relevant information, if available.
    - (G) Identification of principal aquifers monitored.
    - (H) Other relevant well construction information, such as well capacity, casing diameter, or casing modifications, as available.
  - (2) If an Agency relies on wells that lack casing perforations, borehole depth, or total well depth information to monitor groundwater conditions as part of a Plan, the Agency shall describe a schedule for acquiring monitoring wells with the necessary information, or demonstrate to the Department that such information is not necessary to understand and manage groundwater in the basin.
  - (3) Well information used to develop the basin setting shall be maintained in the Agency's data management system.
- (d) Maps submitted to the Department shall meet the following requirements:
  - (1) Data layers, shapefiles, geodatabases, and other information provided with each map, shall be submitted electronically to the Department in accordance with the procedures described in Article 4.

- (2) Maps shall be clearly labeled and contain a level of detail to ensure that the map is informative and useful.
- (3) The datum shall be clearly identified on the maps or in an associated legend. (e)

Hydrographs submitted to the Department shall meet the following requirements:

- (1) Hydrographs shall be submitted electronically to the Department in accordance with the procedures described in Article 4.
- (2) Hydrographs shall include a unique site identification number and the ground surface elevation for each site.
- (3) Hydrographs shall use the same datum and scaling to the greatest extent practical.
- (f) Groundwater and surface water models used for a Plan shall meet the following standards:
  - (1) The model shall include publicly available supporting documentation.
  - (2) The model shall be based on field or laboratory measurements, or equivalent methods that justify the selected values, and calibrated against site-specific field data.
  - (3) Groundwater and surface water models developed in support of a Plan after the effective date of these regulations shall consist of public domain open-source software.
- (g) The Department may request data input and output files used by the Agency, as necessary. The Department may independently evaluate the appropriateness of model results relied upon by the Agency, and use that evaluation in the Department's assessment of the Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10727.6, and 10733.2, Water Code.

#### § 352.6. Data Management System

Each Agency shall develop and maintain a data management system that is capable of storing and reporting information relevant to the development or implementation of the Plan and monitoring of the basin.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728, 10728.2, and 10733.2, Water Code.

Table 1. Summary of GSP Data and Reporting Standards						
Measurement Class	Data and Reporting Standard					
Water Volume and Flow Measurements	, ,					
Water Volume	acre-feet					
Surface Water Flow	cubic feet per second					
Groundwater Flow	acre-feet per year					
Field Elevation Measurements						
Groundwater Elevation	Management of the second of th					
Surface Water Elevation	Measure and report to an accuracy of at least 0.1 feet relative to NAVD88, or another national standard convertible to NAVD88. Describe method of					
Land Surface Elevation	measurement.					
	Measure and report to an accuracy of at least 0.5 feet, or best available information, relative to NAVD88, or another national standard convertible to NAVD88.					
Reference Point Elevations	Describe method of measurement.					
	Report in GPS coordinates by latitude and longitude in decimal degree to five decimal places, to a minimum accuracy of 30 feet, relative to NAD83, or another					
Geographic Locations	national standard that is convertible to NAD83.					
	Specify a unique site identification number and narrative description of the site location.					
	Describe the type of monitoring, type of measurement taken, and monitoring frequency.					
Monitoring Sites	Specify the location, elevation of the ground surface, and identification and description of the reference point.					
e.m.g enec	Describe the standards used to install the monitoring site. Sites that do not conform to best management practices shall be identified and the nature of the					
	divergence from best management practices described.					
	Wells used to monitor groundwater conditions shall be constructed according to applicable construction standards, and shall provide the following information in					
	both tabular and geodatabase-compatible shapefile form:					
	-CASGEM well identification number. If a CASGEM well identification number has not been issued, appropriate well information shall be entered on					
	forms made available by DWR, as described in Article 4, Procedures, of the Emergency Regulations.					
	-Well location, elevation of the ground surface and reference point, including a description of the reference point.					
	-A description of the well use, such as public supply, irrigation, domestic, monitoring, or other type of well, whether the well is active or inactive, and					
	whether the well is a single, clustered, nested, or other type of well.					
Wells	-Casing perforations, borehole depth, and total well depth.					
	-Well completion reports, if available, from which the names of private owners have been redacted.					
	-Geophysical logs, well construction diagrams, or other relevant information, if available.					
	-Identification of principal aquifers monitored.					
	-Other relevant well construction information, such as well capacity, casing diameter, or casing modifications, as available.					
	For wells that lack casing perforations, borehole depth, or total well depth information to monitor groundwater conditions as part of the GSP, the Agency shall					
	describe a schedule for acquiring monitoring wells with the necessary information, or demonstrate to DWR that such information is not necessary to understand					
	and manage groundwater in the basin.					
	Well information used to develop the basin setting shall be maintained in the data management system.					
	Data layers, shapefiles, geodatabases, and other information provided with each map, shall be submitted electronically to DWR in accordance with Article 4,					
Maps	Procedures, of the Emergency Regulations.					
ινιαρο	Maps shall be clearly labeled and contain a level of detail to ensure that the map is informative and useful.					
	The datum shall be clearly identified on the maps or in an associated legend.					
Hydrographs	Hydrographs shall be submitted electronically to DWR in accordance with the procedures described in Article 4, Procedures, of the Emergency Regulations.					
пуснодгарня	Hydrographs shall include a unique site identification number and the ground surface elevation for each site.					
	Hydrographs shall use the same datum and scaling to the greatest extent practical.					
Groundwater and Surface Water Models	The model shall include publicly available supporting documentation.					
	The model shall be based on field or laboratory measurements, or equivalent methods that justify the selected values, and calibrated against site-specific field					
	data.					
	Groundwater and surface water models developed in support of the GSP after the effective date of the Emergency Regulations shall consist of public domain					
	open-source software.					
	DWR may request data input and output files used , as necessary. DWR may independently evaluate the appropriateness of model results and use that					
	evaluation in the assessment of the GSP.					
Data Management Co.	Develop and maintain a data management system that is capable of storing and reporting information relevant to the development or implementation of the GSP					
Data Management System	and monitoring of the basin.					
Notes:	, -					

#### Notes:

- 1. Reference: California Code of Regulations, Title 23, Division 2, Chapter 15, Subchapter 2, Groundwater Sustainability Plans, Article 4, Technical and Reporting Standards.
- 2. Monitoring protocols shall be developed according to best management practices.
- 3. The Agency may rely on monitoring protocols included as part of the best management practices developed by DWR, or may adopt similar monitoring protocols that will yield comparable data.

  4. Monitoring protocols shall be reviewed at least every five years as part of the periodic evaluation of the GSP, and modified as necessary.

### **APPENDIX D**

Well Completion Reports for Groundwater Monitoring Network Wells

# State of California The Resources Agency DEPARTMENT OF WATER RESOURCES

Ph (70 )	M 8	0.000.0	- CORNE	-
11141		BART SI	No.	1 1 1/2
uni	She bear	TIOL	and the contract of	LOG

SHEET	1	of
HOLE NO	LCB	-4
ELEV. 2	5 (topo)	FEET
DEPTH_	1020	FEET
DATE DRILLE	6/24-6	6/25/97
ATTITUDE	Vertic	al

PROJECT	Lower Colusa Basin Conjunctive Use			DATE DRILLED	6/24-6/25/97
FEATURE	Exploratory Boring			ATTITUDE	Vertical
LOCATION _	12N/01E-06D*			LOGGED BY	F. Nasirian
CONTR	Eaton Drilling Co.	DRILL RIG	Ingersoll-Rand	DEPTH TO WATE	Not Determined
OON I H.			TH-400	- DEFINITO WAN	

<sup>\*</sup> Near the south east corner of the intersection of County Line Road and the Colusa Basin Drain

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS	
0.0	CL	Holocene/Pleistocene Sediments 0.0-1020' 0.0-10.0' Clay (CL): Brown, medium plasticity, moist.	11111		Drilled mostly with clear water, at times bentonite was added.	
20.0	GC SP	10.0-20.0' Clayey Gravel (GC): Brown, about 5-10% clay, fine to medium, gravel wet. 20.0-40.0' Sand (SP): Gray, less than 5% fines, fine to coarse grained sand.  40.0-70.0' Clay (CL): Brown, about 5-10% fine gravel, about 5-10% sand, moist	diameter with a 4" coll both ends.  The collars would not any cuttings larger tha 1/2 -3/4" size to come surface.			
40.0					any cuttings larger than 1/2 -3/4" size to come to the surface.	
60.0	CL		411141111		Soils and geologic contacts were determined from logging the drill cuttings recovered from the shaker.	
80.0		70.0-245.0' Ctay (CH): Bluish-brown, high plasticity, moist.	talana la an			
100.0	СН		1111111111			
120.0			trivil min			
140.0		140.0-160.0' Clay with about 10-15% fine to coarse grained sand.				
160.0						

SHEET \_ 2 \_ OF \_ 6 \_ HOLE NO. \_ LCB-4

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
60.0	CH	Holocene/Pleistocene Sediments 0.0-1020.0' (cont'd)	-		
180.0		9			
1111					
200.0		190.0-205.0' Bluish-gray, high plasticity.			
1111		205.0-230.0' Bluish-green, high plasticity.			
220.0		*			
1	СН	230240.0' About 10-15% sand and fine	1		
240.0		gravel.			
a l		245.0-280.0' <u>Gravel (GP)</u> : Gray, less than 5% fines, about 10-15% fine to coarse grained sand, mostly fine gravel.			
260.0	GP				
1					
280.0		290 0 220 0' Grouphy Clay of Cl.). Crowish brown			
1		280.0-320.0' Gravely Clay g(CL): Grayish-brown, 15-20% sand, 20-25% fine to medium gravel.	1		
300.0	g(CL)	300.0-310.0' Reddish brown			
11111			1		
320.0		320.0-330.0' Sand (SP): Gray, fine to medium			
1	SP	grained sand, about 5-10% fines. 330.0-355.0' Gravel (GP): Gray, about 5-10% sand, fine to coarse grained gravel.			
340.0	GP/	**************************************			
1111	GW				
360.0	SP	<ul> <li>355.0-360.0' <u>Sand (SP)</u>: Gray, fine to medium grained.</li> </ul>	1		

HOLE NO. LCB-4

PROJECT & FEATURE Lower Colusa Basin Conjunctive Use

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
380.0	СН	Holocene/Pleistocene Sediments 0.0-1020.0' (cont'd) 360.0-395.0' Clay (CH): Reddish-brown, high plasticity.			Added bentonite to the mud.
420.0	GP	395.0-515.0' Poorly Graded Gravel (GP): Gray, about 10-15% fine to coarse sand grained, up to ½" in diameter.			Added bentonite to the mud.
440.0	GP	460.0-480.0 <sup>1</sup> Clayey Gravel (GC): About	1		
460.0	GC	10-15% clay.	Transferen		
480.0	GP	480.0-515.0' Mostly fine gravel.	1111111111		
500.0	GP		11111111		
520.0	ML	515.0-530.0' Silt with about 5-10% fine gravel.			
540.0	GC	530.0-720.0' Clayey Gravel (GC): Gray, about 15-25% fines, mostly fine gravel.	to contract to		
560.0		. 9-84)	-		

SHEET _	4	OF	6	
HOLE NO.		LCB-4		

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
560.0		Holocene/Pleistocene Sediments	1		
=		0.0-1020.0' (cont'd)	3		
=			3		
580.0	GC		1		
=			3		
E	1		1 4		
=	-		1		
600.0		600.0-620.0' Mostly fine to coarse grained	1 4		
=	1	sand.	1		
=	GC		1 1		
620.0			1 3		
020.0			3		
=			1 3		
=			3		
640.0	1		]		
3			1 3		
=		070 0 000 01 41 44 45 500	1 3		
=		650.0-680.0' About 40-50% sand and gravel.	1 3		
660.0	GC/		1 3		
=			1 3		
3			1 3		
680.0			1 4		
=			]		
=			1 3		
	1		1		
700.0-	GC	700.0-720.0' About 10-15% fines, gravel	1 3		
=	1	up to 3/4" in diameter.	]		
Ė			3		
720.0		720.0-1,000.0' Sandy Clay s(CL): Gray about	] ]		
=		15-25% fine to medium grain sand, less than 5% fine gravel.	3		
=		g	1		
=	s(CL)		1 3		
740.0			=		
=			1 3		
=			1 =		
760.0			1		

PROJECT & FEATURE Lower Colusa Basin Conjunctive Use DEPTH (ELEV.) SAMPLE NO. LOG FIELD CLASSIFICATION AND DESCRIPTION MODE REMARKS 760.0-Holocene/Pleistocene Sediments 0.0-1020.0' (cont'd) s(CL) 780.0. 780.0-800.0' Mostly lean clay less than 5% sand. CL 800.0 810.0-820.0' About 25-30% sand, fine to medium grained. 820.0s(CL) 840.0-860.0-860.0-900.0' About 35-40% sand mostly fine to medium grained. 880.0 900.0s(CL) 900.0-940.0' About 30-40% sand, mostly fine to medium grained. 920.0-940.0 940.0-960.0' Mostly clay with almost no

960.0 -

CL

sand.

SHEET 6 OF 6 HOLE NO. \_\_\_ L CB-4

PROJECT & FEATURE Lower Colusa Basin Conjunctive Use SAMPLE NO. DEPTH FIELD CLASSIFICATION AND DESCRIPTION LOG MODE REMARKS (ELEV.) 960.0-Holocene/Pleistocene Sediments 0.0-1020.0' (cont'd) 980.0 980.0-1020.0' Mostly clay with some sandy clay s(CL) 1000.0 1020.0 Hole bottomed @ 1020.0' 1040.0ATON DRILLING COMPANY
Lell #:

WR RECLAMATION LCB-4

DERTICAL SECTION

OERTICAL SECTION

CLOSURE

CLOSURE

Distance: 0.55 FEET

Rearing: 255.7 DEGREES

[.U.D.: 809.95 FEET

PLANE OF

BOTATED
90 DEGREES

Calc. Method:

Tanantia.

. Well #: DWR RECLAMATION LCB-4

Date: 06-25-1997

CLOSURE

Н

Distance: 0.55 FEET

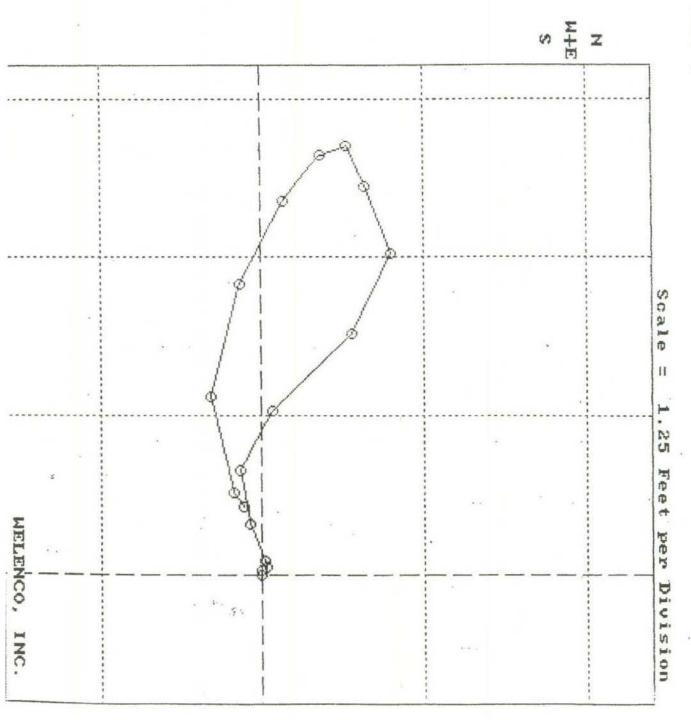
Bearing:

255.7 DEGREES

T.U.D.: 809.95 FEET

Balanced Tangential

Calc. Method



\*

#### >>>> Welenco, Inc.>>>> DIRECTIONAL SURVEY

Date: 06-25-1997

Company : EATON DRILLING COMPANY Well No : DWR RECLAMATION LCB-4

Field : DUNNIGAN State : CALIFORNIA

State : CALIFORNIA County: YOLO Witnessed By: SMITH Rec. By: ROBERTI

Location : COLUSA BASIN DRAIN & COUNTY LINE RD.

Remarks

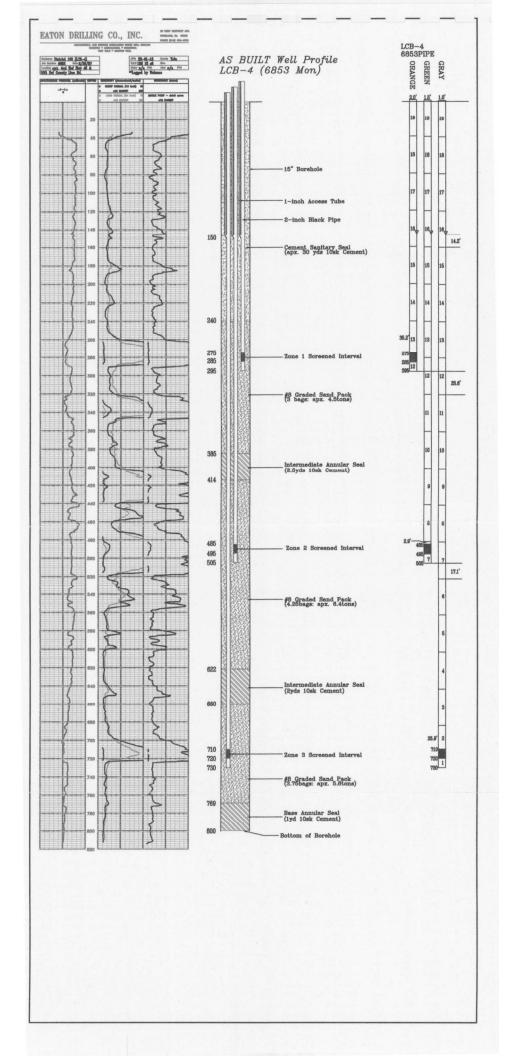
OTHER SERVICES: ELOG

:	*****	*******	*****	******	*****	*********	******	****
	Measured	Incli-	Direc-	Course	True	Closure	Closure	
	Depth,	nation,	tion,	Deviation,	Vertical	Distance,	Bearing,	
	Feet	Degrees	Degrees	Feet	Depth, Feet	Feet	Degrees True	
	0	0.0	0	0.00	0.00	0.00	0.0	20
	50	0.0	210	0.00	50.00	0.00	32.0	
	100	0.1	268	0.04	100.00	0.04	268.0	
4	150	0.1	30	0.09	150.00	0.07	298.0	
	200	0.2	236	0.13	200.00	0.12	281.6	
	250	0.5	254	0.31	250.00	0.41	257.9	
	300	0.5	267	0.44	300.00	0.84	259.2	
ĺ	350	0.8	316	0.57	349.99	1.29	273.7	6
	400	1.2	315	0.87	399.99	2.02	290.4	
	450	0.6	253	0.79	449.98	2.71	291.6	
t	500	0.7	246	0.57	499.98	3.15	284.7	
	550	0.1	257	0.35	549.97	3.43	281.1	
	600	0.5	148	0.26	599.97	3.33	278.1	
	650	0.6	113	0.48	649.97	2.95	273.5	
	700	1.1	121	0.74	699.96	2.29	265.8	
	750	1.1	86	0.96	749.95	1.45	254.7	
	800	0.7	64	0.79	799.95	0.68	251.6	
	810	0.9	48	0.14	809.95	0.55	255.7	

Equip.: L-16 Office: BFL Job No.: 28403

Calculation Method: Balanced Tangential

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



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FORM 115	GATION	DIVISION OF WATER RE		5			SHEET I
<del></del>		STATE OF CALIFORNIA	U.S.	J.S.B.R.	Number		44
		_ WELL LOG	3	LOCAL DE	SIGNAT	31 NON31	
			Date Dril	led Nov	. 8, :	1947	
LOCATION1	500' S. 1	200' W. of N. E. corner			Cole	una	Co.
Col	usa Co.,	Sacto. Valley Dist., Kirkvill	Le Quad.				-/
OWNER			_		KETCH		•
DATE COMPLETED	·		_	_			
DIAMETER OF CAS	14"	hole 8" csg Type Rotary	_	<b>E</b> 91 <b>W</b> 818	YFIDEN	Sec. 137	)G (52
DRILLED BYV	alley Dri	lling Co.	_			•	<b></b>
SOURCE OF INFO	RMATION_D	riller					
INSPECTED WHIL	E DRILLING	SEE FILE NO.	-				
SURFACE ELEVAT	ion 31 ft	<u>. 158</u> ' Depth					
DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL		THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0	22	Top soil & clay					
22	27	Gravel and sand					
<u>27</u> 136	136 158	Clay Gravel				<del> </del>	
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	+			+	<del>-</del>		
				1		<del>                                     </del>	

LOG OBTAINED BY\_\_\_\_\_\_DATE

97868 \$-32 15M CALIFORNIA STATE FRINTING OFFICE

ORIGINÁL File Original, Duplicate and Triplicate with the DIVISION OF WATER RESOURCES P. O. BOX 1079 SACRAMENTO 5, CALIFORNIA

### **DIVISION OF WATER RESOURCES**

•	WATER		DRILLERS RI	EPORT A	The street of the street	State Well No Other Well N	Not Fill In . 13N/1W-7 10
		(Sections 7076	5, 7077, 7078, Water Code)	Victor Lod	e Sec. 13752	Region	
(1)	Address	1309 Wes Wood	Aulman stwood Way lland, Calif. ification C-57		d use or uses c  n   z c and		(3) Equipment used (check):  Rotary   Cable   Dug well
	Owner: Name Address			New we	f work (chec	Recondition	Other
(5)	Well log: Total depth of well Depth From Grou		Give details of formation stone, hardpan, rock. Incl of material, structure (lo	lude size of grave	l (diameter) a	and sand (fine,	ravel, clay, shale, sand- medium, coarse), color
	Surface ft. to	28 ft.	Soil and cla				
	28 ""	31"	Loose redin		<u>vel</u>		
	31 " "	<u> 39                                    </u>	<u>Yellow a ad</u>				<del></del>
	39" "	54"	<u>Dribble gol</u>	low saudy	<u>clay</u> .	·-··	
	54 ""	72"	ollow clay				
8	72 "	<u>78                                    </u>	<u>Brithle pol</u>			<del></del>	
<b>*</b> !	<u>78</u> " "	<u> </u>		bluo Jra <mark>v</mark>			
	<u> </u>	84 "	<u> Mellow clay</u>				
=	81, " "	<u>8</u> 5	Loose lies	<u>bīna "rev</u> .	7.1	<del></del> :	
	<u>86</u> " "_	116	— Moljov ClaA				
	<u>116</u> ""	126 "		<u>llow auroj</u>	<u>, стэй —</u>		nnn
	<u>126</u> " "_	143"	Yellow_clay				<del></del>
	<u>143</u> " "_	155"		<u>low sendy</u>		<del></del>	
	<u> </u>	<u> 195 "                              </u>	<u>Looge media:</u>	<u>n blije gr</u>	ovel		
	<u>165</u> ""_	157 "	<u> </u>				
	<u>167</u> " "_	177"	<u>Looso rediu</u>		<u> </u>		
	177 " "	180	<u> Tellow clay</u>				<del></del>
		·					
		***				<del></del>	<del>-                                      </del>
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
	** **		<u> </u>				
	** **	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Plotted and Coded			<del></del>	
	22 23		130	IW .768			
	33 39	······································	As Weil 1914	100 . 100	<u> </u>		
						· · · · · · · · · · · · · · · · · · ·	
	If additional space	ce is required, co	ontinue on DWR Form No.	. 246—Suppleme	nt, and attacl	h to respective	report copies.
(6	6) Casing left in wel	1:					
	LENGTH FT.	DIAMETER Inches	SINGLE, DOUBLE OTHER	, WELDED,		FOOT OR FCASING	SEATING BELOW GROUND SURFACE, F
	180	12	single		3/10	inch	180
	<del></del>						
-	A	BEETET-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-					
							-2

Type and size of shoe or well ringliana. Welded joints— Yes I No

WATER WELL DRILLERS REPORT

SHEET 2 9

Do Not Fill In
State Well No. 13N/14

	(Sections 7076, 7	077, 7078, Water Code)		Region	
(7)	Perforations:	<b>~</b>			
	Type of perforator used Factor Perforated 108 ft. to	180 ft.	Hole size 그늘" 포	3/16" No. of holes 70	per ft.
	refriorated	>>	39 99	9) )) ))	
		>>	» »	39 39 39	
		***	,, ,,	95 95 95	
	,, ,, ,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	» »		
	37 27 27	»»	33 33		
	» »	»	,, ,,		
	3) 33		<b>37</b>		
	» » » »	»			
	>> '		» »	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
(0)	Water levels:	(9) Well	pumping test:		
(8)			66/7/51 B	y whom Wils	son .
	Depth at which water	Date	of test \\ \dagger_1 \dagger_2 \dagg	y wnom 11	ft
	first encountered 78	it. Depti	1 to water when test	started 53 st 50 G.P.M.	
	Depth to water	G.P.A	down from standing	level 90	ft
	before perforating 53	It. Draw	4 at completion of	st 96 ; level 96 test 570 G.P.M.	77
	Depth to water	(. D	damin at completion	of test () )	
_	after perforating 53	Lange	th of time tested	Approx. 10 f	lours
7.	Note any change in water level while	Tem	nerature of water	55 degrees	
	HOHE	Was	gas present in water	Yes 🖺 No	
(10	) General:  Was well gravel packed?	Size of rock 5/	8 inch	Thickness of pack	<u>inch</u>
	Was a surface sanitary seal provided?	none			
	Were any strata sealed against polluti	on? 💹 Yes 🛂 No II yes	s, attach detalled que	rionon.	
	Strata sealed			CONSIDENT	+ 3 -
	Was analysis made of water?  Yes	No If yes, attach cop	y.	GONEIDENT Section 7076.1, Was	± 4 ±
	Was electric log made of well? [ Ye	s 🔼 No If yes, attach cop			- COAG
	If well abandoned, was it plugged an	d sealed?			
	Method of plugging and sealing				
	T. C. Thy Succepti	. B by Simpson,			
(11	Is a star toy Suggests ) Location: ) by Johnson, T	by Doherty	(12) Time of we		
,	North Sect	· N- 7	Work starte	date $\frac{5}{31}/\frac{51}{51}$ Complete	ed date 6/8/51
	Section 2	tion No, 7	Date of this	report 5/9/51	
	O	vnsmp		,,	
}		e & Meridian	 Well dri	LLER'S STATEMENT:	
		w location of well in Sec-		ell was drilled under my ji	urisdiction and th
	1 1 1 1	w location of well in Sec- ion, thus $(\times)$	rebort is tru	e to the best of my knowled	dge and belief.
		tances to section lines from	-	, ,	-
		vell, Nor S 2580 ft.		Aulmanand Aulma	in
		nd E)or W 1450 ft.	[	Well Driller	. —
		w location of nearest	. A	VERLENS	w
. i .	1 1 1 1 3110	, ,,	_	•	

	Show location of nearest known well, thus (O)
1 MILE	 Distance to nearest known well2000ft.

License No. 109870 Classification C-57
Unity 1, 1950 to
Dated June 30, 1951 Inch 19
Ploffed and Coded

PROJECT	Lower Colusa Basin Conjunctive Use Invest.	HOLE NUMBER _L	.CB-1
FEATURE	Test Hole for Multi-Head Peizometer	DATE DRILLED 1	2/22 & 23 /98
LOCATION	White Rd.@ Colusa Basin Drainage Canal	LOGGED BYC	huck Owens CKO
CONTRACT	OR Eaton Drilling Company		/ertical
DRILLER	Dwayne	DEPTH TO WATER	Unknown (~ 3 ft)
DRILL RIG	Direct Rotary, Ingersoll-Rand TH-400	HOLE DEPTH1	,000 ft
		ELEVATION ~5	50 ft MSL

DEPTH	uscs	FIELD CLASSIFICATION AND DESCRIPTION	SY	REMARKS
0	CL	03-103 GRAVELLY LEAN CLAY w/ SAND: Gray; gravel (>15%) is fine (4 mm); sand >15%	3	General:
	GC	10∋-20∋ CLAYEY GRAVEL w/ SAND: Brown; sand is coarse to fine ≥15%).	5	• Drill bit diameter = 6 1/4ээ
20 -	CL	203-303 LEAN CLAY: Brown	3	Drill rods 223 long, 2½3 dia.     with 43 collars at both ends, so clasts >13 prevented from reaching surface
40	CL	303-653 GRAVELLY LEAN CLAY w/ SAND: Brown; gravel is fine, angular to sub-angular quartz w/ a few clasts to 11/233 sub-rounded volcanics; sand is coarse (>15%)	3	Mud rotary method, so all cuttings are saturated and moisture content not noted.
60		→ Probably thin interbeds		<ul> <li>Log is based on cuttings sampled from shaker about</li> </ul>
80 -	GP	65∋-80∋ POORLY-GRADED GRAVEL: Gray; most gravel (~90%) is fine, but a few 1∋∋ clasts, all is subangular to sub-rounded quartz & volcanics  → Minor Aquiter (70₃-80₃ best)	15	every 10 <sub>3</sub> , but sampling not consistent, plus lag-time error renders elevations of contacts inaccurate – more so with increasing depth.
100	GP- GC	803-1203 POORLY-GRADED GRAVEL w/CLAY: Brown; gravel is fine, sub-rounded to sub-angular (>5%)	5	USBR 5005 Unified Soil Classification System used     Logging Problem:
120				The rotary drilling method mixes cuttings from thin beds together in a mud slurry with any sluffed materials, and the
	GC	120∋-150∋ CLAYEY GRAVEL: Brown  → Many thin, silty interbeds?	5	origination depth of samples from the shaker is uncertain due to irregular collection, lag time and manner cuttings are
140		Williams, only monorate	5	brought to the surface. Thus, thin beds are often not identifiable, contacts are incorrect or uncertain, and soil classification is obstructed.

DRILL HOLE LOG

Project & Feature: Lower Colusa Basin Conjunctive Use

		: Lower Colusa Basin Conjunctive Use		Hole No. LCB-1
DEPTH	USCS	FIELD CLASSIFICATION and DESCRIPTION	SY	REMARKS
160		150э-260э <u>LEAN CLAY</u> : Brown;		
180		190-210: gray, but similar materials		
200	CL	→ Numerous thin, clay/silty interbeds	3	
220				
240				
260 -				
280	SP	260∍-290∍ POORLY-GRADED SAND: Brown; sand is coarse sub-angular to sub-rounded, mostly quartz; <5% clay/silt; <15% fine gravel  → Producing Zone (270∍-290∍ best)	25	
300	GP	2903-3103 POORLY-GRADED GRAVEL w/ SAND: Brown; sand is coarse (~40%); gravel is fine (~55%), all is sub-rounded to sub-angular	15	
320		3103-4053 LEAN CLAY w/ SAND & GRAVEL: Brown; sand is coarse and gravel is fine (variable 5-30%), all is sub-rounded & sub-angular		
340	CL/ SC	→ Numerous interbeds 320∋-355∋: 30% fine gravel	5	
360		355>-375>: ~50% coarse sand		

**DRILL HOLE LOG** 

Project & Feature: Lower Colusa Basin Conjunctive Use

2

DEPTH	uscs	FIELD CLASSIFICATION and DESCRIPTION	SY	REMARKS
360		(continued)		
380	CL/ SC			, [
400		375-405∋: ~15% fine gravel, sub-angular & sub-rounded		
420	GW	405∋-425∋ WELL-GRADED GRAVEL w/ SAND:  Brown; most gravel is fine, but all sizes up to ½ээ; sand is coarse (≥ 15% clay); <5% clay  → Good Producing Zone	20	p
440	sc	4253-4453 SANDY CLAY: Brown; sand is coarse (<5%); pebbles up to 133	5	
460	SP	445₃-470₃ POORLY-GRADED GRAVEL w/ SAND:  Brown; gravel is fine; sand is coarse; <10%.  → Good Producing Zone	20	
480	CL	4703-4903 SANDY LEAN CLAY: Brown; sand is coarse, sub-angular & sub-rounded; ~5% subrounded pebbles	3	
500	sc	4903-5103 CLAYEY SAND w/ GRAVEL: Brown; ~50% / 50% clay and sand/gravel	5	
520	SP	510∋-525∋ POORLY-GRADED SAND: Brown; sand is coarse, sub-rounded to sub-angular; ~10-15% clay.  → Minor Aquifer	20	
540	sc	525∋-555∋ SANDY LEAN CLAY w/ GRAVEL: Brown; sand is coarse (30-50%); 5-15% fine gravel  → Several sandy/clayey interbeds	5	
560				

DRILL HOLE LOG

Project & Feature: Lower Colusa Basin Conjunctive Use

РТН		: Lower Colusa Basin Conjunctive Use		Hole No. LCB-1
60	USCS	FIELD CLASSIFICATION and DESCRIPTION	SY	REMARKS
580	CL	555∋-605∋ GRAVELLY LEAN CLAY w/ SAND: Gray; gravel is fine/pebble size; sand is coarse (~15%)  → several coarse/fine interbeds	5	
00				
320 -	sc	605∍-620∍ SANDY LEAN CLAY w/ GRAVEL: Gray  → Poor/Minor Aquifer	10	
640		620∍-720∍: LEAN CLAY – Gray; coarse sand & pebbles  → several clayey/coarse interbeds 625∍-650∍: ~15-25% coarse sand		
660	CL	650∋-660∋: ~10% fine gravel, well-graded to ½"	3	
880				
700		690∍-720∍: ~5-15% fine gravel & coarse sand		
720	sc	720∍-730∍ CLAYEY SAND: Gray-brown; Sand is coarse; <5% pebbles, all sub-angular and sub-rounded → Poor/Minor Aquifer	10	
740	CL	730 <sub>3</sub> -745 <sub>3</sub> SANDY CLAY: Gray-brown; Sand is coarse; <5% pebbles, all sub-angular and sub-rounded	3	
	sc	745∍-755∍ CLAYEY SAND: Gray-brown; Sand is coarse; <5% pebbles, all sub-angular and sub-rounded  → Poor/Minor Aquifer	10	
760				

Project & Feature: Lower Colusa Basin Conjunctive Use

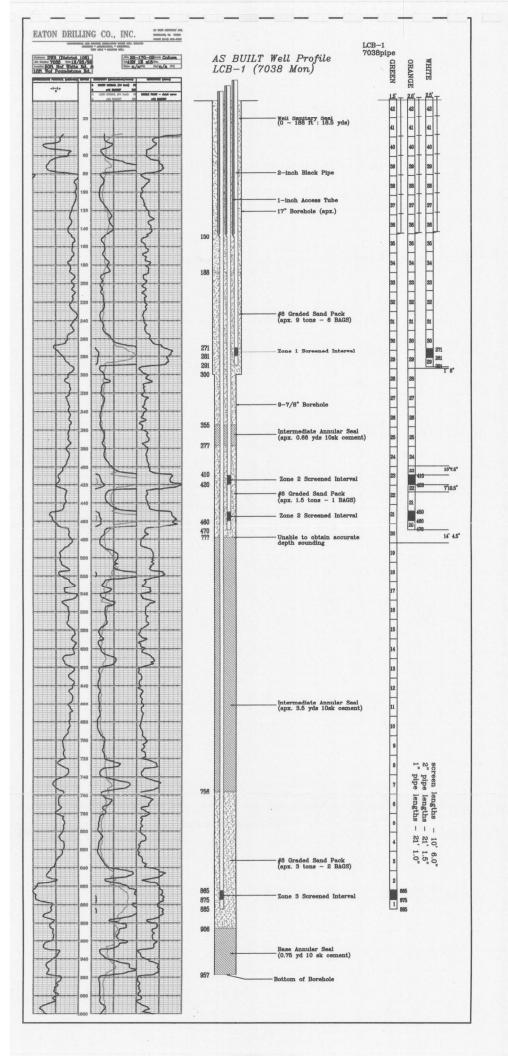
		Lower Colusa Basin Conjunctive Use		Hole No. LCB-1
	USCS	FIELD CLASSIFICATION and DESCRIPTION	SY	REMARKS
760		755>-840> SANDY LEAN CLAY: Gray-brown; sand is coarse (~25%); <5% pebbles		
780				
	CL	→ Numerous clayey/coarse interbeds	3	
800				7.
820				
840		8403-8953 POORLY-GRADED SAND: Gray; sand is coarse sub-angular (<75%); >5% pebbles		
860	SP	→ <u>Producing Zone</u>	25	
880		880-895>: ~15% pebbles; 5% clay (w/ 75% coarse sand)		
900		895>-930> WELL-GRADED SAND: Gray; sand is mostly coarse (~75%); ~5% pebbles; ~5% clay; other is medium sand		
920	SW	→ <u>Producing Zone</u>	25	
940	CL	9309-9459 SANDY LEAN CLAY: Gray-brown; sand is coarse (~25%); <5% pebbles	3	
960		945∍-960∍ POORLY-GRADED SAND: Gray; sand is coarse sub-angular (<75%); >5% pebbles  → Aquifer	25	LEC

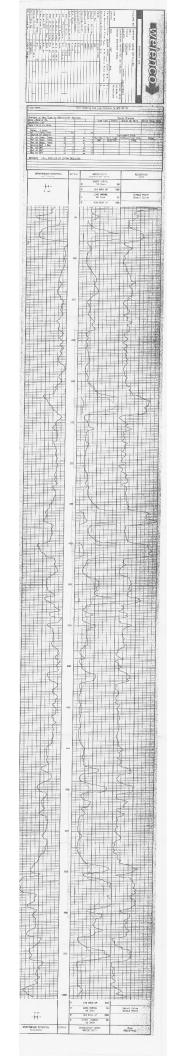
Project & Feature: Lower Colusa Basin Conjunctive Use

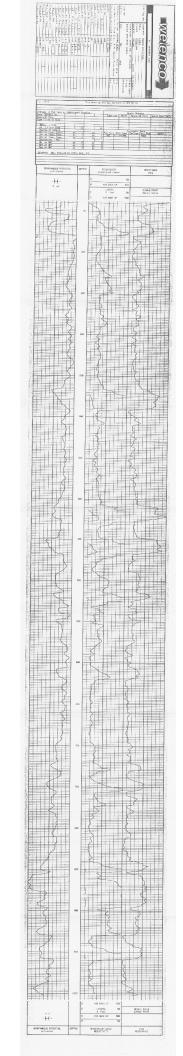
	eature	: Lower Colusa Basin Conjunctive Use		Hole No. LCB-1	
7TH U	JSCS	FIELD CLASSIFICATION and DESCRIPTION	SY	REMARKS	
		960>-1000> CLAYEY SAND: Gray-brown; sand is			
		960∍-1000∍ CLAYEY SAND: Gray-brown; sand is coarse, sub-angular (~75%); ~20% clay; ~5% pebbles			
0	SC		5		
00					
		T.D. = 1,000∋			
		· ·	1 1		
	_				
		*			

#### DIRECTIONAL SURVEY Tabular Listing

				RECTIONAL SUF abular Listin			*	
ŀ	Measured Depth	Incli- nation	Direc- tion	Course Deviation	T.V. Depth	Distance	Bearing	
	Ø	0.0	241	0.00	0.00	0.00	0.0	
	20	0.0	170	0.00	20.00	0.00	0.0	
	40	0.0	349	0.00	40.00	0.00	0.0	L spart se
	60	0.0	348	0.00	60.00	0.00	0.0	
	80	0.1	48	0.02	80.00	0.02	48.0	
	100	0.1	50	0.03	100.00	0.05	48.7	
	120	0.1	53	0.03	120.00	0.09	49.8	
	140	0.1	50	0.03	140.00	0.12	50.3	
1.0	160	0.0	32	0.02	160.00	0.14	50.2	
	180	0.1	200	0.02	180.00	0.12	54.3	
	200	0.1	257	0.03	200.00	0.09	56.2	- 10 S
	220	0.1	258	0.03	220.00	0.06	44.6	
	240	0.1	249	0.03	240.00	0.04	17.3	4-14-14-16-17
			308	0.03	260.00	0.04	334.2	
	260	0.1					316.8	
	280	0.1	280	0.03	280.00	0.07		
	300	0.1	250	0.03	300.00	0.10	301.1	
	320	0.1	242	0.03	320.00	0.12	287.4	
	340	0.2	284	0.05	340.00	0.17	282.5	
	360	0.2	290	0.07	360.00	0.24	283.8	5 30
	380	0.0	34	0.03	380.00	0.27	284.6	3 <sup>22</sup>
	400	0.0	36	0.00	400.00	0.27	284.5	
	420	0.0	45	0.00	420.00	0.27	284.6	
	440	0.4	280	0.07	440.00	0.34	283.7	
	460	0.1	246	0.09	460.00	0.43	281.6	4
	480	0.4	263	0.09	480.00	0.51	278.0	
	-500	0.3	238	0.12	500.00	0.62	273.2	
	520	0.3	252	0.10	520.00	0.71	269.2	
	540	0.2	272	0.09	540.00	0.80	268.2	
	560	2.3	268	0.09	560.00	2.88	268.4	
	580	2.2	243	2.79	580.00	2.3"	268.9	
	500	3.2	223	0.07	600.00	1.03	267.9	
	628	0.1	230	0.05	620.00	1.07	266.0	
	640	Ø.E	200	0.05	640.00	1.10	263.8	
	660	0.2	193	0.07	660.00	1.12	260.5	
	682	0.3	204	0.09	680.00	1.17	256.8	
	700	0.4	196	0.12	700.00	1.24	252.1	
	720	0.4	179	0.14	720.00	1.30	246.6	
	740	0.3	170	0.12	740.00	1.35	241.7	
				0.09	760.00	1.38	238.3	
	760	0.2	173				233.4	
	780	0.6	178	0.14	779.99	1.45		- 4
	800	0.5	180	0.19	799.99	1.57	227.7	1 1
	820	0.7	155	0.21	819.99	1.68	221.5	to the series
	840	0.7	158	0.24	839.99	1.79	214.4	
	860	0.5	135	0.21	859.99	1.89	208.7	
	880	0.6	140	0.19	879.99	1.96	203.4	
	900	0.3	138	0.16	899.99	2.03	199.4	
	920	0.9	125	0.21	919.99	2.11	194.0	<i>J.</i>
	940	1.0	133	0.33	939.98	2.27	186.4	N 14
			107	0.31	959.98	2.41	179.8	4.
	960	0.8	TROL	6.01	202.20	face & Tub.		190
	960 980	0.7	120	0.26	979.98	2.53	174.4	







CONTROL BOARD No. 5 (Intert appropriate number)

REGIONAL WATER POLLUTION

LOCATION NOT CHECKED

#### WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

CONP.

No Not Fill In 100 40376

State Well No.\_ Other Well No.\_

#### STATE OF CALIFORNIA

	(11) WELL LOG:
	Total depth 236 ft. Depth of completed well 236 ft.
	Formation: Describe by color, character, size of material, and structure.
<del></del>	Oft. to 20ft. Soil
<u> </u>	20 112 Clay
(2) LOCATION OF WELL:	112 " 114" Brottle
County Colusa, Owner's number, if any-	114 " 117" Clay
R. F. D. or Street No. Near Southwest Corner of	117 122 Brittle Clay
the Southeast 1/4 of the Southwest	122 138 Gravel
1/A of Costion 20 Manuality 37 March	138 142 Clay
1/4 of Section 22. Township 13 North,	142 157 Brittle Sandy
Range 1 West, M. D. B. & M., and	
being just off the Mumma Road Right	
(3) TYPE OF WORK (check):	
New well       Deepening □ Reconditioning □ Abandon □	165 177 Clay
If abandonment, describe material and procedure in Item 11.	-177 181 Brittle
(4) PROPOSED USE (check): (5) EQUIPMENT:	181 195 Sandy Brittle
	-195 232 Gravel
Domestic   Industrial   Municipal   Rotary	-232 236 Clay
Irrigation T Test Well  Other  Cable Dug Well	0 B
1 Dug wen	u u
(6) CASING INSTALLED: If gravel packed	9 11
SINGLE TOUBLE Gage	
From ft. to ft. Diam. Wall of Bore ft. ft.	
0 236 12" 3/16 22" 0 236"	
<u> </u>	Well Pumped 1900 GPM at 79 ft lift
	" " 1200 " " 53 " "
· · · · · · · · · · · · · · · · · · ·	" "
9 9 9 9 9 11 11 11	" "
	**
Type and size of shoe or well ring Point   Size of gravel: 5/8#	
Describe joint Collar and all perfex welded	. "/ 3
(4)	Sootie, 7
(7) PERFORATIONS:	
Type of perforator used Factory Punched	
Size of perforations 1-1/2* in., length, by 3/16* in.	
From ft. to ft. Perf. per row Rows per ft.	
" 196 " 236 " <u>4 " " " 24 " " "</u>	
	" " " " " " " " " " " " " " " " " " "
	" "
47 14 41 41 41 41 41 41 41	" "
	tr tr
(8) CONSTRUCTION:	u u
Was a surface sanitary seal provided?   Yes XNo To what depth ft.	to a
Were any strats scaled against pollution?   Yes No If yes, note depth of strata	to a
Ferm	
Tionii ft. to ft.	0 0
Method of Sealing None	41 41
Method of Sealing NOTE	Work started 19 , Completed Dec. 31 19 56
(9) WATER LEVELS:	WELL DRILLER'S STATEMENT:
	This well was drilled under my jurisdiction and this report is true to the best of
Depth at which water was first found 112 ft.	my knowledge and belief.
Standing level before perforating 45 ft.	NAME Aulman & Aulman
Standing level after perforating 45 ft.	Address 1309 Westwood Way
	Address 1309 Westwood Way
(10) WELL TESTS:	Woodland, California
Was a pump test made? 🙀 Yes 🗆 No If yes, by whom? W.P. Wilson	(Some) ( Callman
Yield: 1950 gal./min. with 79 T. H &t. draw down after 8 hrs.	[Signed] Well Driller,
Temperature of water	License No. 109870 Dated &/1/56 ,19
Was electric los made of well?     Yes   Of No.	picense No. 2 50 011 Dated 77 7 19

5		100 # J/38F	BASIN_Sa		+0 17-31	
COUNTY Colusa		DEPARTMENT OF WATER RESOURCES	DWR No.			
NEAR Arbuck		-	OTHER NOS		····	
NEAR, A POLICK		WELL LOG	-			
LOCATION 2,58	7' Wand ]	,478' S of NE Corner Section 4	· · · · · · · · · · · · · · · · · · ·		<u> </u>	
OWNER		ADDRESS				· <u></u> _
DRILLED BY	USBR	ADDRESS.		····		
DRILLING METHOS	Rotary	GRAVEL PACKEDDATE CO	MPLETED	<u>6-3-53</u>		
SIZE OF CASING D	EPTH 8" to	12', 4" to 470' STRUCK W	ATER AT			
PERFORATIONS	350 <b>'</b> t	o L701 SIZE		No.		
WATER LEVEL BEI	ORE PERFORAT	Piezometers set at			·	
TEST DATA: DISCI	ARGE G. P. M.	Packers set at 10',310',505',& 730' DRAWDOWN FT.		RUN		
OTHER DATA AVAI						
	ectric log	י יישי				
71	340	MQI	11 - 12 14			
SURFACE ELEV.	183	DATUM MSL SOURCE OF INFORMATIO	N USBR			
SURFACE ELEV.	ELEV. OF BOTTOM OF STRATUM		HICK-	SP. VIELD	. <u></u>	
SURFACE ELEV.	183	MATERIAL Silt, sandy to pebbly pebbles of quartz,	thick- chert, an	d Fran		
SURFACE ELEV.	ELEV. OF BOTTOM OF STRATUM	MATERIAL  Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-prown. Co	thick- chert, an	d Fran		
SURFACE ELEV.	ELEV. OF BOTTOM OF STRATUM	MATERIAL Silt, sandy to pebbly pebbles of quartz,	thick- chert, an	d Fran		
DEPTH 0-6.0	ELEV. OF BOTTOM OF STRATUM  Cored	MATERIAL  Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-prown. Co	thick- chert, an	d Fran		
DEPTH  O- 6.0	ELEV. OF BOTTOM OF STRATUM  Cored	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Co	thick- chert, an	d Fran		
DEPTH 0-6.0 7.5	ELEV. OF BOTTOM OF STRATUM Cored	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Co Silt. clayey, mausive, yellow-brown and, silty, friable, yellow-brown	thick- chert, an	d Fran		
DEPTH 0- 6.0 7.5 10.5	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  S	MATERIAL  Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Go  Silt. clayey, massive, yellow-brown  and, silty, friable, yellow-brown  Sand, very fine, silty, yellow-brown	thickness chert, an red 0.0	d Fran		
DEPTH 0- 6.0 7.5 10.5 12.3 13.0	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of chartz, sandstone, ill-sorted, yellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow	chert, an red 0.0	d Fran		
DEPTH 0-6.0  7.5  10.5  12.3  13.0  19.0	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted.vellow-brown. Co Silt, clayey, massive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow	chert, an red 0.0	d Frunto 53.	1	
DEPTH 0- 6.0 7.5 10.5 12.3 13.0	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of chartz, sandstone, ill-sorted, yellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow	chert, an red 0.0	d Frunto 53.	1	tz,
DEPTH 0-6.0  7.5  10.5  12.3  13.0  19.0	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow Sand, medium to coarse, friable, ill-sor	THICK NESS Chert, and red 0.0	d Franto 33.	1	tz,
DEPTH 0- 6.0  7.5  10.5  12.3  13.0  19.0  20.6  24.0	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Co Silt, clayey, massive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow chert, and Franciscan sandstone, yellow Silt, sandy, friable, slightly plastic,	THICK NESS Chert, and red 0.0	d Franto 33.	1	tz,
DEPTH 0-6.0  7.5  10.5  12.3  13.0  19.0  20.6  24.0  25.8	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow Sand, medium to coarse, friable, ill-sor chert, and Franciscan sandstone, yellow Silt, sandy, friable, slightly plastic, Clay	chert, an red 0.0	d Franto 53.	of quar	tz,
DEPTH 0-6.0  7.5  10.5  12.3  13.0  19.0  20.6  24.0  25.8  26.6	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted.vellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow Sand, medium to coarse, friable,ill-sorthert, and Franciscan sandstone, yellow Silt, sandy, friable, slightly plastic, Clay  Sand, medium to coarse, pervious, some pe	chert, an red 0.0	d Franto 53.	of quar	tz,
DEPTH 0-6.0  7.5  10.5  12.3  13.0  19.0  20.6  24.0  25.8	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted, yellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow Sand, medium to coarse, friable, ill-sor chert, and Franciscan sandstone, yellow Silt, sandy, friable, slightly plastic, Clay	chert, an red 0.0	d Franto 53.	of quar	tz,
DEPTH 0-6.0  7.5  10.5  12.3  13.0  19.0  20.6  24.0  25.8  26.6	ELEV. OF BOTTOM OF STRATUM Cored  H  H  H  H  H  H  H  H  H  H  H  H  H	Silt.sandy to pebbly pebbles of quartz, sandstone, ill-sorted.vellow-brown. Co Silt, clayey, mausive, yellow-brown and, silty, friable, yellow-brown Sand, very fine, silty, yellow-brown Clay  Sand, very fine, silty, friable, yellow Sand, fine pervious, well-sorted, yellow Sand, medium to coarse, friable,ill-sorthert, and Franciscan sandstone, yellow Silt, sandy, friable, slightly plastic, Clay  Sand, medium to coarse, pervious, some pe	chert, an red 0.0	d Franto 53.	of quar	tz,

Silt, clayey, some fine sand, yellow-brown

FORM 2003

40.9

LOG OBTAINED BY...

R. S. Ford

(3**0**W

NUMBER 13 24-4G1

指根制法律	ELEVENION OF TROUTERS	TRIPOLATION CONTROL CO	LOCAL D	ng espelanomacolog son anterior (n e processo anterior (n) anterior (n)	ASSOLUTE	TOTAL
42.3	Cored	Sand, very fine, silty	eer I	votas	PEET	VOIDS FEET
43.0	11	Sand, coarse to very coarse, ill-sorted	â, <u>loo</u>	ве		
44.8	11	Silt, friable, slightly plastic				
46.2	11	Gravel, porly pervious, friable, in cl	y-sil	t matr	x,ye	low-brow
50.0	11	Sand, coarse to very coarse, pervious,	friab	le. O	]-sort	ed.
		some silt, some pebbles of Franciscan chert, and Cretaceous sandstone (rare)	neta-s	edimer	ti, qu	artz,
53.1	ļi.			İ		
	<u> </u>	Gravel, permoable, friable ill-sorted, 39% Franciscan sandstone,4% Cretaceous	sanda sanda	matri tone,	x oeb 39% ch	<u>ble co</u> un ert
		(red and olive gray), 8% black chert, 7	í vein	quart	z	<del></del>
55	No core	Gravel	-			<del></del>
<u></u> 57	"					
	''	Clay and gravel	-			<del></del>
60	11	Firm gravel				
65.5	ff f	Clayey silt with pebbles				
77.0	Cored	Sand, silty with pebbles, friable, ill	-sorte	d, som	e lens	es
<del></del>		of pebble gravel				
87	No core	Silt, gravely to sandy, ill-sorted				
<u>1</u> 02	11	Sand, silty with clay streaks				
118	11	Silt, clayey to sandy				
122	11	Gravel, pebbly, sandy silt matrix				
	11					
125		Silt, clayey				
126.1	Cored	Silt, clayey, slightly plastic, massive	yel	low-br	own	
127.5	п	Silt, pebbly, firm, some sand and pebbl	Les			
133.0	11	Sand, fine to coarse with pebbles, fair	ly per	rvious	roog,	ly friab
		ill-sorted, pebbles of sandstone, cher	and	quartz		
	No core	Sand with streaks of clay, yellow-brow	1			
143			-		· ·	
143 150	ii ii	Sand, fine, ill-sorted, with silt, thin	streak	of c	lay and	l gravel
	II II	Sand, fine, ill-sorted, with silt, thin silt, clayey, yellow-brown	treak	s of c	lay and	i gravel
150 155	11	Silt, clayey, yellow-brown				i gravel
150			c, yel	low-b	rown	d gravel

FOR FIELD COPIES USE ALTERNATE LINES

NUMBER 11 SHEELS

非指揮某種	ELEVETION OF BOYTON OF Greatur	MATERIAL.	T対14年開展電路 甲基化丁	% 90105	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
8.7		Silt, clayey, slightly plantic, yellow	brown			
172.6	11	Sand, coarse, gravelly, yellow-brown			<u> </u>	
175.8	11	Silt, clayey to sandy, yellow-brown				
178.2	TT TT	Sand, coarse, gravelly, yellow-brown				
181.0	ll ll	Silt, clayey, yellow-brown				
181.6	11	Sand, coarse, gravelly, relies-brown				
182.5	11	Clay, silty, firm, out oli o				
188.0	"	Sand, fine, gravelly, pervious, ill-so	rted, 1	orown		<del></del>
198.0	11	Clay, silty, yellow-brown				
198.8	11	Clay, gravelly, olive				
203.0	11	Sand, gravelly, coarse, yellow-brown				
204.0	11	Clay, silty, sandy, plastic				
211.0	1 "	Sand, silty to gravelly, poorly pervious	us, ye	llow-b	rown	
215.5	H	Clay, silty to sandy, plastic, yellow-	rown			
219.8	Ħ	Gravel, sandy, pervious peolles of san quartz, yellow-brown	dstone	, cher	t.,	
242.4	11	Clay, silty, firm, some fine sand, olive t	o yell	bw-bro	MU	
253.4	11	Gravel, sandy, moderately pervious, ill- limonitic, yellow-brown	sorted	, de <b>e</b> r	ly wea	thered,
255.0	11	Silt, sandy to pebbly, yellow-brown		<del></del> -		<del></del>
258.0	· · · · · · · · · · · · · · · · · · ·	Gravel, sandy, limonitdi, yellow-brown				
260.6	11	Sand, fine, pebbly, pervious, friable,	yello	w-brow	n	
264.0	11	Sand, medium, pebbly, pervious, friable, r	ed-bro	wm		
265.8	11	Sand, fine to coarse pervious, loose,	olive-	brown		
274.0	11	Silt, clayey, some fine sand, yellow-b	rown			
279.6	ıı ıı	Sand, very fine, moderately pervious, fri	able,t	hin be	dded,y	ellow-bro
287.0	91	Clay, silty, plastic, with silt and sand,	yello	w-brow	n	
289.5	11	Silt, slightly plastic, yellow-brown	27			
291.0	¥1	Sand, very fine, yellow-brown			ਿਰ <b>ed</b>	
99988			AS W	ell III	14	2W - 4

Clay, silty, plastic, some calcareous nodules, yellow-brown

FOR FIELD COPIES USE ALTERNATE LINES



**WELL LOG** 

NUMBER 13/2W-4G1

LOCAL DESIGNATION

ylaice	·			A. A. S. A. L. L. S. S. S. S. P. A. L. S. P. S.			CONTRACTOR
- 1994)	DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS PEET	4% VOIDA	ABSKALUTE   VOIDS FEET	TOTAL VOIDS FEET
_	299•9	Cored	Silt, friable, thin badded, yellow-brown		eig vir i program para para para para para para para p	community of contract	
_	301.1	rs	Sand, very fine, moderately pervious, ol	ive-b	rown		
	303.6	77	Silt, friable, clayey, yellow-brown				-
_	311.0	Ħ	Clay, silty, some fine sund, calcareous	nodul	es, ye	low-∵	rown
_	317.4	n	Silt, clayey, firm, olive-gray				
_	317.9	11	Sand, very fine, friable, well-sorted				
_	324.0	11	Silt, clayey, firm, olive-gray				
_	331.0	11	Clay, silty, some fine sand, olive-brown				
- EG	332.7	11	Silt, clayey, friable, olive-brown				
	333.5	19	Clay, silty, olive-brown				
RNATE -	334.1	11	Sand, fine, pervious, friable, olive-br	own			
ALTE!	335.6	11	Silt, clayey, olive-brown				
USE.	359.5	11	Sand, fine, highly pervious, friable, ill			ve-bro	wn
COPIES	361.3	"	Clay, silty, brittle, calcareous zones,	blue-	green	<del></del>	
	365.1	11	Sand, fine, silty, moderately pervious,	ll-so	rted,	gray-g	reen
FIELD	384.1	11	Clay, silty, plastic, calcareous streaks	blue	green		
5 - 5 -	394•3	1 !	Silt, sandy, brittle, olive-gray				
_	404.C	11	Sand, medium, silty, pervious, friable, loos	e,ill-	sorted	yello	w-brown
-	422.C	11	Clay, silty, brittle, calcareous streaks,	•live-	green		
-	424.C	11	Silty, clayey, olive-green				
-	425.7	11	Clay, firm, massive, non-calcareous, pa	le oli	ve		
-	432.0	0	Sand, fine, pervious, loose, well-sorted	oliv	e-brow	n	
-	<b>4</b> 32 <b>.</b> €		Clay, silty, firm calcareous, pale oliv	'e			
-	434.7	11	Silt, clayey, friable to plastic, manga carbonate present, yellow-brown	nes <b>e</b> s	tains,	white	
- -	439.7	I	Silt, friable, massive, white carbonate r	  dules	yell	ow-bro	wn
-	445.5	11	Sand, fine pervious, friable, massive,	limoni	te st	ains	
-	447.2	HI -	Gravel, with fine sand, pervious, ill-son	ted,ol	ve-br	own	<del>                                     </del>

Gravel, pervious, massive, ill-sorted, sand 60% Franciscan sandstone, bilive-brown

Flotted and Coded

NUMBER 13/2W-4G1

=		<del></del>	WELL LOG	LOCAL D	ESIGNATI		
	PEPTH	ELEVATION OF BOTTON OF STRATUM	MATERIAL	THICKNESS FRET	% YOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
	455.0	Cored	Gravel, with medium sand matrix, pervious sandstone, chert, and quartz, olive-gra		e, of		
	463.3	11	Silt, clayey, firm, calcareous, manganese	stains	, yell	ow-bro	wn
_	<b>4</b> 66 <b>.</b> 6	11	Sand, silty, pervious, friable, olive-g	ray			
	474.2	11	Clay, silty, non-plastic, calcareous, olive	gray	tc blu	e-gray	-
	479.7	11	Silt, clayey, bedded, yellow-brown				
	<b>4</b> 81 <b>.</b> 2	11	Sand, very fine, pervious, loose, well-so	rted,y	ellow-	crown	
	488.0	1 11 11	Silt, clayey, yellow-brown				
_	<b>4</b> 93•7	11	Clay, silty, massive, clive-brown				
2 — 2 —	503.2	'!	Sand, medium, pervious, loose, friable, thin	-bodd e	d, orc	wra	
7 _ 6	513.2	!1	Clay, silty, massive, calcareous streaks,	blue	green		
ALTERNAT	514.7	11	Sand, fine, silty, pervious, friable, oliv	e-brow	n		
 - -	521.7	11	Clay, silty, massive, plastic, calcareous	streak	s,oliv	e-prov	m
	522.7	11	Sand, very fine, pervious, friable, ill-sor	ted,ol	ive-br	own	
	537.6	ii	Clay, silty, massive, plastic, calcareous, c	live-	to blu	le-gree	n
	538.9	11	Sand, coarse, pervious, loose, ill-sorted,	olive	-gray		
<u> </u>	543.3	11	Gravel, sandy, pervious, loose, ill-sorted,	olive	-gray		
다 -	5/3.3	11	Clay, silty, massive, calcareous, olive to	blue-	green		
_	<b>5</b> 65 <b>.</b> 6	11	Sand, fine, pervious, loose, well-sorted	, oliv	e-gray	,	
_	567.1	11	Clay, silty, firm, non-plastic, carbonate	resent	, yell	ow-bro	wn
_	<b>5</b> 68.6	11	Silt, bedded, friable, yellow-brown				
-	<b>5</b> 72 <b>.</b> 0	11	Sand, fine, silty, pervious, friable, bedded	ill-s	orted,	yellov	r-brow
_	574.8	11	Silt, massive, yellow-brown				
	577.9	(1	Sand, fine, friable, yellow-brown				
_	<b>5</b> 82 <b>.</b> 0	11	Silt, clayey to sandy, yellow-brown				
_	585.9		Clay, silty, massive, calcareous, some f	ine sa	nd, ye	llow-t	rown
_	587.2	11	Silt, clayey, bedded, calcareous, yello	w-brow	n		
	589.8	11	Sand, very fine, silty, pervious, friabl	e mel	l_cont	ed.	

NUMBER 13/2W-4G1

DEPTH	ELEVATION OF BOTTOM OF STRATEM	MATERIAL	THICKNESS	*\ Voios	ARSOLUTE VOIDS FEET	TOTAL VOIDS FEET
<b>5</b> 98 <b>.</b> 1		Silt, clayey, massive, yellow-brown			7167	PEET
602.5	11	Sand, very fine, silty, pervious, friab	e, ol	Lve-br	own	
604.1	11	Silt, friable, calcareous, yellow-brown		,		
607.8	11	Clay, silty, firm, massive, yellow-brow	<b>_</b>			
609.9	11	Silty, sandy, massive, calcareous, well	w-bro	wn.		
614.0	11	Silt, clayey, massive, yellow-brown				
617.8	11	Clay, silty, musive, pale olive				
619.2	<u> </u>	Sand, fine, silty, pervious, friable, ill-so	rted,y	ellow-	brown	
620.8	11	Clay, silty, massive, olive-gray				
626.2	11	Silt, clayey, massive, clive-brown				
6 <b>28.8</b>	11	Sand, fine, silty, pervious, friable, ol	ve-gr	ıy		
529.9	!!	Silt, clavey, olive-brown				
630.6	11	Sand, silty, olive-gray				<u> </u>
639.7	11	Clay, silty, olive-brown to blue-green				
642.0	n	Sand, fine, silty, olive-brown				
643.0	11	Silt, friable, calcareous, olive-brown		·		
649.3	!1	Clay, silty, firm, olive-brown				
651.8	11	Sand, filed, clayey, fairly pervious, olive-	-brown			
678.9	11	Car, ty,plastic to firm, olive-brow	i			
680.0	it	Silt, clayey, calcareous, olive-brown				
686.7	11	Clay, silty, plastic, calcareous, olive-	-brown			
688.0	11	Sand, fine, friable, stratified, ill-sor	ed,yel	low-b	rown	
704.7	н	Sand, silt, and clay, olive-brown				
7%.7	†ŧ	Clay, plastic, greenish-gray				
715.2	11	Clay, silty, plastic, carbonate nodules,	rellow	brown		
724.1	11	Sand, very fine, silty, pervious, friab	Le, wel	l-sor	ted	
		somewhat ashy, yellow-brown	i		1	

FOR FIELD COPIES USE ALTERNATE LINES

A PROPERTY

13N / 2W . 40+

NUMBER 13/2W-YG1

DEPTH	ELEVATION OF BOTTOM	WELL LOG	THICKNESS	ESIGNAT % YOLDS	ABSOLUTE	TOTAL
731.5	Cored	Clay, silty, firm, gray-green	PEET	A0192	FEET	PEET
735.7	11	Clay, silty, yellow-brown to gray-green				
745.5	11	Clay, silty to sandy, clive				
747.8	11	Sand, fine, silty, clayey, yellow-brown				
755•5	"	Clay, silty, calcareous, greenish-gray				
757.2	11	Clay, silty, massive, grayish-green				
738,0	11	Clay, silty, yellow-brown				
762.3	11	Sand, fine, silty, clayey, ill-sorted, brown	n to gr	reenis	h-gray	
7/17.3	11	Clay, silty, brittle, yellow-brown				
000 <u>.</u> 0	11	Clay, silty, weathered, red-brown				
777.5	11	Silt, clayey, ili-sorted, calcareous, ye	llow-br	own		
779.7	n	Clay, silty, firm, calcareous, manganese	stains,	yell	ow-bro	wn
781.2	11	Sand, silty to clayey, thin-bedded, yell	ow-brow	m		
787.5	п	Gravel, pervious, loose, pebbles to 1-in chert, metamorphics	ch, of	sands	tone,	
794.2	11	Clay, silty, firm, calcareous, olive to	blue-gr	een		
798.0	1!	Silt, clayey, calcareous, greenish-gray				
805.9	11	Clay, silty, firm, plastic, olive-brown				<u> </u>
811.8	ll ll	Clay, silty, firm, plastic, yellow-brow	1			
822.2	il	Sand, very fine, pervious thin-bedded i	ll-sort	ed,ol	ive-br	own
830,5	11	Clay, silty, firm to brittle, thin-bedded,	yellow	-brow	n	
832.0	11	Sand, pervious, loose, ill-sorted, yello	v-brown			
840.3	11	Gravel, sandy, pervious, loose			-	
841.8	11	Clay, silty, reddish-brown				
846.1	11	Clay, silty, bluish-gray				
849.5	<del>                                     </del>	Clay, silty, olive-brown				
852.0	TI .	Silt, sandy, calcareous, yellow-brown				
		T. D. at 852.0		, -, i	1 14	- / 4
			<del>. 13</del> /	1		रेक्केटर्ड

FOR FIELD COPIES USE ALTERNATE LINES

STATE OF CALIFORNIA THE RESOURCES AGENCY 13N/02W-12 Do Not Fill In Nº 115408

ORIGINAL file with DWR

### DEPARTMENT OF WATER RESOURCES

#### WATER WELL DRILLERS REPORT

72										Waier Code Soc	13752
(		· · · · · · · · · · · · · · · · · · ·					(11) <b>W</b> I	ELL	LOG:		10702
N							Total depth		778	ft. Depth of completed well	ft.
Ā										acter, size of material, and structure	<u> </u>
							1			ft. to	ft.
(2) LOC	CATIO	N OF/W	ELL:						TEST	HOLE ONLY	
County	Co(.,	5 0		wner's numb	er, if any		0	_	6	Top soil	
	nge, and Sec	tion T13-	N, R	-2W, S	Sec. 2		6	_	18	Gravel in clay	
		ls, railroads, et		•			18	_	26	Loose gravel	
							26	_	34	Gravel in clay	
(3) <b>TYI</b>	PE OF	WORK	(check	):			34		45	Loose sand and	gravel.
New Well		epening [		ditioning [	Destroyir	ıg 🗍	45	_	76	Gravel in clay	
If destructi	on, describ	be material a	nd procedu	re in Item 1	1.		76	_	92	Loose sand and	<u>grav</u> el
(4) PRO	<b>DPOSEI</b>	USE (	cbeck):	:	(5) <b>EQU</b>	IPMENT:	92		182	Yellow clay	
Domestic	☐ Ind	lustrial 🗌	] Munici	ipal 🔲	Rotary	X	182		206	Loose sand and	
Irrigation	XX Te	st Well 🗌	] O <sub>1</sub>	ther 🔲	Cable		206	-	252	Gravel and clay	
		<u> </u>			Other		252	_	264	Loose gravel a	
(6) CAS	SING I	NSTALI	ED:				264		376	Hard blue clay	
STE	EL:	OTHE	R:	NONE	if gravel pac	ked	376		380	Cemented rock	<del></del>
SINGLE [	j <b>bo</b> u:	BLE 🗆 —					380		386	Loose sand and	
	ı	ı	Gage	Diameter	. 1	1	386		418	Hard yellow cla	
From	To	ĺ	or	of	From	To	418	_	434	Layers, sand &	blue
ft.	ft.	Diam.	Wall	Bore	ft.	ft.				clay	
			ļ				434	_	441	Hard blue clay	
<u> </u>	ļ		ļ			ļ	441		446	Sand and grave	1
	ļ <u></u>	<u> </u>	<u> </u>		l	<u> </u>	446		452	Blue clay	
Size of shoe o	r well ring:			Size of gra	vel:		452		464	Sand and grave	
Describe joint	ı				<del> </del>		464	-	486	Soft yellow cl	_
(7) PEF	RFORA	TIONS (	OR SCI	REEN: 1	NONE		486		504	Sand and grave	
Type of perfo	ration or na	me of screen		τ	<del></del>		504		532	Hard yellow cl	
			Perf.	Rows			532		536	Broken shale a	_
From	<b>I</b>	To	per	per	1 .	Size	536		544	Hard blue clay	
ft.	-	ft.	row	ft.	<u> </u>	. x in.	544			<pre>_n   Sand,gravel &amp;</pre>	
				ļ	<del>-</del>		559	_		Hard blue clay	
							615			Broken shale a	
				<del>                                     </del>			631	-	646	Hard yellow cl	
		-+		<del> </del>		<del> </del>	646		658	Gravel and bro	
				1			658		<u>726</u>	Hard yellow cl Broken shale a	
		ICTION:		NONE			726		778	Broken share a	nu clay
		al provided?		40 🗆	To what depth	ft.					
Were any stra	ita sealed ag	ainst pollution		No 🗌	II yes, note	depth of strata					
rom		. to	ft.						5-12-19	74 Completed 5-28- 19 74	
rom		to	ft.				Work start		ER'S STATE		
Method of sea										er my jurisdiction and this report is true	to the best
(.)		LEVELS:			,				ge and belief.	i	
		vas first found		-	ft.		NAME	E	. E LI	HDORFF CO., INC.	
		erforating, if			ft.		NAME		(Perso	n, firm, or corporation) (Typed or printed)	
		forating and o	1eveloping		ft.		Address	Þ	. O. Bo	x 1326	
(10) <b>W</b>		_	- Tar	£ 1	_ >		**Outes		ood <del>Lan</del> d	California 29569	5
Was pump te			<u> </u>	f yes, by who		L	[SIGNED]		77	V Jillian KUN	<del>-</del>
eld:		al./min. with	W/ 1 · ·		lown after	hrs.	LOZGINED		$\gamma \sim$	(Vall Driller)	
remperature Was alustria				cal analysis m		No [Y	┪,,, ,		27662	25 Deced 7-18	_, 19 <u>74</u>
was electric	iog made of	well? Yes	No 🔀	II yes	, attach copy	<u>.</u>	_ License 1	NO	£ / UUZ	25 Dated /-10	, 17 <u>7</u>

SKETCH LOCATION OF WELL ON REVERSE SIDE

CONFIDENTIAL LOG Water Codo Sec. 13752 67/399-750 8-72 30H TRIP OT OSP

#### WELL LOCATION SKETCH

NORTH BOUND	RY OF SECTION
NW 14	NE 1/4
sw 1/4	SE 1/4
 	½ MILE

Township 13 N N/S

Range 2 W E/W

Section No. 2

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

	Stimes - Achuc	kle Rd
WEST	Thiles wiles well site	<u>EAST</u>

B. Location of well in areas not sectionized.

Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

25 1 Mg 11 JUL 2761

BEPT OF WATER RESOURCES ORIGINAL File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.

## WATER WELL DRILLERS REPORT (Sections 7076, 7077, 7078, Water Code)

Do Not Fill In

	•	-	0			Sept.	1	Share of	'n	
		•		 140	 . 10	. 8	-	机火	٠.	*

STATE OF CALIFORNIA

1000	State Well No
We.	Other Well No. 3 1/2
Transf C	Other Well No. 14

<del></del>	(11) WELL LOG: 15J
	Total depth 362 ft. Depth of completed well 362 ft
<del></del>	Formation: Describe by color, character, size of material, and structure.
	0 ft. to 10 ft. 10' Yellow clay & rocks
	10 18 8 Sand & rocks
(2) LOCATION OF WELL:	18 110 92 Yellow clay and rocks
County Colusa Owner's number, if any-	110 118 8 Rocks and gravel 118 181 63 Yellow clay & rocks
R. F. D. or Street No.	
1/2 mile north & 1/8 mile west	
of SE corner in Sec. 15 Twp 13 NR2W	196
	249 270 21 Yellow clay & silt
	270 291 21 Loose sand & grave1
(3) TYPE OF WORK (check):	291 " 310 " 19 Blue clay
New well   ☐ Deepening ☐ Reconditioning ☐ Abandon ☐	310 314 4 Loose sand & gravel
If abandonment, describe material and procedure in Item 11.	314 342 28 Blue clay
(4) PROPOSED USE (check): (5) EQUIPMENT:	342 359 17 Loose rock, gravel
Domestic XX Industrial Municipal Rotary	359 362 3 Blue clay
□ □ □ Cable □	
Irrigation Test Well Other Dug Well Dug Well	a a
(6) CASING INSTALLED: If gravel packed	
	" "
of Diameter from to	u u
7 Prom ft. to ft. Diam. Wall of Bore ft. 11.	4 0
\(\frac{1}{12}\)	0 n,
9 4 9 6 0 0	u a
· · · · · · · · · · · · · · · · · · ·	9 0
. " " " " " " " " " " " " " " " " " " "	tt vi
Type and size of shoe or well ring Size of gravel: Rerun pea g	ravel "
Describe joint Butt welded	4 4
	9 0
(7) PERFORATIONS:	9 9
Type of perforator used Nachine cut at factory	0 0
Size of perforations 1/8 in., length, by 3 in.	0 0
From (t, to ft. Perf. per row Rows per ft.	(t ) te
-270 - 362	и и
0 0 0 0 0 0 0 0 0	" "
	" " Co.,
(8) CONSTRUCTION:	
Was a surface sanitary seal provided?  Yes 1 No To what depth	" "
Were any strata scaled against pollution?  Yes XXNo If yes, note depth of strata	
From ft. to ft.	The state of the s
0 11 0	
Method of Sealing	Work started Aug. 29 1963 Completed Sept. 9 1963
	work started 0.4 = 1.19 , Completed 1 19
(9) WATER LEVELS:	WELL DRILLER'S STATEMENT:
Depth at which water was first found ft.	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
	NAME E. E. LUHDORFF
anding level after perforating ft.	(Person, firm, or corporation) (Typed or printed)
	Address West Main St.
(10) WELL TESTS: m See over for test	Woodland, California
Was a pump test made? 🖔 Yes 🗆 No. If yes, by whom E.E.Luhdorff Co.	E & V 1 1
Yield: gsl./min, with ft. draw down after hrs.	[SIGNED] Well Driller
Temperature of water Was a chemical analysis made? 🗌 Yes 📕 No	License No. 123211 Dated Sept. 23 , 19 63
Was electric log made of well? ☐ Yes 译No	stars and some arm A aro DWR 188 (ney b. 544)

Results of test:

A FAS

Comment & folia villa Z min a S P a S man a comment place of allow S allowed place of a story of arts of S prain in a S comment & T a S place of a accomment of a story of a

.d. 2500

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	550	GTM	ø	2001	P.L.
	370			196	
	190			191	
	100			188	
rte:	retu	ra -		185'	

G. J. Maggaran Nasalingka Genilipal Statemak kalan, Chikathowika

Coluga

3.50

7-872 & 2000 16 / 200 274 2000 84 distribution 830.

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#### ORIGINAL File with DWR

RECEIVED

STATE OF CALIFORNIA

AHC	9 1	WELL	COMPLETION Refer to Instruction Pamp	REPORT
AUG	Z I	ココム	Refer to Instruction Pamp	blet

Page \_\_\_\_1 of \_\_\_\_1
Owner's Well No. \_ 254895 423344 Date Work Began

08/03/92 D. W. R. 08/04/92

Colusa County Health Dept.

Permit No. 0323 Permit Date

LATITUDE LONGITUDE

Permit No0323 Permit Date	AFRI/INS/OTHER						
GEOLOGIC LOG	WELL OWNER -						
ORIENTATION ( ) X VERTICAL HORIZONTAL ANGLE (SPEC	⊒Eγ) I						
DEPTH TO FIRST WATER(Ft.) BELOW SURFACE	Œ   l						
SURFACE DESCRIPTION							
Ft. to Ft. Describe material, grain size, color, etc.	<u> </u>						
0 3 Soil	Address 1550 Ft. North of Marine Ave.						
3 16 Gravel	City 750 Ft. West of Wyer Road						
16   30   Clay	CountyColusa						
30   100   Clay with Streaks of Gravel	APN Book 21 Page 130 Parcel 92						
100 125 Clay	Township 13 N Range 2 W Section 20 ++						
125 140 Sand & Gravel	I stitude NORTH Longitude WEST						
140   185   Clay							
185 196 Gravel & Sand	LOCATION SKETCH X ACTIVITY (\(\sigma\)) -						
196 210 Clay							
210   225   Gravel & Sand	750 Ft MODIFICATION/REPAIR — Deepen						
225 240 Clay	Other (Passifu)						
240 252 Grayel & Sand	Z Contex (Specify)						
252 300 Clay	DESTROY (Describe						
300   315   Gravel & Sand	DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"						
315 320 Clay							
	「						
1 1	WATER SUPPLY						
1 1	X Domestic						
	Marine AvePublic						
	Irrigation						
	Industrial						
	"TEST WELL"						
	CATHODIC PROTEC						
	SOUTH TION						
	such as Roads, Buildings, Fences, Rivers, etc.						
	PLEASE BE ACCURATE & COMPLETE.						
	DRILLING ROTARY FLUID Mud						
	WATER LEVEL & YIELD OF COMPLETED WELL						
	DEPTH OF STATIC WATER LEVEL						
	ESTIMATED YIELD (GPM) & TEST TYPE						
TOTAL DEPTH OF BORING320 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)						
TOTAL DEPTH OF COMPLETED WELL320 (Feet)	* May not be representative of a well's long-term yield.						
	The state of the s						

DEPTH	BORE-		CASING(S)			DEPTH		ANNULAR MATERIAL			
FROM SURFACE	HOLE DIA.	TYPE (∠)	MATERIAL/ INTERNAL	GAUGE	SLOT SIZE	FROM SURFACE		CE- E	TYPE		
Ft. to Ft.	(Inches)	BLANK SCREEN CON- DUCTOR FILL PIPE	GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft.	to Ft.	MENT TO	BEN- ONITE FILI (ニ) (ニ	(TYPE/SIZE)
0 ; 200	9"	XX	F-480	5"	4		0	; 25	X		
200 260	9"	XX	F-480	5"	111	.032	25	340			Pea Gravel
260 300	9"	XX	F-480	5"	4 '			1			$\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{2}$
300   320	9"	XX	F-480	5"	111 4	.032		t t			
											NUC 9 6 1992
									] [		ADG A O MAL

	ATTACHMENTS (∠)	CERTIFICATION STATEMENT		
/	Geologic Log	I, the undersigned, certify that this report is complete and accurate to the best of my l	nowledge	and belief.
	Well Construction Diagram Geophysical Log(s)	PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		
	Soil/Water Chemical Analyses	P. O. Box 759 Vacaville		696
	Other	Salvert Craw & 840-62	TATE 532	<sup>zip</sup> 2679
	ATTACH ADDITIONAL INFORMATION. IF IT EXISTS.	Signed WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED	C-57 LIC	CENSE NUMBER

**ORIGINAL** File with, DWR MAY 06 2010 STATE OF CALIFORNIA COMPLETION REPORT WELL ATE WELL NO./ STATION NO. Page 1 of 4 No. E0109311 Owner's Well No. 8454 Date Work Began 3/29/2010 ., Ended 4/1/2010 - ABCD LATITUDE LONGITUDE Local Permit Agency Colusa County Health Dept
Permit No 2010-018

Permit No. 2	010-018 Permit Date 3/17/2010	APN/TRS/OTHER
1 0111111 110.	010-018 Permit Date 3/17/2010	TYDY Y OXYDID
ORIENTATION (≼)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)	
DEPTH FROM SURFACE	METHOD ROTARY FLUID MUD  DESCRIPTION	
Ft. to Ft.	Describe material, grain, size, color, etc.	
	Top soil	Address 225' Wof Wilson Bend Rd & 840' Sof
5 42	Brown clay with gravel streaks	City Fruchtenicht CA
42 70	Sand and gravel	County COLUSA
70 210	Sand and gravel with brown clay streaks	APN Book 022 Page 130 Parcel 057
210 230	Sand and gravel	Township 14 N Range 1 E Section 35
230 980	Sandy blue clay	l v de vi
	Black sand with blue clay streaks	Latitude DEG. MIN. SEC. DEG. MIN. SEC.
	Sandy blue clay	LOCATION SKETCH————————————————————————————————————
	1	NORTH NEW WELL
1	I .	MODIFICATION/REPAIR
	I	— Deepen — Other (Specify)
<u> </u>	1	
1	1	DESTROY (Describe
<u> </u>	<u> </u>	— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"
. <u>I</u>	1 1 1	PLANNED USES (∠) WATER SUPPLY
] 		Domestic Public Irrigation Industrial
j i	<u> </u>	MONITORING →
<u> </u>		TEST WELL
	· · · · · · · · · · · · · · · · · · ·	CATHODIC PROTECTION
		HEAT EXCHANGE
		DIRECT PUSH
<u> </u>		INJECTION VAPOR EXTRACTION
		SPARGING
į		SOUTH REMEDIATION
į	1	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.
İ		necessary. PLEASE BE ACCURATE & COMPLETE.
<u> </u>	1	WATER LEVEL & YIELD OF COMPLETED WELL
i		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE
i i	1	DEPTH OF STATIC
İ	: · · · · · · · · · · · · · · · · · · ·	WATER LEVEL (Ft.) & DATE MEASURED
TOTAL DEPTH OF	BORING 1540 (Fait)	ESTIMATED YIELD * (GPM) & TEST TYPE
	1015	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)
TOTAL DELIGIOR	COMPLETED WELL 1015 (Feet)	May not be representative of a well's long-term yield.

DEPTH		BORE -			7		C	ASING (S)			DEP	TH		ANN	ULAR	MATERIAL
FROM SURFA	ACE	BORE - HOLE	I	YPE							FROM SU				TY	PE.
Ft. to F	Ft.	DIA. (Inches)	BLANK	SCREEN	CON-	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	Ft.	CE- MENT ( <u>√</u> )	BEN- TONIT (✓)		FILTER PACK (TYPE/SIZE)
Zone	1					- !				,	0	30	1			Sand Slurry
0;	50	14	<u> </u>			,	PVC	2.5	SCH 80		30 ¦	40		<b>√</b>		Bentonite Seal
50¦	60	14		✓	1		PVC	2.5	SCH 80	.030	40	71			✓	SRI#8 Sand
60¦	70	14	✓	1	<u> </u>		PVC	2.5	SCH 80		71	84		7		Bentonite Seal
Zone¦	2				7						84	113			<b>V</b>	SRI#8 Sand
0	135	14	1				PVC	2.5	SCH 80		113	123		<b>V</b>		Bentonite Seal

<del></del>				-0
ATTACHMENTS ( \( \sigma \)	CERTIFICATION	STATEMENT -		
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the t	est of my knowledge and belief.		
Well Construction Diagram	NAME EATON DRILLING CO.	, ,		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
— Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA	95695
Other	ADDRESS // / ~	CITY	STATE	ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Mach Lauren	04/29/10	C	57 A HIC - 13378
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED		-57 LICENSE NUMBER
WR 188 REV 11-97 IF ADDITION	IAL SPACE IS NEEDED LISE NEXT CONSECUTIVELY NUMBER	ED FORM		

#### ORIGINAL File with, DWR

## STATE OF CALIFORNIA WELL COMPLETION REPORT Refer to Instruction Paniphlet

ige 2 of 4	Refer	to Instruc
•		

111511	HOHO	" "	****	pn	ici		
No.	E(	1	0	9	3	1	1

Owner's Well No. 8454	
Date Work Began <u>3/29/2010</u>	, Ended 4/1/2010

Local Permit Agency Colusa County Health Dept
Permit No. 2010-018
Permit Date 3/17/2010

GEOLOGIC LOG

DV	VR USE	ONLY		DO	NOT	FIL	L 1	N
			Lι			ı	ı	
	STA	TE WEL	L NO./	STAT	ION N	0,	,	,
	1				1			
LA	TITUDE			LC	NGITU	DE		,
		1	1			1		
		APN/I	RS/01	THER				

		GEOLOGIC LOG	†	<del>-</del>
ORIENTATIO	ON (≺)	→ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING METHOD ROTARY FLUID MUD		
DEPTH FF				
SURFAC Ft. to	CE Ft.	<b>DESCRIPTION</b> Describe material, grain, size, color, etc.		•
0		Top soil	Address 225' Wof Wilson Bend Rd & 840' So	_£
5		Brown clay with gravel streaks	-	<u>)ı</u>
42		Sand and gravel	City Fruchtenicht CA	
70		Sand and gravel with brown clay streaks	County COLUSA	
210		Sand and gravel	APN Book 022 Page 130 Parcel 057	
230		Sandy blue clay	Township 14 N Range 1 E Section 35	
980		Black sand with blue clay streaks	Latitude I SEC.	DEG. MIN. SEC.
1000		Sandy blue clay	LOCATION SKETCH———	ACTIVITY (Z)
	10.10		NORTH -	→ NEW WELL
	1			MODIFICATION/REPAIR Deepen
!				Deepen Other (Specify)
	1	**************************************		
!	!			— DESTROY (Describe Procedures and Materials
	<u></u>			"Under "GEOLOGIC LOG"
	<u> </u>			PLANNED USES (∠) WATER SUPPLY
	j		TS ST	Domestic Public
1	j		WES	Irrigation Industrial
-	1	-		MONITORING →
<del>-                                    </del>	1		,	TEST WELL
	- :	:	· ·	CATHODIC PROTECTION HEAT EXCHANGE
<u>-</u>	i		,	DIRECT PUSH
	<u> </u>		!	INJECTION
<u>;</u>	i	760	ļ	VAPOR EXTRACTION
			south —	SPARGING
			Illustrate or Describe Distance of Well from Roads. Buildings.	REMEDIATION OTHER (SPECIFY)
<del></del>			Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	
	!		WATER LEVEL & YIELD OF COMPL	ETED WELL
1			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	≣
1	,		DEPTH OF STATIC	
			WATER LEVEL (Ft.) & DATE MEASURED	
TOTAL DEP	TH OF I	BORING 1540 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
		COMPLETED WELL 1015 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	· ·
		(1000)	May not be representative of a well's long-term yield	a.

DEPTH	BORE -		C	ASING (S)			DEP.	гн		ANNU	JLAR	MATERIAL
FROM SURFACE	HOLE DIA.	TYPE (V)	 	INITEDNIAL			FROM SU	RFACE			TY	PE
Ft. to Ft.	(Inches)	SCREEN CON- DUCTOR		INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	Ft.	CE- MENT (∠)	BEN- TONITI	E FILL (✓)	FILTER PACK (TYPE/SIZE)
135 145	14	1	PVC	2.5	SCH 80	.030	123	250			<b>V</b>	SRI#8 Sand
145 215	14		PVC	2.5			250	275		7		Bentonite Seal
215 225		<b>✓</b>	PVC	2.5	SCH 80	.030	275 ¦	525			<b>V</b>	SRI#8 Sand
225; 245	14		PVC	2.5	SCH 80		525	529		V-		Bentonite Seal
Zone¦ 3	4440						529	736				SRI#8 Sand
0; 545	14/10	<b>Y</b>	PVC	2.5	SCH 80		736	747				Bentonite Seal

ATTACHMENTS (∠)
ATTACIMIENTO (V)
Geologic Log
— Well Construction Diagram
Geophysical Log(s)
—— Soil/Water Chemical Analysis
Other
ATTACH ADDITIONAL INFORMATION. IF IT EXISTS.

CERTIFICATION	STATEMENT -		
, the undersigned, certify that this report is complete and accurate to the b	est of my knowledge and belief.		
NAME_EATON DRILLING CO.			
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
20 WEST KENTUCKY AVE	WOODLAND	CA	95695
ADDRESS // / C	CITY	STATE	ZIP
Signed Myh Danuon	04/29/10	C	57 A HIC - 13378
WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED		-57 LICENSE NUMBE

#### **ORIGINAL** File with DWR

#### STATE OF CALIFORNIA

### WELL COMPLETION REPORT

Page 3 of 4	Refer•	to Instruct
Owner's Well No. 8454		No. E

insi	ruci	ion	ramp	met		
No.	E	01	0	93	11	

l					1					
			STA	ΛTE	WEL	NO./ S	TATIO	NO.		
		LATITU	JDE				LONG	SITUDE	Ξ	
	. —									

Date Work Began 3/29/2010 , Ended 4/1/2010

Local Permit Agency Colusa County Health Dept
Permit No. 2010-018 Permit D

\_\_ Permit Date 3/17/2010

		GEOLOGIC LOG	<del></del>	_
ORIENTA	ΓΙΟΝ (ϫ)	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING ROTARY — FLUID MUD		
DEPTH SURF		METHOD ROTARY FLUID MUD  DESCRIPTION		
	Ft.	Describe material, grain, size, color, etc.		,
0	5	Top soil	Address 225' Wof Wilson Bend Rd & 840' Se	of
5	42	Brown clay with gravel streaks	City Fruchtenicht CA	<u> </u>
42	70	Sand and gravel	County COLUSA	
70	210	Sand and gravel with brown clay streaks	APN Book 022 Page 130 Parcel 057	
210	230	Sand and gravel	Township 14 N Range 1 E Section 35	
230	980	Sandy blue clay	Latitude Kange / E Section 33	1 .
980	1000	Black sand with blue clay streaks	DEG. MIN. SEC.	DEG. MIN. SEC.
1000	1540	Sandy blue clay	LOCATION SKETCH————————————————————————————————————	ACTIVITY (∠) —
i			NONTH	✓ NEW WELL
į				MODIFICATION/REPAIR  —— Deepen
1	1	· · · · · · · · · · · · · · · · · · ·		Other (Specify)
t 				
1				— DESTROY (Describe Procedures and Materials
1				Under "GEOLOGIC LOG"
	i			PLANNED USES (∠) WATER SUPPLY
1	1	1911	WEST	Domestic Public
I I	1 1		EA KE	Irrigation Industrial
	1			MONITORING →  TEST WELL
1	l I			CATHODIC PROTECTION
1	1			HEAT EXCHANGE
- 1	1			DIRECT PUSH
- 1				INJECTION
- 1	·			VAPOR EXTRACTION SPARGING
i			SOUTH -	REMEDIATION
1	<u>}</u>		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.	OTHER (SPECIFY)
			necessary. PLEASE BE ACCURATE & COMPLETE.	
			WATER LEVEL & YIELD OF COMPL	ETED WELL
			DEPTH TO FIRST WATER- (Ft.) BELOW SURFACE	
i	į		DEPTH OF STATIC	
!	i		WATER LEVEL (Ft.) & DATE MEASURED _	
TOTAL DE	PTH OF	ORING 1540 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
		COMPLETED WELL 1015 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
TOTALDE	a and Of (	Creer)	May not be representative of a well's long-term yiel	d

DEPT		BORE -				C	ASING (S)			DEP-	TH	ANNULAR MATERIAL				
FROM SUR	FACE	HOLE		YPE (						FROM SU				TY	PΕ	
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN CON-	DUCTOR. FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	Ft.	CE- MENT ( <u>~</u> )	BEN- TONITI	F FILL (✓)	FILTER PACK (TYPE/SIZE)	
545	555	10-3/4		1		PVC	2.5	SCH 80	.030	747	932			1	SRI#8 Sand	
555	610	10-3/4	✓			PVC	2.5	SCH 80	·	932	937	1	1		Bentonite Seal	
610¦	620	10-3/4		<b>V</b>		PVC	2.5	SCH 80	.030	937	1039			<b>V</b>	SRI#8 Sand	
620	695	10-3/4	✓			PVC	2.5	SCH 80		1039	1049		V		Bentonite Seal	
695	705	10-3/4		7		PVC	2.5	SCH 80	.030	1049	1060			<b>-</b>	Native Fill	
705	736	10-3/4	<b>V</b>			PVC	2.5	SCH 80		1060 ;	1440	<b>V</b> -			Sand Slurry	

ĺ	ATTACHMENTS (∠)	CERTIFICATION	STATE
	Geologic Log	i, the undersigned, certify that this report is complete and accurate to the b	est of my
	Well Construction Diagram	NAME EATON DRILLING CO.	
	Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)	
	Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOO
	Other	ADDRESS // ·	(
	ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed	
		WELL DRILLER/AUTHORIZED REPRESENTATIVE	

CERTIFICATION STATEMENT	
the undersigned, certify that this report is complete and accurate to the best of my knowledge	e and belief.
VAME EATON DRILLING CO.	
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)	
20 WEST KENTUCKY AVE WOODLAND	CA 95695
ADDRESS // CITY	STATE ZIP
Signed Narhe Jamon 04,	/29/10 C57 A HIC - 13378
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE	E SIGNED C-57 LICENSE NUMBER

#### **ORIGINAL** File with DWR

WELL COMPLETION REPORT

Refer to Instr

此其	UN	KEP	<b>U</b>
ruction	Pampl	ilet	

Page	4	of	4
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Owner's Well No. 8454

No. E0109311

Date Work Began <u>3/29/20</u>	010 , Ended <u>4/1/201</u>
T 1 70 14 A	Caluar County Health Dant

Local Permit Agency Colusa County Health Dept
Permit No. 2010-018 Permit Date 3/17/2010

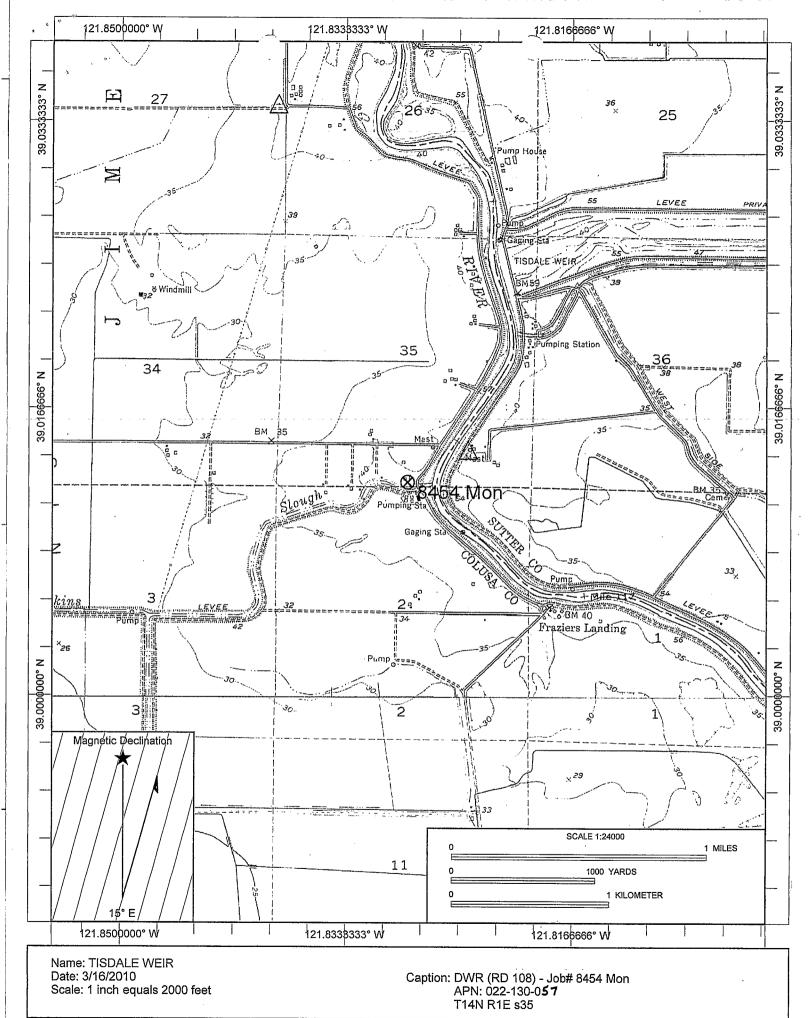
_	DWR	USE	<u> </u>	LY		DQ	NO	TC	FILL	<u> IN</u>	
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-	GEOLOGIC LOG	†	_
ORIENTATION (4	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)		
· · ·	DRILLING ROTARY FLUID MUD		
DEPTH FROM SURFACE	DESCRIPTION		
Ft. to Ft.	Describe material, grain, size, color, etc.		·
	Top soil	Address 225' Wof Wilson Bend Rd & 840' S	of
	2 Brown clay with gravel streaks	City Fruchtenicht CA	
	Sand and gravel	CountyCOLUSA	
	Sand and gravel with brown clay streaks	APN Book 022 Page 130 Parcel 057	
210 230	Sand and gravel	Township 14 N Range 1 E Section 35	
	Sandy blue clay	Latitude	
980 1000	Black sand with blue clay streaks	DEG. MIN. SEC.	DEG. MIN. SEC.
1000 1540	Sandy blue clay	LOCATION SKETCH	ACTIVITY (∠) —
		NONTI	NEW WELL
1			MODIFICATION/REPAIR —— Deepen
ļ			Other (Specify)
1	I.		·
!			DESTROY (Describe     Procedures and Materials
i			Under "GEOLOGIC LOG"
!			PLANNED USES (∠) WATER SUPPLY
1	<u> </u>	is si	Domestic Public
!		WES	Irrigation Industrial
			MONITORING →
			TEST WELL
			CATHODIC PROTECTION HEAT EXCHANGE
			DIRECT PUSH
			INJECTION
			VAPOR EXTRACTION
		south —	SPARGING
		Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION
		Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
<del></del>		WATER LEVEL & YIELD OF COMPL	ETED WELL
		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	<u> </u>
!		DEPTH OF STATIC	
!	I .	WATER LEVEL (Ft.) & DATE MEASURED _	
TOTAL DEPTH OF	PORING 1540 m : s	ESTIMATED YIELD * (GPM) & TEST TYPE	
	(1 000)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	, · · /
TOTAL DEPTH OF	COMPLETED WELL 1015 (Feet)	May not be representative of a well's long-term yiel	d
	<u> </u>		

DEF		BORE.		CASING (S) DEPTH							Н	ANNULAR MATERIAL						
FROM SURFACE		BORE - HOLE DIA.	<del></del>	YPE		=/		INTERNAL	041105	0/ 07 0/75	FRO	ЭM	SUR	FACE			TY	PE
Ft. to	Ft.	(Inches)	BLANK	SCREEN	CON-	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	F	t.	to	Ft.	CE- MENT	BEN- TONITI	E FILL (✓)	FILTER PACK (TYPE/SIZE)
Zone	4										14	40		1540			1	Native Fill
0;	985	14/10/8	✓				PVC	2.5	SCH 80				1					
985	995	8-3/4		<b>✓</b>	1		PVC	2.5	SCH 80	.030			1					
995	1015	8-3/4	<b>√</b>				PVC	2.5	SCH 80				1					
									"				1					
													1					

ATTACHMENTS (∠)	Т
— Geologic Log	I
Well Construction Diagram	I
Geophysical Log(s)	I
— Soil/Water Chemical Analysis	l
Other	I
ATTACH ADDITIONAL INFORMATION IF IT EVICTO	۱

CERTIFICATION S	TATEMENT -		
CERTIFICATIONS	TAILMENT		
, the undersigned, certify that this report is complete and accurate to the be	est 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	STAT	E ZIP
Signed Mark Jawon	04/29/10		C57 A HIC - 13378
WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED		C-57 LICENSE NUMBER



Copyright (C) 1997, Maptech, Inc.

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	State Califo	omnin Go	unty C	olusa		Cubana			Vangarina salah
	State Callin	01911121	,unios	LUSA	·	oubarea_	. Grimes	<del></del>	
	omer G	lenn Morris	- <del></del>		•				
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SLLING METHOD.									
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ر آئے	Into5-194	2 C	asing diam	n •	16		Land-surf.	alt.	3/
RFORATIONS	Source of da	ata <u>Drill</u>	er (USER)	•					
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ST DATA: DISC:		7772 01 11011	•		nu, and	urawdowi	rat end or	Thick-	<del></del>
HER DATA AVA	Correlation			Material		•		ness	Depth (feet)
A WE WANT					•			(feet)	
URFACE ELEV.		Surface	coil						
DEFTH	The same of the sa	Clay, m	. Analas Maria	results - Publication	and the state of the			Towards a secondary	1
-0	General State of the State of t	cost was a marine	a <b>y</b> Tagan <del>ikat</del> in	ا غير الهوميريات الحرام مي	sesa e labor		i ragas et i in inter prob	29	36
Jones D.	Approximate constraints of a property of the constraints of the constr	Clay, sa	ndy		de de la companya de la companya de la companya de la companya de la companya de la companya de la companya de		eren (Service) — Andrewski sing elegi. Britaniy wan ara — Angresia eren (Angresia)	Same Same Same Same	42
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STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

BRANCH No. 14N/IW-4K3

### **WELL DATA**

ERNEST SACHREITER	1/1/11/2
Jwner	State No. 14N/1VV-4K3
ddress	Other No
enant	
ddress	
ype of Well: Hydrograph Key Index	Semi annual 🔀
ocation: County Colusa	Basin <u>Cocusa</u> Co. No. 5-21.04
.S.G.S. Quad	Quad. No. 5-195C
N.W 1/4 SE 1/4 Section 4 Twp. 14N	, Rge. <u>/W SB</u> Base & Meridian 545 C
Description 1.40 MI. W/O DRY SLOUGH	RO. ON " SACHREITER RO, THENC
50' S/O & OF SACHREITER RO.	
eference Point description	B., N. 510E
hich isft. ubove land surface. Ground Elevation	254
below	onft.
eference Point Elev. 35.0 ft. Determined from C	· ·
ell: UseCondition	
asing, size 16 in., perforations 46 to	70 See les attatedes
	<u> </u>
easurements By: DWR 📈 USGS 🔲 USBR 🔲 County 🗌	
nief Aquifer: NameDepth to Top Aq	Depth to Bot, Aq.
pe of MaterialPerm. Rating	Thickness
avel Packed? Yes No Depth to Top Gr	Depth to Bot. Gr
	Depth to Bot. Aq.
iller AUCMAM	90pm 10 90m, 74.
	BR Log_open (1)confidential (2)
quipment: Pump, type TURBINEmake	Property open (1)confidential (2)
quipment: Pump, type	<u>reekless</u>
erial No. 131847 Size of discharge pipe 10 in.	
	Water Levels available: Yes (1)NoNo
P. <u>25</u> Motor Serial No. <u>NHJ69/8274</u>	Period of Record: BeginEnd
lec. Meter No. <u>80233</u> Transformer No	Collecting Agency:
eldft.	Prod. Rec. (1) Pump Test (2) Yield (3)
SKETCH	DELLA DIZZ
SKEICH	REMARKS
10	
SACHREITER RO.	
D 50	
0 50 1 = 1.40 MI	
71.40 MI.	
10	
4K3	
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ı	Recorded by: 5.H. ADANS FROM EIELD CK.
· I	Date4-3-67

#### USGS-CAL-T1 May 1948

#### UNITED STATES DEPARTMENT OF THE INTERIOR **GEOLOGICAL SURVEY** WATER RESOURCES BRANCH

No •	14/2M	/ <u></u>	15117
Other	Nos .	BR	14-2W-13

### WELL LOG

64.4. Om34.5	lana da					****	Col	VFIDERVELAL KOC Code Sec. 13752
State <u>Calif</u> Owner	ornia		Colusa				Ckle	3007
		•			·			JUAL
Location 13	80 ft.	north a	nd 375 ft	t. east	of SW (	corner	(USG	s)
Drilled by	Cooper	& Son		Address		· · · · · · · · · · · · · · · · · · ·		
Date Sept.	•	•					•	601
Source of da						_		
			orations.	vield an	d drawdov	m at end	of log)	<del> </del>
1222002	700 02	JII. POLL		, Lo Lag. Gir.	a arango	vac ca o caxa	Thic	·k-
Correlation			Materia	al			nes (fee	Depth (foot)
	Soil							5 5
		yellow				· · · · · · · · · · · · · · · · · · ·	15	
		yellow	gravel		······································			3 23 3 31
·	Clav.	sandv h	rittle				14	
<del></del>	Clay,	yellow		····	· · · · · · · · · · · · · · · · · · ·	·····	75	
	Clay.	, blue					1 10	
	Grave	1					35	5 167
	Clay,	sandy y	rellow		- ,		137	
	Grave						22	
	Grave	blue	· · · · · · · · · · · · · · · · · · ·	<del> </del>			12	
		sandy y	rellow				19	1
	Grave	1	V = V 1.				28	
		blue	·····				7	4
	,	112' of	3/16" x	14" ca	sing			
•		260' of	3/16" x	: 12 <b>" c</b> a	sing			
		Rotary	04 - 392 type dri	77				
		Irrigat	ion				1	
		****	· · ·	<del></del>	<del></del>			
							106	
·			-			NEIDENT	1AL 3752	
					(	CONFIDENT	Sec. 5,-	
						Maiei		
	Plotted	and Codec	j					
			12W . 13J	NJ				
		· · · · · · · · · · · · · · · · · · ·	<u>-</u>					
ecord by	<del></del>	Date	9	<u></u>			Shee t	of

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)

Do Not Fill In 44455

CT	~~=		$\sim \lambda$	1 1		PARIL	
31 F	1 I E	Or.	CA		ГО	RNIA	١.

State Well No.

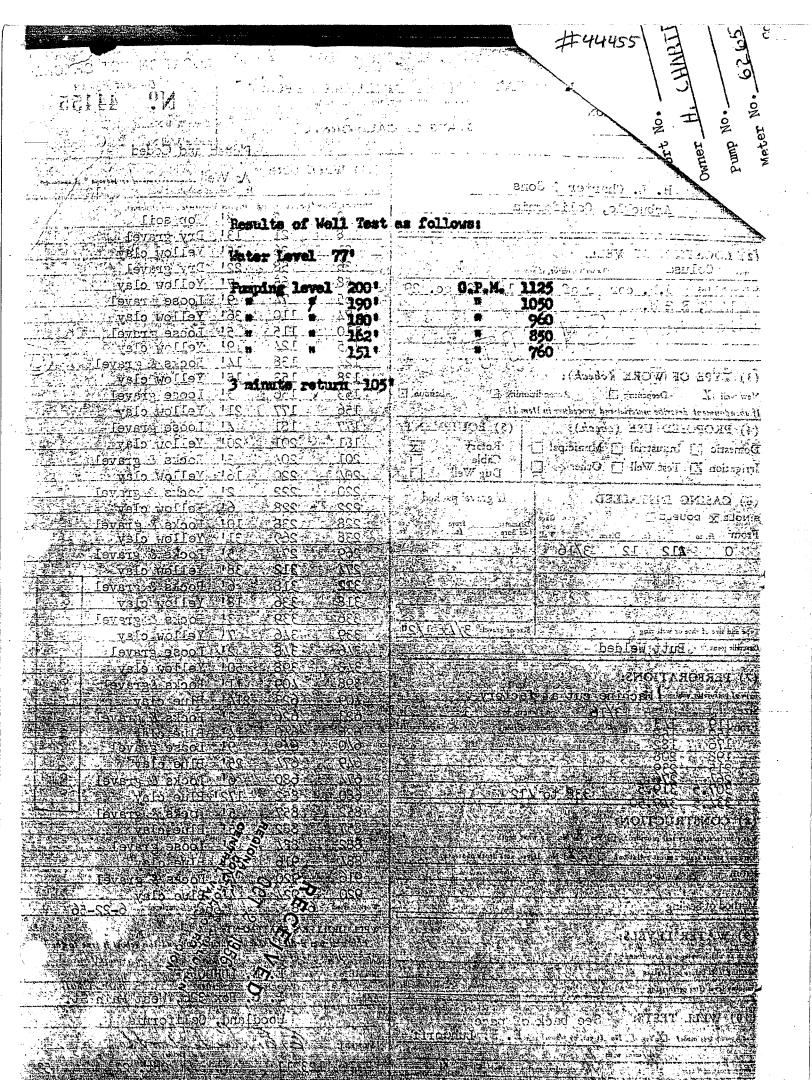
4 2.	• • •	(11) WI	ELL	LOG:	As We		na Paragranaga
$\overline{\nu}$		Total depth				of completed well 4	12 ft.
A						material, and structure.	*
			ft. to		ft. 8t	Top soil	
		8	**	21	" 131	Dry gravel	
(2) LOCATION OF WELL:		21		36		Yellow clayer a	<del></del>
County Colusa 7 Owner's number, if any		36		58	221	Dry gravel	
R. F. D. or Street No. N.E. corner of S.E.	1/4 of Sec. 29	<u>. 58</u>	,	65	7!	Yellow clay	<del></del>
T 14 N, R 2 W.		65_		74.	<u>" 91</u>	Loose gravel	
		74		_110	361	Yellow clay	<del></del>
				115	51	Loose gravel	
	í	115		124	" 91	Yellow clay	
		124		138	14!	Rocks & grave	<u>-</u>
(3) TYPE OF WORK (check):	_ :	138		153	" 15!	Yellow clay	
New well Deepening Recondition	-	153		156	<u>" 31</u>	Loose gravel	
If abandonment, describe material and procedure in Iten		156		177	<u>" 2] '</u>	Yellow clay	
(4) PROPOSED USE (check):	(5) EQUIPMENT:	177_	"	1.87	<u>" 4.1</u>	Loose gravel	
Domestic  Industrial  Municipal	Rotary 🔀	181		201	<u>" 20 ' </u>	Yellow clay	
	Cable 🔲	201		20/;	" 31	Rocks & grave	L
Irrigation [ Test Well  Other	Dug Well	204	**	220	<u>" 161 </u>	Yellow clay	
AND CASTAGE TRICTIANTED.	If gravel packed	220	**	222	" 21	Rocks & gravel	
(6) CASING INSTALLED:	11 graver packed	222_	••	228	<u>" 61</u>	Yellow clay	
	iameter from to	228	*1	238	" 101	Rocks & gravel	
1 TOME IE. to IE. Diam. Want	f Bore ft. ft.	238	"	269	<u>" 31 '</u>	Yellow clay	
<u>" 0 " <b>2</b>12 " 12 " 3/16"  </u>		269	**	274	" 5 <b>!</b>	Rocks & gravel	
11 11 11 11		274	11	312	" 38 <b>!</b>	Yellow clay	And the last of the second
	"	322	41	318	" 61	Rocks & gravel	
., ., ., ., ., ., ., ., ., ., ., ., ., .		318	"	336`	" 18 <b>!</b>	Yellow clay	0° ;a
	(1 11	336	••	339	" 31	Rocks & gravel	1 \-
Type and size of shoe or well ring	ze of gravel: $3/4 \times 1/2$	339	**	346	71	Yellow clay	O ja
Describe joint Butt Welded		346	*1	348.	" 21	Loose gravel	4 H
		348	**	398	" 50 i	Yellow clay	Q <sub>iH</sub>
(7) PERFORATIONS:		398	**	4.09	" 77 1	Rocks & gravel	9 D
Type of perforator used Machine cut at fa	actory	4.09	11'	623	"274.1	Blue clay	Pied
Size of perforations 3/16 in., leng	* <u>.</u>	623	11	626	" 31	Rocks & gravel	gla
From 5 ft. to 1/3 ft. Perf. pe	r row Rows per ft.	626	*1	640	" 7.1	Blue clay	8 H
" 176 " 182 " " "		640	••	649	" 91	Loose gravel	e li-i
- 198 - 208	re 11 te 41	649	••			Blue clay	O IA
215 ·· 239 ·· · · · ·	11 11 11	674		680,	" 61	•	Cod
" 307.5 319.5" 338 to 6	10' " "		**			Rocks & gravel	6
334.5 349.50	<u> </u>	<u>680</u>	**	852	<u>" 1721</u>	Blue clay	
(8) CONSTRUCTION:		852	"	857	" <u>51</u>	Rocks & gravel	
Was a surface sanitary seal provided?  Yes No To wha	t depth ft.	<u>857</u>	**	882	<u>" 251                                   </u>	Blue clay	
Were any strata sealed against pollution? Yes A No If ye		882	**	884		Toose gravel	
the state of the s	s, note dependent	884.		916	<u>" 321                                   </u>	Blue clay	· · · · · · · · · · · · · · · · · · ·
From ft. to ft.		916		920	<del></del>	Bocks & gravel	
		920	<u> </u>	_924	<u> </u>	Blue clay	<del></del>
Method of Sealing		Work started	6.	<del>-</del> 8	19 56	, Completed 6-22	2-56 19
(9) WATER LEVELS:	f.		was i	drilled und		diction and this report is i	true to the best of
Depth at which water was first found	ft.	my knowled	ge and		<b>-</b>	- O 7 - 777 FF	
Standing level before perforating	ft.	NAME			E. LUHI		- heistad)
Standing level after perforating	ft.	Address			o. Box	326, West Main	r printed) 1 St.
(10) WELL TESTS: See back of	of page			Wood	dland,	California	
	E. E. Luhdorff			E F	F	I doubt	
	. draw down after hrs.	[SIGNED]		6,61	S. C.	Well Driller	
	sis made? Yes 🗘 No	License No.	123	3211		Dated Oct. 22	, 1953
Was electric log made of well?  Yes  No			UIN ® SPO		DWR FORM NO	, 246 (REV. 3-54)	

Report No. 196		
Owner_		
Pump No.	aguer en les comme mesmosphones el misson massones la missonam mesmo el son e	error 2018 - Per erro <mark>distances internativos colo</mark> nes in el colonidad esta en esta en esta en esta en esta en esta Esta esta en esta en esta en esta en esta en esta en esta en esta en esta en esta en esta en esta en esta en e
Meter No. 62656		
Region 5; County COLUSA	_	
Township 14N Range 2W	, Section 29 Jl ,	B&M.
	est from southeast corner of	Section.
<u>s k</u>	ETCH	
WELL 0	<i>'</i>	Λ
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15		<i>/</i> V
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1 -0.4 N	Ali-Cyccok HILLGATE	.6. 1
	HILLGATE	Kd.
DECCE TOUTON	OD DEMADING	

4

DESCRIPTION OR REMARDS

Checked by 5. Chamber Date 721-58



#### **ORIGINAL**

File with DWR

STATE OF CALIFORNIA

## THE RESOURCES AGENCY. DEPARTMENT OF WATER RESOURCES

14N/3w-14 Do not fill in

No. 20032

Notice of Intent No	WATER WELL DE	RILLERS REPO	ORT	State Well No.	VA.
ocal it No. or Date			. •	Other Well No.	MPIDENTIAL LOC
<del></del> '					Code Sec. 132
(1	_	(12) WELL LO	Jotal depth_	104 ft. Depth of co	mpleted well 005 f
Adı		from ft. to ft. For	mation (Describe	by color, character,	size or material)
Cit	6m 037	0 10	top soi		
(2) LOCATION OF WELL (See in	ostructions): 6T-214	10-16	clay		
	vner's Well Number W-3225	<u> 16 26</u>	gravel		
Well address if different from above		26 28	clay \		
TownshipRange	Hahn-Cortina Sch.	28- 38	gravel `		
Distance from cities, roads, railroads, fences, etc	haim-cortina Sen.	38- 56	ckay		
Rd 1 mi. W 50'	N	56- 64	gravel		
		64- 68	clay		
		68 80	gravel		
	(3) TYPE OF WORK:	80-82	Clay		
	New Well 🐹 Deepening 🗆	82, 98	gravel		
	Reconstruction	98-102	clay		
	Reconditioning	102-110>	sand		
	Horizontal Well	110-124	* / Z ~ ~ ~ ~ ~ .	lay	
	Destruction (Describe destruction materials and	75.467.20	CASI		
	procedures in Item 12	170-112	3 <b>33</b> 70	000	
	(4) PROPOSED USE	182-108	clay		
	Domestic	100-105	sandy <	tax	
	Irrigation	105003	sand O	<u> </u>	
	Industrial	\$35.871	clay		
	Toot Well	220	Sand -		
	Stock	200-2260	Alay		
	Municipal	226-2#2	sand		
WELL LOCATION SKETCH	Other	242-265	clay		
(5) EQUIPMENT: (6) GI	RAVEL PACK:	268-275	sand		
Rotary 🗆 Reverse 🛣 🏋 🖔	No Size Dea goàv	275×392	clay and	d sandy cl	av
Cable 🗆 Air 🗆 Dunet	Prof bore 24 Size Peak Byave	398-398	sand		
Other Bucket Racket	)rom 0 704	1/398-521	clay and	l sandy cl	av
$\mathcal{H}$	ERFORATIONS:	√521-536	gravel	· · · · · · · · · · · · · · · · · · ·	
Steel Plastic Concrete Type of	performing on size of screen	9 536-548	clay		
From To Dia. Cage or Fre	To See	548 <b>-5</b> 55	sand		
ft. f() in. Wall ft	ft. sizz	555 <b>-56</b> 4	clay		
0- 685 16 0Dx 250 3	390480	<u> 564-581</u>	gravel	<u>670-678</u>	sand
	500- 500	<u> 581-624</u>	clay	<u>678-704</u>	<u>clay</u>
	14-685	624-636	gravel		
(9) WELL SEAL:	410	6 <b>3</b> 6-645	⊂lay		
Was surface sanitary seal provided? Yes	No  If yes, to depthft.	645-663	gravel		
Were strata sealed against pollution? Yes	No [ Intervalft.	553 <b>-</b> 970			
Method of sealing		Work started	19	Completed	<u>18 19.77 </u>
(10) WATER LEVELS:	c.	WELL DRILLER'S			
Depth of first water, if known		This well was drilled u knowledge and belief.	nder my jurisdicti	on and this report is	true to the best of my
(11) WELL TESTS:		Signed F. M.	. Eaton		
Was well test made? Yes □ No □ If	yes, by whom?		(Wel	l Driller)	<del></del>
- ···	iler At and of test	NAME Ea Or	con from or commo	ration) (Typed or pro	nted) .
Depth to water at start of testft.	At end of testft		àtu"ky "(1	ration) (Typed or product SOX	975)
Discharge gal/min after hou	•	<sub>City</sub> Woodland	* * * * *	rnia	<b>Zip</b> 95695
<b>*</b>	yes, by whom?	License No. 1337	33057	Date of this report	7-18-1977
				· - · <u>*</u> - · · · · · · · · · · · · · · · · · ·	

## ORIGINAL Filewith DWR

STATE OF CALIFORNIA

Do not fill in

THE RESOURCES AGENCY

### DEPARTMENT OF WATER RESOURCES WATER WELL DRILLEDS DEPORT

No. 072290

147,311-24

Notice of Intent No WAILI WELL D	RILLERS REPORT State Well No.
Local Permit No. or Date	Other Well No.
1	(12) WELL LOC 320 317 1575%
	(12) WELL LOG: Total depth 320 ft. Depth of completed well ft.
·	from ft. to ft. Formation (Describe by color, character, size or material)  0 = 4 top soil
(2) LOCATION OF WELL (C	4= 20 gravel
(2) LOCATION OF WELL (See instructions): W-3649  County Owner's Well Number	20= 34 clay
Well address if different from above	34-80 sand and gravel
Township 14N Range 3W Section Sec. 24	80-204 stratas of clay
Distance from cities, roads, railpoads, fences, etc. Lahn Cortuin	stratas of gravel
School Fds. 400'W 100'S	204-214 gkavel 214-266, clay and sandy clay
·	266-274\ gravel
(0)	274-284 \sandy clay
(3) TYPE OF WORK:	284. 288 sand
New Well 🔀 Deepening 🗆	288-194 clav
Reconstruction	294-310 grave2
Reconditioning	310-320 clay and sandy clay
Horizontal Well	111-110
Destruction (Describe destruction materials and procedures in Item 127)	
(4) PROPOSED USE	
Domestic 23	
Irrigation	1-1-0
Industrial	(V)
Test Well	
Stock	/// - ~ (° 0 ¢
Municipal	
WELL LOCATION SKETCH Other	-64
(5) EQUIPMENT: (6) GRAVED PACK:	R \(\text{\tint{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{\tex
Rotary   Reverse 🖫 Ves 🗷 No 🗹 Size Des gra	
Cable Air Diameter of bore 16	
Other Bucket Recket from 0 312	
(7) CASING INSTALLED: (8) PERFORATIONS:	_
Steet Plastic Concrete Type of perforation or size of screen	9 -
From To Dia. Cage or From To Side	
ft. ft Wall ft. size	-
0 312 8 5/8 OD 292-312 8 rows	
* 123 mesh	
(9) WELL SEAL:	
Was surface sanitary seal provided? Yes \( \square\) No \( \square\) If yes, to depthft.	
Were strata sealed against pollution? Yes \( \bar{\cap} \) No \( \bar{\cap} \) Interval \( \bar{\cap} \) ft.	_
Method of sealing	Work started 19 Completed 4-10-81 19
(10) WATER LEVELS:	WELL DRILLER'S STATEMENT:
Depth of first water, if knownft.  Standing level after well completionft.	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Standing level after well completionft. (11) WELL TESTS:	Signed
Was well test made? Yes □ No □ If yes, by whom?	(Well Driller)
Type of test Pump Bailer Air lift Depression water at start of test	NAME Eaton Drilling Co. Inc.
Dep water at start of test ft. At end of test ft  Disch gal/min after hours Water temperature	Address P. O. Box 975 (20 W. Kentucky)
Chemical analysis made? Yes No If yes, by whom?	City Woodland, California Zip 95695
Was electric log made? Yes No If yes, attach copy to this report	License No. 133783C57 Date of this report 4-21, 1981

#### ORIGINAL

#### WATER WELL DRILLERS REPORT

FILE WITH PWEIDENTIAL LOG

WALER WILL

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

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

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

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

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

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

					,	
(1) OWNER:	^	<i>h</i>			7) .	(11) WELL LOG:
Name (	0,, 1,,			1. /1	upois	Total depth 140 ft. Depth of completed well 140 ft.
Address ()	MIXIN	<u> </u>	<u>MANA</u>		10000	Total depth ft. Depth of completed well ft.
Tiddless (	1111.	<del>- (0 \</del>	ali	<del>1</del> ,	<del>V</del>	ft. to 10 Top Sail ft.
(2) LOCATIO	N OF W	WEII.		<del>1)</del>		10 30 Bendy much
County (	Pusa		wner's numbe	er. if any		30 30 Clay
Township, Range, and S			WHICH S HOMEO	,,		30 50 Grave & Sam
Distance from cities, ro		etc.				50 55 melow clay
					·	55 12 band & Grave
(3) TYPE OF	WORK	(check)	:			72 135 Blue Clair
New Well D			litioning [	] Destroyir	ıg 🔲	135 140 Black Ldu
If destruction, descr			re in Item 1		<u> </u>	
(4) PROPOSE	D USE	(check):		(5) <b>EQU</b>	IPMENT:	
Domestic 🖾 In	dustrial [	] Munici	pal 🔲	Rotary		
Irrigation [ T	est Well [	] Ot	her 🔲 📗	Cable		
			l	Other		OTHER WILL IS LOCALED AT
(6) CASING	INSTAL	LED:				
STEEL:	отн	ER:	1	f gravel pac	ked	The august in Column.
SINGLE DOL	JBLE 🗌					V
1	1	Gage	Diameter	:	Ì	
From To	Diam.	or Wall	of Bore	From ft.	To ft.	
11. 17.	- Brain.	12/1/2	Dore		10,	
<del>(/_ X/)</del>	10	13401				
<u> </u>	-	1//				
Size of shoe or well ring	5841	2500	C:£		I	
Describe joint	71)	<i>1</i> 0 1	Size of grav	vei:	-	
(7) PERFORA	TIONS	OR SCR	EEN:			
Type of perforation or n		OIC JOIN	LLIA.			
		DC	70		1	
From	To	Perf. per	Rows per		Size	
ft.	ft.	row	ft.	in	x in.	
					:	
					<u>. 401 </u>	Plotted and Goded
(8) CONSTRU	UCTION					
Was a surface sanitary s	eal provided?	Yes 🗗 N	> <u></u>	To what depth.	ft.	As Well 15A1 / 1M - 5G80
Were any strata sealed as	gainst pollution	? Yes 🗌	No 🗆	If yes, note	depth of strata	<u> </u>
From () f	t. to /5	ft.			1 -	St. 17 11 0 /11 11
From f	5 <sub>17</sub> to	ft.			<del></del>	Work started 8/9 19 77, Completed 8/20 19 77
Method of sealing	LAG			······································	<u> </u>	WELL DRIVLER'S STATEMENT:
(9) <b>WATER</b> 1	LEVELS:		N	00		This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Depth at which water	was first found	, if known		20 ft.	· · 1·	Brung Star (8
Standing level before p				1) ft.	<del></del>	NAME / Julie V Sur Jungo U.
Standing level after per	- T	leveloping		SCI ft.		Will Start Uh. Skyl W
(10) <b>WELL T</b>	_ /	<del>-</del>				Address ). The fight
Was pump test made?		Li II	yes, by whon		1	(Signed) 1. 1/80 and
X 44 47 10 48 6 68	gal./min. with	Was a share!	ft. drawdo		hrs.	(Well Driller)
Yas electric log made of	11.11	Was a chemica		attach copy	10	License No. 196093 Dated 9/24 1971

#12982

#### WATER WELL DRILLERS REPORT

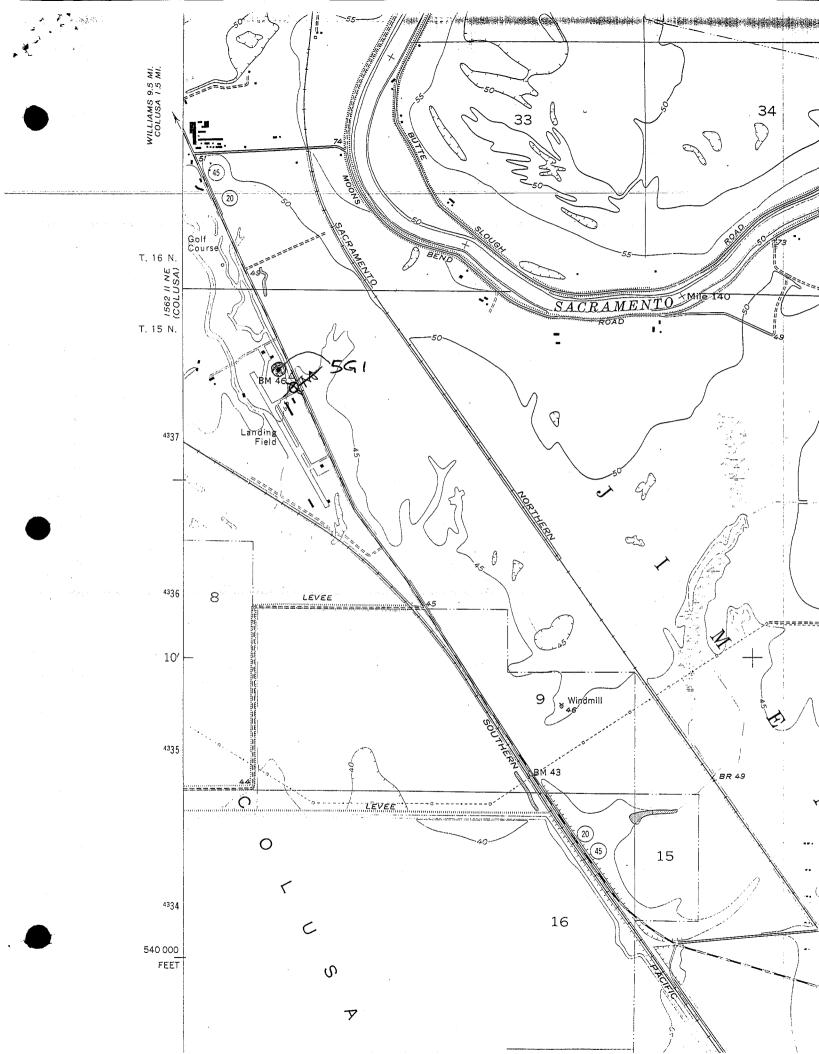
### FIELD WORK SHEET

Report No	12182	
Owner 6/US		AIRTORT
Pump No.		
Meter No.		

LOCATION

	Section _	5G	<del>-</del> ,				• 1	
	Township	15N	<u> </u>					
	Range	IW	<b>-</b>		T	1		
1	71							,
SHUAN		COLUM		(			•	
45								
		14	•					
	4		3800			<b>.</b>		
	N		11/2	4700	) feet North			
	GHWAY	GOLF V			feet West :		corner	
Н	20	C002-					ection	
		WELL_		RARIC		0000444	NTO RIVE	N.
		W		O .	-> 70 S	ME ME	RIDIAN	•. •. •.
	Da -		3.	<b>)</b>		40 P	11	
	locale	ion not could	<u>infinal</u>	and fu	ner -	vell, I	Hunk	
	10 beh	ind liable	u al ma	ren qu	ra a	year		Š.
	303 70 3.0			0	ħ	7000		

Field Checked by



### **WELL DATA**

DISTRICT Northern

~∙≎ =	wner Colusa	Co. Airport		State No. 15N NW -5G1
A		a 2915 Hwy.		Other No
Т	Tenant Caretake	a: Connor Da	בונע.	
Α	Address			
Т	Type of Well: Hydro	graph 🔲 Key 🗆	Index	Semi annual.
	ocation: County			Basin No.
- 11	J.S.G.S. Quad. M.	evidian		Quad. No. 545 b
J	¼		, Twp	MD
_	Description 4 0 +	he Colusa	Co. Airo	rt. SE/of Column on State H
D	about	1 mile. 1.10	ll is insic	le an aluminum clad P.H.
_	100' 510			D Dumos
	100 010	NO TO	2 40	20 peanly 3
	<del>, , , , , , , , , , , , , , , , , , , </del>			
 R	Reference Point desc	ription Hole	T.O.C.	
_				
_		<u> </u>		1128
w	which is 10	1 ft. below, land sur	face. Ground Elevat	ion 4510
	Reference Point Elev		Determined from	puod
W	Yell: Use Indu	strial - Dom.	Condițion	Depth 146
C	Casing, size	in., perforatio	ns 0-+5 CS.	3, ODER MAIC T: 140
М	Measurements By: D	WR USGS L	JSBR County [	Irr. Dist. Water Dist. Cons. Dist.
				Depth to Bot. Aq.
	Type of Material			Thickness
		es No		Depth to Bot. Gr
S	Supp. Aquifer			Depth to Bot. Aq
	Oriller Beame	n S. Sm Pi	ump Co.	Depiti 10 Doi: Aq.
		1 -31	# /	7987
	Date drilled <b>3/2</b> 0		iled # /2	2982open (1)confidential (2) 29
Ε	Equipment: Pump, ty	peSub	make _	
		Size of dischar	ge pipein.	Water Analysis: Min. (1) San. (2) H.M. (3)
Ρ	Power Kind	Make		Water Levels available: Yes (1)No
		Motor Serial No.		Period of Record: Begin 10-21-75 End ACTIV
		Transform		Collecting Agency:
		G.P.M. Pumpi		
_	, ieid	G.F.M. Fumpi	ng levelff.	Prod. Rec. (1)Pump Test (2)Yield (3)
		614 WW 611		
		SKETCH	i	REMARKS
				11 ON 11-28-01 I SURVEYED IN A ACCURATE
			N	
		•	·1·	ELEV. TO THE R.P. FROM USGS B.M 7
	1	•		R.P. WELL CASING HAD BEEN EXTENDED
		•		FALL of 2000. NO ACCURATE RELORD of 7
				EXTENSION WAS MADE SO I DID THIS. EU
				AA/EU MEAGUE
•				& PE MENT QUALIFICATIO
				BY: I-LORENS 3666 6/10
				Dais ./
				Qualification CONFOSITE Semi-Confined
	•			C (1)
				Lenting DEFINITE
				Water Dall Transcript
				Water Body: FLOODPLAIN DEPOSITS E
			. *	
			•	Jour Dwar weposito
				1111
				- Drawning
				Recorded by: Date 1289

### File Original, Duplicate and Triplicate with the

REGIONAL WATER POLLUTION

#### WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

<ul> <li>Control of State (State of State of</li></ul>
COGATION NOT GHED
NAMES OF THE PARTY OF THE PARTY OF
Do Not Fill In
***
<b>№0 71038</b>

1038

#### STATE OF CALIFORNIA

State Well No.	***************************************
Other Well No/5N/2W-	17

CONTROL BOARD No. 5	SIATE OF C	ALIFUR	NIA	c	ther Well No. 157	V/2W-	-19
(1		(11) WE	LL LOG:				
N <sub>3</sub>		Total depth	334	ft. Depth of	completed well		334 ft.
Āċ	_	Formation: Des	cribe by color, cha	racter, size of m	and and		
A-Mills		- 0 f	t. to 3	ft. Soll		Ver	
<del>=</del>			. 9	Sand	and I	FUENT	<u></u>
(2) LOCATION OF WELL ves on A	bele Road	- 9	31	Clay		COOP CA	4/ LOO
County Colusa Owner's number, if any-			36	Grav	er	100	13747
R. F. D. or Street No. 30 feet East from		36	44	CTAY			-
road a short way south from	m Crawford	44	48	Sand			<del></del>
road in the Northwest 1/4	of Section	48	61		y clay		
19, Township 15 North, Ran	ige 2 West,	61	62	Grav			<del></del>
M.D.B. & M.		62 161	161 168	Clay Brit			<del></del>
(3) TYPE OF WORK (check):		168	181	Grav			
New well Deepening Reconditioning	Abandon [	181	198	Clay			
If abandonment, describe material and procedure in Item 11.		198	206		. some f	ine gr	avel
	5) EQUIPMENT:	206	261	Clay		<u> 5-</u>	
, ,	. –	261	264	Sand			
Domestic   Industrial   Municipal	Rotary 🙀	264	271	Clay			
Irrigation Test Well Other	Dug Well	271	273		with fi	ne gra	vel
		273	291	Clay		0	<del></del>
` '	If gravel packed	291	294		tle with	fine	grave
SINGLE DOUBLE Gage Or Diamet		294	311	Clay			<del></del>
From ft. to ft. Diam. Wall of Bor		311	329	Gray			
	4* 0 " 334"		15				
	3* 0 12	Platter	d and Cod	   <del> </del>			
The 24 inch cemented in			a, una cou	icu			
from 12 ft to surface		<b>As</b>	ell	"/2W	19580		
Type and size of shoe or well ring Point Size of	gravel: 5/8#	-	t:				
Describe joint all joints welded	graver: 3/ C		**	<u></u>	000	<del>/</del>	
		354 - 3			Section 3	-	
(7) PERFORATIONS:	standard	Yie]	ld of we	TT 2	- 3	D	
Type of perforator used Factory punched	double /	2750	GPM	90.5 f	**************************************	0.00	_
Size of perforations 1-1/2" in., length, b	, 3/16 in.	2115		85.0	#	<del></del>	2
From 162 t. to 174t. 4 pert. fettow	29 Rows per ft.	1950		82.0	*	100	ON THE
174 182 4 H H			<del>,</del>	02.0	54		- Contract
198 206 4 " "	29	- 3 mi	nute co	mahaal		÷	——————————————————————————————————————
262 274 4 W W	29		"		1 100	<u> </u>	<b>─</b>
290 294 4 " "	29 " "		· ·				<del></del>
	from surface	Perf	oration:	s cont	inueds		
(8) CONSTRUCTION:	4 70 64	,		-4			
Was a surface sanitary seal provided? A Yes No To what dep	th UU IN I Useft.	310	ft to 3.	14 ft	4 per ft	29 :	rows
Were any strata sealed against pollution?  Yes No If yes, not	te depth of strata	314	3	34 "	4 " "	29	-
From ft. to ft.			"				
				17			
Method of Sealing Cement		Work started	May 3	19 62·	Completed Ma	y 16	19 62
(a) WATED IEVEIC.		WELL DRIL	LER'S STATE	MENT:			
(9) WATER LEVELS:	· ·	This well 1	vas drilled unde		tion and this repor	t is true to	the best of
Depth at which water was first found	6 ft.	my knowledge					•
Standing level before perforating	16 ft.	NAME		1 & Au			
canding level after perforating	16 ft	Address		n, er corperation Vestwo		sped or printed	)
(10) WELL TESTS:		Address					
	D 224.7		Wordle	ind, Ca	LIII	<del>~</del>	
	P.Wilson&Son	SIGNED	$X/\subset \mathcal{L}$	eelr	navo		
	w down after 7 hrs.	3	09870		ated 7/1/6	1 .	
Temperature of water	ider   Yes No	License No		D	ated // L/O	<b>▲</b> \$511	. 19
Was electric log made of well? 🔲 Yes 🍱 No		et (see c)					

#### WATER WELL DRILLERS REPORT

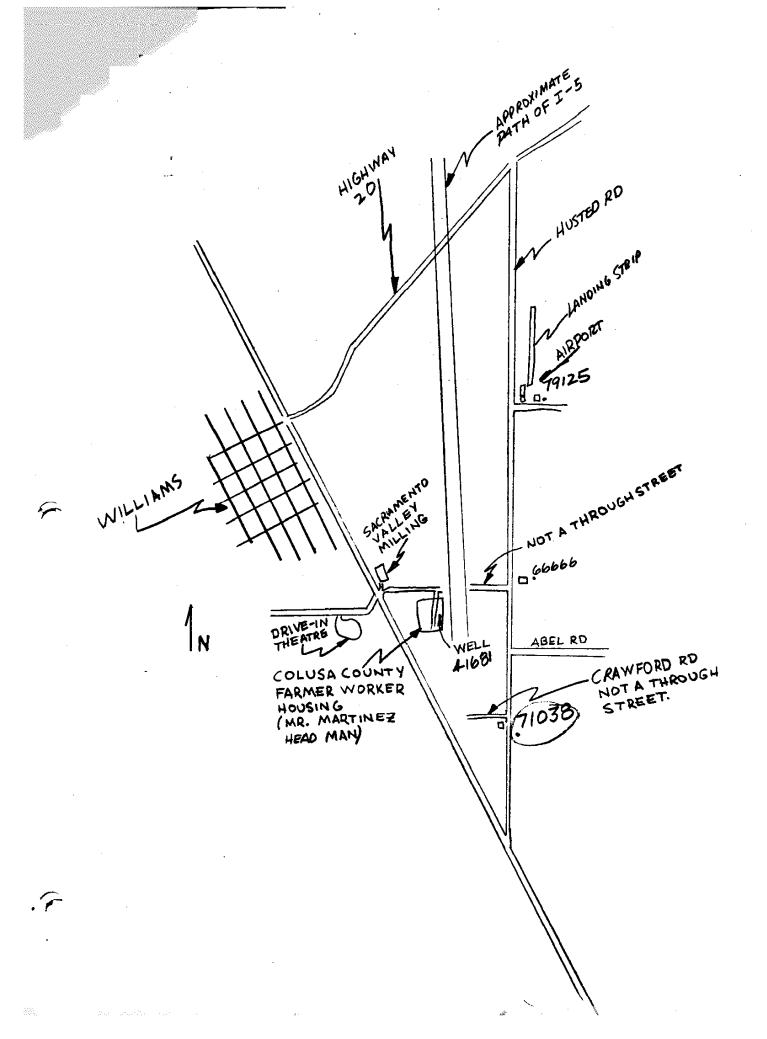
#### FIELD WORK SHEET

<u> </u>	
Report No. 71038	
Owner	
Pump No. 1275316	
Meter No. NONE	
	LOCATION
Section 19E	
Township 15N	
Range 2W	
pl whim	
1 de fion	
K <sup>0</sup>  =	
	·
5 8 Z W	IELL .
	feet North,
WHITE APARTMENT-LOOKING	feet West from S. E. corner of Section
BUILDING	DEWADUC
**	REMARKS
measurable by small,	hole in north side - no PGIE
neter number - m	age not being used

Field Checked by

8-15-74

Date



Permit No. \_

# RECEIVED STATE OF CALIFORNIA COMPLETION REPORT Refer to Instruction Pampbles

Owner's Well No. \_6256.

MAR 05 1993

No. 492125

				_	-	_							
Date '	Work	Began .	1	1	/	30	4	2	w	Ended	1	2,	۷۵.

Local Permit Agency COLUSA CO ENVIRONMENTAL HEALTH

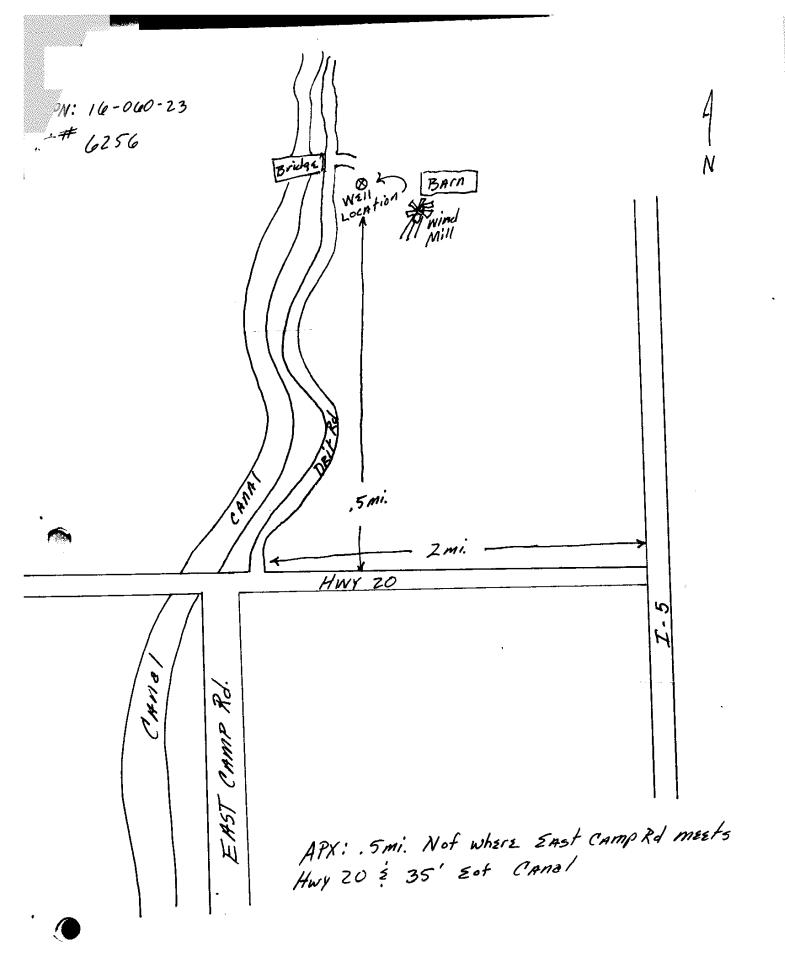
3/92

LATITUDE LONGITUDE APN/TRS/OTHER

		GEOLOGIC LOG		WELL O	W 14 E R	
ORIENT	TATION (∠)	X VERTICAL HORIZONTAL ANGLE (SPECIFY)				
		DEPTH TO FIRST WATER(Ft.) BELOW SURFACE				
	TH FROM URFACE	DESCRIPTION				
Ft.	to Ft.	Describe material, grain size, color, etc.				
0	10	TOP SOIL	Address .5	AI W OF E C		
10	30	CLAY		E OF CANAL		
30	85	GRAVEL	County COLI			
85	88	CLAY, SOME SAND			Dancal 93	
88	130	SMALL SANDY GRAVEL	T or 1: 15	Page <b>060</b> Range <b>3W</b>	raiceiasz	<del>)</del>
130	250	CLAY	l ownship			
250	350	SAND, MOSTLY CLAY	Latitude	MIN. SEC.	Longitu <del>de</del> _	DEG. MIN. SEC.
250		SAND, MOSILI CLAI		CATION SKETCH		TWACTIVITY (4)
$\vdash$			-	NORTH		X NEW WELL
<b>├</b>	<del></del>		_			MODIFICATION/REPAIR
<u> </u>	<u> </u>	1	4			Deepen
<u> </u>	1	1 ***	4			Other (Specify)
Ĺ		• • • • • • • • • • • • • • • • • • • •				l
		1				DESTROY (Describe
	1	t +				Procedures and Materials Under "GEOLOGIC LOG")
		1	<u> </u>		Ę	PLANNED USE(S) -
	į		WEST		E	(∠) MONITORING
	1	1	]			WATER SUPPLY
	1	t I				Domestic
-	i	1 .	7			
上一	1	1	1			Public
	!	<u> </u>	1			X_ Irrigation
1	<u> </u>		1			Industrial
$\vdash$			4			"TEST WELL"
<b>├</b>	<u> </u>			SOUTH		CATHODIC PROTEC-
<b>├</b>	<del>-  </del>	, 	Illustrate or Descri	be Distance of Well from	Landmarks	OTHER (Specify)
<b></b>		· ·	PLEASE BE ACC	dings, Fences, Rivers, etc URATE & COMPLETE	). [.	
			DRILLING			<del></del>
<u> </u>	1 		DRILLING REVI	ERSE	FLUID _	WATER
	<u> </u>	1		LEVEL & YIELD	OF COMPI	LETED WELL -
	<u> </u>	· 	DEPTH OF STATIC WATER LEVEL	(Ft.) & DA	TE MEASURE	D
		1	STIMATED YIELD	(GPM) &	TEST TYPE	
TOTAL	DEPTH OF	BORING 360 (Feet) 25.0		(Hrs.) TOTAL DRAV		
TOTAL	DEPTH OF	COMPLETED WELL 350 (Feet)	i e	sentative of a well's lon		
10111	221111 01	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	not be repres	on were of	s with join.	
[	DEPTH	CASING(S)		DEPTH	ANNU	LAR MATERIAL

		EPT			BORE-	CASING(S)								DEPTH				ANNULAR MATERIAL					
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F	ŧ.	to	F	=t.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (ビ)	BEN- TONITE (ビ)	FILL (ン)	FILTER PACK (TYPE/SIZE)			
		:	140		28"	X		П	Г	ASTM-135	12-3/4	.250		١	1	20	X			SAND SLURRY			
14	l)	i	250		22"	X				ASTM-135	10-3/4	. 250		20	:	150			X	6X16 SAND PACK			
2	50	1	350	)	22"		I	Π		HOUSTON CULT	19-3/4		0.050	150		210			X	GRAVEL			
[	•	:	30	)						T&C	2"			210	J 1	360			X	6X16 SAND PACK			
	30	,	130	1	28"		Y			HOUSTON CULT	16"		0.050		1					MAR 1 3 1993			
		1						$\mathbb{L}$							:					191719 - 0 - 1000			

ATTACHMENTS (∠)	CERT	FICATION STATEMENT —	. " '.
Geologic Log	I, the undersigned, certify that this report is  NAME EATON DRILLING CO	·	t of my knowledge and belief.
Geophysical Log(s) Soil/Water Chemical Analyses	(PERSON, FIRM, OR CORPORATION) (TYPED OR PE	Woodland	CA 95695
Other ATTACH ADDITIONAL INFORMATION. IF IT EXISTS.	Signed WELL DRILLER/AUTHORIZED REPRESENTATIVE	03/0	
DWB 188 BEV 7-90 IF ADDITIONAL	SPACE IS NEEDED LISE NEXT CONSECU	ITIVELY NUMBERED FORM	



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1	ORIGINAL				STATE O	OF CALIFOR	RNIA	OWR US	ONLY -	DO N	OT FILL IN			
	File with DWR			WELL	COMP	LETIO	N REPOR	T 15 M	0300	<u>-2-</u>	<b>4</b> )			
	Page f of 2	,		, , 30 30 30	Refer to In	striction Pu	mphlet	i	TATE WELL NO.	/STATIC	N NO.			
	Owner's Well No		>34	20001	MA No	802	5084	<u> </u>	الاللل	$\perp$	البليل			
	Date Work Began	A70	Pro des	. Ended		200		LATITUD	<u> </u>	LO	NGITUDE.			
	Local Permit Ag	1	فيركه ويحاني	COUNTY			~~~~~~~~~~~	_	APN/TRS/C	77450		└─		
	Permit No	** ! · · · ·		Permit	Date			-	AFN/ (Hore	JIREN		t		
	***************************************	GI	OLOGI	c roc —					V/4812/4032					
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		HMENTS (∠	<u> </u>				- CERTIFICA	TION STATEMEN	r					
ės.	Geologic	·		I, the und	ersigned, ce	ertify that this	s report is complete	e and accurate to the	e best of my ki	nowled	ge and belief.			
	_	s Log nstruction Diagra	m	NAME LO	resc	24 P.	wordflow	1						
		sical Log(s)		(PERS	SUN, FIRM, OR C	) (MURANUANUL مر سم و	TYPED OR PRINTED)	مصاس يرسي	Contraction of		1 G S			
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	ATTACH ADDITIONAL	INFORMATION. I	F IT EXIST	rs. Signed	DRILLER/AUTHO	RIZED REPRESEN	ATIVE	0	ATE SIGNED		-57 LICENSE NUMB	ER		
	ISSUE DEL DET 11 DT		IF ADD	ITIONAL SPACE	IS NEEDED.	. USE NEXT	CONSECUTIVELY	NUMBERED FORM				,		

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	File with DWR		W.E.L.	COM.	PLETI	ION REPORT STATE WELL NO STATION NO.					
	Page of Owner's Well No						2510			NO. ISTATION	NO.
	Date Work Began		Employe	·	OU	ULCA		LATITU		LOWE	ITUDE
A STATE OF	Lored Pornit Agen		EMRICAL		-		Ì	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
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		VERTICAL HO									
	1 1	DRILLING .				Name Mailing Addr	ace		***************************************	····	
	DEPTH FROM SURFACE	METHODD	ESCRIPTION	FLUID		i Mannig Addin					
	Ft. to Ft.	Describe unter	ial, grain siz	e, color, e	tc.	CITY				STATE	ZIP
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Į	<del></del>					Illustrate or Doscrib Fraces, Rivers, etc., necessary, PLEASE	e Distance o	f Well from Roa	els, Buildings,		MEDIATION
F	<del>j</del> <del>j</del>	<del></del>			<del></del> [	necessary. PLEASE	BE ACCU	ATE & COM	ional paper if LETE.	Oiner	R (SPECIFY)
<u> </u>						WATI	ER LEVE	L & YIELD	OF COMPL	ered wa	
-				<del></del>		DEPTH TO FIRST					
-			VV-TV-10-10-10-10-10-10-10-10-10-10-10-10-10-			DEPTH OF STATIC		(1 1.7 2.1	-12/74 00(1) 701	•	
						WATER LEVEL		(Ft.) & DATE	E MEASURED _	· ·	
-	OTAL DEPTH OF BORE	4 620			<u> </u> .	ESTIMATED YIELD					
	OTAL DEPTH OF COME		7.5%		· .	TEST LENGTH				(Ft.)	• .
-	(51.41) 1510 141 (56. (34.541)	TIGHTAL WELL	(Feet)			* May not be rep	resentative	of a well's lon	ig-term yield.		
i e	DEPTH		C,	ASING (S)					ANNI	JLAR MAT	ERIAI I
j I	FROM SURFACE HO	LE (TYPE(스)			**************************************			EPTH SURFACE	711110	TYPE	EJECKA35
ļ	DI/	SCREEN CON- CON- DUCTOR FILL PIPE	MATERIAL /	INTERNAL DIAMETER	GAUGE OR WALL	SLOT SIZE	<b>II</b>		CE- BEN-		TED D404
	Fl. to Fl.	SCREEN SOREEN 'Y DUCTOR FILL PIPE	GRADE	(Inches)	THICKNESS	IF ANY (Inches)	FL.	to Ft.	MENT TONITE	''*- (	ILTER PACK TYPE/SIZE)
	0:130		VC.	575	54.6	<i>i</i>	180	358	( <u>×</u> ) ( <u>×</u> )	(×)	n de Masser
3	20 160	·	WE	1/2	Silver	2 000	1200	360		1 Page 1	n. Per jan
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	ATTACHMEN	(TS (\(\sigma\))	<u> </u>			CERTIFICA	TION ST	ATEMENT			
	Geologic Lag		I, the under	signed, cer	tify that this	report is comple	te and acc	urate to the I	oest of my kno	owledge and	f belief.
1	Well Construction	on Diagram	NAME LE	D.C.	A	01.	260				- Transit
	Geophysical Log	-	(PERSON	N, FIRM. OR CO	RPORATION) (	TYPED OR PRINTED)					
1	Soil/Water Chem		1 PO	130 X	141	24 m	يومم مع و	CIF	95%	78	
	Other		ADDRESS	1 .,	, 1.3	G,	· ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	CITY	. 17-0	STATE	ZIP
A 7	TACH ADDITIONAL INFORM	IATION, IF IT EXISTS	Signed	den la	SALLE	A S			11-0	12:	3326

DWR 188 REV. 11:97

DUPLICATE Driller's Copy

Owner's Well No. 7546

Page 1 of 6

STATE OF CALIFORNIA

### WELL COMPLETION REPORT

o manachon	1 ampinei	•		Λ
No. 726	832	A.	13,	C

Ended 6/17/2003 Date Work Began 6/9/2003 Local Permit Agency COLUSA COUNTY HEALTH DEPT.
Permit No. 2003-77 Permit Date 6/3

Permit Date 6/3/2003

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STATE WELL NO. STATION NO.										
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	APN/	TRS/	OTHE	₹ _						

TOTALL	110	GEOLOGIC LOG	KALESA A VALIMIED	
		✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)		
ORIENTATI	ON ( <del>\</del> \(\times\)	DRILLING REVERSE FLUID WATER		
DEPTH F		DESCRIPTION FLUID WATER		
SURFA Ft, to		DESCRIPTION  Describe material, grain, size, color, etc.		
0		OLIVE/BROWN CLAY	Address 30 FT S OF MAXWELL RD & 6 MI	E OF 4 MILE RD
18	24	YELLOW/BROWN SILT	City CA	
24	40	YELLOW/BROWN CLAY	County COLUSA	
40	66	ORANGE/BROWN CLAY	APN Book Q30 Page 910 Parcel 010	
66	106	YELLOW/BROWN CLAY	Township 16 N Range 2 W Section 5	· · · · · · · · · · · · · · · · · · ·
106	126	OLIVE/GRAY CLAY		
126	170	OLIVE/GRAY CLAY W/SML GRAVEL STREAKS		DEG. MIN. SEC.
170	187	WELL GRADED GRAVEL	LOCATION SKETCH	ACTIVITY (∠) —
187		YELLOW/BROWN CLAY	e-log on file	
226		OLIVE/GRAY CLAY	16-109 OI TUE	MODIFICATION/REPAIR  —— Deepen
236	260	WELL GRADED GRAVEL W/COBBLE STREAKS	$\mathbf{J}$	Other (Specify)
260	306	YELLOW/GRAY CLAY		DECEDOV (December
306	320	OLIVE/GRAY CLAY		DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG
320	340	GRN/GRY CLY AND SND W/SML GRVL STRKS		PLANNED USES (∠)
340	346	POORLY GRADED SAND		WATER SUPPLY
346	366	GREEN/GRAY CLAY	WEST	Domestic Public Industria
366	386	GREEN/GRAY CLAY WITH SAND STREAKS	₹ a	MONITORING
386		GREEN/GRAY CLAY AND SAND		TEST WELL
426	446	OLIVE/GRAY CLAY AND SAND		CATHODIC PROTECTION.
446	456	OLIVE/BROWN CLAY AND SAND		HEAT EXCHANGE
456	476	POORLY GRADED GRAVEL WITH SILT		DIRECT PUSH
476	486	BLUE/GRAY CLAY		INJECTION VAPOR EXTRACTION
486	534	OLIVE/BROWN CLAY		SPARGING
534	542	WELL GRADED GRAVEL WITH SAND	SOUTH SOUTH	REMEDIATION
542	606	YELLOW/GRAY CLAY	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.	OTHER (SPECIFY)
606	618	GREEN/GRAY CLAY WITH SAND	necessary. PLEASE BE ACCURATE & COMPLETE.	EXTENSOMETE
618	640	WELL GRADED GRAVEL WITH SAND	WATER LEVEL & YIELD OF COMPL	ETED WELL
640	650	CLAY	DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	<u> </u>
650	664	WELL GRADED GRAVEL WITH SAND	DEPTH OF STATIC	•
664	668	CLAY	WATER LEVEL (Ft.) & DATE MEASURED _	
TOTAL DEL	OF I	BORING 986 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
		COMPLETED WELL 813 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN  May not be representative of a well's long-term yield	
TOTAL DEC	111 01 (	2014 THE 11 TOD = 1-2 (1.001)	way not be representative of a well's long-term yield	f

DEPTH	PORE	CASING (S)				DEP FROM SU	тн	ANNULAR MATERIAL						
FROM SURFACE	BORE -	TYPE (✓)					GAUGE	GAUGE SLOT SIZE		RFACE	TYPE			PE
Ft. to Ft.	DIA. (Inches)	BLANK	CON	DLCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. to	Ft.	CE- MENT	BEN- TONITE	<u>20</u>	3 FILTER PACK (TYPE/SIZE)
0 18	36		•	7	BLK STEEL	24			0	18	iNi	7,	9 -	SAND SLURRY
ZONE 1									. 0	117	100	✓		HALIBURTON
0.0 174.1	36/18	<b>V</b>		T	PVC	2.5	SCH 80		117	301	,		✓	#8 GRD SAND
174.1 183.7	18		7		SS WR WR	2.5		0.020	301	433		<b>V</b>		HALIBURTON
183.7 245.8	18	~	1	1	PVC	2.5	SCH 80		433	535			<b>V</b>	#8 GRD SAND
245.8 255.4	18		<b>V</b>		SS WR WR	2.5		0.020	535	673		_		HALIBURTON

 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)

WOODLAND CITY 07/11/03 DATE SIGNED STATE ZIP

<u>C57 A HIC - 1337</u>83

C-57 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DUPLIC	ATE
Driller's	Copy

#### STATE OF CALIFORNIA

WELL COMPLETION REPORT

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	NI.		^	•	-	^

Page 2 of 6	Refer	to Instruction	Panıp
Owner's Well No. 7546		No. 726	83

\_, Ended 6/17/2003 Date Work Began 6/9/2003

Permit No. 2003-77 Permit Date 6/3 Permit Date 6/3/2003

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	LATIT	UDE				LON	GIT	JDE			
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	APN/TRS/OTHER										

	<del></del>	GEOLOGIC LOG	ALIMA A VARIFABRA						
ORIENTA	ΓΙΟΝ (ϫ)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING METHOD REVERSE — FLUID WATER							
DEPTH SURI	FROM	DESCRIPTION							
Ft. to		Describe material, grain, size, color, etc.							
668		WELL GRADED GRAVEL WITH SAND	Address 30 FT S OF MAXWELL RD . S MI E OF 4 MILE RD						
688		GREEN/GRAY CLAY	City CA						
706		GREEN/GRAY CLAY WITH FINE SAND	County COLUSA						
720		POORLY GRADED GRAVEL WITH SAND	APN Book 030 Page 910 Parcel 010						
747		WELL GRADED GRAVEL W/COARSE SAND	Township 16 N Range 2 W Section 5						
766	826	GRAY/GREEN CLAY W/FINE SAND AND SILT	Latitude	1 1					
826		OLIVE/BROWN CLAY	Latitude	DEG. MIN. SEC. ——ACTIVITY (∠) ——					
846	860	GRAY/GREEN CLAY WITH SILT	NORTH -	✓ NEW WELL					
860		POORLY GRADED GRAVEL		MODIFICATION/REPAIR					
875	906	GRAY CLAY W/FINE SAND AND SILT STREAKS		Deepen					
906		GRY/BLK CLY W/FINE SAND AND SILT STRKS		Other (Specify)					
946	986	BLU/GRY CLY W/FINE SAND AND SILT STRKS		DESTROY (Describe					
				Procedures and Materials Under "GEOLOGIC LOG")					
				PLANNED USES(∠)					
				WATER SUPPLY					
			WEST	Domestic Public Irrigation Industrial					
			× 13	MONITORING					
				TEST WELL					
				CATHODIC PROTECTION					
			·	HEAT EXCHANGE					
				DIRECT PUSH					
	***************************************			INJECTION					
				VAPOR EXTRACTION SPARGING					
			south —	REMEDIATION					
			Illustrate or Describe Distance of Well from Roads, Buildings,	OTHER (SPECIFY)					
			Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	EXTENSOMETE					
			WATER LEVEL & YIELD OF COMPL	ETED WELL					
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	:					
			DEPTH OF STATIC WATER LEVEL						
				1					
TOTAL D	EPTH OF	BORING 986 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE (Ft.)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)						
		COMPLETED WELL 813 (Feet)	May not be representative of a well's long-term yield	` '					

DEPTH ROPE CASING (S)									DEPTH		ANNULAR MATERIAL									
FROM SURFACE	BORE -		YPE				INTERNAL	GAUGE	SLOT SIZE		FROM SURFACE		FROM SURFACE		FROM SURFACE			T	T	YPE
Ft. to Ft.	DIA. (Inches)	BLANK	SCREEN	CONT	FILL PIPE	MATÉRIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)		Ft. to	o Ft.	CE- MENT	BEN- TONIT	E FILL (✓)	FILTER PACK (TYPE/SĮZE)				
255.4 276.6	18	<b>√</b>	1			PVC	2.5	SCH 80			673	797				#8 GRD SAND				
ZONE 2										L	797	986	1	9	$M_{h}$	SAND SLURR				
0.0 730.0		~				BLK STEEL	4					na.	MÖ.	T to						
730.0; 750.0	1		7			MILLSLOT	4		0.060			2.80								
750.0 813.0	i	~				BLK STEEL	4													
ZONE 3												i								

-	ATTA	CHMENTS	(1)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis \_\_ Other \_

CERTIFICATION	STATEMENT
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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)

WELL DRILLER/AUTHORIZED REPRESENTATIVE

WOODLAND CITY 07/11/03 DATE SIGNED

95695 E ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER STATE

CA

DUPLIC	ATE
Driller's	Copy

Page 3 of 6

#### STATE OF CALIFORNIA

## WELL COMPLETION REPORT Refer to Instruction Pamphlet

Refer	to Instructi	on .	Pampi
	No "T	20	00

No. 726832 Owner's Well No. 7546 , Ended 6/17/2003 Date Work Began 6/9/2003

Local Permit Agency COLUSA COUNTY HEALTH DEPT.

Permit No. 2003-77 \_\_ Permit Date \_6/3/2003

	DWR	USE	ONLY		DO	_NC	T	FIL	<u>L</u>	IN_	
- 1	1.	1 1	1	اا			L	1			
	STATE WELL NO./ STATION NO.										
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	LATIT	UDE			Į	ONC	SITL	JDE			
1						1		Ī.	Ţ		
APN/TRS/OTHER											

Tomin	140.	GEOLOGIC LOG	1	1
ORIENTAT	TON (≰)	VERTICAL HORIZONTAL ANGLE (SPECIFY)		
DEPTH	EROM	DRILLING METHOD REVERSE FLUID WATER		
SURF	ACE	DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.	WELL LOCATION	
0		OLIVE/BROWN CLAY	Address 30 FT S OF MAXWELL RD & 6 MI	E OF 4 MILE RD
18		YELLOW/BROWN SILT	City CA	
24		YELLOW/BROWN CLAY	County COLUSA	
40		ORANGE/BROWN CLAY	APN Book 030 Page 910 Parcel 010	
66		YELLOW/BROWN CLAY	Township 16 N Range 2 W Section 5	
106		OLIVE/GRAY CLAY	Latitude	DEG. MIN. SEC.
126		OLIVE/GRAY CLAY W/SML GRAVEL STREAKS	LOCATION SKETCH	DEG. MIN. SEC. —ACTIVITY (⊻) ——
170		WELL GRADED GRAVEL	NORTH -	✓ NEW WELL
187		YELLOW/BROWN CLAY		MODIFICATION/REPAIR
226		OLIVE/GRAY CLAY		— Deepen
236		WELL GRADED GRAVEL W/COBBLE STREAKS		Other (Specify)
260		YELLOW/GRAY CLAY		DESTROY (Describe
306		OLIVE/GRAY CLAY		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
320		GRN/GRY CLY AND SND W/SML GRVL STRKS		PLANNED USES(∠)
340		POORLY GRADED SAND		WATER SUPPLY
346		GREEN/GRAY CLAY	WEST	Domestic Public Irrigation Industrial
366		GREEN/GRAY CLAY WITH SAND STREAKS	≥ π	MONITORING
386		GREEN/GRAY CLAY AND SAND		TEST WELL
426		OLIVE/GRAY CLAY AND SAND		CATHODIC PROTECTION
446		OLIVE/BROWN CLAY AND SAND		HEAT EXCHANGE
456	476	POORLY GRADED GRAVEL WITH SILT		DIRECT PUSH INJECTION
476	486	BLUE/GRAY CLAY		VAPOR EXTRACTION
486	534	OLIVE/BROWN CLAY		SPARGING
534	542	WELL GRADED GRAVEL WITH SAND	SOUTH ————————————————————————————————————	REMEDIATION
542	606	YELLOW/GRAY CLAY	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.	OTHER (SPECIFY)
606	618	GREEN/GRAY CLAY WITH SAND		EXTENSOMETE
618	640	WELL GRADED GRAVEL WITH SAND	WATER LEVEL & YIELD OF COMPL	ETED WELL
640	650	CLAY	DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	•
650	664	WELL GRADED GRAVEL WITH SAND	DEPTH OF STATIC	
664	668	CLAY	WATER LEVEL (Ft.) & DATE MEASURED _	
TOTAL DE		000	ESTIMATED YIELD * (GPM) & TEST TYPE	
			TEST LENGTH(Hrs.) TOTAL DRAWDOWN	• •
TOTAL DE	STH OF (	COMPLETED WELL 813 (Feet)	May not be representative of a well's long-term yield	7.

DEP	TH	BODE					<b>C</b> A	ASING (S)				DEP	TH		ANN	ULAR	MATERIAL														
FROM SU		BORE -		YPE				INTERNAL	GAUGE	SLOT SIZE	FROM SURFACE		FROM SURFACE		FROM SURFACE		FROM SURFACE		FROM SURFACE		FROM SURFACE		FROM SURFACE		FROM SURFACE		FROM SURFACE		DEN.	1	PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (¥)	BEN- TONIT ( <u></u> )	FILL (⊻)	FILTER PACK (TYPE/SIZE)														
0.0	462.4	36/18	✓				PVC	2.5	SCH 80			0	18	✓			SAND SLURRY														
462.4	473.4	18		1			SS WR WR	2.5		0.020		<u>o i</u>	117		<b>✓</b>		HALIBURTON														
473.4	494.6	18	✓				PVC	2.5	SCH 80		11	7	301			ah	#8 GRD SAND														
											30	1	433	4	( C	mò	HALIBURTON														
			_								43	3	<sub>1</sub> 5,35	1	12	~	#8 GRD SAND														
											53	5	1678	2			HALIBURTON														

		_
ATTACHMENTS	11	)

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

\_\_ Other ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

AND MICHEA	TECATO	CODA CENTRAL ACTOR	ATTYY1
CRRTHIC'S	7.1.16.31.	STATEME	N I

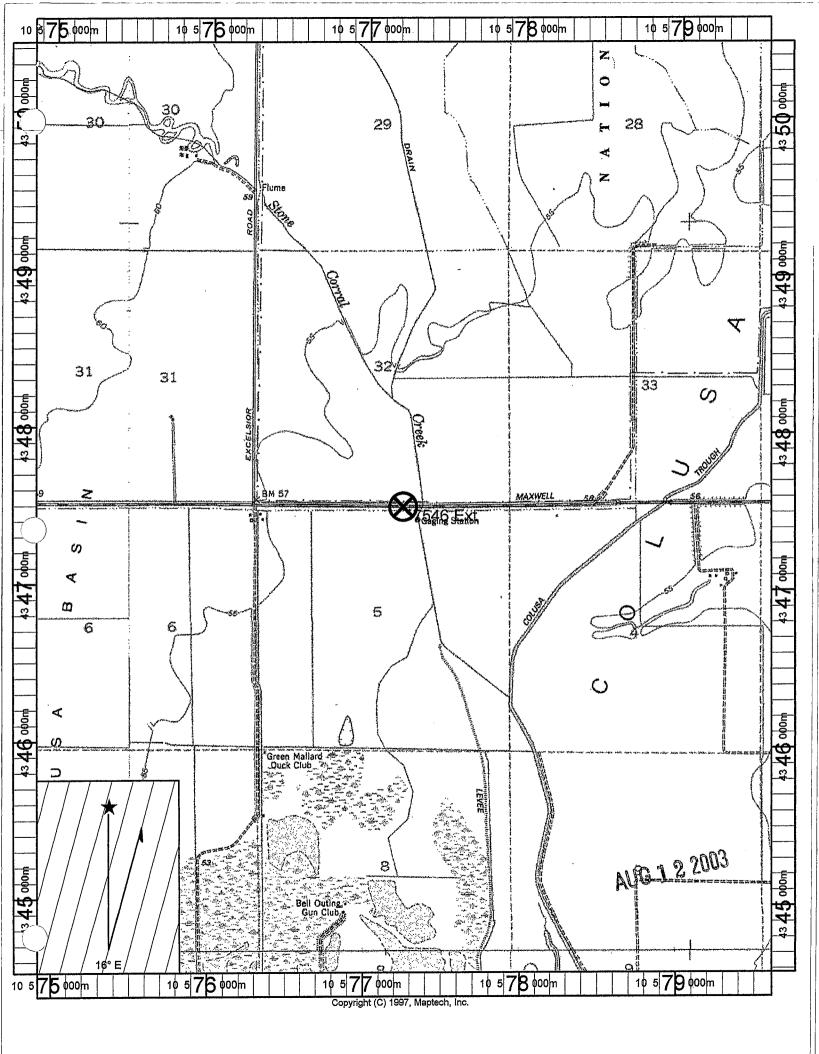
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME\_EATON DRILLING CO.

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

WOODLAND 07/11/03 CA STATE

E ZIP C57 A HIC - 133783





16N/2W-25B2

	*** *	Dote /	arma 12	1965	•
Rig No	AAA	Driller in Char	ge Clarence	Doblen	•
	saanneyer	Location Z	me allow	Colona	
Depth of Hole 2:		Size 🖇	Water Level		
th of Casing 🏖					
FORM	MATION: (State	every Stratum a	nd Condition)	A	
n <u>2</u>	feet to	feet 📆	i - grane	E	
эт. <u>8</u> 4	feet to 🥍 🎉	feet, 122	ul Jarar	a Clay	
om 96		feet &	on moles	ej	
rom 2/2.	feet to 🛂 🔼	feet 4	Car of Cal	·	
irom 276	feet to 3/2	feet d	everes low	muel	
From	feet to	feet	Bollows.	-	
From		feet		The first on the first of the control of the contro	
From	feet to	feet			
Remarks:					
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### 2-Mile Rd Well

## 16N/03W-14H003-6M

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ORIGINAL File with DWR		WELL COMP		ON REPOR	RT 6WR	N ON 3	- 00 W	NOT FILL IN
Page 1 of 4			nstruction		ļ	STATE WELL	NO./ STA	TION NO
Owner's Well No	, 8469	N	°. E01	16237		¶	<b>∐</b>	
Date Work Began	8/16/2010 E	nded8/27/2010	Ź	LRCI	LATITU	DE	L	ONGITUDE
				1901	_			
Permit No. V	VP0000085 GEOLOGIC L	Permit Date <u>8/1</u>	10/2010		_	APN/T	RS/OTHER	₹
	GEOLOGIC L	OG		<b>.</b>	44,547			1
ORIENTATION (≰)	✓ VERTICAL HORIZ	CONTAL ANGLE	_(SPECIFY)					
	DRILLING ROTARY	ELUID MUE	) '					
DEPTH FROM SURFACE		CRIPTION						
Ft. to Ft.	Describe material	l, grain, size, color, e	tc.	L				
	Top soil			Address 30' We	of 2 Mile Rd & 1.6	Mi Notini		
5 660	Sandy brown clay with	small gravel streak	\$	City Lurline Av				
660 1130	Sandy blue clay with s	and streaks		County COLUS		```		
1130 1230	Sand and gravel				Page 210	Dargal OC	15	
1230; 1350	Sandy blue clay							
1350¦ 1440	Black sand with gravel			Latitude	Ranges vv	_ Section _	<del></del>	
1440¦ 1500	Blue clay			DEG.	MIN. SEC.		DEG.	MIN. SEC.
	1	-1-14141		LO	CATION SKETCE	I <del></del>		.CTIVITY (∠) —
	1				NORTH		7-4	NEW WELL
1	1 .				•			FICATION/REPAIR
1	1							Deepen Other (Specify)
1	<u></u>						ļ	
: 1	1	W - 1811 Success						DESTROY (Describe
1	1	<del></del>						Procedures and Materials Under "GEOLOGIC LOG"
1	1						PLA	NNED USES(∠)
ŧ	1			ļ <sub>.</sub>			WATE	R SUPPLY
!	<u> </u>			WES				Domestic Public Imigation Industrial
!	!			>			ار	MONITORING →
1	<u> </u>							TEST WELL
. [	1						CATHO	DIC PROTECTION
-								HEAT EXCHANGE
l l	1							DIRECT PUSH
1	1	7.7						INJECTION
	1						VAP	OR EXTRACTION
	1				— south —			SPARGING
	1			Illustrate or Describe	Distance of Well from Roads	s, Buildings,	<b>.</b>	REMEDIATION OTHER (SPECIFY)
1	<u></u>			necessary. PLEASE I	l attach a map. Use addition BE ACCURATE & COM	MPLETE.		OTHER (SPECIFT)
1	<u>1.,</u>	· · · · · · · · · · · · · · · · · · ·		WATE	R LEVEL & YIELI	D OF COMI	OF ETER	WELL
1	1							WEEL
1	1				WATER (Ft.) I	SELOW SURFA	4UE	
t	t			DEPTH OF STATIC WATER LEVEL	(Ft.) & DA	TE MEASURED	)	
1	<u> </u>				* (GPM) &			
TOTAL DEPTH OF	BORING 1500 (Feet)				(GFN) &			
TOTAL DEPTH OF	COMPLETED WELL 1440	(Feet)			resentative of a well's			
				May not be repr	Cocmative of a west	tong-term v	iciu.	
DEPTH	BORE - TOTAL COLL	CASING (S)			DEPTH	AN	NULAR	MATERIAL
FROM SURFACE		İ			DEPTH FROM SURFACE		T	/PE
	SCREEN SCREEN CON-	MATERIAL / INTERNAL GRADE DIAMETER	GAUGE OR WALI			CE- BE		FILTER PACK
Ft. to Ft.		(inches)	THICKNES		Ft. to Ft.	MENT TON	IITÉ FILL (✓)	(TYPE/SIZE)
Zone 1					0 169		<del>/ \ _/</del>	Sand Siver
0 295	14 🗸 💮 P\	VC 2.5	SCH	80			+7	Sand Slurry
295 305		VC 2.5			169 253	-		SRI#8 Sand
305 315		VC 2.5			252 270	<u> </u>		Bentonite Seal
Zone 2		2.0	30/17		270   378	<del></del>		SRI#8 Sand
0, 720	14 V P	VC 2.5	SCH	80	378   383	3		Bentonite Seal
1	HMENTS ( $\angle$ )				383   475			SRI#8 Sand
Geologic		I, the undersigned, certify the	hat this renort	is complete and accura	ATION STATEMEN	A.I.	,	
Well Co	nstruction Diagram	NAME EATON DRI	LLING CC	)		ioage alla pelle		
1	ical Log(s)			ATION) (TYPED OR PE	•		٥.	05000
Soil/Wate	er Chemical Analysis	20 W. Kentucky Av	<del>e</del>		Woodland CITY		CA STATE	95695 ZIP
1	NFORMATION, IF IT EXISTS,	Signed Mark		un.	·	09/01/10		C57 A 133783
1		1 WELL DRILLER/A	AUTHORIZED	REPRESENTATIVE	ī	DATE SIGNED		C-57 LICENSE NUMBER

ORI	<b>GIN</b>	٩L
File	with	DWR

#### STATE OF CALIFORNIA

Page 2 of	4	
Owner's	Well No.	8469

WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E0116237

, Ended 8/27/2010 Date Work Began 8/16/2010 Local Permit Agency Colusa County Health Dept
Permit No. WP0000085

Permit Date 8/10/2010

	DWR	USE	ONLY		DO	NOT	FILL	IN
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		LL_		1	1	LI	1 1	
			A DM/		TUEO			

GEOLOGIC LOG	AZUELA A OXAULED	
ORIENTATION (\$\square\$)		
Ft. to Ft. Describe material, grain, size, color, etc.		
0 5 Top soil	Address 30' Wof 2 Mile Rd & 1.6 Mi Nof	
5 660 Sandy brown clay with small gravel streaks	City Lurline Ave CA	
660 1130 Sandy blue clay with sand streaks	County COLUSA	
1130; 1230; Sand and gravel	APN Book 014 Page 210 Parcel 005	
1230¦ 1350¦ Sandy blue clay	Township 16 N Range 3 W Section 14	
1350¦ 1440¦Black sand with gravel	Latitude	1 +
1440¦ 1500¦ Blue clay		DEG. MIN. SEC.
	LOCATION SKETCH	—ACTIVITY (∠) —
	NORTH -	→ NEW WELL
		MODIFICATION/REPAIR
		— Deepen
		Other (Specify)
		DESTROY (Describe
		— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"
		PLANNED USES(∠)
1 1		WATER SUPPLY
1 I	WES.	Domestic Public Industrial
	>	
1 1		MONITORING → TEST WELL
		CATHODIC PROTECTION
i i		HEAT EXCHANGE
		DIRECT PUSH
		INJECTION
		VAPOR EXTRACTION
ļ (		SPARGING
1	Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION
	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
	necessary. PLEASE BE ACCURATE & COMPLETE.	
	WATER LEVEL & YIELD OF COMPL	ETED WELL
	DEPTH TO FIRST WATER— (Ft.) BELOW SURFACE	
	DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURED _	
3 (.		
TOTAL DEPTH OF BORING 1500 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
TOTAL DEPTH OF COMPLETED WELL 1440 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	
TOTAL DEL TATO CONTENDED TO TO TO TO TO TO TO TO TO TO TO TO TO	May not be representative of a well's long-term yield	d

DEPT		BORE -					CASING (S)  DEPTH ANNULAR MATERIAL						MATERIAL				
FROM SUR	RFACE	BORE - HOLE DIA.	_	YP	$\overline{}$	<u> </u>						FROM SURFACE				TY	PE
Ft. to	Ft.	(inches)	BLANK	SCREEN	-NOO	DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (✓)	BEN- TONITE (✓)	E FILL (✓)	FILTER PACK (TYPE/SIZE)
720	730	14		✓	1.		PVC	2.5	SCH 80	.035	475	; ;	515		~		Bentonite Seal
730	740	14	✓	1			PVC	2.5	SCH 80		515	5	700			<b>V</b>	SRI#8 Sand
Zone	3										700	) ;	710		$\overline{}$		Bentonite Seal
0;	1140	10	<b>√</b>	1			PVC	2.5	SCH 80		710	) ;	775			<b></b> √	SRI#8 Sand
1140	1150	10		7	7		PVC	2.5	SCH 80	.035	775	<del>,</del>	800		~		Bentonite Seal
1150¦	1170	10	~	Г			PVC	2.5	SCH 80		800	<del>)                                    </del>	904				SRI#8 Sand

-	ATTACHMENTS	( <u>✓</u> )
---	-------------	--------------

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

 -	CERTIFICA	47	TION S	TATE	EMEN	1

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 W. Kentucky Ave

WELL DRILLER/AUTHORIZED REPRESENTATIVE

## ORIGINAL File with DWR

WELL STATE OF CALIFORNIA COMPLETION REPORT

Page	3	of 4	
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age 3 of 4	to instruction Fumphier
Owner's Well No. 8469	No. E0116237
Date Work Began 8/16/2010, Ended 8/27/2010	
Local Permit Agency Colusa County Health Dept	
Permit No. WP0000085 Permit Date	8/10/2010
GEOLOGIC LOC	

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Pennit No	o. vvr occoods Permit Date o/10/2010		
	GEOLOGIC LOG —	WELLOWNED _	
ORIENTATION	DRILLING ROTARY		
DEPTH FROM SURFACE	DESCRIPTION		'
Ft. to F	Describe material, grain, size, color, etc.		•
0;	5 Top soil	Address 30' Wof 2 Mile Rd & 1.6 Mi Nof	=
5	660 Sandy brown clay with small gravel streaks	City Lurline Ave CA	
660 1	130 Sandy blue clay with sand streaks	County COLUSA	
1130 1	230 Sand and gravel	APN Book 014 Page 210 Parcel 005	
1230 1	350   Sandy blue clay	Township 16 N Range 3 W Section 14	
1350 1	440 ¦ Black sand with gravel	Latitude	
1440 1	500 Blue clay	DEG. MIN. SEC.	DEG. MIN. SEC.
t	1	LOCATION SKETCH	—ACTIVITY (∠) —
i	1	NORTH -	→ NEW WELL
i		1	MODIFICATION/REPAIR  —— Deepen
!		1	Other (Specify)
!			
			DESTROY (Describe Procedures and Materials
			Under "GEOLOGIC LOG"
<u> </u>			PLANNED USES(∠)
		F. F.	WATER SUPPLY  Domestic Public
		WESI EAST	Imigation Industrial
. !			MONITORING →
			TEST WELL CATHODIC PROTECTION
			HEAT EXCHANGE
i			DIRECT PUSH
			INJECTION
<u> </u>			VAPOR EXTRACTION
<del></del>		SOUTH	SPARGING
<u> </u>		SOUTH  Illustrate or Describe Distance of Well from Roads. Buildings,	REMEDIATION
	1	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
!		WATER LEVEL & YIELD OF COMPL	ETED WELL
i		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	
1	l	DEPTH OF STATIC	
i		WATER LEVEL (Ft.) & DATE MEASURED	
TOTAL DEPTH	OF BORING 1500 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
	4440	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
TOTAL DEPTH	OF COMPLETED WELL 1440 (Feet)	May not be representative of a well's long-term viel	d

DEPTH FROM SURFACE		BORE -					CA	ASING (S)		DEPTH		ANNULAR MATERIAL				
		HOLE DIA.				<u>(숙)</u>		111757111				FROM SURFACE		,	TY	PE.
Ft. to Ft	t.	(Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SŁOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT	BEN- TONITI	FILL (√)	FILTER PACK (TYPE/SIZE)
	180	10		✓			_PVC	2.5	SCH 80	.035	904	922		\ <del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>		Bentonite Seal
	200	10	✓		<u>L</u>		PVC	2.5	SCH 80		922			-	~	SRI#8 Sand
Zone	4										1005	1026		~		Bentonite Seal
L	370	8.75	✓				PVC	2.5	SCH 80		1026	1078			~	SRI#8 Sand
	380	8.75		<b>√</b>			PVC	2.5	SCH 80	.035	1078	1106		~		Bentonite Seal
1380¦ 1²	410	8.75	_				PVC	2.5	SCH 80		1106	1236			<b></b>	SRI#8 Sand

ATTACHMENTS ( / )	CODE DE CONTRACTOR DE CONTRACT	
, , , , , , , , , , , , , , , , , , ,	CERTIFICATION	
— Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my k
Well Construction Diagram	NAME EATON DRILLING CO.	
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)	
— Soil/Water Chemical Analysis	20 W. Kentucky Ave	Woodl
Other	ADDRESS	C
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Mark Cu	
	WELL DRILLER/AUTHORIZED REPRESENTATIVE	

#### **ORIGINAL** File with DWR

#### STATE OF CALIFORNIA

Owner's Well No. 8469 Date Work Began 8/16/2010

\_, Ended 8/27/2010

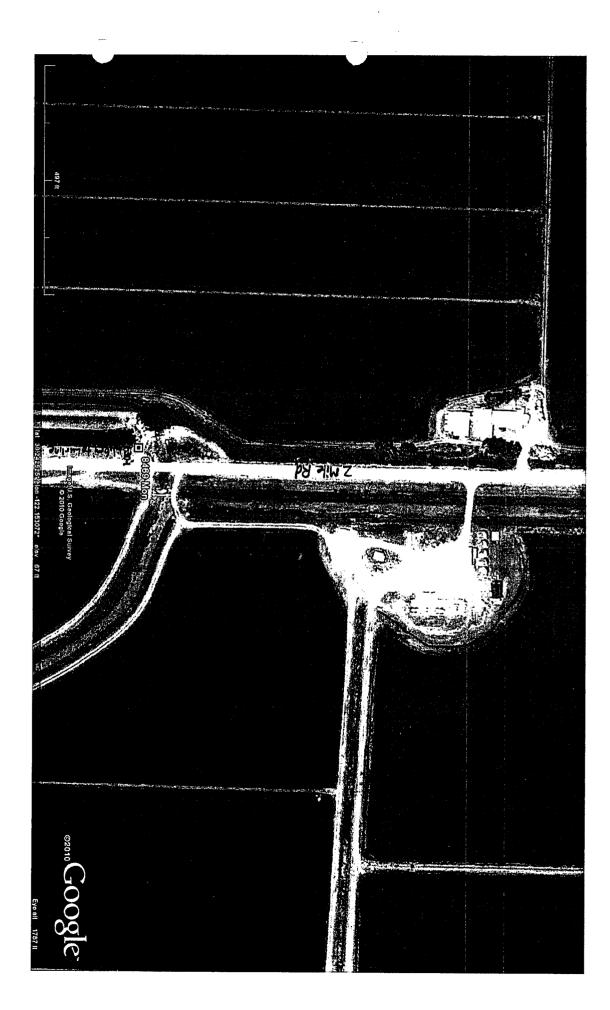
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E0116237

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

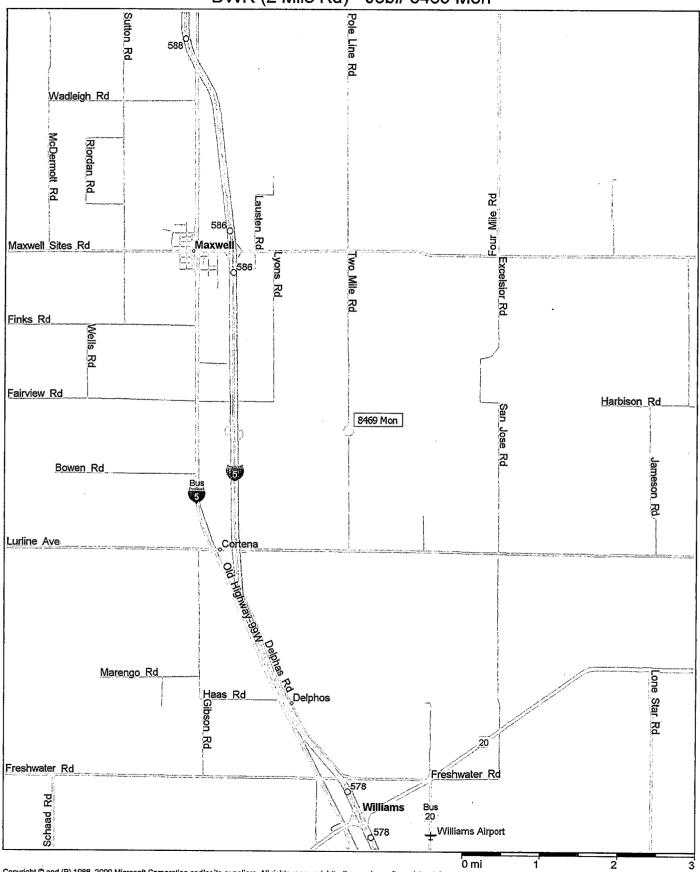
Local P	ermit A	gency Colusa County Health Dept			ADVERS	UDTUES		
Permi	t No <u>W</u>	<u>F0000085</u> Permit Date 8/10/2010			APN/TRS	OTHER		
		GEOLOGIC LOG	1	WELL C	WNED -			
ORIENTAT	. , ,	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD						
DEPTH SURF		DESCRIPTION						
Ft. to		Describe material, grain, size, color, etc.						
0;	5	Top soil	- -I Address <u>30' Wof 2</u>	Mile Rd & 161	Mi Not	-		
5	660	Sandy brown clay with small gravel streaks	City Lurline Ave		*** ****			
660	1130	Sandy blue clay with sand streaks	County COLUSA		-,	·		
1130		Sand and gravel		240	D 100E			
1230		Sandy blue clay	APN Book 014 Township 16 N	_ Page <u>2 10</u>	Parcel 005			
1350		Black sand with gravel			Section 14			
1440		Blue clay	Latitude	SEC.	-	DEG. MIN. SEC.		
			LOC#	ATION SKETCH-		ACTIVITY (\(\angle\)		
1				NORTH		→ NEW WELL		
			1			MODIFICATION/REPAIR		
			•			— Deepen — Other (Specify)		
+			•					
+						DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG"		
						Under "GEOLOGIC LOG"		
<del>                                     </del>						PLANNED USES(∠)		
<del>                                     </del>			·		ST	WATER SUPPLY  — Domestic — Public		
<del></del>			WEST		:AS	Imigation Industrial		
-			.]		ш	MONITORING →		
ļ						TEST WELL		
i-						CATHODIC PROTECTION		
—— <u> </u>						HEAT EXCHANGE		
-						DIRECT PUSH INJECTION		
1						VAPOR EXTRACTION		
						SPARGING		
1.			Illustrate or Describe Dist	SOUTH	Ruildinas	REMEDIATION		
! !			Fences, Rivers, etc. and att necessary. PLEASE BE	ach a map. Use additiona	l paper if	OTHER (SPECIFY)		
<u> </u>								
				LEVEL & YIELD				
<u> </u>			DEPTH TO FIRST WA	TER (Ft.) BE	LOW SURFACE	=		
ļ			DEPTH OF STATIC WATER LEVEL	/E+ \ 2. DATE	MEASIDED			
ļ								
TOTAL DE	PTH OF	BORING 1500 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE					
TOTAL DE	PTH OF	COMPLETED WELL 1440 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)  May not be representative of a well's long-term yield.					
L			May not be represe	munve of a well S l	ong-term yiel	и,		
I		CACINIC (C)	ł i		l			

DEPTH FROM SURFACE		BORE -					C.	ASING (S)		DEPTH FROM SURFACE			ANNULAR MATERIAL				
		BORE - HOLE		TYPE ( </td <td>1 141</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ΤΥ</td> <td>PE</td>		1 141										ΤΥ	PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft	CE- MENT	BEN- TONIT	E FILL (⊻)	FILTER PACK (TYPE/SIZE)
1410	1420			✓	1		PVC	2.5	SCH 80	.035	1236	3 ;	1261		~		Bentonite Seal
1420	1440	8.75	✓	_			PVC	2.5	SCH 80		1261		1295			~	SRI#8 Sand
i											1295	5 !	1322		~		Bentonite Seal
i					L						1322	2	1481			~	SRI#8 Sand
t 1											1481		1488		~	-/	Bentonite Seal
1											1488	3	1500			<b>V</b>	Native Fill

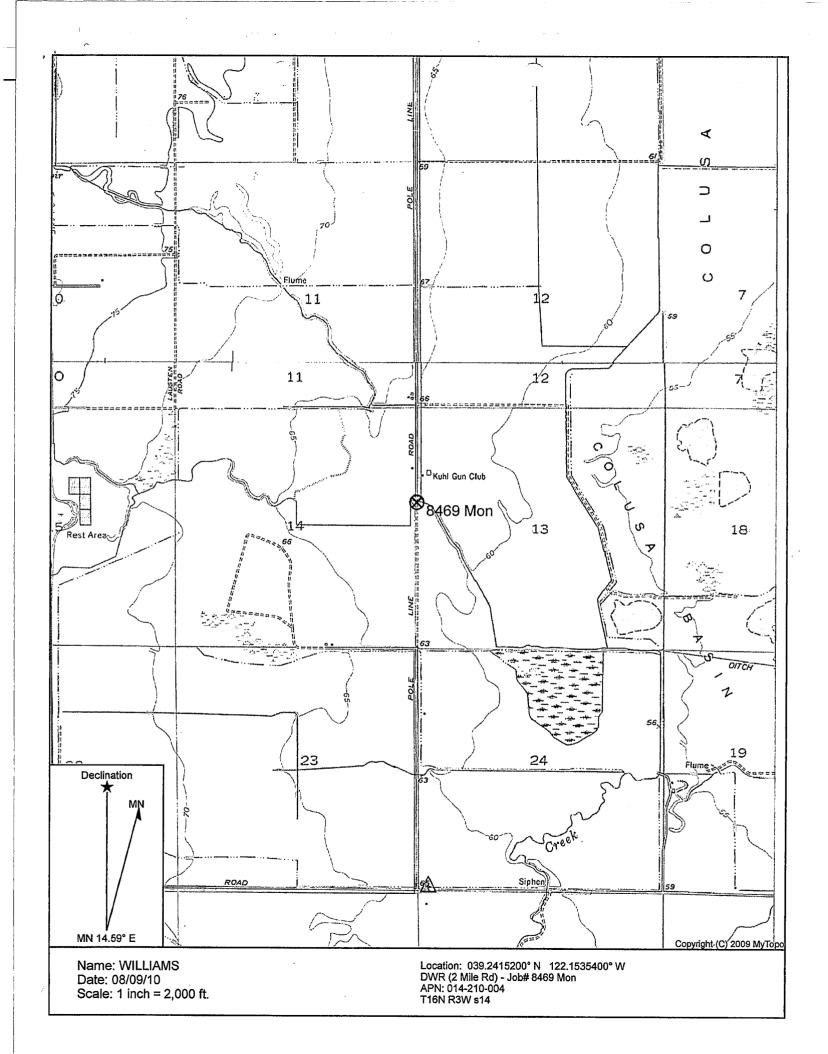
i		1488   1500	Native Fill
ATTACHMENTS (∠)	CERTIFICATI	TION STATEMENT —	
Geologic Log	I, the undersigned, certify that this report is complete and accurate	to the best of my knowledge and belie	ef.
— Well Construction Diagram	NAME_EATON DRILLING CO.		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRIN	TED)	
Soil/Water Chemical Analysis	20 W. Kentucky Ave	Woodland	CA 95695
Other	ADDRESS	CITY	STATE ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed WELL DRILL ERIALTHORIZED REPRESENTATIVE	09/01/10	C57 A 133783



⊔WR (2 Mile Rd) - Job# 8469 Ivion



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FORM	115	
		INVESTIGATION

#### **DIVISION OF WATER RESOURCES**

DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

U.S.B.R. NUMBER 16-3W

357V

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V	v	ᆮ	L	L.		

LOCAL DESIGNATION 38

		Date drilled 12-1	3-46
OCATION 100' N., 250' E.,	of S.W. corner		-37

Colusa Co., Sacto. Valley Dist., Spring Valley Quad.

SKETCH

CONFIDENTIAL LOG

DIAMETER OF CASING 4"

L.C. Farkison

source of information Owner & Driller

INSPECTED WHILE DRILLING\_\_\_\_\_SEE FILE NO.\_\_\_\_

SURFACE ELEVATION 731

FOR FIELD COPIES USE ALTERNATE LINES

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0	60	Sticky topsoil				
60	238	Clay				
238	239	Sand				
239	500	Clay				
500	?	Gravel				
		Cased 403 feet				
		Pulled casing later as well was si	lty			
		Unable to measure				
				-		
venezation of the second of the						<del></del>
		· · · · · · · · · · · · · · · · · · ·				
		Plotted and Coded				
		A Well 16N / 3W 35N80				

LOG OBTAINED	BY
--------------	----

\_\_DATE\_\_

97568 9-32 15M CALIFORNIA STATE PRINTING OFFICE

ORIGINAL File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5

## WATER WELL DRILLERS REPORT (Sections 7076, 7077, 7078, Water Code)

Do Not Fill In

N	Ō	7	7	4	8	4
ate Well	No					

### STATE OF CALIFORNIA

(1) OW	(11) WELL LOG:
Name	Total depth 203 ft. Depth of completed well 203 ft.
Address	Formation: Describe by color, character, size of material, and structure.
	0 ft. to 2 ft. 2' Top soil
	2 9 7' Yellow clay
(2) LOCATION OF WELL:	9 15 6' Sand, pea gravel & shale
` '	15
County Colusa Co. Owner's number, if any	75 102 27' Yellow clay, gravel
R. F. D. or Street No.	and shale
Sec. 11, TWP 16 N, R 4 W	102 112 10' Brown shale
300' west of Mills Orchard Rd.	112 117 5' Sand, pea gravel, shale
	117 131 14' Yellow clay
	131 146 15' Sand, pea gravel, shale
(3) TYPE OF WORK (check):	146 203 57' Sand rock & pea gravel
New well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐	0 0
If abandonment, describe material and procedure in Item 11.	0 0
(4) PROPOSED USE (check): (5) EQUIPMENT:	
Domestic Industrial Municipal Rotary	CONFIRM
Invitation Tot Well Cother V Cable	
(stock) Dug Well	
(6) CASING INSTALLED: If gravel packed	
• •	0
SINGLE DOUBLE Gage Diameter from to	11 (1
From ft. to ft. Diam. Wall of Bore ft. ft.	
	tt tt
	· · · · · · · · · · · · · · · · · · · ·
	v (1
(1 11 12 12 12 12 12 12 12 12 12 12 12 12	ti ti
0 0 0	C U
Type and size of shoe or well ring Size of gravel: Pea gravel	11
Describe joint Welded	tt ti
	te e
(7) PERFORATIONS:	0 0
Type of perforator used Machine cut at factory	tt tt
Size of perforations 1/8 in., length, by 3 in.	tt tr
From ft. to ft. Perf. per row Rows per ft.	tt r
· 112 · 203 · · · · · · · · · · · · · · · · · · ·	
n n n n n n n n n n n n n n n n n n n	и и
0 tr tt tt tt tt tt	" " " " " " " " " " " " " " " " " " " "
	" " " " T
(8) CONSTRUCTION:	· · · · · · · · · · · · · · · · · · ·
Was a surface sanitary seal provided?  Yes  No To what depth ft.	" " " A
	Plotted and Coded
Were any strata sealed against pollution?  Yes No If yes, note depth of strata	
From ft. to ft.	As Well - 16 N / 4W - 2P80
· · · · · · · · · · · · · · · · · · ·	u u
Method of Sealing	Work started 12-4 1963, Completed 12-12 1963
	WELL DRILLER'S STATEMENT:
(9) WATER LEVELS:	This well was drilled under my jurisdiction and this report is true to the best of
Depth at which water was first found ft.	my knowledge and belief.
Standing level before perforating ft.	NAME E. E. LUHDORFF
canding level after perforating ft.	(Person, firm, or corporation) (Typed or printed)
	Address WEST MAIN STREET
(10) WELL TESTS: See back of page	WOODLAND, CALIFORNIA
Was 2 pump test made? Yes No If yes, by whom? E.E. Luhdorff Co.	
	[SIGNED] 5,6. Juhdroff
	Well Drilleff
Temperature of water Was a chemical analysis made? Yes X No	License No. 123211 Dated 5an. 13 , 19 64
Was electric log made of well? ☐ Yes 🍇 No	57025 6-57 50M QUIN △ SPO DWR 188 (REV. 3-54)
	= (

#### ATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

Do	Not	Fill	ln
No	7	74	84

Do	TAOL LINE IM
$N\dot{o}$	77484
es Wall No	

LUCATION NOT CHECKE

DWR 188 (REV. 3-54)

Do	Not	Fill	In
No	7	74	84

Other Well No.

0

150

187

96' Pumping level 125 GPM (1)

116'

Was electric log made of well? 
Yes X No

STATE OF CALIFORNIA

7 10 10 1501	(11) WELL LOG:
en en en en en en en en en en en en en e	Total depth 203 ft. Depth of completed well 203 ft.
Andress	Formation: Describe by color, character, size of material, and structure.
	0 ft. to 2 ft. 2' Top soil
	2 9 7' Yellow clay
(2) LOCATION OF WELL:	9 15 6' Sand, pea gravel & shale
County Colusa Co. Owner's number, if any-	15 75 60' Yellow clay
R. F. D. or Street No.	75
Sec. 11, TWP 16 N, R 4 W	and shale
300' west of Mills Orchard Rd.	102 112 10' Brown shale
	112 117 5' Sand, pea gravel, shale
	117 131 14' Yellow clay
	131 146 15' Sand, pea gravel, shale
(3) TYPE OF WORK (check):	146
New well \( \overline{\mathbb{L}} \) Deepening \( \overline{\mathbb{L}} \) Reconditioning \( \overline{\mathbb{L}} \) Abandon \( \overline{\mathbb{L}} \)	tt to
If abandonment, describe material and procedure in Item 11.	ti e
(4) PROPOSED USE (check): (5) EQUIPMENT:	4
Domestic   Industrial   Municipal   Rotary   K	" "
Invication Tot Wall Cother X Cable	SONFIDENTIAL LOG
(stock) Dug Well	3. 400 Sec 133.
(6) CASING INSTALLED: If gravel packed	
The second secon	0 0
or Diameter from to	a a
From ft. to ft. Diam. Wall of Bore ft. ft. 188 18# 0 203	, α ·
203 0 100 10 0 203	lt ti
- α α α α α α α α α α α α α α α α α α α	U ()
	ti ti
	(1
Type and size of shoe or well ring Size of gravel: Pea gravel	"
Describe joint Welded	
(7) PERFORATIONS:	
Type of perforator used Machine cut at factory	ti ti
1/9	11
E	H C
From ft. to ft. Perf. per row Rows per ft.  112 203	4 4
112 203	. (1
	a a frage
0 0 a a n t n a n	" / , C ,
	- " " " " The state of the stat
(8) CONSTRUCTION:	" " " TOTAL BY
Was a surface sanitary seal provided? ☐ Yes A No To what depth ft.	" "
Were any strata sealed against pollution?  Yes No If yes, note depth of strata	Plotted and Coded " Cod
Pana	A- W-II - 16 A \ 7111.1 7000
From ft. to ft.	As Well 16 N / 4W - 2P80
	" "
Method of Sealing	Work started 12-4 1963, Completed 12-12 1963
(9) WATER LEVELS:	WELL DRILLER'S STATEMENT:
	This well was drilled under my jurisdiction and this report is true to the best of
Depth at which water was first found ft.	my knowledge and belief.
Standing level before perforating ft.	NAME E. E. LUHDORFF
tanding level after perforating ft.	(Person, firm, or corporation) (Typed or printed)
(10) WELL TESTS. C. 1-1 C	Maries
(10) WELL TESTS: See back of page	WOODLAND, CALIFORNIA
Was 2 pump test made? Yes Do If yes, by whom? E.E. Luhdorff Co.	[SIGNED] E.G. Lukdorff
Yield: gal./min. with ft. draw down after hrs.	[SIGNED] Well Drilley
Temperature of water Was a chemical analysis made? Yes X No	License No. 123211 Dated 12n 13 , 19 64

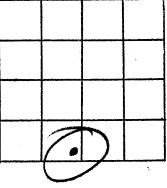
57025 6-57 50M QUIN △ SPO

#### WATER WELL DRILLERS REPORT

#### FIELD WORK SHEET

Report No.	77484					
Owner _						
Pump No	SUB					
Meter No	376731					
		:	LOCATION	1		
Section	2P 16N					
Township	16 N	,				
Range	4W					
	·					

seed for two



 reet	North	1,			
 feet	West	from	s.	E.	corner
			٥f	Sec	rtion

REMARKS

masine	able			
,				

203 ft. cture. clay ea gravel & shale clay clay, gravel le nale a gravel, shale clay a gravel, shale ck & pea gravel ENTIAL LOG de Sec. 13752 12-12 19 63 report is true to the best of

TION NOT CHECKE

o Not Fill In

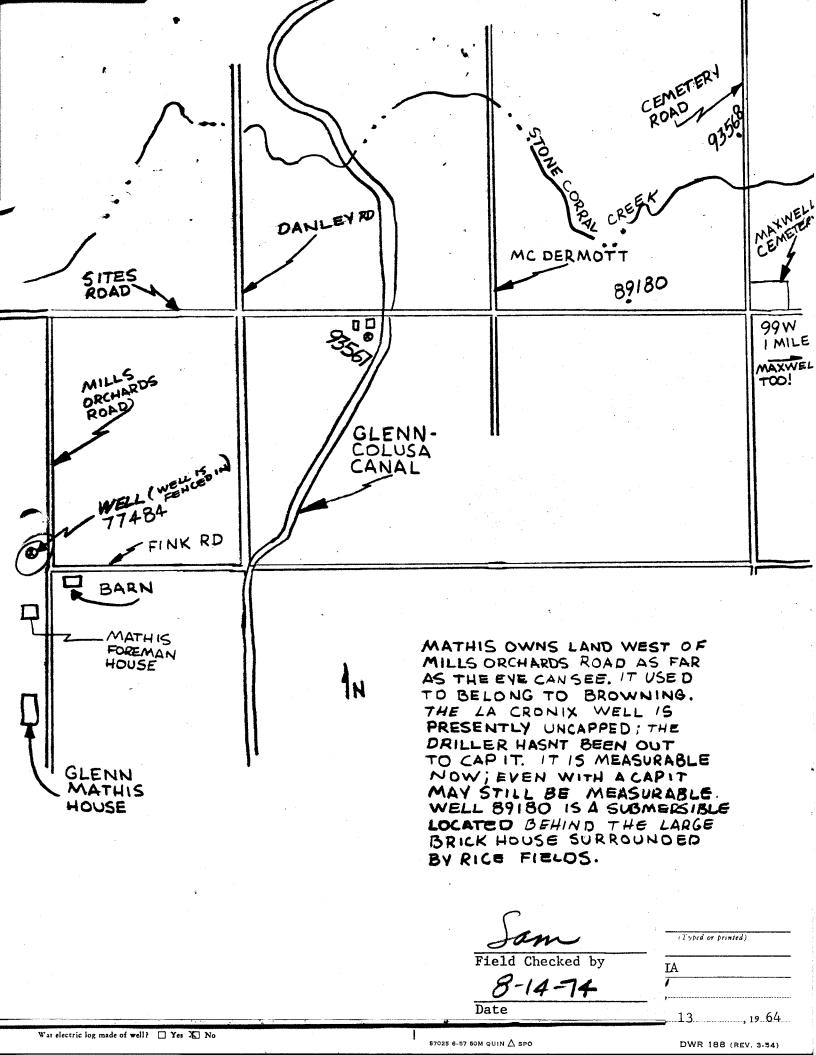
77484

Field Checked by

IA

8-14-74 Date

13 , 19 64



STATE OF CALIFORNIA

COMPLETION REPORT

Refer to Instruction Pamphlet

Page 1 of 4 Owner's Well No. 8449

APR 30 2010

No. E0109199

ate	Work Began	3/1/2010	Ended 3/5/201
		" HWW Extends to be	- I'Mic

ABCD

Local Permit Agency Collusa County Health Dept
Permit No. 2010-008
Permit Date 2/19/2010

USE	ONLY DO	NOT FILL IN	٧
	IOIW	7/0	
STA	TE WELL NO./ STA	TION NO.	
LATITUDE	L	ONGITUDE	
	APN/TRS/OTHER	₹	

		GEOLOGIC LOG —————	<u> </u>	TURT 1 /	OXX/MIDELIN	
ORIENTATIO	ON ( <u>✓</u> )	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING METHOD ROTARY FLUID MUD_				
DEPTH FF	ROM					
SURFAC		DESCRIPTION  Describe material, grain, size, color, etc.				
Ft. to		Top soil	l	<u></u>	QÇALIDIY—	
5		Sand and gravel with brown clay	Address 50' Nof G		MI LOT	
			City Putnam Rd (	JA		
180		Sandy blue clay	County COLUSA			
380		Sand and gravel	APN Book 012	_ Page <u>180</u>	Parcel <u>045</u>	<del>.</del>
450		Sandy blue clay	Township 17 N	_ Range1 W	Section 10	
770		Sand and gravel (Hard drilling)	Latitude		_	<u> </u>
800	1420	Sandy blue clay with black sand		SEC. ATION SKETCH		DEG. MIN. SEC. —ACTIVITY (∠) —
	!			NORTH		→ NEW WELL
ļ						MODIFICATION/REPAIR
1	1					Deepen
1	1					Other (Specify)
I I	1					DESTROY (Describe
l.	- 1					DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"
į į	ı I					PLANNED USES (∠)
i	i					WATER SUPPLY
1	i		EST		ST	Domestic Public
1	i		W		E	Irrigation Industrial
<del></del> -						MONITORING
<del></del>	1	· · · · · · · · · · · · · · · · · · ·	•			TEST WELL CATHODIC PROTECTION
<del>-</del>	. !				. ` '	HEAT EXCHANGE
<u> </u>				î,	•	DIRECT PUSH
						INJECTION
	1					VAPOR EXTRACTION
				. ·		SPARGING
		<u>*</u>	Illustrate or Describe Dist	<ul> <li>SOUTH ————————————————————————————————————</li></ul>	Buildings,	REMEDIATION
1			Fences, Rivers, etc. and att necessary. PLEASE BE	ach a map. Use addition ACCURATE & COM	nal paper if PLETE.	OTHER (SPECIFY)
				LEVEL & YIELD		•
			DEPTH TO FIRST WA	TER (Ft.) BE	ELOW SURFACE	•
	-	44.44	DEPTH OF STATIC WATER LEVEL	(Ft.) & DATI	E MEASURED	
i		4400	ESTIMATED YIELD *_			
		BORING 1420 (Feet)	TEST LENGTH			
TOTAL DEP	TH OF	COMPLETED WELL 820 (Feet)		entative of a well's		

DEPT		PODE		CASING (S) DEPTH						TH	ANNULAR MATERIAL					
FROM SUF	RFACE	BORE - HOLE	Т	TYPE (✓)		1 111				i	FROM SU				TY	ΡΕ
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	Ft.	CE- MENT (✓)	BEN- TONITI	FILL ( <u>√</u> )	FILTER PACK (TYPE/SIZE)
Zone	1										0 1	72	✓			Sand Slurry
0;	88	14	✓	1			PVC	2.5	SCH 80		72	81		✓		Bentonite Seal
, 88¦	98	14		<b>√</b>	1		PVC	2.5	SCH 80	.030	81	117			✓	SRI#8 Sand
98	108	14	<b>✓</b>	1			PVC	2.5	SCH 80		117	127		<b>✓</b>		Bentonite Seal
Zone	2				Γ						127	204			<b>√</b>	SRI#8 Sand
0	148	14	7				PVC	2.5	SCH 80		204	214		7		Bentonite Seal

ATTACHMENTS ( \( \sigma \)	CERTIFICATION	STATEMENT -		
\ <del>-</del> - /				
— Geologic Log	I, the undersigned, certify that this report is complete and accurate to the b	oest of my knowledge and belief.		
Well Construction Diagram	NAME EATON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
— Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA	<u>95695</u>
Other	ADDRESS // //	CITY	STATE	ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Warne auron	04/28/10		<u> 57 A HIC - 1</u> :
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-	57 LICENSE NU

#### STATE OF CALIFORNIA

WELL COMPLETION REPORT

7	to mstruction	гитриче	
	No. <b>⊏∩</b>	1001	ĺ

Page 2 of 4 Owner's Well No. 8449

\_\_\_\_\_, Ended 3/5/2010

Date Work Began 3/1/2010 Local Permit Agency Colusa County Health Dept
Permit No. 2010-008 Permit D

Permit Date 2/19/2010

	DW	R	USE	ON	ILY		DO	N	ОТ	FILL	. IN	
1	1									ı	l	
			STA	TE	WELI	NO.	/ ST/	OITA	1 NC		•	
		1		1	$\prod$		1					
	LA	TTU	DE					LONG	ITUE	Œ		
			i					1		1		
				F	NPN/T	RS/C	THE	R				

		GEOLOGIC LOG —	WELL VANED —	
ORIENTAT	. ,	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING METHOD ROTARY FLUID MUD		
DEPTH F SURFA		DESCRIPTION DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.		
01	5	Top soil	Address 50' Nof Gridley Rd & 58 Mi Eof	
5	180	Sand and gravel with brown clay	City Putnam Rd CA	
180	380	Sandy blue clay	County COLUSA	
380	450	Sand and gravel	APN Book 012 Page 180 Parcel 045	
450	770	Sandy blue clay	Township 17 N Range 1 W Section 10	
770	800	Sand and gravel (Hard drilling)	Latitude	
800	1420	Sandy blue clay with black sand	DEG. MIN. SEC.	DEG. MIN. SEC.
			LOCATION SKETCH—	—ACTIVITY (∠) —
			NORTH	NEW WELL
i				MODIFICATION/REPAIR —— Deepen
		U-01-01-01-01-01-01-01-01-01-01-01-01-01-		Other (Specify)
1				
1				DESTROY (Describe Procedures and Materials
1				Under "GEOLOGIC LOG"
				PLANNED USES(∠) WATER SUPPLY
i		,	WEST.	Domestic Public
i			WE EA	Irrigation Industrial
<u></u>				MONITORING →  TEST WELL
i				CATHODIC PROTECTION
<del></del>				HEAT EXCHANGE
	1			DIRECT PUSH
				INJECTION
· [				VAPOR EXTRACTION SPARGING
<del></del>		1—1—11.4.1.4.4.1.4.1.1.1.1.1.1.1.1.1.1.1	south	REMEDIATION
<del></del>		the control of the desired and the control of the c	Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc., and attach a map. Use additional paper if	OTHER (SPECIFY)
			Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	
	1		WATER LEVEL & YIELD OF COMPL	ETED WELL
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	<u>.</u>
			DEPTH OF STATIC WATER LEVEL	
			ESTIMATED YIELD * (GPM) & TEST TYPE	(
TOTAL DE	PTH OF	BORING <u>1420</u> (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
		COMPLETED WELL <u>820</u> (Feet)	May not be representative of a well's long-term yiel	` '
			1 2.24, nor do representative of transmitting term year	

DEPTH		BORE -					CA	ASING (S)			DE	PTH	-	ANN	JLAR	MATERIAL
FROM SURFA	ACE	HOLE			<u> </u>						FROMS	URFACE		1	TY	PE
Ft. to F	Ft.	DIA. (inches)	BLANK	SCREEN	CON-	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT (✓)	BEN- TONITI	E FILL ( <u>✓</u> )	FILTER PACK (TYPE/SIZE)
148	158	14		✓			PVC	2.5	SCH 80	.030	214	246			<b>√</b>	Gravel Fill
158¦	178	14	✓	_			PVC	2.5	SCH 80		246	258		✓		Bentonite Seal
Zone	3									· · · · · · · · · · · · · · · · · · ·	258	¦ 299		,	✓	Gravel Fill
0;	380	14/10	✓				PVC	2.5	SCH 80		299	308		~		Bentonite Seal
380;	390	10-3/4		✓	П	T	PVC	2.5	SCH 80	.030	308	356		./	V	Gravel Fill
390	415	<del>10-3/4</del> -	<b>V</b>				PVC	2.5	SCH 80		356	366				Bentonite Seal

ATTACHMENTS ( \( \sigma \)	CERTIFICATION	STATEMENT -		
\ <del>-</del> ,		<del></del>		
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the b	est of my knowledge and belief.		
Well Construction Diagram	NAME EATON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
— Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA	95695
Other	ADDRESS	CITY	STATE	ZIP
ATTACK ADDITIONAL INFORMATION IF IT EVICTS	Signed Signed	04/28/10	<u>C5</u>	<u> 7 A HIC - 1337</u>
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57	7 LICENSE NUMBE

# WELL STATE OF CALIFORNIA WELL COMPLETION REPORT Refer to Instruction Pamphlet

Owner's Well No. 8449

No. E0109199

Owner's Well Ivo.	
Date Work Began 3/1/2010	Ended 3/5/2010
2000 11 0111 2 0 Burn	, Enava

Local Permit Agency Colusa County Health Dept
Permit No. 2010-008 Permit Date 2/19/2010

	D'	WR	USE	40	ILY		DO	N	от	FILL	. IN	
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	L	ATITU	JDE				<u></u> 1	LONG	SITUE	ΣE		
1			1			I	J					
					\PN/T	RS/C	THE	R				

	GEOLOGIC LOG	WELL OWNER —	
ORIENTATION (	✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY — FLUID MUD		
DEPTH FROM SURFACE	DESCRIPTION		
Ft. to Ft.			
0 !	5 Top soil	Address 50' Nof Gridley Rd & .58 Mi Eof '	
	80 Sand and gravel with brown clay	City Putnam Rd CA	
	80 Sandy blue clay	County COLUSA	
	50 Sand and gravel	APN Book 012 Page 180 Parcel 045	
	70 Sandy blue clay	Township 17 N Range 1 W Section 10	
	00 Sand and gravel (Hard drilling)	Latitude	1 1
800 14	20 Sandy blue clay with black sand	DEG. MIN. SEC.	DEG. MIN. SEC.
i		LOCATION SKETCH—	—ACTIVITY (∠) ——
i	~	i	MODIFICATION/REPAIR
	1		Deepen
	 		Other (Specify)
			DESTROY (Describe
1			DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG"
1	<u> </u>		PLANNED USES (∠)
		.	WATER SUPPLY
1		WES	Domestic Public Industrial
1		<b> </b> ▶	MONITORING →
1			TEST WELL
			CATHODIC PROTECTION
1			HEAT EXCHANGE
			DIRECT PUSH
1			VAPOR EXTRACTION
			SPARGING
i		SOUTH  Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION
		Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
		<del></del>	
		WATER LEVEL & YIELD OF COMPLI	
		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	•
		DEPTH OF STATIC  WATER LEVEL (Ft.) & DATE MEASURED	
	 	ESTIMATED YIELD * (GPM) & TEST TYPE	
TOTAL DEPTH	OF BORING 1420 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
TOTAL DEPTH	OF COMPLETED WELL <u>820</u> (Feet)	May not be representative of a well's long-term yield	` '
· · · · · · · · · · · · · · · · · · ·			·

DEPTH	BORE	L		CASING (S) DEPTH						ANNULAR MATERIAL										
FROM SURFACE	HOLE DIA.	-		<u>E (</u>			INTERNAL	GAUGE	SLOT SIZE	FR	FROM SURFACE		FROM SURFACE		FROM SURFACE				TY	PE
Ft. to Ft.	(Inches	B! ANK		CON	DUCTOR FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	F	₹t.	to F	ŧ.	CE- MENT ( <u>√</u> )	BEN- TONITE	FILL ( <u>Y</u> )	FILTER PACK (TYPE/SIZE)			
415 42			,			PVC	2.5	SCH 80	.030		366	1	475			<b>✓</b>	SRI#8 Sand			
425 44	5 10-3/	4   s	1			PVC	2.5	SCH 80			475	 	510		<b>√</b>		Bentonite Seal			
Zone	4									:	510		696	✓			Sand Slurry			
0; 77	0   14/10/	- I '	7			PVC	2.5	SCH 80			<del>396</del>	Ī	702		~		Bentonite Seal			
	8-3/	· I	7	$ egthinspace{1.5em} $	Τ	PVC	2.5	SCH 80	.030		702	i i	828			~	SRI#8 Sand			
780 79	90 8 <del>-3</del> /	7				PVC	2.5	SCH 80			328	Ï	836		_		Bentonite Seal			

			<u> </u>			
ATTACHMENTS (∠)		- CERTIFICATION	STATEMEN	т ——		
Geologic Log	ersigned, certify that this report is o	omplete and accurate to the	e best of my knowle	edge and belief.		
Well Construction Diagram NAME_	EĂTON DRILLING CO.					
Geophysical Log(s) (P	ERSON, FIRM, OR CORPORATIO	N) (TYPED OR PRINTED)		*		
— Soil/Water Chemical Analysis 20 WE	<u>ST KENTUÇKY AVE</u>		WOODLA	ND	CA	95695
Other ADDRES	s // /\		CITY		STATE	ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.   Signed -	Mark & James			04/28/10		<u> 7 A HIC - 1337</u> 8
AT TACH ADDITIONAL INFORMATION, IF IT EXISTS.	VELL DRILLER/AUTHORIZED RE	PRESENTATIVE	D/	ATE SIGNED	C-57	LICENSE NUMBE

Page 4 of 4

### STATE OF CALIFORNIA

## WELL COMPLETION REPORT

Refer	to Instruction	Pamphlet	
	No. EO	1091	99

Owner's Well No. 8449		<sup>№</sup> E010
Data Worls Boson 3/1/2010	B. 4-43/5/2010	

Date Work Began 3/1/2010 \_\_\_, Ended <u>3/5/2010</u>

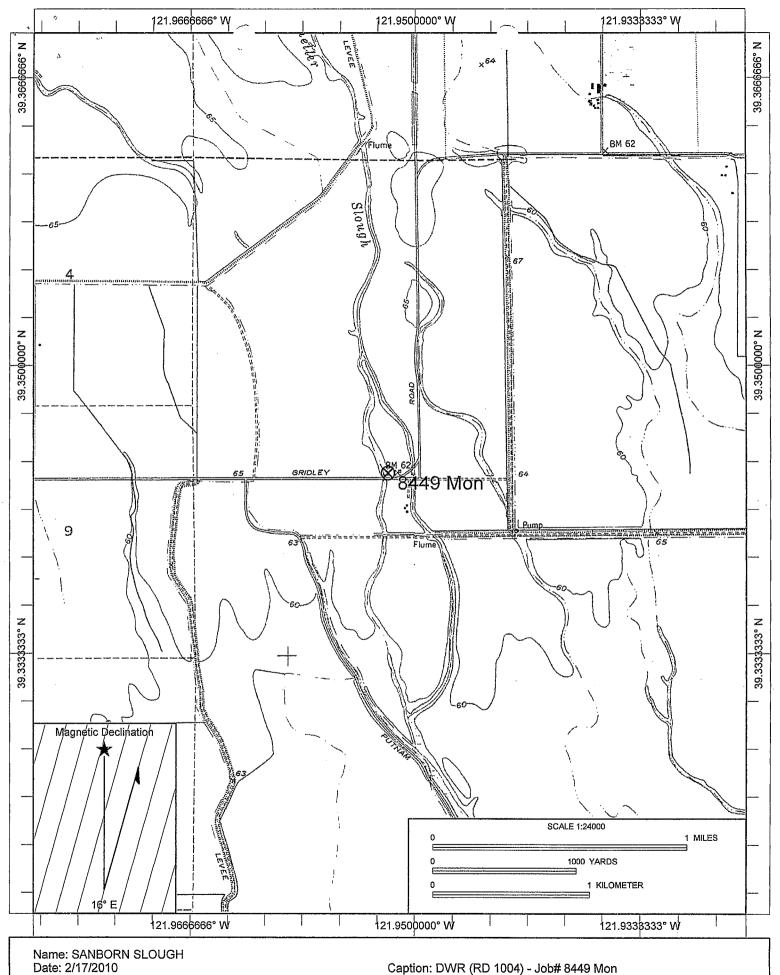
Local Permit Agency Colusa County Health Dept
Permit No. 2010-008 Permit D Permit Date <u>2/19/2010</u>

DVR_USE ONLY DO NOT FILL IN
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
ADM/TDP/OTHED

		GEOLOGIC LOG	•	******	OXXXXXXX	;
ORIENTA	ΓΙΟΝ (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING METHOD ROTARY FLUID MUD				
DEPTH						
SURF Ft. to		DESCRIPTION  Describe material, grain, size, color, etc.				
0:	5	Top soil	Address 50' Nof C	Fridlev Rd & .5	8 Mi Eof	
5	180	Sand and gravel with brown clay	City Putnam Rd 0		-	
180	380	Sandy blue clay	County COLUSA			
380	450	Sand and gravel	APN Book 012	Page 180	Parcel 045	
450	770	Sandy blue clay	Township 17 N	_ 1 ago <u>100</u>	Section 10	
770	800	Sand and gravel (Hard drilling)	Latitude		_ Scotion	1 1
800	1420	Sandy blue clay with black sand	DEG. MIN	, SEC.		DEG. MIN. SEC.
i				TION SKETCE	1	—ACTIVITY (∠) —
i				NORTH		→ NEW WELL
			:			MODIFICATION/REPAIR —— Deepen
!		•				Other (Specify)
	,					
						DESTROY (Describe     Procedures and Materials
i i						Under "GEOLOGIC LOG"
Ī						PLANNED USES(∠) WATER SUPPLY
1			TS:		EAST	Domestic Public
İ			WE		EA	Irrigation Industrial
<del></del>			-			MONITORING →  TEST WELL —
						CATHODIC PROTECTION
<u>-</u>						HEAT EXCHANGE
<u>_</u>						DIRECT PUSH
			:			INJECTION
						VAPOR EXTRACTION
				- SOUTH		SPARGING REMEDIATION
			Illustrate or Describe Dista	ance of Well from Roads	s, Buildings,	OTHER (SPECIFY)
			Fences, Rivers, etc. and att necessary. PLEASE BE A	ACCURATE & CON	VIPLETE.	
<del></del>			WATER I	LEVEL & YIELI	D OF COMPL	ETED WELL
į			DEPTH TO FIRST WA	TER (Ft.) E	BELOW SURFACE	<b>=</b>
			DEPTH OF STATIC WATER LEVEL	(Ft.) & DA	TE MEASURED	
<u> </u>		1400	ESTIMATED YIELD *_			
		BORING 1420 (Feet)	TEST LENGTH	_ (Hrs.) TOTAL DRA	AWDOWN	(Ft.)
TOTAL DI	EPTH OF	COMPLETED WELL 820 (Feet)	May not be represe			

DEPTH	BODE		C	ASING (S)			DEF	ANNULAR MATERIAL				
FROM SURFACE	BORE - HOLE DIA.	TYPE (✓)	AAATEDIAI /	INTERNAL	GAUGE	SLOT SIZE	FROM SURFACE				TY	PE
Ft. to Ft.	(Inches)	BLANK SCREEN CON- DUCTOR FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. t	o Ft.	CE- MENT	BEN- TONITE	FILL (✓)	FILTER PACK (TYPE/SIZE)
790 800	8-3/4		PVC	2.5	SCH 80	.030	836	860			✓	Native Fill
800¦ 820	8-3/4	$  \checkmark  $	PVC	2.5	SCH 80		860	1420	✓			Sand Slurry
i												
<u> </u>												

ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -		····
— Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and beli-	ef.	
— Well Construction Diagram	NAME EĂTON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
— Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA	95695
Other	ADDRESS // /	CITY	STATE	ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed James Sourcon	04/28/10		<u> 257 A HIC - 1337</u> 8
ATTACT ADDITIONAL INFORMATION, IF IT ENCIO.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	) (	-57 LICENSE NUMBE



Scale: 1 inch equals 2000 feet

Caption: DWR (RD 1004) - Job# 8449 Mon APN: 012-180-045

T17N R1W s10

# RD, 1004 - Morgan Levce Mon. Well

17NOW27A1-3M

ORIGINAL File with DWR						***** *		OF CALIFO					DWR_U	E ON	LY -	- DO	NOT FILL IN
					. 1	WELL	COMP				(I			TATE		R T	TION NO.
Page 1 of 3	0515					•	-			•				IAIE V		U./ STA	TION NO.
Owner's Well No		10			_	12/0/2	010	"EU i	_	2768			LATITUDE	!			ONGITUDE
Date Work Began										ABC	/		, I		1 .	,	J
Local Permit A Permit No. W	gency 1	JOILLS 144						40/2040			-			1	PN/TRS	/OTHER	<del> </del>
Permit No. V	VF 00000 I	CFC		OCIO	710	Permit	Date	19/2010	_		_						
																	1
ORIENTATION (≰)	DRILLING	ERTICA	AL.	— н	ORIZ	ONTAL	ANGLE	_(SPECIFY)									
DEPTH FROM	METHO	o RC	)T/			FL	. <sub>UID</sub> <u>MUD</u>										
SURFACE	-	Daras	wika			CRIPTION	. oolov o	la l									
Ft. to Ft. Describe material, grain, size, color, etc.								ζ,	1	0041			لايا. بالنيان؛ ٢	JUAL	IDAN.		
<del></del>			wn.	clayy	with	sand and	gravel			Address 2.94 M			<u>ey Ka &amp;</u>	1.57	Mi W	01	
						sand stream				City Putnam Ro		4					
	Blue gr				77 (11 )	00110 00100	2110			County COLUS							
	Sand a								1	APN Book 012		Page 28	30	Parce	1 <u>003</u>		
	Gray cl				i etr	eaks	<u> </u>			Township 17 N		Range?	<u></u>	Section	n <u>27</u>		
	Sand a				. JU	cano			۱ ا	Latitude	MIM	SEC	<del></del>		-	DEG.	MIN CEO
	Gray cl				1 etr	eake			╁		CAT	TION S	KETCH-				MIN. SEC. CTIVITY ( <u>/</u> )
						nd streaks			┢			NORTH -					NEW WELL
1000	Dittie	gray	CIC	y wit	11 30	iiu siicaks			ł								FICATION/REPAIR
<u> </u>	i								1								— Deepen — Other (Specify)
ļ	<u> </u>								ł	•							Other (openity)
1	<u> </u>								ł							<u> </u> g	DESTROY (Describe Procedures and Materials
	-					<del></del>			ł							[	Inder "GEOLOGIC LOG"
	,								1								NNED USES(∠)
<del> </del>	1								ŀ⊭	<u> </u>					<b>j</b>		R SUPPLY Domestic Public
l									WEST	į.					EAST	i	rigation Industrial
<u> </u>	<u>i</u>								1						ш		MONITORING 🗸
<u> </u>	<u> </u>													-			TEST WELL
i	<u>i                                      </u>								ŀ			•				ľ	DIC PROTECTION
1	1 [						***		ŀ							· '	HEAT EXCHANGE DIRECT PUSH
	<u> </u>																INJECTION
	1			•												VAPO	OR EXTRACTION
	! !			:												}	SPARGING
	<u> </u>									Illustrate or Describe I	Distan	SOUTH - ce of Well f	rom Roads,	Building	<u> </u>		REMEDIATION
ļ	Ļ									Fences, Rivers, etc. and necessary. PLEASE B					if	٩	OTHER (SPECIFY)
ļ	<u> </u>						* ***		H								******
	<u>i</u>												YIELD				WELL
1	<u> </u>					····		·		DEPTH TO FIRST 1			— (Ft.) ВЕ	LOW S	URFAC	E	
<u></u>	!									DEPTH OF STATIC WATER LEVEL			Ft.) & DATE	MEASI	IBED		
ļ	!									ESTIMATED YIELD						-	
TOTAL DEPTH OF					eet)					TEST LENGTH						/Et \	
TOTAL DEPTH OF	COMPLE	TED	WE	LL <u>53</u>	30	(Feet)			l	May not be repr							
		ī						-	_	1							
DEPTH FROM SURFACE	BORE - HOLE	-		<u>(√)</u>		C.	ASING (S)				I	DEP ROM SU	TH		ANNU		MATERIAL
TROWGORI AGE	HOLE DIA.		7E	<u>,                                    </u>		MATERIAL /	INTERNAL	GAUGE		SLOT SIZE	F	ROM SU	RFACE			<u>TY</u>	PE
Ft. to Ft.	(Inches)	BLANK	SCREEN	DUCTOR FILL PIPE		GRADE	DIAMETER	OR WALL	L	IF ANY				CE- MENT	BEN- TONITE	E FILL	FILTER PACK
and the same of th	771*	m   8	٦,	결료			(Inches)	THICKNES	5S 	(Inches)	L	Ft. to	Ft.	S	<u>(</u>	S	(TYPE/SIZE)
Zone 1		igspace	4									0 :	122	1			Sand Slurry
0 160	12		↲		_P\	_	2.5	SCH				122	136		<b>✓</b>		Bentonite Seal
160 170	12	1. 1	1	$\perp \perp$	P۷		2.5	SCH			L	136	203			<b>\</b>	SRI#8 Sand
170 180	. 12	1	$\perp$		P۷	<u>C</u>	2.5	SCH	80		<u></u>	203	212		<b>√</b>		Bentonite Seal
Zone 2 0 260	<del></del>		$\downarrow$	$\perp$		70		86			L	212	285			<b>√</b>	SRI#8 Sand
	12				PV		2.5	SCH	8C	ار		285 ¦	290		- ✓		Bentonite Seal
	IMENTS	(∠)	_							- CERTIFICA							
— Geologic — Well Cor	Log estruction D	iagram	1			I, the undersig	ned, certify th	at this report	is ).	complete and accurat	te to t	he best of	my knowled	ige and	belief.		ľ
Geophysical Log(s) (PERSON, FIRM, OR CORPOR							R CORPORA		ION) (TYPED OR PR	RINTE	•						
ľ	r Chemical	Analy	sis			20 W. Ke ADDRESS	ntucky Ave	<u> </u>	-	· · · · · · · · · · · · · · · · · · ·		W	oodland CITY			CA	95695
Other ATTACH ADDITIONAL II	VEORMATIC	ON IF	ITF	XISTS	-	Signed	Marle	Jemon						2/22/1		STATE	ZIP C57 A 133783
DWR 188 REV. 11-97	JAMATA	-17, 11-1			إلي	WEL			_	EPRESENTATIVE			DA	TE SIGI			C-57 LICENSE NUMBER
Mar. 11.7/			ır	ווטטה	ION/	al opace is	וזבבטבט, (	JOE NEXT	Ú(	ONSECUTIVELY N	NUME	EKED F	UKM				

ORIGINA	٩L
File with	<b>DWR</b>

#### STATE OF CALIFORNIA WELL CO

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r	to	Ins	truct	ion	P.	amn	hlet		

Page 2 of	3			
Owner's	Well	No.	8515	

No. E0122768

Date Work Began 12/6/2010 , Ended 12/9/2010 Local Permit Agency Colusa County Health Dept Permit No. WP0000111

11/19/2010

	WR US	E ON	LY		_DO	N	OT.	FILL	_ IN	
		.1	ĺ				Ī			
	STATE WELL NO./ STATION NO.									
				Ī	ı					
L	ATITUDE				L	ONG	ITU	E		
	L			Ī		1				
APN/TRS/OTHER										

GEOLOGIC LOG Permit Date 11/19/2010	
	•
ORIENTATION (-/ ) VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)	
DRILLING METHOD ROTARY FLUID MUD	
SURFACE DESCRIPTION	
Ft. to Ft. Describe material, grain, size, color, etc.	
0 10 Top soil	Address 2.94 Mi Sof Gridley Rd & 1.57 Mi Wof
10 60 Yellow brown clay with sand and gravel	City Putnam Rd CA
60 125 Yellow brown clay wtih sand streaks	CountyCOLUSA
125¦ 145 ¦ Blue gray clay	APN Book 012 Page 280 Parcel 003
145¦ 190¦ Sand and gravel	APN Book 012         Page 280         Parcel 003           Township 17 N         Range 1 W         Section 27
190¦ 230 ¦ Gray clay with sand streaks	Latitude
230¦ 290¦Sand and gravel	DEG. MIN. SEC. DEG. MIN. SEC.
290 800 Gray clay with sand streaks	LOCATION SKETCH ACTIVITY ( $\leq$ )
800 1500 Brittle gray clay with sand streaks	I WEVY VVECC
	MODIFICATION/REPAIR —— Deepen
	S — Other (Specify)
	— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"
	I I
	PLANNED USES(∠)
	WATER SUPPLY — Domestic — Public
	LS Unique to Lorentz LS Unique to Lorentz LS Unique to Lorentz LS Unique to Lorentz LS Unique to Lorentz LS Unique to LS U
	MONITORING →
	TEST WELL
	pathodic protection
	HEAT EXCHANGE
i i	DIRECT PUSH INJECTION
1 1	VAPOR EXTRACTION
1	SPARGING
	SOUTH REMEDIATION
1 1	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.
	necessary, FLEASE DE ACCURATE & COMPLETE.
	WATER LEVEL & YIELD OF COMPLETED WELL
	DEPTH TO FIRST WATER——— (Ft.) BELOW SURFACE
	DEPTH OF STATIC
1 1	WATER LEVEL (Ft.) & DATE MEASURED
TOTAL DEPTH OF BORING 1500 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE
	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)
TOTAL DEPTH OF COMPLETED WELL 530 (Feet)	May not be representative of a well's long-term yield.

DEPTH	BORE -	BORE - CASING (S) DEPTH						CASING (S)						ANNULAR MATERIAL				
FROM SURFACE	HOLE	_	YPE	<u> </u>	-			·	FROM					TY	(PE			
Ft. to Ft.	DIA, (Inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT	BEN- TONIT	E FILL ( <u>v</u> )	FILTER PACK (TYPE/SIZE)			
260 270	12		1		PVC	2.5	SCH 80	.030	290	1	335			~	SRI#8 Sand			
270 280	12	1			PVC	2.5	SCH 80		.335	-	345	•	<b>√</b>		Bentonite Seal			
Zone 3	7							·	345	Ī	391			~	SRI#8 Sand			
0 430	8.5	~			PVC	2.5	SCH 80		391	!	402		-		Bentonite Seal			
430 440	8.5		V		PVC	2.5	SCH 80	.030	402	1	581			~	SRI#8 Sand			
440¦ 500	8.5	~			PVC	2.5	SCH 80		581	-	599		<b></b> √		Bentonite Seal			

_	ATTACHMENTS	(1)	

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

	Ou ioi	
TTACH ADDI	TIONA	L INFORMATION, IF IT EXISTS.

CERTIFIC	Δ	TION	STA	TEMENT

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 W. Kentucky Aye

ADDRESS

CITY

WELL DRILLER/AUTHORIZED REPRESENTATIVE

12/22/10 DATE SIGNED

95695 E ZIP C57 A 133783 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORI	GIN/	٩L
File '	with	DWR

STATE OF CALIFORNIA

WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page 3 of	3	
Overnoute	Wall No	85

No. E0122768

J W IICI	2 44 CH 146	,. <u></u>	
Date W	ork Began	12/6/2010	 Ended 12

Local Permit Agency Colusa County Health Dept Permit No. WP0000111 Permit I

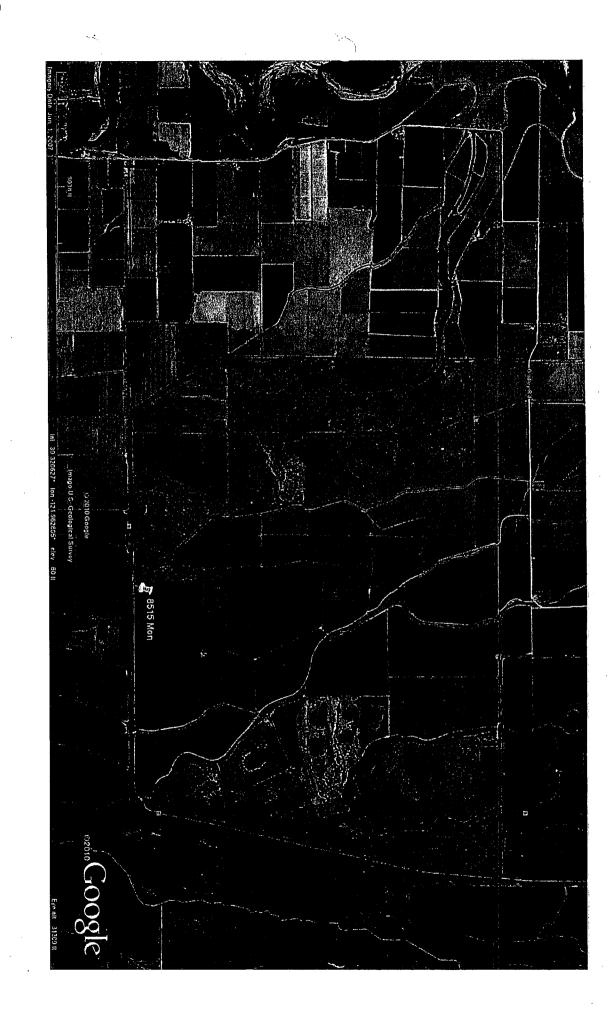
	DWR	USE	ONLY	D	ONOT	FILL	IN			
	1	1	. 1	Li		1 1				
STATE WELL NO./ STATION NO.										
				7	11	1 1				
LATITUDE LONGITUDE										
Ш				1.1						
	ADMINISTRA									

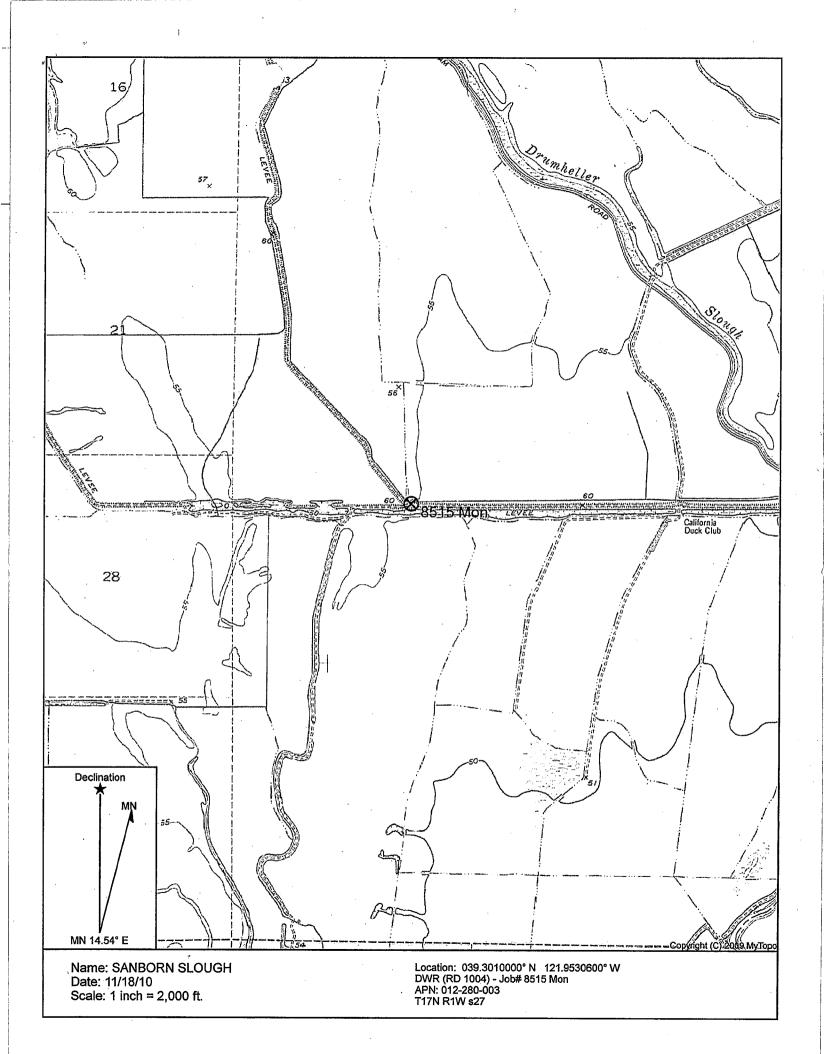
GEOLOGIC LOG	WELLOWARD
ORIENTATION ( $\checkmark$ )  DEPTH FROM SURFACE  Ft. to Ft.  ORIENTATION ( $\checkmark$ )  VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY  METHOD ROTARY  DESCRIPTION  Describe material, grain, size, color, etc.	- -
0 10 Top soil	Address 2.94 Mi Sof Gridley Rd & 1.57 Mi Wof
10; 60 Yellow brown clay with sand and gravel	City Putnam Rd CA
60 125 Yellow brown clay wtih sand streaks	County COLUSA
125¦ 145 Blue gray clay	APN Book 012 Page 280 Parcel 003
145¦ 190¦ Sand and gravel	Township 17 N Range 1 W Section 27
190 Gray clay with sand streaks	
230 Sand and gravel	DEG. MIN. SEC. DEG. MIN. SEC.
290 800 Gray clay with sand streaks	LOCATION SKETCH ACTIVITY (🗹)
800 1500 Brittle gray clay with sand streaks	I INEVV WELL
	MODIFICATION/REPAIR —— Deepen
	Other (Specify)
	DESTROY (Describe Procedures and Materials
. 1	Under "GEOLOGIC LOG"
	PLANNED USES(∠) WATER SUPPLY
	Domestic Public
	····
	MONITORING →
	TEST WELL CATHODIC PROTECTION
	HEAT EXCHANGE—
	DIRECT PUSH
	INJECTION
	VAPOR EXTRACTION
	SPARGING
1 1	Illustrate or Describe Distance of Well from Roads. Buildings.
1 1	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 (Ft.) & DATE MEASURED
! !	ESTIMATED YIELD * (GPM) & TEST TYPE
TOTAL DEPTH OF BORING 1500 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)
TOTAL DEPTH OF COMPLETED WELL 530 (Feet)	May not be representative of a well's long-term yield.
	many more of a presentative of a wett's long-term yield.

DEPTH FROM SURF		BORE - HOLE	RE - CASING (S)  TYPE (∠)  CASING (S)  DEPTH FROM SURFACE								ANNULAR MATERIAL							
	Ft.	HOLE DIA. (Inches)	AMK.	SCREEN	S S	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER	GAUGE OR WALL	SLOT SIZE IF ANY	F	FROM SURFACE		CE- MENT	BEN-		PE FILTER PACK	
500	510	8.5	<u> </u>	8	2	륜	PVC	(inches)	SCH 80	(Inches)	-		to :	Ft.	( <del>\(\)</del>	(⊻)	(⊻)	(TYPE/SIZE)
510	530	8.5	_				PVC	2.5	SCH 80	.030		599	<del></del>	1500				Sand Slurry
				_									<u>i</u>					
													!					
	TTACH	IMENTS	( ⊻	<u> </u>	<u> </u>					CERTIFICA	ATIO	ON ST	AT	EMENT	<u> </u>			

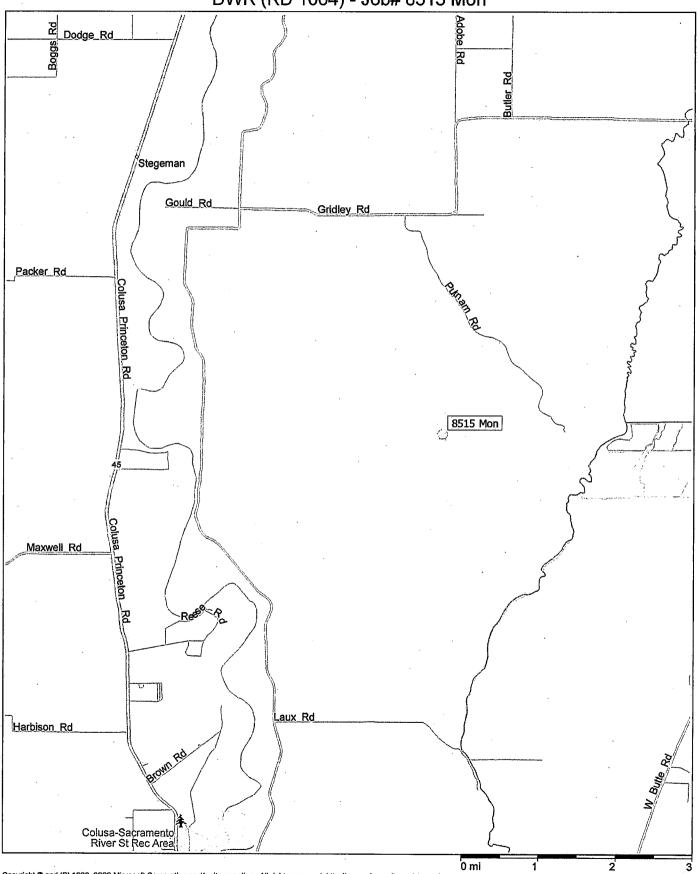
ATTACHMENTS ( \( \subseteq \)	7 7
Geologic Log	I, the undersigned, certify that this report is comp
Well Construction Diagram	I, the undersigned, certify that this report is comp  NAME EATON DRILLING CO.
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION)
Soil/Water Chemical Analysis	20 W. Kentucky Ave
— Other —	ADDRESS
ATTACH ADDITIONAL INCODIATION IS IT TO HOPE	I signed July ( )a

plete and accurate to the best of my knowledge and belief. (TYPED OR PRINTED) CA STATE — <u>C57 A</u> C-57 LK Woodland CITY





DWR (RD 1004) - Job# 8515 Mon



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Page 1 of 6

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STATE OF CALIFORNIA

WELL COMPLETION REPORT

* *	سرسوس			****	O 1 1
		Refer	to	Instruction	Pamphle

Page 1 of 6 0 CT 0 7 2003 Owner's Well No. 7548

No. 726866 A,B,

Date Work Began 9/12/2003 \_\_\_\_\_, Ended 9/22/2003

Local Permit Agency COLUSA COUNTY HEALTH DEPT

DWR USE ONLY DO NOT FILL IN							
17 N/02 W-09 M							
STATE WELL NO STATION NO.							
LATITUDE LONGITUDE							
APN/TRS/OTHER							

Local Permit	Agency COLUSA COUNTY HEALTH DEPT	APN/TRS/	OTHER						
Permit No	2003-78 Permit Date 6/3/2003	Armino	OTTLER						
	GEOLOGIC LOG	THE ATTENDED							
ORIENTATION (∠	VERTICAL HORIZONTAL ANGLE(SPECIFY)								
•	DRILLING REVERSE FLUID WATER								
DEPTH FROM SURFACE	DESCRIPTION								
Ft. to Ft.	Describe material, grain, size, color, etc.								
	5 OLIVE GRAY CLAY	Address NOF PACKER RD & WOF AWY 45							
25 3	8 GRAVEL AND SAND	City CA							
38 6	1 YELLOW BROWN CLAY	County COLUSA							
61 7	6 SAND	APN Book 012 Page 160 Parcel 170							
76 23	1 BROWN CLAY	Township 17 N Range 2 W Section 9							
231 27	2 GRAVEL	Latitude	1 1						
272 32	0 BROWN SAND		DEG. MIN. SEC.						
320 33	4 GRAVEL	LOCATION SKETCH	ACTIVITY (∠) —						
334 40	6 OLIVE GRAY CLAY	- 1 - 11-0	MODIFICATION/REPAIR						
406 42	6 YELLOW BROWN CLAY	E-109 W/ 429	— Deepen						
426 44	1 OLIVE GRAY CLAY		Other (Specify)						
441 47	0 SAND		DESTROY (Describe						
470 49	6 GRAVEL		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")						
496 50	6 BROWN SAND		PLANNED USES(∠)						
506 52	6 OLIVE GRAY CLAY		WATER SUPPLY						
526 54	4 GRAVEL	WEST	Domestic Public Irrigation Industrial						
544 61	8 OLIVE GRAY CLAY	Ĭ <sub>N</sub>	MONITORING						
618 66	1 GRAVEL WITH SAND		TEST WELL						
661 68	8 OLIVE GRAY CLAY		CATHODIC PROTECTION						
688 73	6 GRAVEL AND SAND		HEAT EXCHANGE						
736 74	6 DARK GRAY CLAY		DIRECT PUSH						
	2 GRAVEL		INJECTION VAPOR EXTRACTION						
752 77	5 GREENISH BLACK CLAY		SPARGING						
775 78	5 SAND	SOUTH  Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION						
	1 GRAVEL AND SAND	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)						
801 82	2 BLACK AND GRAY SAND		EXTENSOMETE						
822 83	6 GREENISH GRAY CLAY	WATER LEVEL & YIELD OF COMPL							
836 84	6 SAND	DEPTH TO FIRST WATER- (Ft.) BELOW SURFACE	Ξ ,						
846 86	6 GREENISH GRAY CLAY	DEPTH OF STATIC							
866 88	0 CLAYEY GRAVEL WITH SAND	WATER LEVEL (Ft.) & DATE MEASURED							
TOTAL DEPTH O	F BORING 940 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE (Ft)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft)							
	F COMPLETED WELL 863 (Feet)	May not be representative of a well's long-term yield.							
101111 1111 01		May not be representative of a wett's tong-term yield							

DEPTH		PARE		CASING (S) DEPTH						CASING (S)						ANNULAR MATERIAL															
FROM SURF	ACE	BORE -	TYPE (✓)																						FRON	DEPTH FROM SURFACE				TY	PE .
Ft, to F	Ft.	DIA. (Inches)	BLANK	SCREEN	CONT.	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT ( <u>\</u>	BEN- TONITE	FILL ( <u>Y</u> )	FILTER PACK (TYPE/SIZE)														
ZONE	1											0	20	✓			SAND SLURRY														
0	250	36/18	<b>√</b>				PVC	2-1/2	SCH 80			0	190		✓		BENTONITE/LI														
250	260	18		<b>√</b>			PVC	2-1/2	•	.02	19	0	302			✓	#8 GRD SAND														
260	280	18	<b>√</b>				PVC	2-1/2	SCH 80		30	2	438		<b>√</b>		BENTONITE/LI														
ZONE	2										43	8	578			<b>√</b>	#8 GRD SAND														
0	779	36/18	<b>√</b>				ASTM-135	4			57	8	749		<b>V</b>		BENTONITE/LI														

	1			- 1 1				l .				<u> </u>	, -1.0				*** • ***	
	A CONTRACT	TRATORIUM A								EDETECA	COLORI	COT LODGE	NATIONAL PROPERTY.	Λ		K.		
	— ATTAC	HMENTS (	<u>~</u> ) —		──					ERTIFICA	TION	SIAIL	INTERIA		D. 7111	18.13		
	Geologia	Log			- [ ] [,	the undersig	med, certify th	at this repo	ort is complet	e and accurate	to the be	st of my kn	owiedge	and belie	e Lui	<b>3</b> -3		
)	Well Co	nstruction Dia	gram		- 11.	NAME_E	ATON DRI	<u>LLING C</u>	:O				1/2	18 0				
/	Geophys	ical Log(s)				(PER	SON, FÍRM, C	R CORPO	RATION) (1	YPED OR PRI	NTED)							
	Soll/Wat	er Chemical A	Analysis		- 11.	20 W. KE	NTUCKY	AVE.				woo	DLAN	<u>D</u>	CA		<u>95695                                  </u>	
	Other				- 11	ADDRESS	MI 1	` \				(	CITY		STAT		ZIP	
		V=0.5144.T/0.1			- II.	Sianed	Much	/)a	mon				0	9/29/03			<u> </u>	
ATTAC	H ADDITIONAL I	VEORMATION	i, ir ii <i>i</i> =2	XIS   S.			L DRILLER/A	UTHORIZI	ED REPRES	ENTATIVE			DA	TE SIGNE	D	C-57 LI	ÇENSE NL	JMBEI

# WELL COMPLETION REPORT Refer to Instruction Pamphlet

Page 2 of	6	
Owner's	Well No	7548

No. 72686	6
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Date Work Began 9/12/2003 , Ended 9/22/2003

Local Permit Agency COLUSA COUNTY HEALTH DEPT
Permit No. 2003-78 Permit Date 6/3/2003

 DWR	USE O	NLY		DO	NC	т	FILL	IN	
 	1 ,		1 .						
	<u> </u>						<u> </u>		
	STATE	WELL	NO.	/STA	AOIT.	N NC	Ò,		
			$\mathbb{I}^{\mathbb{C}}$	1	Ī	L	11		
 LATIT	UDE			L	ONO	SITU	DE		
						1			
		APN/T	RS/C	THE	R				

		GEOFORIC TOG		
ORIENTAT	ION (≰)	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING REVERSE — FLUID WATER		
DEPTH		DESCRIPTION		
SURF Ft. to		DESCRIPTION  Describe material, grain, size, color, etc.		
880		GRAY BROWN SAND	Address NOF PACKER RD & WOF AWY 45	
899		OLIVE GRAY CLAY		
099	340	OLIVE GIVAT OLAT	City CA	
			County COLUSA	
			APN Book 012 Page 160 Parcel 170	<u></u>
			Township 17 N Range 2 W Section 9	
			Latitude	
			DEG. MIN, SEC.	DEG. MIN. SEC.
			LOCATION SKETCH————————————————————————————————————	ACTIVITY (∠)
			NONTH	✓ NEW WELL
<del></del>				MODIFICATION/REPAIR  —— Deepen
				- Other (Specify)
<u> </u>				DESTROY (Describe
				DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
				PLANNED USES (∠)
1				WATER SUPPLY
			WEST	Domestic Public Irrigation Industrial
			\₹	1 -
<del></del>				MONITORING
<u> </u>				TEST WELL
				CATHODIC PROTECTION
		1		HEAT EXCHANGE
				INJECTION
				VAPOR EXTRACTION
				SPARGING
			SOUTH	REMEDIATION
-			Illustrate or Describe Distance of Well from Roads, Buildings,	OTHER (SPECIFY)
			Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	EXTENSOMETE
			WATER LEVEL & YIELD OF COMPI	ETED WELL
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACI	E
<del></del>			DEPTH OF STATIC	
			WATER LEVEL(Ft.) & DATE MEASURED _	
i_		0.40	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 940 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	(Ft.)
TOTAL DE	PTH OF	COMPLETED WELL 863 (Feet)	May not be representative of a well's long-term yield	<i>d</i> .

DEP		BORE -	CASING (S)  DEPTH						ANNULAR MATERIAL								
FROM SUI		BORE - HOLE DIA, (Inches)	ANK	SCREEN			FROM SURFACE								BEN- TONITE		PE FILTER PACK
Ft. to	Ft.		面	띯	oğ	맆		(Inches)	THICKNESS	(Inches)	Ft.	to	> Ft.	<u>(~)</u>	(⊻)	( <u>v</u> )	(TYPE/SIZE)
779	800	18		✓	1 1		MILL SLOT	4		.060	74	9	806			<b>✓</b>	#8 GRD SAND
800	863	18	✓				ASTM-135	4			80		940	✓			SAND SLURRY
ZONE	3		Γ									9					
0	460	36/18	V				PVC	2-1/2	SCH 80								in
460	470	18		V			PVC	2-1/2		.020					0	<b>ର</b> ୍	No.
470	510	18	V				PVC	2-1/2	SCH 80					1	S Post	(6)	

i	1 1 1 .	! ! !		L			V 13 17.07		_
	ATTACHMENTS (∠)				CERTIFICATION	STATEMENT :	11 15 1 10		_
	. Geologic Log	l i	I, the undersigned, certify th	at this report is compl	ete and accurate to the be	st of my knowledge at	nd belief.		
)	. Well Construction Diagram		NAME EATON DRI	LLING CO.					
,	Geophysical Log(s)		(PERSON, FIRM, C	R CORPORATION)	(TYPED OR PRINTED)				
	- Soil/Water Chemical Analysis	.	20 W. KENTUCKY	AVE		WOODLAND	CA	95695	
	Other		ADDRESS ///			CITY	STA		
ATTACL! ADD	DITIONAL INFORMATION, IF IT	EVICTO	Signedlaw	2 + aure			29/03	C57 A HIC - 133	
ATTACH ADL	DITIONAL INFORMATION, IF IT	EN373.	WELL DRILLER/A	UTHORIZED REPRE	SENTATIVE	DATE	SIGNED	C-57 LICENSE NUM	BE
	44.05	FADDITION	L OBAGE IO NEEDED	IOT NEVT CONOR	COLUMN VELVE BUILDING	ED FORM			

#### STATE OF CALIFORNIA

#### WELL COMPLETION REPORT

Page 3 of	6		
Owner's	Well No	7548	

Refer to Instruction Pamphlet

Owner's Well No. 7548	No. / 26866
Date Work Began 9/12/2003	Ended 9/22/2003
Local Permit Agency COLUSA COL	JNTY HEALTH DEPT
Permit No. 2003-78	Permit Date 6/3/2003

	DWR	USE	ONLY	D	0 1	IOT	FIL	L H	Ν_	
1	1	<u> </u>					ı	Ī		
		STA	TE WEL	L NO/S	TATIC	N N	Ō.			
							1	1_	][	
	LATIT	UDE			LON	IGITL	JDE			$\equiv$ [
	APN/TRS/OTHER									

F	GEOLOGIC LOG	TAINET & OTTAINED	
ORIENTATION	DRILLING REVERSE CHIP WATER		
DEPTH FRO	/IVI		
Ft. to F	t. Describe material, grain, size, color, etc.		
0	25 OLIVE GRAY CLAY	Address NOF PACKER RD & WOF AWY 45	
25	38 GRAVEL AND SAND	City CA	
38	61 YELLOW BROWN CLAY	County COLUSA	
61	76 SAND	APN Book 012 Page 160 Parcel 170	
76	231 BROWN CLAY	Township 17 N Range 2 W Section 9	
231	272 GRAVEL	Latitude	1 1
272	320 BROWN SAND		DEG. MIN. SEC.
320	334 GRAVEL	LOCATION SKETCH  NORTH	ACTIVITY (∠) —
334	406 OLIVE GRAY CLAY		MODIFICATION/REPAIR
406	426 YELLOW BROWN CLAY		— Deepen
426	441 OLIVE GRAY CLAY		Other (Specify)
441	470 SAND		DESTROY (Describe
470	496 GRAVEL		DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
496	506 BROWN SAND		PLANNED USES(∠)
506	526 OLIVE GRAY CLAY		WATER SUPPLY
526	544 GRAVEL	WEST	Domestic Public Irrigation Industrial
544	618 OLIVE GRAY CLAY	ğ ±	MONITORING
618	661 GRAVEL WITH SAND		TEST WELL
661	688 OLIVE GRAY CLAY		CATHODIC PROTECTION
688	736 GRAVEL AND SAND		HEAT EXCHANGE
736	746 DARK GRAY CLAY		DIRECT PUSH
746	752 GRAVEL	` `	INJECTION VAPOR EXTRACTION
752	775 GREENISH BLACK CLAY		SPARGING
775	785 SAND	SOUTH	REMEDIATION
785	801 GRAVEL AND SAND	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.	OTHER (SPECIFY)
801	822 BLACK AND GRAY SAND	necessary. PLEASE BE ACCURATE & COMPLETE.	EXTENSOMETE
822	836 GREENISH GRAY CLAY	WATER LEVEL & YIELD OF COMPL	
836	846 SAND	DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	<u> </u>
846	866 GREENISH GRAY CLAY	DEPTH OF STATIC	
866	880 CLAYEY GRAVEL WITH SAND	WATER LEVEL (Ft.) & DATE MEASURED	
TOTAL DEPT	H OF BORING 940 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
	H OF COMPLETED WELL 863 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN  May not be representative of a well's long-term yield	- · ·
101111111111111111111111111111111111111	(100)	May not be representative of a well's long-term yield	· · · · · · · · · · · · · · · · · · ·

DEP'		PODE					C.	ASING (S)				DEP	TH		ANNU	JLAR	MATERIAL
FROM SU	RFACE	BORE - HOLE	T	YPE	(✓	)		1		i	FRO	/ SU	IRFACE			TY	'PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	SOINT DITICION	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (¥)	BEN- TONITE	E FILL (幺)	FILTER PACK (TYPE/SIZE)
510	520	18		1			PVC	2-1/2		.020		0	20	<b>\</b>			SAND SLURRY
520	540	18	✓				PVC	2-1/2	SCH 80			0	190		<b>√</b>		BENTONITE/LI
											19	0	302			✓	#8 GRD SAND
											30	2	438		<b>V</b>	,	BENTONITE/LI
				$\Box$							43	8	578			~	#8 GRD SAND
											57	8	749		. (	D D.	BENTONITE/LI

	ATTACHMENTS (∠) -	
-	Geologic Log	
	Well Construction Diagram	

\_ Geophysical Log(s) - Soil/Water Chemical Analysis

\_\_\_ Other . ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

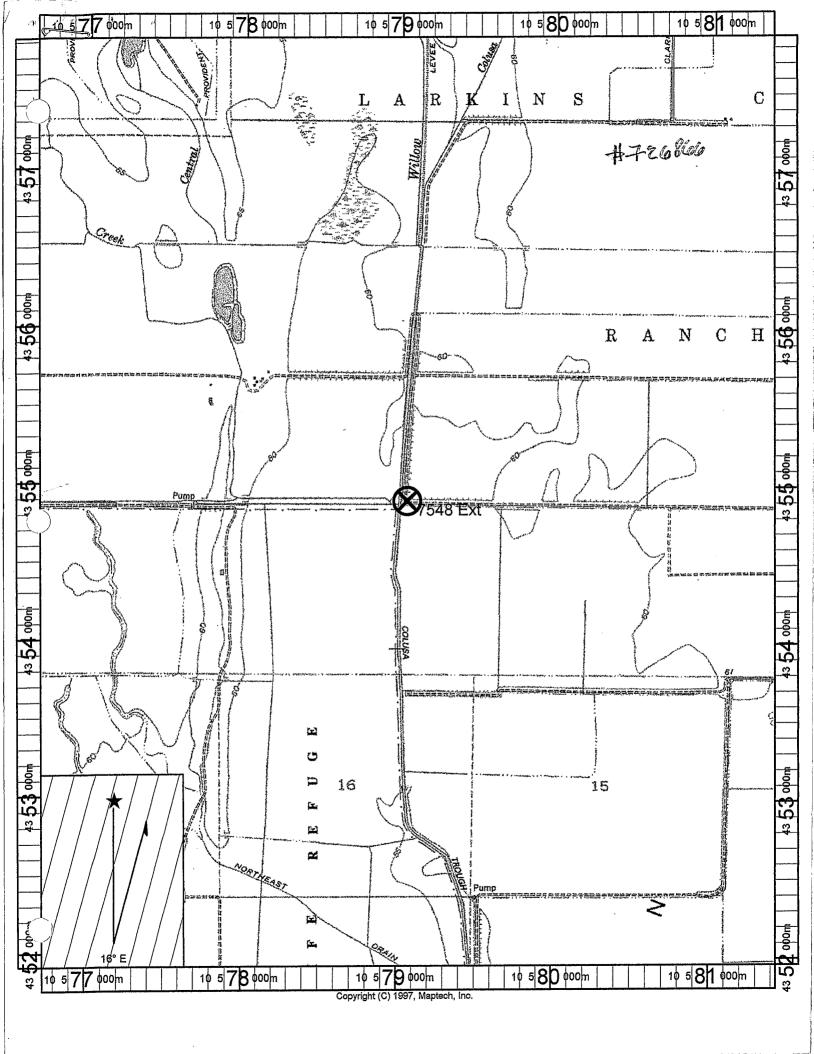
I, the undersigned, certify that this report is comp	CERTIFICATION	STATEMENT	KS K
I, the undersigned, certify that this report is comp	lete and accurate to the be	st of my knowledge a	ลทส์เมิตไโด
WARE EATON DRILLING CO			

NAME <u>EATON DRILLING CO.</u>
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. KENTUCKY AVE ADDRESS
Signed Well DRILLER/AUTHORIZED REPRESENTATIVE

WOODI	-AND	CA	95695
CIT	Y	STATE	ZIP
	09/29/03	C5	7 A HIC - 133783
	DATE SIGNED	C-5	7 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM



### ORIGINAL File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5

## WATER WELL DRILLERS REPORT (Sections 7076, 7078, Water Code)

#### LOCATION NOT CHECKED Do Not Fill In No 57083

STATE OF CALIFORNIA	STAT	CE C	OF (	CALI	FO	RN	IA
---------------------	------	------	------	------	----	----	----

	7.4	•	0,	$\mathbf{J}$	,		
State	Well	No	<b></b>				n
Other	r Wel	No	4	12		4. 	Ĺ

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(	(11) WELL LOG:
, N	782
	The state of the s
<u>-</u>	fe. to 39 fe. Yellow Clay
· · · · · · · · · · · · · · · · · · ·	39 60 sand
(2) LOCATION OF WELL	50 177 yellow clay
(2) LOCATION OF WELL:  County Column Owner's number, if any—	177 181 sang
	181 gravel
R. F. D. or Street No. R. F. D.	
3 miles east & 1 mile north of	" "
Maxwell, Calif.	
	tt tt
	at tr
(3) TYPE OF WORK (check):	n e
New well  Deepening  Reconditioning  Abandon	0 0
	9 0
If abandonment, describe material and procedure in Item 11.	
(4) PROPOSED USE (check): (5) EQUIPMENT:	0 0
Domestic Industrial Municipal Rotary	
Irrigation Test Well Other Dug Well	0
Dug wen []	
(6) CASING INSTALLED: If gravel packed	Section 7076.1, Water
SINGLE DOUBLE Gage	- 100 7076.1. West
From 0 ft. to 159 ft. 6 Diam. 3/16 all of Bore ft. ft.	l — John Code I
170110 If. to 177 It. O Diam. 37 10 211	
0 0 0 0 10	
	н п
· · · · · · · · · · · · · · · · · · ·	" " 1 T
Type and size of shoe or well ring 3/3x4x0   Size of gravel:	10
Describe joint Welded	1.
(7) DEDECRATIONS.	
(7) PERFORATIONS:	п н
Type of perforator used torch	
Size of perforations 4 in., length, by 12 in.	" "
From 1 27t. to 129 ft. Perf. per row Rows per ft.	11 11
6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Plant 1 Color 2 (1974)
0 0 0 0 0 0 0 0 0 0	Plotted and Coded
The second secon	As Well 17 N 7 2W - 30 K80
	The state of the s
/A) CONTEMPLICATION	0 0
(8) CONSTRUCTION:	Platted and Codod (1973)
Was a surface sanitary seal provided? Yes No To what depth ft.	- Flurica and Coded \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Were any strata sealed against pollution?	As Well 17.N /3W 36A80
From (t. to ft.	A or or
44 (14	0 P
Method of Sealing	Work started 4/5/ 19 60 Completed 4/8/ 19 60
(9) WATER LEVELS:	WELL DRILLER'S STATEMENT:
Depth at which water was first found 20 ft.	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
ding level before perforating ft.	
ling level after perforating ft.	NAME L.C. 137kison Drilling Co. (Person, firm, or corperation) (Typed or printed)
It.	Address XXX Box 324
(10) WELL TESTS:	
	Butte City, California
Was 1 pump test made? Yes No If yes, by whom?	[SIGNED] Vergenie Parkson Owner
Yield: gal./min, with ft. draw down after hrs.	Well Driller
Temperature of water Was a chemical analysis made?  Yes No	License No. 188522 Dated 0/30 , 1960
Was electric log made of well? . Ter No.	ether are now about A some

BRANCH \_\_\_

## STATE OF CAUTFORMIA THE RESOURCES AGENT DEPARTMENT OF WATER RESOURCES

**WELL DATA** 

	T
wher.	State No.
Address	Other No.
Tenant	
Address	- I - Z W M N
Type of Well: Hydrograph [ ] Key [ ] Index [ ]	Semiannual [1] G.W.M.P.
Location: County Coluga	Bosin <u>Lolusa</u> No. 5-21.04
U.S.G.S. Quad. Maxwell	71/2 Quad, No. 178 d
4 Section Two	, Rge, 5B Base & Meridian
Description 4 Mi. E/O maxwell on Maxwe	11 Colusa Rd. To Four Mile Rd.
Non Amila Rd 1/4 mi. To Ranch	Rd west. N/w on Ranch Rd. approx.
1/4 mi. To Ranch Headquarters. Well is	
Reference Point description Survice Tup, on East	Side of PH.
Reference Point description	9199 8) 1111
which isft. above lond surface. Ground Elevat	ion fe
Reference Point Elevft, Determined from	
Well: Use Domi Condition	n. 192 (
Condition	Depth 182 ft.
Casing, size 6 in., perforations 157	
Measurements By: DWR USGS USBR County	
	Depth to Bot, Aq.
Type of MaterialPerm, Rating	Thickness
Gravel Packed? Yes [7] No 🔀 Depth to Top Gr	Depth to Bot, Gr.
Sipp. Aquiler Depth to Top Aq.	Depth to Bot, Aq.
Tiller L.C. Parkinson Drilling Co.	Bulle City Depth to Bot, Aq
Date drilled 4-8-60 log filed	open (1)confidential (2) 57983
Equipment: Pump, type Subm. make	Barnes
Serial No. Size of discharge pipe 2 in.	
Power, Kind Elec. Make	1
	Water Levels available: Yes (1)No
H. P Motor Serial No. 436T200-10	Period of Record: BeginEnd
Elec, Meter No. 69036 Transformer No.	Collecting Agency:
Yieldft,	Prod. Rec. (1)Pump Test (2)Yield (3)
SKETCH	REMARKS
	The state of the s
. <b> </b>	
N	
barns   PH.	
, \ _ Trailer	
House	
K	***************************************
1/4 mi.	
/7 M1.	
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// /	
= 14m, =	
7 1 2	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Maxwell	
Maxwell - Colusa Rd.	Recorded by:
Military Commence of the Comme	Date
**************************************	
TO SHOW MAY COME OF THE MET OF THE PART WE ARE AND THE COME OF THE	, 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



#### WATER WELL DRILLERS REPORT

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

Do Not Fill In

49451

# THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF WATER RESOURCES Soc

				·			(11) <b>WELL</b>	LOG:		Jell 1	- 2	
							Total depth		ft. I	Pepth of completed well	151	ft.
						<del></del>	<del></del>	e by color, c		of material, and structure		
									ft. t			ft.
(2) <b>LOC</b>	ATION	V OF W	ELL:	• "	,		0'	to	61	Top Soil		
County	Colus			wner's numb	er, if any		61	to	14.	Yellow Clay		
Township, Ras		17	17N R3	3W 58			741	to	30 <b>1</b>	Sand Yellow C	Clav	
Distance from cities, roads, railroads, etc. 200 North of Lenahan Rd.					301	to	50 <b>'</b>	Yellow Clay				
					501	to	601	Red Clay				
(3) <b>TYP</b>	E OF	WORK	(check)	) :			601	to	821	Sand Yellow (	Clay	
New Well [	2 Dec	epening [	Recond	ditioning [	Destro	ying 🗌	821	t.a	87 •	Red Clay		
If destruction	m, describ	e material a	nd procedu	re in Item	11.		871	t.a	94 •	Sand Red Clay	у	
(4) PRC	POSET	USE (	check):	:	(5) <b>EQ</b>	UIPMENT:	94.	to	1401	Red Clay		
Domestic	🔼 Ind	ustrial 🗀	Munici	ipal 🔲	Rotary		140'	to	1471	Sand Red Clay	у	
Irrigation	i 🔲 Tes	t Well 🗀	Ot	her 🔲	Cable	<u> </u>	1471	to.	151!	Sand & Grave	1	
					Other		ì					
(6) CAS	ING I	NSTALI	LED:									
STE	EL:	OTHE	R:	]	(f gravel p	oacked					······································	
SINGLE 🛚	DOUE	3LE 🗀										
	i i	1	Gage	Diamete	- 1	1						
From	То		or	of	From							
ft.	ft.	Diam.	Wall	Воге	ft.	ft.						
Ž	130	6"	.188									
·												
	i	İ	1 1	ł.								
			ــــــــــــــــــــــــــــــــــــــ									
Size of shoe or	well ring:	homema	ade	Size of gra	vel:							
Describe joint		weld	ed		vel:							
Describe joint		weld	ed OR SCR	REEN:	vel:					NEIDENTIAL LOG	3	
Describe joint (7) PER	FORA'	weld TIONS	ed	REEN:	vel:				co	NFIDENTIAL LOG	<u> </u>	
Describe joint (7) PER	FORA'	weld TIONS	ed OR SCR	REEN:	vel:				CC	NFIDENTIAL LOC ter Code Sec. 1375	3	
Describe joint (7) PER Type of perfo	RFORA'	Welde FIONS ( me of screen	ed OR SCR torc Perf. per	REEN: h Rows	vel:	Size			CC	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo  From ft.	AFORA'	welde FIONS  me of screen  To  ft.	ed OR SCR torc Perf.	Rows		in. x in.			CC Wa	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo  From ft.	AFORA'	Welde FIONS ( me of screen	ed OR SCR torc Perf. per	REEN: h Rows			Plotted 2:	nd Cod	CC Wo	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo  From ft.	AFORA'	welde FIONS  me of screen  To  ft.	ed OR SCR torc Perf. per	Rows		in. x in.	Plotted e:	id Cod	ed and	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo  From ft.	AFORA'	welde FIONS  me of screen  To  ft.	ed OR SCR torc Perf. per	Rows		in. x in.	Plotted at As Well	nd Cod	cc We ed an h	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo From ft.	AFORA'	welde FIONS  me of screen  To  ft.	ed OR SCR torc Perf. per	Rows		in. x in.	Plotted e:	nd Cod	ed and	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo  From ft. 125	RFORA' ration or na	welds TIONS me of screen ft. 30	ed OR SCR toro Perf. per row	Rows		in. x in.	Plotted e: As Well	nd Cod	ed and	NFIDENTIAL LOC ter Code Sec. 1375	2	
Describe joint (7) PER Type of perfo  From ft. 125	RFORA' ration or na  1	welds TIONS me of screen To fit. 30	ed OR SCF torc Perf. per row	REEN: h Rows per ft.		in. x in. 4x/4	Flotted en	d Code	Wg	ter Code Sec. 1373	2	
Describe joint (7) PER Type of perfo  From ft. 125  (8) COI Was a surface	RFORA' ration or na  1  NSTRU sanitary see	Welds FIONS me of screen To ft. 30	ed OR SCF torc Perf. per row	REEN: h  Rows per ft.  4	To what dept	in. x in. 4x/4		d Code	Wg	NFIDENTIAL LOC ter Code Sec. 1375	2	
Pescribe joint (7) PER Type of perfo  From ft. 125  (8) COI  Was a surface Were any stra	NSTRU	Welds FIONS ( me of screen  To ft.  30  ICTION: al provided? sinst pollution	ed OR SCF torc Perf. per row	REEN: h Rows per ft.	To what dept	in. x in. 4x/4	Flotted en	d Code	Wg	ter Code Sec. 1373	2	
Pescribe joint (7) PER Type of perfo  From ft. 125  (8) COI  Was a surface Were any stra	NSTRU sanitary series saled age	Welds TIONS ( me of screen To fit.  30  CCTION: al provided? sinst pollution to	ed OR SCR torc Perf. per row	REEN: h  Rows per ft.  4	To what dept	in. x in. 4x/4	Flotted an	d Code	ed an \( / 3\( / 3\( / 3\) \)	ter Code Sec. 1373		
Pescribe joint (7) PER Type of perfo  From ft. 125  (8) COI  Was a surface Were any stra From From	NSTRU sanitary sea	Welds FIONS me of screen To ft. 30  ICTION: al provided? sinst pollution to	ed OR SCF torc Perf. per row  : Yes □ N ft. ft.	REEN: h  Rows per ft.  h  No ©	To what dept	in. x in. 4x/4	As Well	d Code	ed and (3%)	ter Code Sec. 1373	72	
Describe joint (7) PER Type of perfo  From ft. 125  (8) COI Was a surface Were any stra From Method of sea	NSTRU sanitary sea	Welds TIONS me of screen To fit. 30  ICTION: al provided? sinst pollution to blank	ed OR SCR torc Perf. per row	REEN: h  Rows per ft.  h  No ©	To what dept	in. x in. 4x/4	As Well  Work started 3- WELL DRILL	d Code 17N 24 ER'S STA	ed and (3%)  -/ 3%  -/ 3W	ter Code Sec. 1373	72	one be
Pescribe joint (7) PER Type of perfo  From ft. 125  (8) COI Was a surface Were any stra From From Method of sea (9) WA	NSTRU sanitary ser ta sealed age ft.	Welds FIONS TO Section 150 TO Section 150 TO Section 150 TO Section 150 To Sectio	ed OR SCR toro Perf. per row  Yes	REEN: h  Rows per ft. 4  No E	To what depti	in. x in. 4x/4	As Well  Work started 3- WELL DRILL	d Gode 17N 24 ER'S STA	ed and and and and and and and and and an	RSI  - 8980  - 8980	72	oe be
Per per per per per per per per per per p	NSTRU sanitary sea ta scaled age ft. ft. thing TER I ich water w	Welder FIONS TIONS TO fit.  30  ICTION: al provided? sinst pollution to blank EVELS: ras first found	ed OR SCR torc Perf. per row  Yes	REEN: h  Rows per ft.  h  No ©	To what depti	in. x in. 4x/4	As Well  Work started 3-  WELL DRILL  This well was of my knowledge	24 ER'S STA s drilled u ge and belie	ed and Ambed	RSI  - 8080  - 8080  - 8080  - 8080  - 8080  - 8080  - 8080	72	oe be
Pescribe joint (7) PER Type of perfo  From ft. 125  (8) COI Was a surface Were any stra From From Method of sea (9) WA Depth at whi	NSTRU sanitary season of the fit.  Aling TER I ich water wel before pee	Welds FIONS  TO fit.  30  ICTION: al provided? sinst pollution to blank EVELS: cas first found inforating, if	ed OR SCF torc Perf. per row  Yes	REEN: h  Rows per ft.  4  No E	To what depti	in. x in. 4x/4	As Well  Work started 3-  WELL DRILL  This well was of my knowledge	d Gode  17N  24  ER'S STA  ss drilled a  sge and belie  ier Di	ed and / 3W.  19 72.0  TEMENT: under my justif.	RSI  - 8980  - 8980	72 t is true to the	be be
Per per per per per per per per per per p	NSTRU sanitary sea ft. ft. sling TER I ich water we el before pee	Welds TIONS me of screen To fit. 30  CCTION: al provided? sinst pollution to to blank EVELS: ras first found erforating, if forating and	ed OR SCF torc Perf. per row  Yes	REEN: h  Rows per ft. 4  No E	To what depti	in. x in. 4x/4	Work started 3- WELL DRILL This well was of my knowledge NAME Squ	24 ER'S STA ss drilled u ge and belie	ed away and a second area of the	R81 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080	72 t is true to the	be be
Pescribe joint (7) PER Type of perfo  From ft. 125  (8) COI  Was a surface Were any stra  From Method of sea (9) WA Depth at whi Standing leve (10) W.	NSTRU sanitary seates sealed against the sealed aga	Welds FIONS me of screen Fo ft.  30  CCTION: al provided? sinst pollution to to blank EVELS: cas first found erforating and ESTS:	ed OR SCF torc Perf. per row  Yes	REEN: h  Rows per ft.  4  No E	To what depting if yes,  If yes,  ft.  ft.	in. x in. 4x/4	Work started 3- WELL DRILL This well wa of my knowledg NAME Squ Address P	24 ER'S STA s drilled u ge and belie ier Dr	ed aw and a second	- 8030  - 8030	72 t is true to the	oe be
Per le l'alian de le l'alian de le l'alian de le l'alian de le l'alian de le l'alian de	NSTRU sanitary seates sealed aga ft. ft. whing TER I ich water w el before per el after perf ELL T st made? Y	Welder FIONS  TO Secretary  To ft.  30  CCTION: al provided? ainst pollution to to blank  EVELS: ras first found inforating, if forating and ESTS: (es \( \) No	ed OR SCF torc Perf. per row  Yes   N Yes   K ft. Casin known known developing	REEN: h  Rows per ft.  4  No E  20  20  1f yes, by who	To what depti If yes,	in. x in.  4x/4  h ft.  note depth of strata	Work started 3- Well DRILL This well wa of my knowledg NAME Squ Address P	24 ER'S STA ss drilled u ge and belie	ed aw and a second	R81 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080 - 8080	72 t is true to the	be be
Per le point (7) PER Type of per for ft. 125  (8) COI Was a surface Were any stra From Method of sea (9) WA Depth at whist Standing leve (10) W.	NSTRU sanitary see ta sealed age ft. ft. htting TTER I ich water w el before per el after per ELL T) st made? Y	Welds FIONS me of screen Fo ft.  30  CCTION: al provided? sinst pollution to to blank EVELS: cas first found erforating and ESTS:	ed OR SCR torc Perf. per row  Yes   N Yes   K ft. Casin known known developing	REEN: h  Rows per ft.  l  No E  No C  20  (if yes, by who ft. draw	To what depting if yes,  If yes,  ft.  ft.	in. x in. 4x/4	Work started 3- WELL DRILL This well wa of my knowledg NAME Squ Address P	24 ER'S STA s drilled u ge and belie ier Dr	ed aw and a second	- 8030  - 8030	72 t is true to the	oe be

#### WATER WELL DRILLERS REPORT

#### FIELD WORK SHEET

Report No. 4945/	
Owner	
Pump No. 5 VB	
Meter No.	
LOCATION	
Section 8R	
Township	
Range 3W	
Range 3W 16 MAXWELL CENTERAD	
1-5 CEMEROAD	
W LIAN LIAN	
LENAPOAD	
LENAHAN POAD	
feet North,	
feet West from S. E. corner	
of Section	
REMARKS	
	_
measuable and 200' much of lenehand when the	
neasuchle and 200' much of lenchand	
measuchle and 200' much of lenehand	
$\mathcal{C}$	
Sam .	
Field Checked by	
Date	,

17N/3W-32 H

STATE OF CALIFORNIA
THE RESOURCES AGENCY

Do Not Fill In

ORIGINAL
File with DWR

# DEPARTMENT OF WATER RESOURCES WATER WELL DRILLERS REPORT

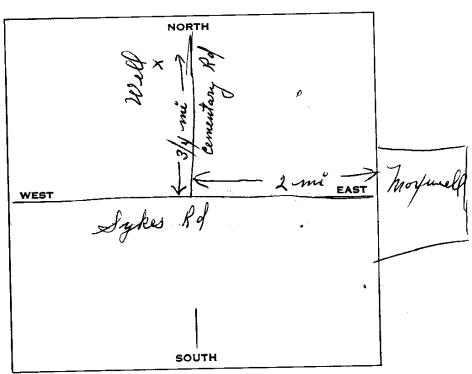
Nº 93568
State Well No. State Well No. State Well No. State Well No. State N

	Other Well No.
	(11) WELL LOG:
	Total depth 140 ft. Depth of completed well 1/2 ft.
	Formation: Describe by color, character, size of material, and structure
	ft. to ft.
(2) LOCATION OF WELL:	0 - 18- Zellong Clay
County Caluba Owner's number, if any	10 - 32 - Soud & offsomet
Township, Range, and Section	32 - 70 - zelloze Clos
of Theodorell on Permeters Mond	1. 70 - 71 - Sand & Shoul
(b) TYPE OF WORK (check):	105 - 100 Sauch Cloud Alland
New Well Deepening Reconditioning Destroying	108 - 1/2 Zellas Clor
If destruction, describe material and procedure in Item 11.	112 - 140. 22 Luc Flord -
(4) PROPOSEO USE (check): (5) EQUIPMEN	T:
Domestic Industrial I Municipal I Rotary	
Irrigation Test Well Other Cable	
Other	
(6) CASING INSTALLED:  STEEL: OTHER: If gravel packed	
STEEL: OTHER: IT graves packed	
SINGLE []	
From To Gage Diameter or of From To	
ft. ft. Diam. Wall Bore ft. ft.	
0 112 65/8 1089 12 0 140	
Size of shoe or well ring:  Size of gravel:	
Describe joint W eVd	CONFIDENTIAL LOG
(7) PRRFORATIONS OR SCREEN:  Type of perforation or name of screen 3/16 × 1/2 Punched	Water Code Sec. 13752
	Trailer Code Sec. 13/32
From To Perf. Rows per Size	
ft. ft. row ft. in. x in.	
68 72 8 3/16×1/2	
104 1/2	
(8) CONSTRUCTION:	Plotted and Coded
w / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /	As Well 17N /3W - 32.H80
Were any strata scaled against pollution? Yes No I If yes, note depth of stra	VICII populateleitare ( 1939-1931
From 0 ft. to 40 ft.	
from fr. to ft.	Work started 3/29 1971 , Completed 3/29 1974
Method of sealing Cement	WELL DRILLER'S STATEMENT:
(9) WATER LEVELS:	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Depth at which water was first found, if known ft.	+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$
Standing level before perforating, if known ft.  Standing level after perforating and developing A ft.	(Person, firm, or corposerion) (Typed or printed)
The state of the s	
(10) WELL TESTS: (11) Jung appear 200 97 W	Audies PO W 470 W Mons
ield: gal./min. with ft. drawdown after brs.	[SIGNED] Of ala Q alay Th)
Temperature of water & & Was a chemical analysis made? Yes . No .	(Well Driller)
Was electric log made of well? Yes No D If yes, attach copy	License No. 195165 Dated 21/6
CKETCH LOCATION O	E WELL ON BEVERSE SIDE
SKEICH LOCATION O	F WELL ON REVERSE SIDE

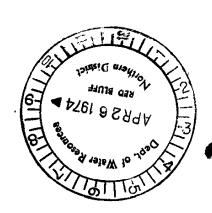
NORTH BOUND	ARY OF SECTION
NW 1/4	NE, 1/4
SW 1/4	SE 1/4
1/2 MILE	½ MILC

Township	N/S
Range	E/W
C No	

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



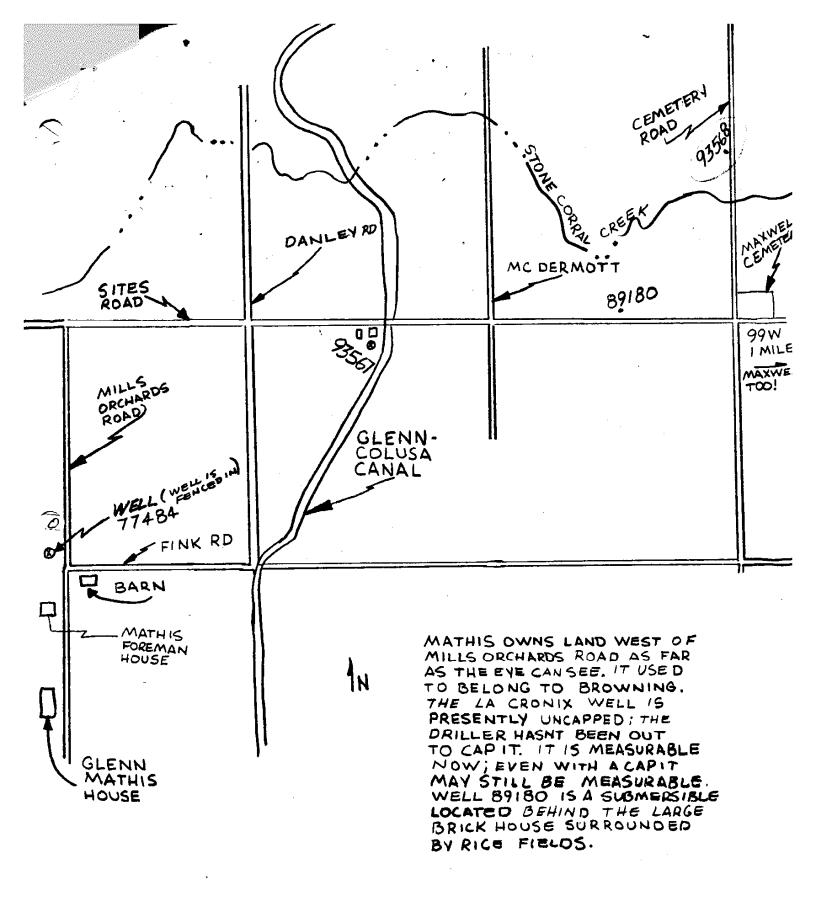
B. Location of well in areas not sectionized. Sketch roads, railroads, streams, or other features as necessary. Indicate distances.



## FIELD WORK SHEET

Report No. 93568	1100 -
Owner	- 1100 Ay Engl
Pump No. SUB	
Meter No.	- Like
v <sub>i</sub>	
	LOCATION AND THE STATE OF THE S
Section 32H	LOCATION AND AND AND AND AND AND AND AND AND AN
	10 No
Township $\frac{7N}{3W}$	
MAXWELL	
SIKES RD	
A	
(GU.	
MAXWELL	
	RED BARN feet North,
STONE OF	feet West from S. E. corner
CREEK	of Section
1 1/	REMARKS
weasundle-to	he well is on the west
weasundele-to	(which early red born

Field Checked by
8-12-74



ÆL.

#### ORIGINAL

#### **File with DWR**

# STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

Do not fill in No. 177869

Notice of Intent No.	WATER WELL DI	RILLERS REPORT	State Well No	
Local No. or Date			Other Well No	
		(19) WELL LOC.	A= s A,	
			al depth. 455 ft. Depth of completed well 45 (Describe by color, character, size or materia	
A f		- 9	top Sail	11)
(2) LOCATION OF WELL		9 - 38	Brown Clay	
(2) LOCATION OF WELL (See instructionary County County Owner's	tions):	38 - 41	gravel	
Well address if different from above	Well Number	41 - 88	BROWN CLAN	
Township 18 N Range 2 W	Section 36	88. 129	50000	
Distance from cities, roads, railroads, fences, etc.	Section	127 - 191	Rive Clay	
_ 1	rner or	1910 - 114	Bille - Bock	
Secion 36		124 - 268	Blue Clau	
•		168 - 310	SAND & Gravel	
	(3) TYPE OF WORK:	310/2 446	Blue Clau	
	New Well Deepening	446 455	> Shale & Gravel	
	Reconstruction	- //	<b>\( \sigma</b>	
!	Reconditioning	- (0	3 A	
	Horizontal Well	- 1	<u>ම</u>	
	Destruction [ (Describe destruction materials and		0	
	procedures in Item 12	<u> </u>	Rall	
	(4) PROPOSED USE	- (1)		
	Domestic	7-1	0,1	
	Irrigation		7.9.	
	Industrial \	4/2)-V		
	Ten Well	AH &- 6	<b>&gt;</b>	
	Stock		· · · · · · · · · · · · · · · · · · ·	
	Municipal	-@\\\		
WELL LOCATION SKETCH	Other	- D ·		
(5) EQUIPMENT: (6) GRAVEL	(11 1).			
Rotary Reverse Xet No				
Cable Air Dimeter of bo		((),\V-		
Other Bucket Packed from  (7) CASING INSTALLED: (8) PERFOR	ATTOOK:	<del>-</del>		
	and or size of screen	<u> </u>		
	177 17 26			<del></del>
From To Dia. Gage of From ft. ft. Wall ft.	To Slot			
Q 334 V8 14 88	118 Amills Ku	-		
230 410 H6 B-GA 195	2.35 mils K	hiling -	,	
210	340			
(9) WELL SEAL:	All the construction of the construction of the design of the construction of the cons	-	DEC 3 1985	
	If yes, to depthft.	_	- 1 <del>000</del>	
Were strata sealed against pollution? Yes X No	Intervalft.			
Method of sealing Clay Seal		<del> </del>		85
(10) WATER LEVELS:	<b>4</b> 0 <sub>ft</sub>	WELL DRILLER'S STATI	//	
Depth of first water, if known  Standing level after well completion	38 ft.	This well was drilled under my knowledge and belief.)	jurisdiction and this report is true to the bes	t of my
(11) WELL TESTS:		SIGNED: 7	Steellell	
Was well test made? Yes No 🖂 If yes, by	whom? Walley Pump		(Well Driller)	
Type of test Pump Bailer Depth to water at start of test 38 ft.	Air lift   At end of test 36 ft	NAME VALLE LA Purn (Person, firm,	or corporation) (Typed or printed)	<del></del>
Discharge 3400 gal/min after 90 hours	Water temperature	Address 470 No. Geo	. Wash Blud	
Cherr alysis made? Yes \( \sigma\) No \( \sigma\) If yes, by	_	City 4 uba City	CA Zip95991	
	tach copy to this report	License No. 256384		985

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

Erys .	
ORIGINA	۱L
File with	

## JUL 2 2 2003WELL C

STATE OF CALIFORNIA

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a Care	**	Tanaturia		Downlet	at	

$\mathcal{L}$	Y.	1	تناليا	11		_ 1
Refer	to	ħ	struc	tton	Panip	hlet

Page 1 of 2	•	~	2003	Refer	to Instruction
Owner's Well No. `7564					No. 72
Date Work Began 6/23/2003			, Ended 7/1/20	03	

**6833** ABC

Local Permit Agency GLENN COUNTY HEALTH DEPT

Permit No. MW 161-03 \_\_ Permit Date 6/23/2003

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

95695 ZIP

STATE ZIP

C57 A HIC - 133783

C-57 LICENSE NUMBER

CA

07/14/03 DATE SIGNED

ſ		GEOLOGIC LOG	•	
ORIENTA	ΓΙΟΝ (≰)	✓ VERTICAL HORIZONTAL ANGLE (SPECIFY) DRILLING METHOD ROTARY FLUID MUD		
DEPTH SURF		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.		
0		YELLOW/BROWN CLAY	Address 1.45 MI S OF HWY 162 & .6 MI W C	OF C/R 2
40	140	LOOSE SAND AND GRAVEL WITH MINIMUM	City CA	
		YELLOW CLAY STREAKS	County GLENN	
140	150	BROWN CLAY	APN Book 013 Page 060 Parcel 050	
150	200	GRAY CLAY	Township 18 N Range 1 W Section 2	
200	265	GRAY/BLUE CLAY	Latitude	l 1
265	280	SAND AND GRAVEL WITH GRAY CLAY	DEG. MIN. SEC.	DEG. MIN. SEC.
280	410	GRAY CLAY WITH SAND	LOCATION SKETCH	ACTIVITY (🗹 ) —
410	425	SAND AND GRAVEL		MODIFICATION/REPAIR
425	432	GRAY CLAY WITH SAND		— Deepen
432	455	SAND		Other (Specify)
455	480	SAND AND GRAVEL		DESTROY (Describe
480	490	SAND		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
490	510	GRAY CLAY WITH SAND AND GRAVEL STRKS		PLANNED USES(∠)
510	540	GRAY CLAY WITH SAND		WATER SUPPLY
540	555	SAND	MEST.	Domestic Public Industrial
555	800	SAND WITH GRAY CLAY STREAKS	EAS	MONITORING →
				TEST WELL
				CATHODIC PROTECTION
				HEAT EXCHANGE
				DIRECT PUSH INJECTION
				VAPOR EXTRACTION
				SPARGING
			SOUTH	REMEDIATION
			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.	OTHER (SPECIFY)
			WATER LEVEL & YIELD OF COMPL	ETED WELL
İ			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	Ē
			DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURED	
i		700	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 760 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	(Ft.)
TOTAL DI	EPTH OF (	COMPLETED WELL 739 (Feet)	May not be representative of a well's long-term yield	d.

DEP	тн	BODE			CASING (S) DEPT								ANN	ULAR	MATERIAL
FROM SU	RFACE	BORE - HOLE	Т		(\( \)					FROM SU	FROM SURFACE				PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	Ft.	CE- MENT		FILL O(2)	FILTER PACK TYPE/SIZE)
ZONE	1									0	60	18.96	<b>E 1</b>	63 PM	SAND SLURRY
0	110	12	1			PVC	2-1/2	SCH 80		60	200	10,		✓	#8 GRD SAND
110	120	12		<b>√</b>		PVC	2-1/2	SCH 80	0.030	200	320	1			SAND SLURRY
120	130	12	1			PVC	2-1/2	SCH 80		320	492			1	#8 GRD SAND
ZONE	2									492	680	1			SAND SLURRY
0	450	12	~			PVC	2-1/2	SCH 80		680	760			1	#8 GRD SAND

ATTACHMENTS (∠)	7 T
Geologic Log	I, the undersigned, certify that this report is converged in the convergence in the converged in the convergence in the converged in the conve
Well Construction Diagram	NAME EATON DRILLING CO.
Geophysical Log(s)	
Soil/Water Chemical Analysis	20 W. KENTUCKY AVE.
Other	ADDRESS ////

CERTIFICATION STATEMENT emplete and accurate to the best of my knowledge and belief.

ON) (TYPED OR PRINTED) WOODLAND

WELL DRILLER/AUTHORIZED REPRESENTATIVE IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

#### STATE OF CALIFORNIA

#### WELL COMPLETION REPORT

Page 2 of 2	Refer	to Instruction	•
Owner's Well No. `7564		No. 726	833
Date Work Began 6/23/2003 ,	Ended 7/1/2003		

Local Permit Agency GLENN COUNTY HEALTH DEPT.
Permit No. MW 161-03 Permit Date 6

Permit Date 6/23/2003

<del></del>	DWR	USE	ONLY	<u></u>	DO	NOT	FILL	. IN	
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		STA	TE W	ELL NO	/STA	TION N	10.		1
					1				
	LATIT	UDE			L	ONGIT	JDE		
1						Ιi			
APN/TRS/OTHER									

Permit	No. IVI	VV 161-03 Permit Date 6/23/2003		
		GEOLOGIC LOG	1	
ORIENTATI	ON (≰)	VERTICAL HORIZONTAL ANGLE (SPECIFY)		
DEPTH F	DOM	DRILLING ROTARY FLUID MUD		
SURFA		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.	WELL LOCATION	
0;		YELLOW/BROWN CLAY	Address 1.45 MI S OF HWY 162 & .6 MI W C	OF C/R 2
40	140	LOOSE SAND AND GRAVEL WITH MINIMUM	City CA	
	13/2	YELLOW CLAY STREAKS	County GLENN	
140		BROWN CLAY	APN Book 013 Page 060 Parcel 050	
150	200	GRAY CLAY	Township 18 N Range 1 W Section 2	
200		GRAY/BLUE CLAY	Latitude	1
265	280	SAND AND GRAVEL WITH GRAY CLAY	DEG. MIN. SEC.	DEG. MIN. SEC.
280	410	GRAY CLAY WITH SAND	LOCATION SKETCH	ACTIVITY (∠) ——
410		SAND AND GRAVEL		MODIFICATION/REPAIR
425	432	GRAY CLAY WITH SAND		Deepen
432	455	SAND		Other (Specify)
455	480	SAND AND GRAVEL		DESTROY (Describe
480	490	SAND		DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"
490	510	GRAY CLAY WITH SAND AND GRAVEL STRKS		PLANNED USES (∠)
510	540	GRAY CLAY WITH SAND		WATER SUPPLY
540	555	SAND	WEST	Domestic Public Irrigation Industrial
555	800	SAND WITH GRAY CLAY STREAKS	<b>≱</b>	MONITORING ✓
				TEST WELL
	`			CATHODIC PROTECTION
				HEAT EXCHANGE
				DIRECT PUSH
				INJECTION VAPOR EXTRACTION
			·	SPARGING
			south —	REMEDIATION
			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.	OTHER (SPECIFY)
			WATER LEVEL & YIELD OF COMPL	
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	<b>:</b>
			DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURED _	
<del></del>		700	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 760 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	_ (Ft.)
TOTAL DEF	TH OF	COMPLETED WELL 739 (Feet)	May not be representative of a well's long-term yield	d

DEP	тн	PODE					CA	ASING (S)				D	EPT	Ή			AN	NU	LAR	MA	TERIA	L	
FROM SU	IRFACE	BORE - HOLE	T		<u>( Y</u>						FR	OM	SUF	RFACE					T	YPE			
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	SON TO TO	FIL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	F	 ŧ.	to	Ft.	M	Æ- ENT ✓)	BE!	UTĖ	FILL ( <u>√</u> )		FILTER (TYPE/		
450	460	12		✓			PVC	2-1/2	SCH 80	0.030									20	13	}		
460	470	12	<b>√</b>				PVC	2-1/2	SCH 80						ARI	C	1	4	for the	,			
ZONE	3	12		ļ									1		F. St.		علا						
0	719	12	~				PVC	2-1/2	SCH 80														
719	729	12		~			PVC	2-1/2	SCH 80	0.030			1										_
729	739	12	V				PVC	2-1/2	SCH 80											$\top$			_

-	ATTACHMENTS	$(\angle)$
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- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis \_\_\_\_ Other \_\_

ATTACH	ADDITIONAL	INFORMATION.	IF IT EXISTS.

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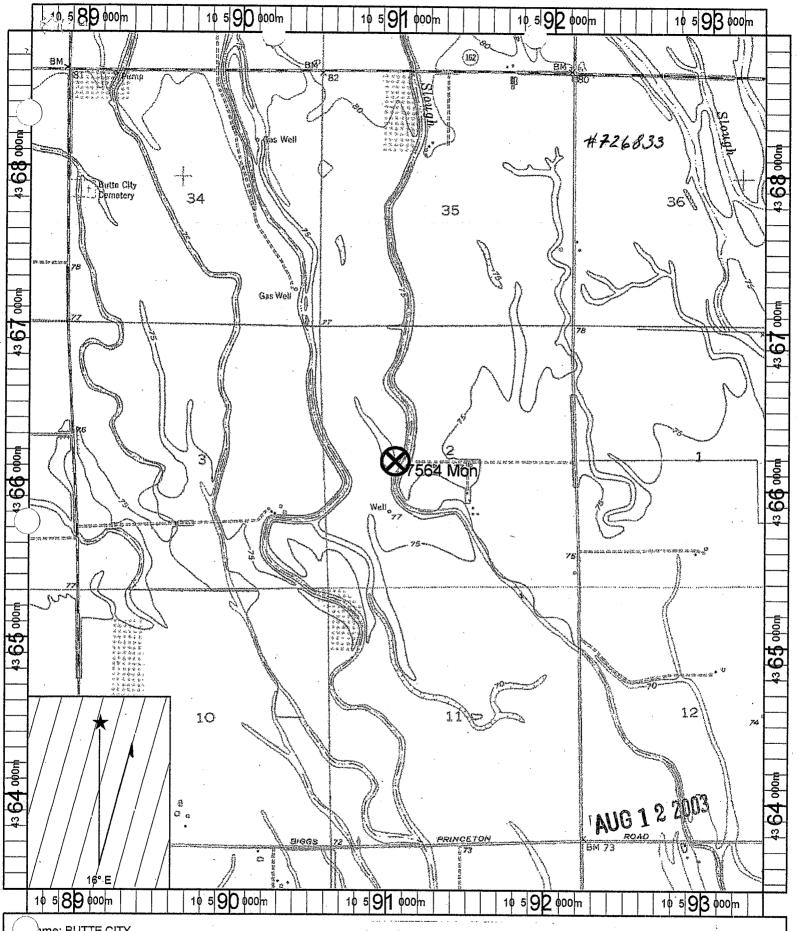
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME EATON DRILLING CO.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. KENTUCKY AVE.
WOODLAND

ADDRESS
Signed
WELL DRILLER/AUTHOR/ZED REPRESENTATIVE
O7/14/03
DATE SIGNED

CA STATE ZIP



me: BUTTE CITY Date: 6/23/2003

Scale: 1 inch equals 2000 feet

Caption: Glenn County - Job# 7556 Dom APN: 013-060-050 T18N R1W s2

Page 1 of 12

# STATE OF CALIFORNIA WELL COMPLETION REPORT Refer to Instruction Pamphlet

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N	<b>.</b>		Λ	A	E	A	A	7

Owner's Well No. 7986	
Date Work Began 9/5/2006	Ended 9/14/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW 247-06 Permit Date 6/

Permit Date 6/15/2006

 DWR	USE	ONL		DO	NOT	FILL	IN		
18	W	li	12	h-	·   -	7 /	8		
 STATE WELL NO./ STATION NO.									
			76	ιĺ		11		1	
LATIT	UDE			LO	NGITL	IDE			
	1			LL		لــــــــــــــــــــــــــــــــــــــ			
APN/TRS/OTHER									

	·	GEOLOGIC LOG	1	
ORIENTA <sup>*</sup>	TION (≰)	✓ VERTICAL HORIZONTAL ANGLE (SPECIFY)  DRILLING MOTARY FLUID MUD		
DEPTH SURF		DESCRIPTION DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.		
0		DARK BROWN CLAY	Address .93 MI NOF RD 68 & 525 EOF NOF	RMAN RD
20	100	SILTY ORANGE BROWN CLAY	City CA	
100	170	SILTY YELLOW BROWN CLAY WITH FINE SAND	County GLENN	
170	210	TAN CLAY WITH MINIMUM SAND	APN Book 013 Page 280 Parcel 001	
210	280	BROWN TAN CLAY WITH COARSE SAND	Township 18 N Range 2 W Section 18	
280	400	BROWN TAN CLAY WITH SAND		
400	520	SOFT YELLOW BROWN CLAY WITH COARSE		DEG. MIN. SEC.
		SAND	LOCATION SKETCH	—ACTIVITY (∠) —
520	700	SAND AND GRAVEL WITH BRITTLE YELLOW	NORTH	MODIFICATION/REPAIR
İ		BROWN CLAY		MODIFICATION/REPAIR  —— Deepen
700	710	BLUE CLAY WITH SAND AND GRAVEL		Other (Specify)
710	720	SOFT YELLOW BROWN CLAY WITH SAND		
ı		AND GRAVEL		DESTROY (Describe Procedures and Materials
720	760	SOFT BLUE GRAY CLAY WITH SAND AND		Under "GEOLOGIC LOG"  PLANNED USES (✓)
i		GRAVEL		WATER SUPPLY
760	800	SOFT YELLOW CLAY WITH SAND	WEST	Domestic Public Industrial
800	850	SOFT YELLOW CLAY WITH BRITTLE GRAY	Ä	
		CLAY AND SAND		MONITORING → TEST WELL
850	1025	BRITTLE GRAY BROWN CLAY WITH SAND		CATHODIC PROTECTION
i	***	AND GRAVEL		HEAT EXCHANGE
1025	1040	COARSE SAND		DIRECT PUSH
1040	1195	BRITTLE GRAY BROWN CLAY WITH SAND		INJECTION VAPOR EXTRACTION
	A	AND GRAVEL STREAKS	The second of the first of the first of the second of the	SPARGING
			SOUTH	REMEDIATION
		1	Illustrate or Describe Distance of Well from Rouds, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
i i			necessary. PLEASE BE ACCURATE & COMPLETE.	
i	* -	1	WATER LEVEL & YIELD OF COMPLI	ETED WELL
			DEPTH TO FIRST WATER (FL) BELOW SURFACE	<b>5</b>
			DEPTH OF STATIC	
		1	WATER LEVEL(Ft.) & DATE MEASURED _	
TOTAL D	EPTH OF	BORING 1200 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
		COMPLETED WELL 1000 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	
TOTALD	BEIR OF	COMILEPIED MEDE 1999 (Lect)	May not be representative of a well's long-term yield	

DEPTH PODE						CASIN	SING (S)			DEPTH		ANNULAR MATERIAL						
FROMS	JRFACE	BORE -	_	YPE			1				p 15 s	FI		URFACE			TY	PE
Ft. to	Ft.	DIA. (inches)	BLANK	SCREEN	-NOO	DUCTOR FILL PIPE			RNAL IETER hes)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		Ft. 1	to Ft.	CE- MENT (✓)	BEN- TONITE (✓)	E FILL (✓)	FILTER PACK (TYPE/SIZE)
ZONE	. 1							-					0	130	1			SAND SLURRY
0	246	14	<b>~</b>	1			PVC F480		2.5	SCH 80	ł		130	134		<b>✓</b>		<b>BENTONITE S</b>
246	256	14		<b>V</b>	1		PVC F480		2.5	SCH 80	.030		134	223			1	SRI#8 SAND
256	266	14	~	1			PVC F480		2.5	SCH 80			223.	235		~		BENTONITE S
ZONE	2		Π										235	280			<b>V</b>	SRI#8 SAND
. 0	510	14	~	Ī			PVC F480		2.5	SCH 80		Г	280	290		V		BENTONITE S

		200	BEITIOITIE
ATTACHMENTS ( < )	CERTIFICATION		A STATE OF THE STA
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief.	ने संग्रह र ६६
Well Construction Diagram	NAME EATON DRILLING CO.	·	
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		
- Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA 95695
Other	ADDRESS ON / 1	CITY	STATE ZIP
	Signed Market amon	10/05/06	C57 A HIC - 13378
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57 LICENSE NUMBER

ODICINI	<b>^1</b>
ORIGINA	<del>-\</del> L.
File with	DIVID
I RG MILL	DAAT

Page 2 of 12

## WELL COMPLETION REPORT

Refer

to	Inst	ructio	n .	Pan	ıph	let		
				200	4	4	-	

Owner's Well No. 7986 Date Work Began 9/5/2006

No. E045412 ., Ended 9/14/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW 247-06 Permit Date 6

Permit Date 6/15/2006

_	_	DWR	USE	ONLY		DO	NOT	FILL	IN,	
	1	[	Πī	1	Ĺ	ıl	. 1	1 1		
-	STATE WELL NO./ STATION NO.									
	1_				$\neg \lceil$	ļ				
	LATITUDE LONGITUDE									
	L									
-				APN	TRSK	THE	}			

	GEOLOGIC LOG	1				
ORIENTATIO	' ' DELL'INC					
DEPTH FR	(OM					
SURFAC Ft. to	Ft. Describe material, grain, size, color, etc.	WELLLOCATION				
o¦	20 DARK BROWN CLAY	Address .93 MI NOF RD 68 & 525 EOF NOF	RMAN RD			
·20¦	100 SILTY ORANGE BROWN CLAY	City CA				
100¦	170 SILTY YELLOW BROWN CLAY WITH FINE SAND	County GLENN				
170¦	210 TAN CLAY WITH MINIMUM SAND	APN Book 013 Page 280 Parcel 001				
210	280 BROWN TAN CLAY WITH COARSE SAND	Township 18 N Range 2 W Section 18				
280¦	400 BROWN TAN CLAY WITH SAND	Latitude	l 1			
400 !	520 SOFT YELLOW BROWN CLAY WITH COARSE	DEG. MIN. SEC.	DEG. MIN. SEC.			
l !	SAND	LOCATION SKETCH	ACTIVITY (∠) —			
520	700 SAND AND GRAVEL WITH BRITTLE YELLOW		MODIFICATION/REPAIR			
l i	BROWN CLAY		- Deepen			
700	710 BLUE CLAY WITH SAND AND GRAVEL		Other (Specify)			
710	720 SOFT YELLOW BROWN CLAY WITH SAND		DESTROY (Describe			
i	AND GRAVEL		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG"			
720¦	760 SOFT BLUE GRAY CLAY WITH SAND AND		PLANNED USES (∠)			
	GRAVEL		WATER SUPPLY			
760¦	800 SOFT YELLOW CLAY WITH SAND	WEST EAST	Domestic Public Industrial			
800¦	850 SOFT YELLOW CLAY WITH BRITTLE GRAY	<u></u>	— ingation — MONITORING ✓			
	CLAY AND SAND		TEST WELL			
850¦	1025 BRITTLE GRAY BROWN CLAY WITH SAND		CATHODIC PROTECTION			
	¦AND GRAVEL		HEAT EXCHANGE			
1025	1040 COARSE SAND		DIRECT PUSH			
1040	1195 BRITTLE GRAY BROWN CLAY WITH SAND		INJECTION VAPOR EXTRACTION			
i	AND GRAVEL STREAKS		SPARGING			
1		SOUTH SOUTH Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION			
		Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)			
· i						
	İ	WATER LEVEL & YIELD OF COMPL				
	i	DEPTH TO FIRST WATER (Ft.) BELOW SURFACE				
<u> </u>	<u> </u>	DEPTH OF STATIC WATER LEVEL(Ft.) & DATE MEASURED				
1	1000	ESTIMATED YIELD * (GPM) & TEST TYPE				
	TH OF BORING 1200 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	(Ft.)			
TOTAL DEP	TH OF COMPLETED WELL 1000 (Feet)	May not he representative of a well's long-term yield	<i>I</i> .			

DEPTH BORE - CASING (S)						DEPTH			ANNULAR MATERIAL							
FROM SURFAC	FROM SURFACE HOLE DIA.		TYPE				INTERNÁL	041105	SLOT SIZE	FROM SURFACE		TYPE			PE	
Ft. to Ft.	(Inches)	BLANK	SCREEN	NOS S	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	GAUGE OR WALL THICKNESS	IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (✓)	BEN- TONITI ( <u>√</u> )	F FILL (✓)	FILTER PACK (TYPE/SIZE)
	20 14		٧	1		PVC F480	2.5	SCH 80	.030	290	1	488			<b>✓</b>	SRI#8 SAND
520 5	30 14	~	1			PVC F480	2.5	SCH 80		488	1	500		<b>V</b>		BENTONITE S
ZONE	3									500	1	543			<b>V</b>	SRI#8 SAND
	20 14	1 '	1			PVC F480	2.5	SCH 80		543	!	553		~		BENTONITE S
	30 14		٧			PVC F480	2.5	SCH 80	.030	553	!	598			~~~	SRI#8 SAND
630 6	<del>'0 14</del>	7	Τ	1		PVC F480	2.5	SCH 80		598	<u> </u>	608		~		BENTONITE S

ATTACHMENTS (✓)	7
Geologic Log	1, ti
Well Construction Diagram	I N
Geophysical Log(s)	
— Soil/Water Chemical Analysis	2
<b>.</b>	I I A

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION	SIAIEMENI									
, the undersigned, certify that this report is complete and accurate to the best of my kπowledge and belief.										
NAME_EATON DRILLING CO.										
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)										
20 WEST KENTUCKY AVE	WOODLAND	CA	95695							
ADDRESS (A)	CITY	STATE	ZIP							
Signed Wash Danner	10/05/06	C	<u>57 A HIC - 1337</u> 81							
WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	<del>c</del>	57 LICENSE NUMBER							

Page 3 of 12

#### STATE OF CALIFORNIA

### WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. E045412

Owner's Well No. 7986

, Ended 9/14/2006

Date Work Began 9/5/2006 Local Permit Agency GLENN COUNTY HEALTH DEPT.
Permit No. MW 247-06 Permit Date 6

Permit Date 6/15/2006

DWR USE ONLY	00	NOT	FILL	IN						
	ıl									
STATE WELL NO./ STATION NO.										
		lι								
LATITUDE	L.	ONGITU	DE							
	1.1									
APN/TRS/OTHER										

	GEOLOGIC LOG ———	1				
ORIENTATION	( <u>V</u> ) VERTICAL HORIZONTAL ANGLE (SPECIFY)					
DEPTH FROM	DRILLING MOTARY FLUID MUD					
SURFACE Ft. to F	DESCRIPTION					
0;	20 DARK BROWN CLAY	Address .93 MI NOF RD 68 & 525 EOF NOF	RMAN RD			
20¦	100 SILTY ORANGE BROWN CLAY	City CA				
100¦	170 SILTY YELLOW BROWN CLAY WITH FINE SAND	County GLENN				
170¦	210 TAN CLAY WITH MINIMUM SAND	APN Book 013 Page 280 Parcel 001				
210	280 BROWN TAN CLAY WITH COARSE SAND	Township 18 N Range2 W Section 18				
280	400   BROWN TAN CLAY WITH SAND	Latitude	l 1			
400	520   SOFT YELLOW BROWN CLAY WITH COARSE	DEG. MIN, SEC.	DEG. MIN. SEC.			
1	SAND	LOCATION SKETCH	ACTIVITY (∠) —			
520	700 SAND AND GRAVEL WITH BRITTLE YELLOW	No.	MODIFICATION/REPAIR			
	BROWN CLAY		—— Deepen			
700	710 BLUE CLAY WITH SAND AND GRAVEL		Other (Specify)			
710	720 SOFT YELLOW BROWN CLAY WITH SAND		DECEDOY (Deserte			
	AND GRAVEL		DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"			
720	760 SOFT BLUE GRAY CLAY WITH SAND AND	·	PLANNED USES (∠)			
	GRAVEL		WATER SUPPLY			
760¦	800 SOFT YELLOW CLAY WITH SAND	WEST	Domestic Public     Irrigation Industrial			
800	850 SOFT YELLOW CLAY WITH BRITTLE GRAY	N T				
	CLAY AND SAND		MONITORING			
850¦ 1	025 BRITTLE GRAY BROWN CLAY WITH SAND		CATHODIC PROTECTION			
	AND GRAVEL		HEAT EXCHANGE			
1025 1	040 COARSE SAND	,	DIRECT PUSH			
1040 1	195 BRITTLE GRAY BROWN CLAY WITH SAND	·	INJECTION VAPOR EXTRACTION			
	AND GRAVEL STREAKS		SPARGING			
		SOUTH  Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION			
		Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)			
1		necessary. PLEASE BE ACCURATE & COMPLETE.				
		WATER LEVEL & YIELD OF COMPL	ETED WELL			
		DEPTH TO FIRST WATER (Ft.) BELOW SURFAC	E			
		DEPTH OF STATIC  WATER LEVEL(Ft.) & DATE MEASURED				
<u> </u>		ESTIMATED. YIELD * (GPM) & TEST TYPE				
TOTAL DEPTH	OF BORING 1200 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)				
	OF COMPLETED WELL 1000 (Feet)	May not be representative of a well's long-term yield	_ , ,			
L		Trans into de l'est enemante of a treil à long-tellit yiele	*			

DEPTH	BORE - CASING (S)					DEPTH			ANNULAR MATERIAL							
FROM SURFACE	HOLE			투 ( <u>:</u>		-				FROM	SUI	RFACE			TY	PE
Ft. to Ft.	DIA. (inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (✓)	BEN- TONITE	FILL (⊻)	FILTER PACK (TYPE/SIZE)
670; 680	14		<b>V</b>	1_		PVC F480	2.5	SCH 80	.030	608	3 ¦	693			<b>V</b>	SRI#8 SAND
680¦ 700	14	<b>✓</b>	1			PVC F480	2.5	SCH 80		693	3	716		<b>V</b>		<b>BENTONITE S</b>
ZONE¦ 4				П	T					716	; ;	930			<b>√</b>	SRI#8 SAND
0 975	14/8-3/4	~				PVC F480	2.5	SCH 80		930	) <u>;</u>	944		<b>V</b>		BENTONITE S
975 985	8-3/4		~		T	PVC F480	2.5	SCH 80	.030	944	F	996			_	SRI#8 SAND
<del>985¦ 1000</del>	8-3/4	~		$\top$	$\top$	PVC F480	2.5	SCH 80		996	<del>-</del>	1002		<b>-</b> _		BENTONITE S
• •							1									L

 ATTACHMENTS	( <u>v</u> )
 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

ADDRESS

WILL DRILLERIAUTHORIZED REPRESENTATIVE

WOODLAND

10/05/06

DATE SIGNED

CA STATE

E ZIP C57 A HIC - 13378 C-57 LICENSE NUMBER

ORIĞINAL
File with DWR
Page 4 of 12

#### STATE OF CALIFORNIA

### WELL COMPLETION REPORT

to	Inst	ruci	ion	1	an	ph	iet		
1	N۸		$\mathbf{a}$	A	2	A	4	1	

Owner's Well No. 7986 Date Work Began 9/5/2006

\_\_\_\_\_\_, Ended 9/14/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW 247-06 Permit Date 6

EOLOGIC LOC Permit Date 6/15/2006

	DWR	USE	ONLY		DO	NOT	FILL	IN	_	
1	1		1	1_1					l	
STATE WELL NO./ STATION NO.										
				$\neg \vdash$	ı	<del>                                      </del>				
	LATIT	JDE			L	ONGITU	DE		i	
		i		]			1_1			
			A DNI/I	rpein	THE	,				

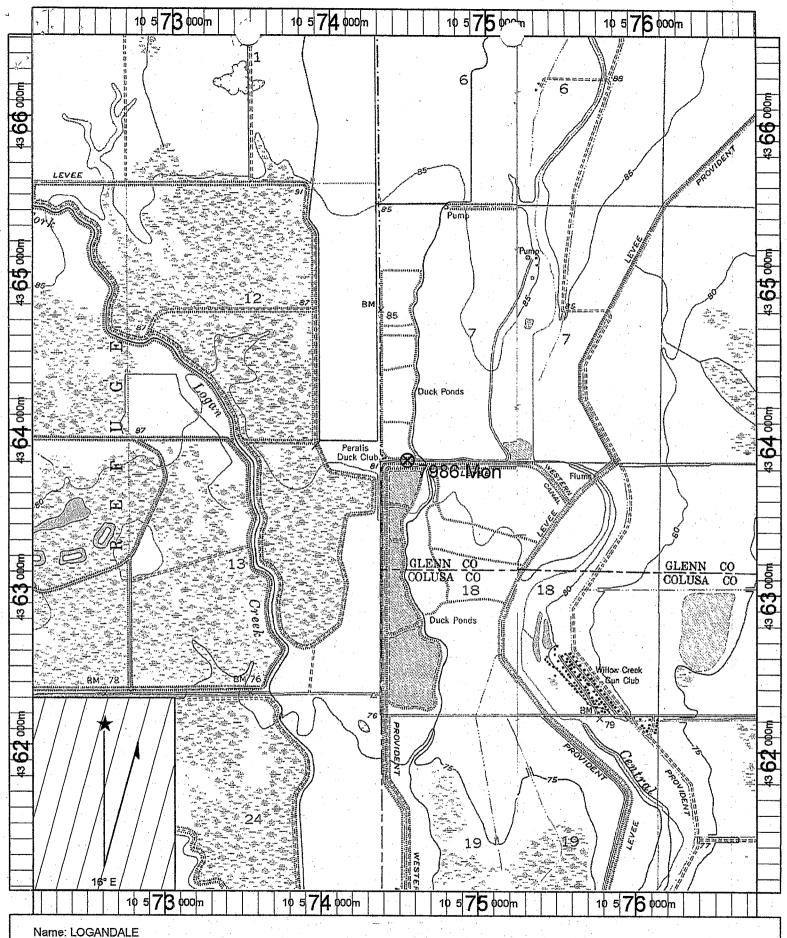
		GEOLOGIC LOG	Γ				
ORIENTA	TION (≰)	VERTICAL HORIZONTAL ANGLE(SPECIFY)					
DEPTH	FROM	DRILLING METHOD ROTARY FLUID MUD					
SURF	ACE	DESCRIPTION					
Ft. to		Describe material, grain, size, color, etc.		WELL L	OCATION-		
0		DARK BROWN CLAY	Address .93 MI NO	OF RD 68 & 52	5' EOF NOF	RMAN RD	
20		SILTY ORANGE BROWN CLAY	City CA				
100		SILTY YELLOW BROWN CLAY WITH FINE SAND	County GLENN				
170		TAN CLAY WITH MINIMUM SAND	APN Book 013	_Page 280	Parcel 001		
210		BROWN TAN CLAY WITH COARSE SAND	Township 18 N	Range 2 W	Section 18		
280		BROWN TAN CLAY WITH SAND	Latitude		_		
400	520	SOFT YELLOW BROWN CLAY WITH COARSE	DEG. MIN.			DEG. MIN. SEC. —ACTIVITY (∠) —	
		SAND	LUCA	TION SKETCH	•	— ACTIVITY (€) ——	
520	700	SAND AND GRAVEL WITH BRITTLE YELLOW				MODIFICATION/REPAIR	
		BROWN CLAY				— Деереп	
700	710	BLUE CLAY WITH SAND AND GRAVEL				Other (Specify)	
710	720	SOFT YELLOW BROWN CLAY WITH SAND				DESTROY (Desember	
		AND GRAVEL				DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG"	
720	760	SOFT BLUE GRAY CLAY WITH SAND AND				PLANNED USES (∠)	
		GRAVEL		-		WATER SUPPLY	
760	800	SOFT YELLOW CLAY WITH SAND	WEST		EAST	Domestic Public Industrial	
800	850	SOFT YELLOW CLAY WITH BRITTLE GRAY	×		E	MONITORING -	
. !	1	CLAY AND SAND				TEST WELL	
850	1025	BRITTLE GRAY BROWN CLAY WITH SAND				CATHODIC PROTECTION	
1		AND GRAVEL				HEAT EXCHANGE	
1025	1040	COARSE SAND				DIRECT PUSH	
1040	1195	BRITTLE GRAY BROWN CLAY WITH SAND				INJECTION VAPOR EXTRACTION	
		AND GRAVEL STREAKS				SPARGING	
		A A A A A A A A A A A A A A A A A A A		- SOUTH		REMEDIATION	
			Illustrate or Describe Dista Fences, Rivers, etc. and atta	ach a map. Use additio	mal paper if	OTHER (SPECIFY)	
<b> </b>			necessary. PLEASE BE	ACCURATE & CON	1PLÈTE.		
			WATER I	EVEL & YIELD	OF COMPLI	ETED WELL	
,			DEPTH TO FIRST WAT	TER (Ft.) B	ELOW SURFACE	Ξ :	
			DEPTH OF STATIC				
			WATER LEVEL(Ft.) & DATE MEASURED				
TOTAL D	EDTH OF	BORING 1200 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE				
1			TEST LENGTH(Hrs.) TOTAL DRAWDOWN (Ft.)				
TOTALD	erin or (	COMPLETED WELL 1000 (Feet)	May not be represe	ntative of a well's	long-term yield	<u>/</u>	

DEPTH		BORE - HOLE		CASING (S)						DEPTH		ANNULAR MATERIAL						
FROM SURFACE			TYPE (✓)				  -				FROM SURFACE		TYPE					
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON-	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		Ft.	to	Ft.	CE- MENT ( <u>√</u> )	BEN- TONITI	FILL ( <u>v</u> )	FILTER PACK (TYPE/SIZE)
ZONE	1										_1	002		1200			<b>V</b>	NATIVE FILL
0	246	14	<b>V</b>	1	Γ		PVC F480	2.5	SCH 80				ĺ					
246	256	14		~	1	П	PVC F480	2.5	SCH 80	.030			Ï					
256	266	14	~	1			PVC F480	2.5	SCH 80				İ					
ZONET	2												į					
0	510	14	~	Π		$\sqcap$	PVC F480	2.5	SCH 80				į					

 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 EĂTON DRILLING CO.										
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)										
20 WEST KENTUCKY AVE	WOODLAND	CA	95695							
ADDRESS W	CITY	STATI	E ZIP							
Signed Mink Namon	10/05/06		C57 A HIC - 133781							
WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNE	Ð	C-57 LICENSE NUMBER							



Date: 6/12/2006

Scale: 1 inch equals 2000 feet

Caption: DWR (GCID) - Job# 7986 Mon APN: 013-280-001 (103 acres) T18N R2W s18

# WELL STATE OF CALIFORNIA REPORT Refer to Instruction Pamphlet

ager	O.	U			
Numar	10	Wall	No	7842	2

Owner's Well No. 7842	No. 816274	
	Ended9/30/05	
Local Permit Agency GLENN COUL	NTY HEALTH DEPT	
Permit No. MW228-05	Permit Date 5/24/05	

DWR USE	ONLY	DO	NOT	FILL	IN				
11912	10		-12	12					
STATE WELL NO./ STATION NO.									
			l						
LATITUDE		LC	ONGITU	DE					
	APN/TR	S/OTHER							

		GEOLOGIC LOG		
ORIENTAT		✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING METHOD ROTARY — FLUID MUD		
DEPTH I		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.		· ·
0		BROWN CLAY WITH COARSE SAND	Address 780' EOF AFTON BLVD & 1.96 MI	NOF HWY 162
85	107	COARSE SAND AND GRAVEL	City CA	
107	120	SOFT BROWN CLAY	County GLENN	
120	345	GRAY BLUE CLAY AND BLACK SANDSTONE	APN Book 015 Page 018 Parcel 003	
345	365	COARSE SAND AND FINE GRAVEL	Township 19 N Range 1 W Section 22	
365	545	GRAY BLUE CLAY AND BLACK SANDSTONE	Latitude	
545	780	GRAY BLUE CLAY WITH SAND AND GRAVEL	DEG. MIN. SEC.	DEG. MIN. SEC.
780	790	BLUE GRAY CLAY WITH SAND AND GRAVEL	LOCATION SKETCH	—ACTIVITY (⊻) —
790	810	GRAY BLUE SILTY CLAY		MODIFICATION/REPAIR
1				—— Deepen
				Other (Specify)
			:	DECEROY (Decerbs
				DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
				PLANNED USES (∠)
			<u></u>	WATER SUPPLY
		i i	WEST	Domestic Public Infigation Industrial
		[	<b>Σ</b>	MONITORING →
				TEST WELL
		1 1		CATHODIC PROTECTION
			·	HEAT EXCHANGE
		·		DIRECT PUSH INJECTION
				VAPOR EXTRACTION
		1 1		SPARGING
			SOUTH  Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION
			Transtrate or Describe Distance of weat from Audits, Datamass, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
		·	WATER LEVEL & YIELD OF COMPLI	CTED WELL
	······································	 	DEPTH TO FIRST WATER (FL) BELOW SURFACE	<b>=</b>
			DEPTH OF STATIC	,
1			WATER LEVEL	
TOTAL DE	PTH OF	BORING 820 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
		000	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	` '
TOTALDI	rinur	COMPLETED WELL 800 (Feet)	May not be representative of a well's long-term yield	

DEPTI	DODE:				C	ASING (S)			DEF	тн		ANN	JLAR	MATERIAL	
FROM SURFACE HOLE		TYPE (✓)		<u>( &lt; )</u>					FROM SL	TY			/PE		
Ft. to	Ft.	DIA, (inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	) Ft.	CE- MENT ( <u>√</u> )	BEN- TONITE	FILL (⊻)	FILTER PACK (TYPE/SIZE)
ZONE	1									0	64	✓			SAND SLURRY
0	80	14	<			PVC	2.5	SCH 80		64	120			✓	SRI#8 SAND
80	90	14		✓		PVC	2.5	SCH 80	.030	120	289	1			SAND SLURRY
90	100	14	~			PVC	2.5	SCH 80		289	295		<b>✓</b>		BENTONITE C
ZONE	2									295	380			1	SRI#8 SAND
0	340	14	~			PVC	2.5	SCH 80		380	448	✓			SAND SLURRY

ì		2.5 001100	300 ; 440 V	SAND SLUKK
1	ATTACHMENTS (∠)	CERTIFICATION	N STATEMENT -	<u>,</u>
1	Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	he best of my knowledge and belief.	
ı	Well Construction Diagram	NAME EATON DRILLING CO		
	Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED		
ı	Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA 95695
	Other	ADDRESS OM	CITY	STATE ZIP
I		Signed Marke ) auron	11/07/05	<u>C57 A HIC - 1337</u>
ı	ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57 LICENSE NUMBE

# STATE OF CALIFORNIA WELL COMPLETION REPORT

Refer to

	ruction	n Pamphle	nt .
No.	81	6274	•

rage 4 or	0		
Owner's	Well	No.	7842

-, Ended 9/30/05

Date Work Began 9/26/05

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW228-05 Permit Date 5/

Permit Date 5/24/05

 DWR	USE	ONLY	<i>(</i> -	- DO	N	OT_	FILL	IN			
19	1	$I_{\parallel}$	DI	w	-	3	2				
 STATE WELL NO./ STATION NO.											
11						L					
LATIT	UDE				LONG	SITU	DE_				
						1_					
		AP	N/TRS	/OTHE	R						

		GEOLOGIC LOG					
ORIENTAT	ION (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD					
DEPTH SURF		DESCRIPTION					
Ft, to	E+	Describe material, grain, size, color, etc.	WELL LOCATION	105111107.400			
0;	85	BROWN CLAY WITH COARSE SAND	Address 780' EOF AFTON BLVD & 1.96 MI	NOF HVVY 162			
85		COARSE SAND AND GRAVEL	City CA				
107	120	SOFT BROWN CLAY	County GLENN				
120	345	GRAY BLUE CLAY AND BLACK SANDSTONE	APN Book 015 Page 018 Parcel 003				
345	365	COARSE SAND AND FINE GRAVEL	Township 19 N Range 1 W Section 22				
365	545	GRAY BLUE CLAY AND BLACK SANDSTONE	Latitude	DEG. MIN. SEC.			
545	780	GRAY BLUE CLAY WITH SAND AND GRAVEL	DEG. MIN. SEC. LOCATION SKETCH	ACTIVITY (\(\angle\)			
780	790	BLUE GRAY CLAY WITH SAND AND GRAVEL	NORTH NORTH	_✓ NEW WELL			
790		GRAY BLUE SILTY CLAY		MODIFICATION/REPAIR			
				Deepen Other (Specify)			
	***			Other (Opeony)			
				DESTROY (Describe			
				DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")			
				PLANNED USES (∠)			
			l	WATER SUPPLY Domestic Public			
			WEST	Imigation Industrial			
			≥	MONITORING →			
				TEST WELL			
		1		CATHODIC PROTECTION —			
				HEAT EXCHANGE			
		1		DIRECT PUSH INJECTION			
		1		VAPOR EXTRACTION			
		1	1 .	SPARGING			
		1	SOUTH  Illustrate or Describe Distance of Well from Roads, Buildings,	REMEDIATION			
		1	Fences Rivers etc. and attach a map. Use additional paper if	OTHER (SPECIFY)			
		1	necessary. PLEASE BE ACCURATE & COMPLETE.	<u> </u>			
			WATER LEVEL & YIELD OF COMPL	l l			
ļ			DEPTH TO FIRST WATER (Ft.) BELOW SURFAC	E			
			DEPTH OF STATIC				
			WATER LEVEL(Ft.) & DATE MEASURED _				
		820	ESTIMATED YIELD * (GPM) & TEST TYPE				
TOTAL I	EPTH OF	BORING 820 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft)				
TOTALI	EPTH OF	COMPLETED WELL 800 (Feet)	May not be representative of a well's long-term yiel	<u>u.                                    </u>			

DEPT	ш	CASING (S)								DEPTH ANNULAR MATERIAL						
FROM SUF		BORE - HOLE	T		<u> (×</u>	100			241105	SLOT SIZE	FROM SUF	RFACE	CE-	BEN-	TY	PE
		DIA. (Inches)	AN A	SCREEN	CON-	PIPE	MATERIAL / GRADE	INTERNAL DIAMETER	GAUGE OR WALL	IF ANY (Inches)	Ft. to	Ft.	MENT	TONITE	i	FILTER PACK (TYPE/SIZE)
Ft. to	Ft.		ᆱ	ပ္တ	25	표		(inches)	THICKNESS				( <del>X</del> )	( <u>v</u> )	(\(\times\)	DENITONITE O
340	350	14		✓	1		PVC	2.5	SCH 80	.030_	448	450				BENTONITE C
350	360	14	1	1			PVC	2.5	SCH 80	Ì	450	555			<b>V</b>	SRI#8 SAND
ZONE	3		<u> </u>		t	1					555	710	✓			SAND SLURRY
0	520	14	<b>√</b>	$\vdash$	+-	-	PVC	2.5	SCH 80		710	820			V	SRI#8 SAND
520	530	14	$\vdash$	7	$\uparrow$	<b> </b>	PVC	2.5	SCH 80	.030					<u></u>	
530	540	14	V	⇈	$\vdash$	丅	PVC	2.5	SCH 80							

A	TTACHMENTS	(1)	

- ... Geologic Log
- Well Construction Diagram
- \_ Geophysical Log(s)
- --- Soil/Water Chemical Analysis
- \_ Other \_ ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICA	TION	STATEN	MENT

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 KENTUCKYAVE

WOODLAND

CA 95695

STATE ZIP

C57 A HIC - 133783

C-57 LICENSE NUMBER

WELL DRILLER/AUTHORIZED REPRESENTATIVE Signed -

## STATE OF CALIFORNIA WELL COMPLETION REPORT

									_
Re	fer	to	Instru	ectio	n	$P_{i}$	an	np	hlet

u	Insu	uction	i lampine	•
	No.	Ω4	697/	L

Page 3 of 6 Owner's Well No. 7842 Date Work Began 9/26/05

, Ended 9/30/05

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW228-05 Permit Date 5/

Permit Date 5/24/05

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

		GEOLOGIC LOG					
ORIENTAT	'ION (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD					
DEPTH SURE		DESCRIPTION					
Ft. to	E+	Describe material, grain, size, color, etc.	WELL LOCAT	TION	105 13407 400		
0	85	BROWN CLAY WITH COARSE SAND	Address 780' EOF AFTON BLVD & 1	.96 MI N	NOF HWY 162		
85		COARSE SAND AND GRAVEL	City CA				
107	120	SOFT BROWN CLAY	County GLENN				
120	345	GRAY BLUE CLAY AND BLACK SANDSTONE	APN Book 015 Page 018 Parc	cel <u>003</u>			
345	365	COARSE SAND AND FINE GRAVEL	Township 19 N Range 1 W Sect	tion <u>22</u>			
365	545	GRAY BLUE CLAY AND BLACK SANDSTONE	Latitude		DEG. MIN. SEC.		
545	780	GRAY BLUE CLAY WITH SAND AND GRAVEL	DEG. MIN. SEC. LOCATION SKETCH	· · · · · · · · · · · · · · · · · · ·	—ACTIVITY (∠) —		
780	790	BLUE GRAY CLAY WITH SAND AND GRAVEL	NORTH		✓ NEW WELL		
790	810	GRAY BLUE SILTY CLAY		Ì	MODIFICATION/REPAIR		
1					Deepen Other (Specify)		
		1					
		1			DESTROY (Describe		
				1	Procedures and Materials Under "GEOLOGIC LOG")		
		1			PLANNED USES (∠)		
		1	<u>L</u>		WATER SUPPLY Domestic Public		
		1	WEST	.YS.	Imigation Industrial		
				ш	MONITORING →		
					TEST WELL		
		1			CATHODIC PROTECTION		
					HEAT EXCHANGE		
					INJECTION		
			_		VAPOR EXTRACTION		
					SPARGING		
<b></b>			SOUTH ————————————————————————————————————	dings,	REMEDIATION		
	!		Illustrate or Describe Distance of Well from Roads, Builde Fences, Rivers, etc. and attach a map. Use additional par necessary. PLEASE BE ACCURATE & COMPLET	per if TE.	OTHER (SPECIFY)		
			WATER LEVEL & YIELD OF		ETED WELL		
	!		DEPTH TO FIRST WATER (FL) BELOW				
	1		DEPTH OF STATIC				
	!		WATER LEVEL (Ft.) & DATE ME.	ASURED _			
	I I		ESTIMATED YIELD * (GPM) & TEST TYPE				
TOTAL	EPTH OF	BORING 820 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOV				
TOTAL	EPTH OF	COMPLETED WELL 800 (Feet)	May not be representative of a well's long-	-term yield	<u>d.</u>		
					VIV. A.D. BACADEDIAT		

DEP	тн						<b>C</b> A	ASING (S)			DEPT	ГН	ANNULAR MATERIAL			
FROMSU		BORE - HOLE		YPE	( <u>/</u>	)		INTERNAL	GAUGE	SLOT SIZE	FROM SUI	RFACE	CE-	BEN-	TY	PE
Ft. to	Ft.	DIA. (inches)	BLANK	SCREEN	CON- DUCTOR	ILL PIP	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. to	Ft.	MENT (≰)		FILL ( <u>√</u> )	FILTER PACK (TYPE/SIZE)
ZONE	1		-	,,	-	-					0	64	✓			SAND SLURRY
0	780	14	_				PVC	2.5	SCH 80		64	120			✓	SRI#8 SAND
780		14	Ė	1	1		PVC	2.5	SCH 80	.030	120	289	1			SAND SLURRY
790	800	14	~		-		PVC	2.5	SCH 80		289	295		<b>V</b>		BENTONITE C
				-	$\vdash$				-		295	380			<b>V</b>	SRI#8 SAND
			-	$\vdash$	╁╴						380	448	<b>√</b>			SAND SLURRY

ATTACHMENTS (		)
---------------	--	---

- Geologic Log
- \_ Well Construction Diagram
- \_\_\_ Geophysical Log(s)
- Soil/Water Chemical Analysis
- \_ Other \_ ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

	CERTIFICATION	STATEMENT	
the undersinged certify that this report is com	plete and accurate to the	best of my knowled	ge and belief.

I, the undersigned, certify that this report is complete and accurate to the NAME EATON DRILLING CO
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 WEST KENTUCKY AVE
ADDRESS
Signed
WELL DRILLER/AUTHORIZED REPRESENTATIVE

WOODLAND 11/07/05 DATE SIGNED

95695 E ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER STATE

CA

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

007 1 9 2034

**ORIGINAL** File with DWR

STATE OF CALIFORNIA

# WELL COMPLETION

Refer to Instruction Pamphlet

Page 1 of 6

Owner's Well No. 7679

No. 726952AB

, Ended 7/23/2004

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW 206-04
Permit Date 5/3/2004

LATITUDE LONGITUDE APN/TRS/OTHER

	•	GEOLOGIC LOG	1					
ORIENTATI	ON ( <u></u>	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)						
DEPTH F		DRILLING METHOD REVERSE FLUID WATER						
SURFA Ft. to		DESCRIPTION  Describe material, grain, size, color, etc.						
0		TAN BROWN CLAY	Address SOE HV	NY 162 & EOF	OCATION-			
68	92	SAND AND GRAVEL	City CA	111 102 0 201 0	2/11/11			
92	160	TAN BROWN CLAY	County GLENN					
160	202	TAN BROWN SILTY CLAY	1 *	Page <b>210</b>	Daract 012	****		
202	226	GRAVEL AND SAND		Range 2 W				
226	240	BLUE CLAY	Latitude	Kangez_	Section 9			
240	260	TAN BROWN CLAY	DEG. M	IN. SEC.	-	DEG. MIN. SEC.		
260	298	TAN BROWN SILTY CLAY WITH SAND	LOC	ATION SKETCH		ACTIVITY (∠) —		
298	374	TAN BROWN CLAY WITH SAND		NORTH		✓ NEW WELL		
374	462	TAN BROWN SILTY CLAY WITH SAND				MODIFICATION/REPAIR  — Deepen		
462	468	GRAVEL				Other (Specify)		
468	556	TAN BROWN CLAY WITH SILTY SAND						
556	600	TAN BROWN SILTY CLAY				<ul> <li>DESTROY (Describe Procedures and Materials</li> </ul>		
600	638	SANDSTONE AND CLAYEY SAND				Under "GEOLOGIC LOG"		
638¦	776	TAN BROWN SILTY CLAY				PLANNED USES (∠) WATER SUPPLY		
776¦	796	GRAVEL	WEST		ξ	Domestic Public		
796¦	822	LIGHT TAN CLAY	<b>\S</b>		E A	Irrigation Industrial		
822	826	SANDSTONE				MONITORING → TEST WELL —		
826	856	LIGHT TAN CLAY WITH FINE SAND				CATHODIC PROTECTION		
856	882	GRAVEL				HEAT EXCHANGE		
882	936	TAN BROWN SILTY, CLAYEY FINE SAND				DIRECT PUSH		
936		GRAVEL AND SAND WITH BLUE TAN SILTY				INJECTION VAPOR EXTRACTION		
		CLAY				SPARGING		
965	1000	BLUE SILTY SANDY CLAY	III. d. d. D. d. D.	SOUTH	D :11:	REMEDIATION		
		1	Fences, Rivers, etc. and	istance of Well from Roads, attach a map. Use addition E ACCURATE & COM	al paper if	OTHER (SPECIFY)		
		1	WATER	LEVEL & YIELD	OF COMPLI	ETED WELL		
		1	DEPTH TO FIRST WATER					
	-	I	DEPTH OF STATIC					
		<u> </u>		(Ft.) & DATI				
TOTAL DE	PTH OF	BORING 1000 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE					
		20.7		(Hrs.) TOTAL DRAV				
TOTALDE	IIIOr	COMPLETED WELL 939.7 (Feet)	May not be repre	sentative of a well's	ong-term yield			
		CASINC (S)			ANINT	WAR MATERIAL		

DEP		BORE -		CASING (S)						DE	DEPTH		ANNULAR MATERIAL			
FROM SU	RFACE	HOLE		YPI	1 1 111		INTERNAL			FROM				1	T)	PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (≰)	BEN- TONITE ( <u>√</u> )	FILL (⊻)	FILTER PACK (TYPE/SIZE)
MONE	1									0	1	59	✓			SAND SLURRY
0	77	24/18	✓	1		PVC C200	2.5	SCH 80		0	1	136			<b>√</b>	SRI#8 SAND
77	87	18		1		PVC C200	2.5	SCH 80	.030	136	l I	171		✓		BENTONITE S
87	97	18	✓	1		PVC C200	2.5	SCH 80		171	1	265			<b>V</b>	SAMB SAND
ZONE	2									265	1	829		1	Δ	BENTONITE S
0;	208	24/18	<b>√</b>			PVC C200	2.5	SCH 80		829	1	910	AM	1	*	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	ne best of my knowledge and beli	ef.	
NAME EATON DRILLING CO.			
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED	)		
20 W. KENTUCKY AVE.	WOODLAND	CA	95695
ADDRESS ///	CITY	STAT	E ZIP
Signed Marke Din	09/16/04		C57 A HIC - 133783
WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED		C-57 LICENSE NUMBER

STATE OF CALIFORNIA

# WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page 2 of	6		
Owner's	Well	No.	7679

No.	7	26	39	5
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_		_	_	_	-	•		_		_		_			_			_	_	•
D	af	e	۲	V	ork	-	F	36	-0	a	n		7	/1	9	/2	0	0	4	

-, Ended 7/23/2004

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MWV 206-04 Permit Date 5/3

Permit Date 5/3/2004

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

		GEOLOGIC LOG	Ť			
ORIENTAT	ION (≰)	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)				
DEPTHI		DRILLING REVERSE FLUID WATER				
SURF		DESCRIPTION				
Ft. to		Describe material, grain, size, color, etc.				
0		TAN BROWN CLAY	Address SOF HW	/Y 162 & EOF	OCATION—	
68		SAND AND GRAVEL	City CA			
92		TAN BROWN CLAY	County GLENN			
160		TAN BROWN SILTY CLAY	APN Book 016	Page 210	Parcel 012	
202	226	GRAVEL AND SAND	Township 19 N	Range 2 W	Section 8	
226	240	BLUE CLAY	Latitude	_ range	_ Section	
240		TAN BROWN CLAY	DEG. MIN			DEG. MIN. SEC.
260	298	TAN BROWN SILTY CLAY WITH SAND	Loca	ATION SKETCH - NORTH		ACTIVITY (∠)
298	374	TAN BROWN CLAY WITH SAND	-	NORTH		✓ NEW WELL
374	462	TAN BROWN SILTY CLAY WITH SAND				MODIFICATION/REPAIR Deepen
462	468	GRAVEL	-			Other (Specify)
468	556	TAN BROWN CLAY WITH SILTY SAND				
556	600	TAN BROWN SILTY CLAY	-			DESTROY (Describe     Procedures and Materials
600	638	SANDSTONE AND CLAYEY SAND	-			Under "GEOLOGIC LOG")
638	776	TAN BROWN SILTY CLAY	-			PLANNED USES (∠) WATER SUPPLY
776¦	796	GRAVEL	WEST		ST	Domestic Public
796¦	822	LIGHT TAN CLAY	<b>\</b>		EA	Irrigation Industrial
822	826	SANDSTONE	-			MONITORING →
826	856	LIGHT TAN CLAY WITH FINE SAND	·  -  -			TEST WELL
856	882	GRAVEL	-			HEAT EXCHANGE
882	936	TAN BROWN SILTY, CLAYEY FINE SAND				DIRECT PUSH
936	965	GRAVEL AND SAND WITH BLUE TAN SILTY				INJECTION
	,	CLAY	-			VAPOR EXTRACTION
965	1000	BLUE SILTY SANDY CLAY	-	- south		SPARGING REMEDIATION
1			Illustrate or Describe Dis Fences, Rivers, etc. and at			OTHER (SPECIFY)
			necessary. PLEASE BE			
			WATER	LEVEL & YIELD	OF COMPLE	ETED WELL
			DEPTH TO FIRST WA	TER (Ft.) E	BELOW SURFACE	≣
1			DEPTH OF STATIC WATER LEVEL	(Ft.) & DA1	TE MEASURED	
		1000	ESTIMATED YIELD *			
		BORING 1000 (Feet)	TEST LENGTH			1
TOTAL DE	PTH OF	COMPLETED WELL 939.7 (Feet)	May not be repres			• •

DEPTH BORE -				CASING (S)						DEPTH			ANNULAR MATERIAL					
FROM SU	RFACE	HOLE DIA.		YPE	- 177		INTERNAL		0.07.075		FROM SURFACE			7	TYPE			
Ft. to	Ft.	(Inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	3	Ft.	CE- MENT (✓)	BEN- TONITE	FILL (⊻)	FILTER PACK (TYPE/SIZE)	
208	218	18		✓		PVC C200	2.5	SCH 80	.030	91	0		1000	1	1		SAND SLURRY	
218	228	18	<b>✓</b>			PVC C200	2.5	SCH 80			1							
TONE	3										1							
0;	290.6	24/18	<b>√</b>			ASTM-135	4	.312										
290.6	299.9	18				COMP SEC					1		-		<b></b>			
299.9	720.9	18	~			ASTM-135	4	.312		<b>—</b>	1				<del> </del>	<u> </u>		

ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -	
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief.	<u>.</u>
Well Construction Diagram	NAME EATON DRILLING CO.		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		
— Soil/Water Chemical Analysis	20 W. KENTUCKY AVE.	WOODLAND	CA 95695
Other	ADDRESS /// \	СПҮ	STATE ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Mark Dalice	09/16/04	C57 A HIC - 133
ATTACH ADDITIONAL INFORMATION, IF TEXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57 LICENSE NUM

STATE OF CALIFORNIA

Page 3 of 6

WELL COMPLETION REPORT

						L		
	_	ST	ATE '	WEL	L NO	/ STA	TION	N
1	- 1	1			H		1	

I age J UI (	,		
Owner's	Well No	7679	 

Refer to Instruction Pamphlet No. 726952

Date Work Began 7/19/2004

, Ended 7/23/2004

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW 206-04 Permit Date 5/

GEOLOGIC LOC

				1							-	- 1
		STA	TE '	WELI	NO.	/ST/	OITA	ΝN	o.			
	ATITL	IDE	_1_					 GITL				
			-				LON	GIIC	UE			
							$\perp$				[	ı
			F	PN/T	RS/C	THE	R			-		_

DWR USE ONLY --- DO NOT FILL IN -

GEOLOGIC LOG		
ORIENTATION (🗹) VERTICAL HORIZONTAL ANGLE (SPECIFY) DRILLING REVERSE FLUID WATER		
DEI III KOM		
SURFACE  Ft. to Ft.  Describe material, grain, size, color, etc.		
Ft. to Ft. Describe material, grain, size, color, etc.	WELL LOCATION————	
	Address SOF HWY 162 & EOF C/R R	
	City CA	
	County GLENN	
160 202 TAN BROWN SILTY CLAY	APN Book 016 Page 210 Parcel 012	
202 226 GRAVEL AND SAND	Township 19 N Range 2 W Section 8	
226 240 BLUE CLAY	Latitude	
240 260 TAN BROWN CLAY	DEG. MIN. SEC. DEG. MIN. SEC.	_
260 298 TAN BROWN SILTY CLAY WITH SAND	LOCATION SKETCH ACTIVITY (🗹)	
298 374 TAN BROWN CLAY WITH SAND	INEVV WELL	
374 462 TAN BROWN SILTY CLAY WITH SAND	MODIFICATION/REPAIR —— Deepen	
462 468 GRAVEL	Other (Specify)	į
468 556 TAN BROWN CLAY WITH SILTY SAND		
556 600 TAN BROWN SILTY CLAY	DESTROY (Describe Procedures and Mate	erials
600 638 SANDSTONE AND CLAYEY SAND	Under "GEOLOGIC L	.OG")
638 776 TAN BROWN SILTY CLAY	PLANNED USES (3	۷)
776 796 GRAVEL	WATER SUPPLY Domestic Publi	c
796 822 LIGHT TAN CLAY	ν μω Domestic Publi γ μω Irrigation Indus	strial
822 826 SANDSTONE	MONITORING -	✓
826 856 LIGHT TAN CLAY WITH FINE SAND	TEST WELL	
856 882 GRAVEL	_ CATHODIC PROTECTION _ HEAT EXCHANGE _	
882 936 TAN BROWN SILTY, CLAYEY FINE SAND	DIRECT PUSH	
936 965 GRAVEL AND SAND WITH BLUE TAN SILTY	NJECTION -	
CLAY	VAPOR EXTRACTION	
965 1000 BLUE SILTY SANDY CLAY	SPARGING_	
9051 TOOUTBLOE SILTY SANDY CLAY	SOUTH REMEDIATION REMEDIATION	
	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	
1 1	WATER LEVEL (Ft.) & DATE MEASURED	
TOTAL DEPTH OF BORING 1000 (Feet)	ESTIMATED YIELD *	
TOTAL DEPTH OF COMPLETED WELL 939.7 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)	
(1 001)	May not be representative of a well's long-term yield.	

DEPTH BORE -			CASING (S)							DEPT	Н	ANNULAR MATERIAL																								
FROM SU	RFACE	HOLE		YPE	( <u>{</u>						FROM SURFACE																				FROM SURFACE				TY	PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (✓)	BEN- TONITE (✓)	FILL ( <u>v</u> )	FILTER PACK (TYPE/SIZE)																				
720.9	730.2	18				COMP SEC					0	59	<b>√</b>	<u> </u>		SAND SLURRY																				
730.2	856.6	18	✓	1 1		ASTM-135	4	.312			o	136			<b>√</b>	SRI#8 SAND																				
856.6	876.6	18		<b>√</b>		DBL MILLSL	4	.312	.060	136	3 ¦	171		<b>√</b>	1	BENTONITE S																				
876.6	939.7	18	<b>√</b>			ASTM-135	4	.312		17	1	265			<b>✓</b>	SRI#8 SAND																				
										265	5 ¦	829		<b>V</b>		BENTONITE S																				
										829	9 ¦	910			<b>1</b>	SRI#8 SAND																				

ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -		
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief	ŧ.	
— Well Construction Diagram	NAME EATON DRILLING CO.	,		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
- Soil/Water Chemical Analysis	20 W. KENTUCKY, AVE.	WOODLAND	CA	95695
Other	ADDRESS AN	CITY	STATE	ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Mark Danuer	09/16/04	<u>C5</u>	7 A HIC - 1337
	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-5	7 LICENSE NUMB

Page \_\_\_\_ of \_

## RECEIVED

STATE OF CALIFORNIA

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WELL COMPLETION REPORT

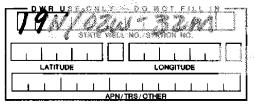
DEG 20 1994	
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Refer to Instruction Pamphlet

Owner's Well No. . Date Work Began \_\_11/7/94 D. WFRed \_\_11/11/94\_\_

No. 581475

Local Permit Agency Glenn County Environmental Health Permit No. \_\_\_\_59698 



		GEOLOGIC LOG	WELL OWNER —	
ORIENTATIO	N (∠)	_X VERTICAL HORIZONTAL ANGLE (SPECIFY)		
DEPTH FO	POM	DEPTH TO FIRST WATER(Ft.) BELOW SURFACE		
SURFA	CE	DESCRIPTION		
Ft. to	Ft.	Describe material, grain size, color, etc.	WELL LOCATION _	
0;	7		Address 3/4 - 1 mi Wast of S	
7	17	Gravel	City 4 Corners	
17:	25;	Clay	County Glenn	
25	33	Gravel	APN Book 13 Page 22 Parcel 0	- 018
33	44	Clay		2 pr
44;	46:	Grave1 Grave1	Latitude   NORTH Langitude	U WEST
46	120	Clay		DEG. MIN. SEC.
120	124		LOCATION SKETCH NORTH	ACTIVITY (\(\text{L}\)
124	160:			X NEW WELL
	190		1.7	MODIFICATION/REPAIR
160		Gravel, cobblestones	1	Deepen
190	<u> 197</u> ;	<del></del>	1 121	Other (Specify)
197	.251	Gravel, cobblestones	i ii	
251	<u> 265 ¦</u>	· · · · · · · · · · · · · · · · · · ·	الأا ممما	DESTROY (Describe
265	270	_Grave1	K1) -(00-11-	Procedures and Materials Under "GEOLOGIC LOG")
270	274	Small gravel	قريد الم	PLANNED USE(S) -
274	300	Clay	[2] /4	(∠) — MONITORING
1 1		<u>.</u>	[: Live of	WATER SUPPLY
	!		l hl	Domestic
			1 1	Public
1			1 \	X Irrigation
	- :		l	Industrial
			] ]	"TEST WELL"
<u> </u>	•		20171	CATHODIC PROTEC-
1			SOUTH SOUTH Illustrate or Describe Distance of Well from Landmarks	TION OTHER (Specify)
			such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.	
	. 1			I
:			DRILLING METHOD <u>Reverse Rotary</u> FLUID -	Water
	1		METHOD Reverse Rotary FLUID WATER LEVEL & YIELD OF COMP	LETED WELL -
			DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURE	012-7-94
<u> </u>	1		ESTIMATED YIELD* 5000 (GPM) & TEST TYPE _	# turbine
TOTAL DEI	PTH OF E	BORING 300 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	<b>70</b> (Ft.)
TOTAL DE	PTH OF C	COMPLETED WELL 260 (Feet)	* May not be representative of a well's long-term yield.	

DEPTH BORE-			CASING(S)							DEPTH				ANNULAR MATERIAL					
FROM SURFAC	HOLI DIA	TYPE (∠)					INTERNAL	GAUGE	SLOT SIZE	FROM	SU	RFACE		DEN	'1	/PE			
Ft. to Ft	(Inche	) ¥	SCREEN	DUCTOR		MATERIAL/ GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft.	to	Ft.	CE・ MENT (ど)	BEN- TONITE (エ)	FILL (∠)		R PACK E/SIZE)		
0 10	0 28	2	ζ .			steel	20	.250		0	;	35	x						
100 16	0 28	3	ζ			steel	16	.250		35		260				3/8"	grav		
160; 26	0 28	$\perp$		x L	$\perp$	<u>steel</u>	16	,	.080		1								
		ᆜ	┺	$\perp \perp$	↓						- ;								
			$\perp$	$\downarrow \downarrow$	$\perp$						_;_			ļ	DE		7.6		
1											1					Ĺ			

ATTACHMENTS (\(\perceq\))	CERTIFICATION	STATEMENT	
Geologic Log Well Construction Diagram	I, the undersigned, certify that this report is complete and  NAME SILL INCAME (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		f my knowledge and belief.
Geophysical Log(s) Soil/Water Chemical Analyses	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)  P.O. Box 1448	Corning	CA 96021
Other ATTACH ADDITIONAL INFORMATION. IF IT EXISTS.	Signed WELL DRILLER/AUTHORIZED REPRESENTATIVE	CITY 12/14 DATE SIGNED	STATE ZIP  /94 656504  C57 LICENSE NUMBER
	HELL DIGLETRY HOTTORIZED INCINCIONATIVE	DATE SIGNED	C-57 EIGENSE NOMBER

### <del>ORIG</del>INAL File with DWR

MAY 3 1 2005

# WELL COMPLETION REPORT Refer to Instruction Pamphlet No. 816220

Page	1	۸f	1
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Owner's Well No. 1821	010220
Date Work Began 3/15/2005	Ended 3/17/2005
Local Permit Agency GLENN COL	INTY HEALTH DEPT
Permit No MW226-05	Permit Date 2/15/2005

DWR USE ONLY DO NOT FILL IN									
19N/04W-14									
STATE WELL NO./ STATION NO.									
LATITUDE LONGITUDE									
APN/TRS/OTHER									

CIMIL		GEOLOGIC LOG		
ORIENTATI	ROM	VERTICAL HORIZONTAL ANGLE (SPECIFY)  DRILLING ROTARY FLUID MUD  DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.		
0		TOP SOIL	Address .35 MI WOF ROAD BB & 1.5 MI SO	F HWY 162
9		SANDY CLAY	City CA	
20		YELLOW CLAY	County GLENN	
30	42	LOOSE SAND AND GRAVEL	APN Book 018 Page 030 Parcel 032	
42		SANDY BROWN CLAY	Township 19 N Range 4 W Section 14	
64	70	YELLOW CLAY	I atitude	
70	400	BLUE CLAY WITH SAND	D20: Mile: 020:	DEG. MIN. SEC.
400	425	SAND WITH BLUE CLAY	LOCATION SKETCH————————————————————————————————————	ACTIVITY (∠) —
425	494	BLUE CLAY WITH SAND	, indicate the second	MODIFICATION/REPAIR
494	502	TIGHT SAND WITH SMALL GRVEL	·	— Deepen
502		BLUE CLAY WITH BRITTLE CLAY STREAKS		Other (Specify)
750	758	SAND WITH BLUE CLAY		DESTROY (Describe
758	863	SILTY BLUE CLAY WITH SAND		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
863	1010	BLUE/PURPLE CLAY WITH HARD CLAY STREAK		PLANNED USES(∠)
			·	WATER SUPPLY
			EST	Domestic Public Industrial
			MAIN MAIN MAIN MAIN MAIN MAIN MAIN MAIN	MONITORING →
			•	TEST WELL
				CATHODIC PROTECTION
		· ·		HEAT EXCHANGE
				DIRECT PUSH
			·	INJECTION VAPOR EXTRACTION
				SPARGING
			SOUTH	REMEDIATION
			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.	OTHER (SPECIFY)
		·	WATER LEVEL & YIELD OF COMPL	ETED WELL
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	· <b>.</b>
-			DEPTH OF STATIC	İ
<del>                                     </del>		(	WATER LEVEL (Ft.) & DATE MEASURED _	
		366	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 366 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	
TOTAL DE	PTH OF	COMPLETED WELL 65 (Feet)	May not be representative of a well's long-term yield	d.

DEPTH							CA	ASING (S)			DE	PTH	,	ANN	JLAR	MATERIAL
FROM SUI		BORE - HOLE			F ( <u>%</u>			INTERNAL	GAUGE	SLOT SIZE		URFACE		DEN	TY	PE
Ft, to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	FILL PIPE	MATERIAL: / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. t	o Ft.	CE- MENT ( <u>~</u> )	BEN- TONIT	FILL ( <u>√</u> )	FILTER PACK (TYPE/SIZE)
0	45	8	<b>√</b>	1			PVC ASTM	2-1/2	F480		0	21.5	1			SAND SLURRY
45	55	8		✓			PVC ASTM	2-1/2	F480	.030	21.5	25		<b>✓</b>		BENTONITE C
55	65	8	1	1			PVC ASTM	2-1/2	F480		25	147			✓	SRI#8 SAND
				1.							147	160		<b>V</b>		BENTONITE C
		· · ·		İ							160	209			<b>V</b>	SRI#8 SAND
					1 1						209	366	1			SAND SLURRY

ATTACHMENTS (∠)	CERTIFICATION			
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the be	st of my knowledge and belief.		,
Well Construction Diagram	NAME EATON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
Soil/Water Chemical Analysis	20 W. KENTUCKY AVE.	WOODLAND	CA	95695
Other	ADDRESS M. A. T.	CITY	STATE	ZIP
	signed Mark James	<u>05/12/05</u>		57 A HIC - 1337
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	Ç.	57 LICENSE NUMBI

20N/2W-11A1

4.0		L9# 3669 •	тика коз	/_ SCF	
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CATION	050 West	and 5,200' North of SW corner, JEL, NEW of			T001 #0:-
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HILLED BYC		ADDRESS		, CA	96080
ILLING METHO		DATE COMP	LETED_		9-2-7
hole	4%"	TO 70' \$ 412" TO 700' DATE STATE		<b>6</b>	00-7/
LE OF GAMME	AI	A2 A3	A. A. T.	8=	30-76
RPORATIONS	€ 76-90°	@ NO-160' @ 440-510 11	L" PV	PIP	ec
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ATER LEVEL BE	Pore Perporat	rimer a manual	-		
	ONE PERIORA	ATTER			
ST DATA: DISC	HARGE G. P. M	PANDOUN			
		DRAWDOWN FT.	HOURE	RUN_	
HER DATA AVA	LASLE: WATER	LEVEL RECORD			
		ANALYSIS_		<del></del>	
RFACE ELEY	120'	BATUM MSL	Geol	ogist	
		BATUM BOURCE OF INFORMATION	Geor	ORIBL	·
	ELEV. OF		1		
DEPTH	ELEV. OF BOTTOM OF STRATUM	MATERIAL	THICK-	AIRTD	
0-31	1	J_soil	3'	1 "	
3-70	T	vellow play with some gravel	<del></del>	<del>├</del>	
70-92		medium-small gravel	67	}	
92-109	1	graveley brown clay	22	<del>├</del> ── <del>-</del>	<del></del>
109-160		medium-small gravel with thin beds	11	<del> </del>	
		of fine gravel	51		
160-258	<del></del> -	sandy rown clay	<del> </del>	<b></b> '	
258-283			98		
283-303	- <del></del> -	coarse cond with medium-small gravel	25		
303-335	-	brown any clay	20		
335-350		fine seri beds (thin) with brown clay	32		
222-330	<del>- </del>	coarse send and medium-small grave; with	15		
	<del></del>	brown clay			
350_388		brown clay with medium sand	38		
350-388	- <del> </del>	fine sand	10		
388-398					
388-398 398-405		fine sand with brown clay	8		
388-398 398-405 405-412		fine sand			
388-398 398-405 405-412 412-438		fine sand fine sand with brown clay	8		
388-398 398-405 405-412 412-438 438-450		fine sand fine sand with brown clay fine-coarse sand	8 7 26		
388-398 398-405 405-412 412-438 438-450 450-456		fine sand fine sand with brown clay fine-coarse sand brown silty clay	8		
388-398 398-405 405-412 412-438 438-450 450-456 456-480		fine sand fine sand with brown clay fine-coarse sand brown silty clay fine-coarse sand	8 7 26 12 6		
388-398 398-405 405-412 412-438 438-450 450-456		fine sand fine sand with brown clay fine-coarse sand brown silty clay fine-coarse sand	8 7 26 12 6 24		
388-398 398-405 405-412 412-438 438-450 450-456 455-480 480-515		fine sand fine sand with brown clay fine-coarse sand brown silty clay fine-coarse sand median-small gravel beds (1' thick)	8 7 26 12 6		
388-398 398-405 405-412 412-438 438-450 450-456 456-480		fine sand fine sand with brown clay fine-coarse sand brown silty clay fine-coarse sand medium-amail gravel beds (1' thick) in medium sands	8 7 26 12 6 24 35		
388-398 398-405 405-412 412-438 438-450 450-456 455-480 480-515		fine sand fine sand with brown clay fine-coarse sand brown silty clay fine-coarse sand median-sall gravel beds (1' thick) in medium sands brown silty clay with sand	8 7 26 12 6 24 35		
388-398 398-405 405-412 412-438 438-450 450-456 456-480 480-515 515-526 526-578		fine sand fine sand with brown clay fine-coarse sand brown silty clay fine-coarse sand median-sall gravel beds (I' thick) in medium sand brown silty clay size sand fire-medium sand size brown clay	8 7 26 12 6 24 35		
388-398 398-405 405-412 412-438 438-450 450-456 456-480 480-515 515-526 526-578 578-592		fine sand  fine sand with brown clay  fine-coarse sand  brown silty clay  fine-coarse sand  Ledisa-sall gravel beds (I' thick)  in medium sand  brown silty clay with sand  fire-redium sand with brown clay  medium coarse	8 7 26 12 6 24 35		
388-398 398-405 405-412 412-438 438-450 450-456 456-480 480-515 515-526 526-578 578-592 592-598		fine sand  fine sand with brown clay  fine-coarse sand  brown silty clay  fine-coarse sand  Ledisa-scall gravel beds (l' thick)  in medium sand  brown silty clay sile sand  fire-redium sand shown clay  medium coarse  n clay	8 7 26 12 6 24 35 11 52 14		
388-398 398-405 405-412 412-438 438-450 450-456 456-480 480-515 515-526 526-578 578-592		fine sand  fine sand with brown clay  fine-coarse sand  brown silty clay  fine-coarse sand  medium sand single sand  fine-medium sand single sand  fire-medium sand single sand  fire-medium sand single sand  fire-medium coarse  sand single sand single sand  fire-medium sand si	8 7 26 12 6 24 35 11 52 14		
388-398 398-405 405-412 412-438 438-450 450-456 456-480 480-515 515-526 526-578 578-592 592-598		fine sand  fine sand with brown clay  fine-coarse sand  brown silty clay  fine-coarse sand  Ledisa-scall gravel beds (l' thick)  in medium sand  brown silty clay sile sand  fire-redium sand shown clay  medium coarse  n clay	8 7 26 12 6 24 35 11 52 14		

10-4-76

LOG DETAINED BY...

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# DEPARTMENT OF WATER RESOURCES

Stony Creek Fan

		WELL LOG	OG LOCAL DESIGNATION S			
BEPTE	ELEVATION OF BOTTON OF BYSATUM	MATERIAL	**************************************	% T0104	assolute voice Fray	707»
624-638'		fine sand with layers of brown clay blue silty clay with fine sand	14		- FAS	7887
538-700		blue silty clay with fine sand	32			
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OPIGINAL	COLUMN OF CLUT	TODAK (			S-V8
File with DWR	STATE OF CALII WELL COMPLETI	ON REPORT	2011/0	2241	8 R (51-7) M
Page of	Refer to Instruction	Pamphlet .		TATE WELL NO.	STATION NO.
Owner's Well No		1448ABCD	Celd Ap)	reste	Garaccono
ate Work Began	193/01 , Ended /23/02	- · · · · · · ·	LATITUDE	well	LONGITUDE
\ Local Permit A				APN/TRS/C	THER
Permit No. 🕹		<del></del>	~ \ \	ATTATATO	
	GEOLOGIC LOG				
ORIENTATION (∠)	DRILLING HORIZONTAL ANGLE (SPECIFY)				
DEPTH FROM	METHOD DESCRIPTION FLUID				
SURFACE Ft. to Ft.	Describe material, grain size, color, etc.				
0 70	Brown to tan Clay	Address Co. Ro	L WELL TO	Cation	d 39
70 80	Coarse Sand (all)	City Glenn	有物ど		•
80 130	Blue Grey Clay	1	<u> </u>		
130 180	1 Sang & Grave	APN Book <b>019</b>	Page <b>220</b>		)//
180 290	Light Brown Clay	1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Range	Section	
296 295 295 445	+ Sand	Latitude	NORTH SEC.	Longitude	DEG. MIN. SEC.
295 445	Brown to tan Clay		ON SKETCH .		→ACTIVITY (∠) -
451 490	Brown Clay		IORTH		NEW WELL
490 500	Sand	-		.	MODIFICATION/REPAIR Deepen
500 55	Yellow to tan Clau		20 Y		Other (Specify)
515 525	Sand	CoRd	37 ^	_	DESTROY (Describe
525 575	Yellow Clay				Procedures and Materials Under "GEOLOGIC LOG
575 580	Sand	1		.	PLANNED USES (∠)
280 630	Yellow to Inn Clay	-		CO	WATER SUPPLY Domestic Public
630 655	Sand	5 25/ Jak	$\gamma$		Irrigation Industria
CO5 695	Yellow to tan Clay	GIND GIND	canal	<b>L</b> EAST	MONITORING
705 750	Yellow to Zan Clay			Į,	TEST WELL CATHODIC PROTECTION
750 805	Brown cityton w/tuff Fragments	11:11 Y	. [		HEAT EXCHANGE
805 822	Green / Grey Siltatone	willows	1.01		DIRECT PUSH
822 840	Lt. Grey Clay	Cok	d44	-	INJECTION VAPOR EXTRACTION
840 905	Brown Sitistone with Chy			ĺ	SPARGING
905 940	Sand and Basato Chips	Illustrate or Describe Distan	ce of Well from Roa	ds, Buildings,	REMEDIATION
940 950	+ Blue / Grey Clay	Illustrate or Describe Distan Fences, Rivers, etc. and attac necessary. PLEASE BE AC	ch a map. Use additi CURATE & COMP	ional paper if LETE.	OTHER (SPECIFY)
	Volcome Sands	WATER LE	VEL & YIELD	OF COMPLE	TED WELL
1// 10/0	Lt Green to Yellow Clay	DEPTH TO FIRST WATER	(Ft.) BE	ELOW SURFACE	
1		DEPTH OF STATIC			
1	1	WATER LEVEL			
TOTAL DEPTH OF	BORING 1020 (Feet)	TEST LENGTH (			(E+ )
	COMPLETED WELL LOOO (Feet)	* May not be representat	•		_ (FL)
				<u> </u>	
DEPTH FROM SURFACE	BORE- HOLE TYPE (ڬ)	<sub>FE</sub>	DEPTH ROM SURFACE	ANNU	LAR MATERIAL
	HOLE TYPE(스) DIA. 날 집 . 원 뿐 MATERIAL / INTERNAL GAUG	E SLOT SIZE		CE- BEN-	TYPE
Ft. to Ft.	DIA. (Inches) WATERIAL / DIAMETER OR WATERIAL / GRADE (Inches) THICKNE		Ft. to Ft.	MENT TONITE	FILL FILTER PACK (TYPE/SIZE)
			1	(~) (~)	(∠)
	no wood and the	Locy:			
Hua	se garage				2000
1			1	0	· la
			1	79.	
i			İ	<b>V</b>	
ATTAC	HMENTS (∠)  I, the undersigned, certify that the second control of the second control o	CERTIFICATION		heet of my kno	whedre and halist
Geologi		The report is complete and		Dear of Hily KIIC	wisugs and belief.
'	nstruction Diagram  NAME  (PERSON, FIRM, AR CORPORATION)	(TYPED OR PRINTED)	JU PUIC	100	
	sical Log(s)	471	Zamo	7 ST	0 95/98
Soil/Wa	ter Chemical Analyses	1 1	CITY		STATE ZIP
	INFORMATION, IF IT EXISTS.   Signed   Signed	e yourch	us	118/02	512268
	WELL DRILLER/AUTHORIZED REPRE			TE SIGNED	C-57 LICENSE NUMBER
DWR 188 REV. 11-97	IF ADDITIONAL SPACE IS NEEDED, USE NEX	KT CONSECUTIVELY NUM	BERED FORM		

# Casing

# Deep Well

Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
1000 - 980		Blank	Steel	2"	Sch 40	
980 - 970		Screen	Steel	2"	Sch 40	.020
970 – 930		Blank	Steel	2"	Sch 40	
930 - 920		Screen	Steel	2"	Sch 40	.020
920 - +6"		Blank	Steel	2"	Sch 40	
				•		

# #2 Well

Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
675 – 655		Blank	Steel	2"	Sch 40	•
655 - 635		Screen	Steel	2"	Sch 40	.020
635 - +1		Blank	Steel	2"	Sch 40	

# Middle Well

Ft. to Ft.	Borehole Dia.	Туре	Material Grade	Internal Dia	Gauge	Slot Size
545 – 525		Blank	Steel	2"	Sch 40	
526 - 515		Screen	Steel	2"	Sch 40	.020
515 - 460		Blank	Steel	2"	Sch 40	
460 - 450		Screen	Steel	2"	Sch 40	.020
450 - +2.5		Blank	Steel	2"	Sch 40	

# Shallow Well

Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
201 - 180		Blank	Steel	2"	Sch 40	
180 - 170		Screen	Steel	2"	Sch 40	.020
170 - 150		Blank	Steel	2"	Sch 40	
150 - 140		Screen	Steel	2"	Sch 40	.020
140 - +2		Blank	Steel	2".	Sch 40	

# Annular Material

Ft. to Ft.	Type
100 – 925	#8 Sand
925 - 917	#60 Sand
917 - 902	Hot Batch Grout
902 - 513	Cement Grout
531 - 403	#8 Sand
403 - 393	#60 Sand
393 - 283	Cement Grout
283 - 171	#8 Sand
171 - 163	#60 Sand
163 - 101	Cement Grout
101 - 35	# 8 Sand
35 - 31	#60 Sand
31 – Surface	Cement Grout

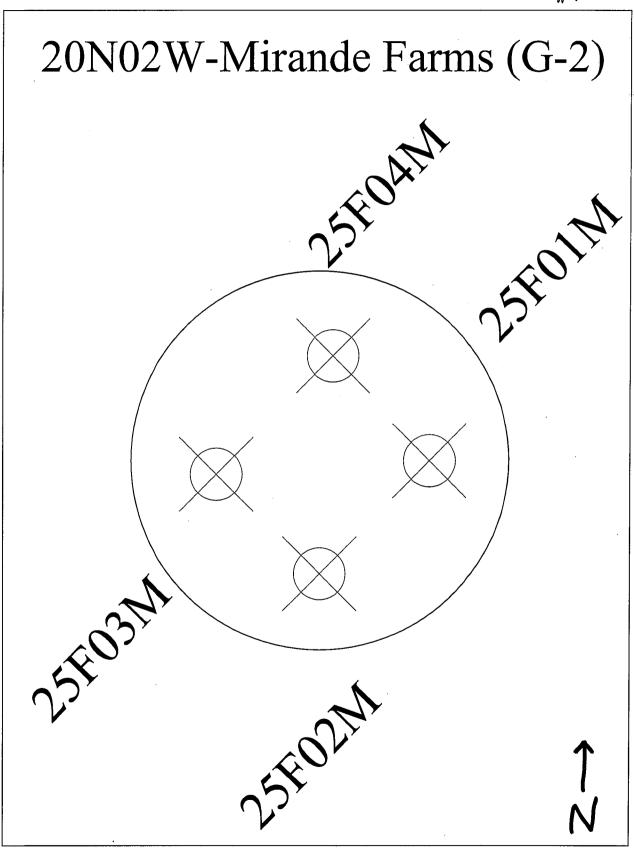
ORIGINAL	ST	TATE OF CALIFO	RNIA	DWR US	E DNEY -	DO NOT FILL IN
File with DWR			N REPORT	20M/C	12 W Z	5 F(1-4) M
Page of	Refe	er to Instruction Pa	amphlet	)s	TATE WELL NO.	STATION NO.
Owner's Well No	G-2	1 No. 782	025ABLI	Quest	SPECIPAL	E KANDE 725
Date Work Began	10 3 51 Ended /23	10/10/	ひとうかべ	LATITUDE	WEZ	LONGITUDE
Local Permit Ag					APN/TRS/C	THER
Permit No. <u>N</u>		e 10/1/01	<del></del>	<u> </u>	APN/THS/C	THER
	GEOLOGIC LOG		<u> </u>	`` <u>``````````````````````````````</u>	MATER	
ORIENTATION (∠)	VERTICAL HORIZONTAL ANGLI	E (SPECIFY)				
DEPTH FROM	METHODFLUID					
SURFACE	DESCRIPTION  Describe material, grain size, col	lor ato				
Ft. to Ft.	Sand		Address 7954	CO RO	CATION -	
20 60	Lt. Brown Clay		Address 7959 City Glea		77	
60 80	Sand & Gravels	32 P				
80 190	Brown Clay		APN Book 019	Page 116	Parcel	25 <b>-9</b>
190 200	Coanse Sand		Township		Section	<u>,                                      </u>
260 250	Brown Clau		Latitude		Longitude _	l l WEST
750 760	Sand	Not of the second	DEG. MIN.	SEC.	Zongrado _	DEG. MIN. SEC.
260 410	Blue Grey Clay			FION SKETCH -		—ACTIVITY (∠) — X NEW WELL
410 440	Sand		15.00			MODIFICATION/REPAIR
440 450	Blue/Grey Clay		11	Co Rd 39	1	Deepen
450 490	Sand			CORASI	<del></del>	Other (Specify)
480 510	Blue Grey Clay				1	DESTROY (Describe
5/0 520	Sand & Gravel				1 /5	Procedures and Materials Under "GEOLOGIC LOG",
520 930	Blue Grey Clay			<i>₹</i>		PLANNED USES (∠)
930 960	Sand		1	Red		WATER SUPPLY Domestic Public
960 1000	Blue/ Grey Clay		70	3	\ \J <sub>\+</sub>	Irrigation Industrial
1	<u>                                     </u>		3 7 75	1	Rived	MONITORING X
1	<u> </u>		willer	1	1 1 1	TEST WELL
1	<u>.</u>		Co	ed 44 🟋	\ <u>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </u>	CATHODIC PROTECTION
1	1				<del></del>	DIRECT PUSH
/ <del> </del>	<u> </u>		7	7954 Co.R		INJECTION
!	1			4	4	VAPOR EXTRACTION
1	 			SOUTH -		SPARGING REMEDIATION
			Illustrate or Describe Dist Fences, Rivers, etc. and at necessary. PLEASE BE A	ance of Well from Road tach a man. Use additi	ls, Buildings,	OTHER (SPECIFY)
			necessary. PLEASE BE A	CCURATE & COMP.	LETE.	
1			WATER L	EVEL & YIELD	OF COMPLE	TED WELL
1	1		DEPTH TO FIRST WATE	ER (Ft.) BE	LOW SURFACE	
	1		DEPTH OF STATIC			
	1			(Ft.) & DATE		177 L
TOTAL DEPTH OF	BORING 1000 (Feet)		ESTIMATED YIELD		-	TULLY
1	COMPLETED WELL(Feet)		* May not be represen	. (Hrs.) TOTAL DRAW		(Ft.) <b>V</b>
101113 321111 01			111ay not or represen	interest of its weeks von	1	
DEPTH	I BOBE:	NG (S)		DEPTH	ANNU	LAR MATERIAL
FROM SURFACE	HOLE   TYPE( <u></u>   YPE( <u></u>   YPE( <u></u>	TERNAL GAUGE	SLOT SIZE	FROM SURFACE		TYPE
	(Inches)   홍 및   중인 로   GRADE   DIA	METER OR WALL	IF ANY	E E.	CE- BEN- MENT TONITE	FILL FILTER PACK
Ft. to Ft.	N	nches) THICKNESS	S (Inches)	Ft. to Ft.	(\(\perceq\)	(エ) (TYPE/SIZE)
			·	İ		
( ) )		10				
MIL	Los Die Ut	Xacx	$\Delta$ $\lambda$	00/		/
1 000						
				1		<b>№</b> 5005
A TOTA C	IMENTS ( )		CEPTIFICATIO	ON STATEMENT	DECA	1 2 -
	HMENTS (∠)	ned, certify that this	CERTIFICATION S report is complete a		best of mv kn	owledge and belief.
Geologic	c Log	. 1		tion .	One	<u>.</u>
, I	nstruction Diagram NAME (PERSON, FI	PECTIUM  IRM, OR CORPORATION) (			<u> </u>	<i>^</i>
1	sical Log(s)	Box 11	71 7	a mora	(n	45698
1	er Chemical Analyses			CITY	1 1	STATE ZIP
	INFORMATION IS IT EXISTS   Signed	Milino	Mound	4123	16/23	5/22/2
ATTACH ADDITIONAL		ER/AUTHORIZED REPRESEN	NTATIVE	DAT	E SIGNED	C-57 LICENSE NUMBER

# Casing

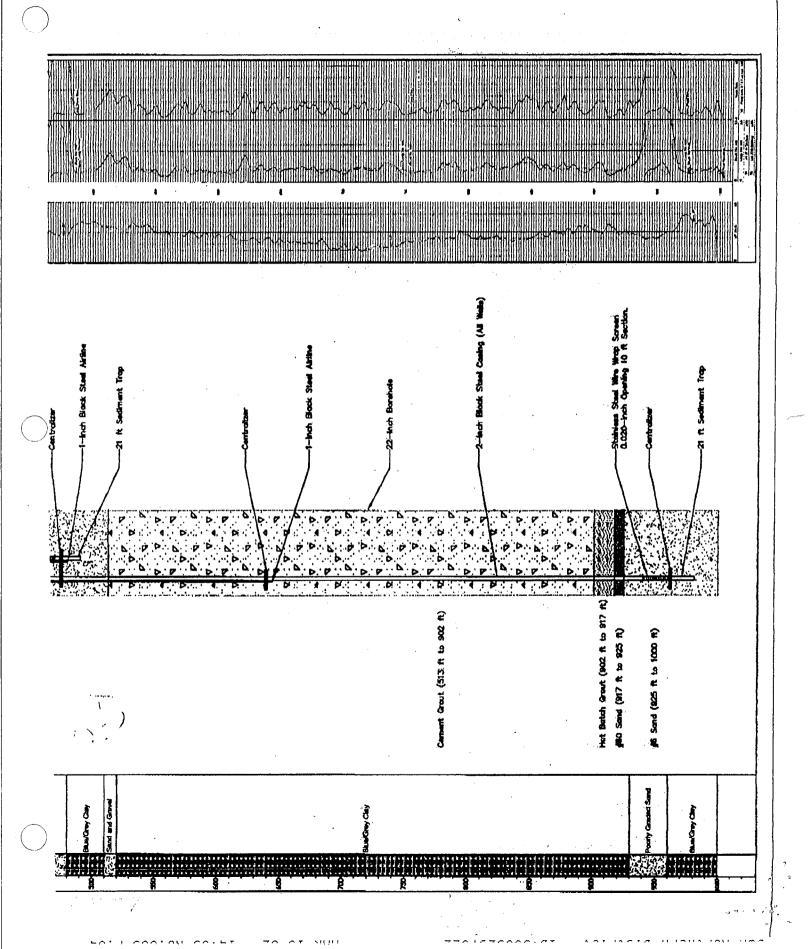
	Deep Well						·
	Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
	980 - 960		Blank	Steel	2"	Sch 40	
X	960 – 940		Screen	Steel	2"	Sch 40	.020
7.	940 – +6"		Blank	Steel	2"	Sch 40	
	#2 Well						
	Ft. to Ft.	Borehole Dia.	Туре	Material Grade	Internal Dia	Gauge	Slot Size
	490 - 470		Blank	Steel	2"	Sch 40	
0	470 – 460		Screen	Steel	2"	Sch 40	.020
10	460 - 430		Blank	Steel	2"	Sch 40	
y	430 – 420		Screen	Steel	2"	Sch 40	.020
	420 - +1		Blank	Steel	2"	Sch 40	
	Middle Well						
_	Ft. to Ft.	Borehole Dia.	Туре	Material Grade	Internal Dia	Gauge	Slot Size
$\bigcirc$	280 – 260		Blank	Steel	2"	Sch 40	
V	260 - 250		Screen	Steel	2"	Sch 40	.020
	250 - 200		Blank	Steel	2"	Sch 40	
	200 - 190		Screen	Steel	2"	Sch 40	.020
	190 - +2.5		Blank	Steel	2"	Sch 40	
	Shallow Well		•				
	Ft. to Ft.	Borehole Dia.	Туре	Material Grade	Internal Dia	Gauge	Slot Size
E	85 – 65		Blank	Steel	2"	Sch 40	
$\vee$	65 – 55		Screen	Steel	2"	Sch 40	.020
,	55 - +2		Blank	Steel	2"	Sch 40	

# Annular Material

Ft. to Ft.	<u>Type</u>
985 - 925	#8 Sand
925 - 500	Cement Grout
500 - 400	#8 Sand
400 - 285	Cement Grout
285 - 170	#8 Sand
170 – 85	Cement Grout
85 – 45	#8 Sand
45 – Surface	Cement Grout



	DATE COMPLETED ALCORD			3			
BER G. MINNMEERING LOCATION Green, Garen, Garen, 1984 44 and Garen, Bull.	EPTH JIDDA DATE STARTED JOGAND DRULL HELPER(S) Kandusel NUMBER OF	Hock Steel Conductor Coaing 1/4-both Wall Microsom to 35 ft.	Controlling 20 it Section  Controlling  Cont	Controlizars  Controlizars  Stohless Stail Was Wap Sorem  Cooperated to the Sections	Controling Stations Steel Was Warp Screen GAGGO-hads Opening 10 ft Section.	To To To To To To To To To To To To To T	Staining Steel Wee Way Screen
STATE OF CALIFORNIA - RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES NORTHERN DISTRICT FEATURE CHARMING WAL HOLE MUMBER S	Seaton Bulletin TYPE OF RIG LEON	Cament Grout (aurfices to 31 ft	Sand & Garnel  B Sand (35 A to 101 A)	Cument Grout (101 ft to 163 ft)  Brown Clay  Brown Cla	Course Castred Sand  (17) R to 283 R)  Well Cerebod Sand  (17) R to 283 R)	Bhain'Grey Cley Comment Grout (283 ft to 363 ft)	100 Sand (383 ft to 403 ft)   100 Sand (383 ft to 403 ft)   100 Sand (403 ft to 513 ft)   100



COUNTY_GER	70	DEPARTMENT OF WATER RESOURCES	OWR No	ZON	21.02 12W - 33B MD
EAR		- WELL LOG	OTHER NO.		F-6
OCATION   Mi	le west f	con intersection of "Rd V" and "Rd 46"	•		368
-f · logs	1. L	Cal at "	<u>, a</u> na	6	200 north
OT INTERSE	ction ot	"Rd 46" and irrigation road west of Le	wis hor	me N	est side of ro
		DWR ADDRESS Northern Division			
		GRAVEL PACKED YES DATE COM			
ZE OF CABING D	EPTH 10 5/8	"hole : 3"casing 0-20' 6"casing 0-320 STRUCK WAT	ER AT		74'
		; 200 - 320'			
ATER LEVEL BEF				<del>)</del>	
DET DATA: DISCH	ARGE G. P. M.	DRAWBOWN FT	HOUR	6 RUN_	
THER DATA AVAIL	LABLE: WATER	LEVEL RECORDANALYSIS.	<del></del>		
rface elev	103	DATUM MSL SOURCE OF INFORMATION		Geol	ogist
	ELEV. OF BOTTOM OF STRATUM			ï	.0
DEPTH	BOTTOM	MATERIAL	THICK	P.	
·	OF STRATUM			17	
0-8	OF STRATUM	Sandy brown soil	8'	7	
8-15'	OF STRATUM	Brown clay	8'	7	
8-15'	OF BTRATUM	Brown clay Pea Gravel lense	8' 7' 5'	7	
8-15' 15-20' 20-42'	OF STRATUM	Pea Gravel lense Sandy brownish-yellow clay "Iminor gravel	8' 7' 5' 22'	7	
8-15' 15-20' 20-42' 42-46'	OF STRATUM	Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel  Brown clay very little fine sand	8' 7' 5' 22' 4'	*	
8-15' 15-20' 20-42' 42-46' 46-70'	OF STRATUM	Brown clay Pea Grayel lense Sandy brownish-yellow clay "Iminor gravel Brown clay very little fine sand Sandy brown clay	8' 7' 5' 22' 4' 24'		
8-15' 15-20' 20-42' 42-46'	OF STRATUM	Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel  Brown clay very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor	8' 7' 5' 22' 4'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel  Brown clay very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay	8' 7' 5' 22' 4' 24'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel  Brown clay very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay	8' 7' 5' 22' 4' 24' 14'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92'		Brown clay  Pea Grayel lense  Sandy brownish-yellow clay "Iminor gravel  Brown clay very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Goarse sand and pea arayel	8' 7' 5' 22' 4' 24' 14'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98'		Brown clay  Pea Grayel lense  Sandy brownish-yellow clay "Iminor gravel  Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Goarse sand and pea gravel  Brown sity clay	8' 7' 5' 22' 4' 24' 14' 2' 6'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120'		Brown clay Pea Grayel lense Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand Sandy brown clay Coarse sand and pea gravel "Iminor brown clay Brown clay Coarse sand and pea gravel Brown sity clay Coarse sand and pea gravel Coarse sand and pea gravel	8' 7' 5' 22' 4' 24' 14'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98'		Brown clay  Pea Grayel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor brown clay  Brown clay  Coarse sand and pea gravel  Brown sity clay  Coarse sand and pea gravel  Brown sity clay  Coarse sand and pea gravel  Sandy clay (red-brown areen-brown and	8' 7' 5' 22' 4' 24' 14' 2' 6'		(4)
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144'		Brown clay  Pea Grayel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Goarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  by ff-brown)	8' 7' 5' 22' 4' 24' 14' 2' 6' 22'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)	8' 7' 5' 22' 4' 24' 14' 2' 6' 22'		(4)
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144'		Brown clay  Pea Grayel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Goarse sand and pea gravel  Brown sity clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)	8' 7' 5' 22' 4' 24' 14' 2' 6' 22' 24'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Conrise sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "minor fine sand (a reen-black)	8' 7' 5' 22' 4' 24' 14' 2' 6' 22' 24'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Conrise sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "Iminor fine sand (green-black  and areen-brown)	8' 7' 5' 22' 4' 24' 14' 2' 6' 22' 24'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Conrise sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "Iminor fine sand (green-black  and areen-brown)	8' 7' 5' 22' 4' 24' 14' 2' 4' 22' 24' 10' 10' 18'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "Iminor fine sand (green-black  and green-brown)  Greenish-brown clay	8' 7' 5' 22' 4' 24' 14' 2' 22' 24' 10' 18'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor brown clay  Brown clay  Goarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay (minor fine sand (green-black and green-brown)  Greenish-brown clay  Red-brown and green-brown clavey	8' 7' 5' 22' 4' 24' 14' 2' 4' 22' 24' 10' 10' 18'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay (red-brown and green-black  and green-brown)  Greenish-brown slay  Red-brown and green-brown slayey  sand "Iminor pea gravel lenses	8' 7' 5' 22' 4' 24' 14' 2' 22' 24' 10' 18'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay (red-brown and green-black  and green-brown)  Greenish-brown clay  Red-brown and green-brown clayey  sand "Iminor pea gravel lenses  Greenish brown clay	8' 7' 5' 22' 4' 24' 14' 2' 22' 24' 10' 18'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown sitty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "minor fine sand (green-black  and green-brown)  Greenish-brown clay  Red-brown and green-brown clayey  sand "minor pea gravel lenses  Greenish brown clay  Greenish brown clay	8' 7' 5' 22' 4' 24' 14' 2' 22' 24' 10' 18' 10' 18'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-148' 98'-218' 88-218' 36-223' 263-236' 36-240'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Concse sand and pea gravel "Iminor  brown clay  Brown clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "minor fine sand (green-black  and green-brown)  Greenish - brown clay  Red-brown and green-brown clayey  sand "Iminor pea gravel lenses  Greenish brown clay  Greenish brown clay  Greenish brown clay	8' 7' 5' 22' 4' 24' 14' 2' 4' 10' 18' 10' 18' 20'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218' 88-218' 36-223' 263-236' 36-240'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Concse sand and pea gravel "Iminor  brown clay  Brown sity clay  Coarse sand and pea gravel  Brown sity clay  Coarse sand and pea gravel  Sandy clay (red-brown green-brown, and  buff-brown)  Sity clay (red-brown and green-brown)  Pea gravel  Sity clay "Iminor fine sand (green-black  and green-brown)  Greenish-brown clay  Red-brown and green-brown clayey  sand "Iminor pea gravel lenses  Greenish brown clay  Greenish brown clay  Screenish brown clay  Screenish brown clay  Screenish brown clay  Screenish brown clayey sand  Pea Gravel  Whiteish-tan clayey sand "Iminor gravel	8' 7' 5' 22' 4' 24' 14' 2' 22' 24' 10' 18' 10' 18'		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218' 283-236' 36-240' 40-260'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown sity clay  Coarse sand and pea gravel  Brown sity clay  Coarse sand and pea gravel  Sandy clay (red-brown green-brown, and  buff-brown)  Sity clay (red-brown and green-brown)  Pea gravel  Sity clay "Iminor fine sand (green-black  and green-brown)  Greenish-brown clay  Red-brown and green-brown clayey  sand "Iminor pea gravel lenses  Greenish brown clay  Greenish brown clay  Greenish brown clay  Sereenish brown clay  Greenish brown clay  Greenish brown clay  Sereenish brown clayey sand  Pea Gravel  Whiteish-tan clayey sand "Iminor gravel  lenses	8' 7' 5' 22' 4' 24' 14' 2' 4' 10' 18' 10' 18' 20'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218' 88-128' 88-148' 88-148' 98'-218'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown silty clay  Coarse sand and pea gravel  Brown silty clay  Coarse sand and pea gravel  Sandy clay (red-brown, green-brown, and  buff-brown)  Silty clay (red-brown and green-brown)  Pea gravel  Silty clay "Iminor fine sand (green-black  and green-brown)  Greenish-brown clay  Red-brown and green-brown clayey  sand "Iminor pea gravel lenser  Greenish brown clay  Greenish brown clay  Greenish brown clay  Sand "Iminor pea gravel lenser  Greenish brown clay  Sand "Iminor pea gravel lenser  Greenish brown clay  Sand "Iminor gravel whiteish-tan clayey sand "Iminor gravel  lenses  Pea Gravel	8' 7' 5' 22' 4' 24' 14' 2' 4' 10' 18' 10' 18' 20'		
8-15' 15-20' 20-42' 42-46' 46-70' 70-84' 84-86' 86-92' 92-98' 98-120' 120-144' 144-160' 160-170' 170-188' 88-198' 98'-218' 283-236' 36-240' 40-260'		Brown clay  Pea Gravel lense  Sandy brownish-yellow clay "Iminor gravel Brown clay, very little fine sand  Sandy brown clay  Coarse sand and pea gravel "Iminor  brown clay  Brown sity clay  Coarse sand and pea gravel  Brown sity clay  Coarse sand and pea gravel  Sandy clay (red-brown green-brown, and  buff-brown)  Sity clay (red-brown and green-brown)  Pea gravel  Sity clay "Iminor fine sand (green-black  and green-brown)  Greenish-brown clay  Red-brown and green-brown clayey  sand "Iminor pea gravel lenses  Greenish brown clay  Greenish brown clay  Greenish brown clay  Sereenish brown clay  Greenish brown clay  Greenish brown clay  Sereenish brown clayey sand  Pea Gravel  Whiteish-tan clayey sand "Iminor gravel  lenses	8' 7' 5' 22' 4' 24' 14' 2' 4' 10' 18' 10' 18' 20'		

FOR FIELD COPIES USE ALTERNATE LINI

.... 203

NUMBER SCF-6

BEPTH ELEVATION SOTTON		WELL LOG	LOCAL	DESIGNAT	SCF	
282-288'	Serrou er Stratum	MATERIAL	THICKNE FEET	25 % VOIDE	ABSOLUTE VOIDS FEET	TOTA VOID FEET
_388 - 310'		Silty buff clay	6			
<u> 288 - 310'</u> <u> 310 - 326'</u>	!	2 2 CB4/36 741/4	22'			
	<u> </u>	brown clayer gravel (no water)	16			
	<u> </u>	* Note: There is a 10' section of drill				
		Note: There is a 10 section of drill				
		pipe at the bottom of this hale	<del></del>			
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BOSS CALLISON RD. NEWCASTLE, CA 95858 (9 16) 663 - 2696 Location Sec. 33, T2IIN, R2
No No. 1 Am No. 2
Natural + Bentonite SCF-6 Paulsen Lorens, Pearso CALIFORNIA STATE DIVISION OF WATER RESOUARCE Red Bluff, Dist. **ELECTRICAL WELL LOG** APPLIED GEOLOGICAL ENGINEERING, INC. Density
Viscosity
Resistivity
Res. e BHT
pH
Circ. Temp. Elevation 120 State No. 1
Aug. 24, 1977
10
376
376
325 County Glenn

Page	1	۸f	12	
1 age		U.L	14	

ORIGINAL Tile with DWR Tage 1 of 12 Owner's Well No. 8123	WELL	STATE OF CALIFORNIA  COMPLETION REPORT Refer to Instruction Pamphlet  No. E057712
Date Work Began 6/4/2007	, Ended 6/18/2	
Local Permit Agency GLENN COL	INTY HEALT	H DEPT

200 03W - H	
STATE WELL NO./ STATION NO.	_
LATITUDE LONGITUDE	'
APN/TRS/OTHER	

Permit	No. M	W 280-07 Permit Date 5/31/2007	APN/TRS/OTHER
		GEOLOGIC LOG	WITH AWAID
ORIENTATI	ON ( <u>✓</u> )	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING METHOD ROTARY FLUID MUD	
DEPTH F		DESCRIPTION FLUID MOD	
SURFA Ft. to		Describe material, grain, size, color, etc.	
0		TOP SOIL	Address 50' EOF RD D & .46 MI SOF RD 35
10	40	BROWN CLAY WITH SAND AND GRAVEL	City CA
40	130	YELLOW BROWN CLAY WITH SAND STREAKS	County GLENN
130		SAND AND GRAVEL	
140	250	YELLOW BROWN CLAY WITH SAND STREAKS	APN Book 020 Page 210 Parcel 008
250		SAND AND GRAVEL	Township 20 N Range 3 W Section 7
260	310	YELLOW BROWN CLAY WITH SAND STREAKS	Latitude
310		YELLOW BROWN CLAY WITH SAND AND	
		GRAVEL	NORTH NEW WELL
465	485	SAND AND GRAVEL WITH BLUE CLAY	MODIFICATION/REPAIR
485		SAND AND GRAVEL	— Deepen — Other (Specify)
500		BLUE CLAY WITH SAND	
530		BLUE AND YELLOW CLAY MIX WITH SAND	DESTROY (Describe Procedules and Materi Under "GEOLOGIC LC
1		AND GRAVEL STREAKS	Under "GEOLOGIC LO
625		SAND AND GRAVEL WITH YELLOW AND BLUE	PLANNED USES (✓
1	700	CLAY MIX	WATER SUPPLY Domestic Public
700	865	YELLOW BROWN AND BLUE CLAY MIX WITH	Los Domestic Public Industr
!		SAND AND GRAVEL	MONITORING -
865	1000	GRAY CLAY WITH SAND AND GRAVEL STREAK	TEST WELL
1000		SAND AND GRAVEL	CATHODIC PROTECTION— HEAT EXCHANGE—
1050		SAND AND GRAVEL WITH BLUE GRAY CLAY	DIRECT PUSH_
1200		YELLOW ORANGE CLAY WITH SAND AND	INJECTION
1200		GRAVEL STREAKS	VAPOR EXTRACTION
1300		SOFT YELLOW GRAY CLAY WITH SAND AND	SPARGING
10001	- 1	GRAVEL	Illustrate or Describe Distance of Well from Roads, Buildings,
1395		HARD ROCK	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.
1000	1400	TUTO ROOK	WATER LEVEL & YIELD OF COMPLETED WELL
+	<del></del>		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE
	i		DEPTH OF STATIC
1	1		WATER LEVEL (Ft.) & DATE MEASURED
OTAL DE	VIII OF 1	BORING 1400 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE
			TEST LENGTH(Hrs.) TOTAL DRAWDOWN (Ft.)
OTAL DE	TH OF (	COMPLETED WELL 1034 (Feet)	May not be representative of a well's long-term yield.

DEP.		BORE -			-	C	ASING (S) DEPTH ANNULAR MATERIAL					MATERIAL			
FROM SU	RFACE	BORE - HOLE	T	YPE	<del></del>						SURFACE			TY	PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT ( <u>√</u> )	BEN- TONITE	E FILL (⊻)	FILTER PACK (TYPE/SIZE)
ZONE	1									0	84	1			SAND SLURRY
0	118	16	✓			PVC	2.5	SCH 80		84	95		<b>√</b>		BENTONITE C
118	128	16		<b>√</b>		PVC	2.5	SCH 80	.030	95	160			✓	SRI#8 SAND
128	138	16	<b>√</b>	1		PVC	2.5	SCH 80	٠,	160	176		<b>√</b>		BENTONITE C
ZONE	2									176	318			<b>√</b>	SRI#8 SAND
0	380	16/14	<b>√</b>			PVC	2.5	SCH 80		318	352		<b>V</b>		BENTONITE C

			D
ATTACHMENTS ( \( \sigma \)	CERTIFICATION	STATEMENT -	
Geológic Log	I, the undersigned, certify that this report is complete and accurate to the b	est of my knowledge and belief,	
Well Construction Diagram	NAME EATON DRILLING CO.		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		
Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA 95695
Other	ADDRESS // .	CITY	STATE ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed larh auron	07/06/07	<u>C57 A HIC - 1337</u> 8
	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57 LICENSE NUMBER

Page 1 of 2

# STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 726740, A

Owner's	Well No	<u>, 7448-1</u>
		8/26/2002

\_, Ended 9/6/2002

DWR USE ONLY	DO NOT FILL IN
ZINIOZV	V-01/4
STATE WELL!	NO./STATION NO.
LATITUDE	LONGITUDE
APN/TR	S/OTHER

Local Pe	rmit Ag	ency GLENN CNTY HEALTH DEPT.			
Permit	No. M	W-139-02 Permit Date 8/21/2002		APN/TRS	OTHER
· · · · · · · · · · · · · · · · · · ·		GEOLOGIC LOG	1		
ORIENTATI	ON (🗸)	✓ VERTICAL HORIZONTAL ANGLE (SPECIFY)			
		DRILLING METHOD ROTARY FLUID MUD			
DEPTH P SURFA	ROM CE	DESCRIPTION			
Ft. to	Ft.	Describe material, grain, size, color, etc.		WHIT LOCATION	
0		WELL GRADED SAND W/SILT AND FINE GRVL	Address .25 MI SOF	C/R 24 & .75 M EOF C	/R V V
10		WELL GRADED SAND WITH FINE GRAVEL	City CA		
20		POORLY GRADED SAND AND GRAVEL	County GLENN		
50		POORLY GRADED SND AND GRVL W/TAN CLY	1	age 360 Parcel 060	
60	70	POORLY GRADED SAND WITH GRAVEL	Township 22 N , R	Range 2 W Section 15	01
70		POORLY GRADED GRAVEL	Latitude 2//V		1 1
80	100	GRAY/BROWN CLAY WITH SAND AND GRAVEL	DEG. MIN.		DEG. MIN. SEC.
100	110	POORLY GRADED SAND		ON SKETCH	ACTIVITY (∠)
110	120	POORLY GRADED SAND WITH FINE GRAVEL			MODIFICATION/REPAIR
120		POORLY GRADED GRAVEL	,		Deepen
150	160	GRAVEL AND SAND W/YELLOW STICKY CLAY	·		Other (Specify)
160	190	YELLOW CLAY WITH GRAVEL AND SAND			DESTROY (Describe
190	200	POORLY GRADED GRAVEL W/SAND AND CLAY			DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
200	230	YELLOW CLAY WITH SAND AND GRAVEL			PLANNED USES (∠)
230	240	YELLOW SILTY CLAY			WATER SUPPLY
240	250	YELLOW SILTY CLAY W/SAND AND GRAVEL	WEST	TS	Domestic Public Irrigation Industrial
250	260	SMALL GRAVEL WITH SAND AND SILTY CLAY	\$	亞	
260	270	POORLY GRADED GRAVEL WITH SAND			MONITORING →  TEST WELL
270	280	POORLY GRADED GRAVEL			CATHODIC PROTECTION
280	300	GRAVEL			HEAT EXCHANGE
300	310	GRAVEL WITH FINE SAND			DIRECT PUSH
310	340	GRAVEL			INJECTION VAPOR EXTRACTION
340	350	TUSCAN ROCK WITH GRAVEL AND SAND			SPARGING
350	370	TUSCAN ROCK W/SANDSTONE, QUARTZ,		OUTH	REMEDIATION
		OTHER METAMORPHICS, TUFF, BASALT, SAND	Illustrate or Describe Distance Fences, Rivers, etc. and attach	a map. Use additional paper if CURATE & COMPLETE.	OTHER (SPECIFY)
370	380	COARSE SAND	necessary. PLEASE BE ACC	URATE & COMPLETE.	
380	450	TUSCAN AND METAMORPHIC RCK W/SND, CLY	WATER LEV	VEL & YIELD OF COMPL	ETED WELL
450	460	SILTSTONE WITH GRAVEL, QUARTZ, RED	DEPTH TO FIRST WATER	(Ft.) BELOW SURFACE	≣
1		CHERT, AND VOLCANICS	DEPTH OF STATIC		
460	555	MIXED COLORED CLAY WITH GRAVEL	ì	(Ft.) & DATE MEASURED _	I
<u> </u>		600		(GPM) & TEST TYPE	
		in a second seco	1	Irs.) TOTAL DRAWDOWN	` '
TOTAL DEL	In Or (	COMPLETED WELL 5/8 (Feet)	May not be representa	ntive of a well's long-term yield	d
T					

DEP	TH	BODE					CA	SING (S)			DEF	тн		ANN	JLAR	MATERIAL
FROM SU		BORE - HOLE DIA.	$\overline{}$		()			INTERNAL	GAUGE	SLOT SIZE	FROM S	JRFACE		T	TY	PE
Ft. to	Ft.	(Inches)	¥	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	DIAMETER (inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft, to	Ft.	CE- MENT	BEN- TONITI	FILL	FILTER PACK (TYPE/SIZE)
			ద	တ	Ī	Ē		(IIICHES)	11101114200	(monday			( <del>X</del> )	( <u>X</u> )	(x)	(
ZONE	1										0	220	1			SAND SLURRY
0	232	12					ACCESS TB	1			220	230		1		CHIPS
0	547	12/8	<b>V</b>				SCH 40	2			230	385			✓	#8 GRD SAND
547	557	8		7			SS SCREE	2		.030	385	505	✓			SAND SLURRY
557	578	8	<b>√</b>				SCH 40	2			505	600			1	#8 GRD SAND
ZONE	2												0		99	2002

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
  - Soil/Water Chemical Analysis \_ Other \_

ATTACH ADDITIONAL INFO	RMATION, IF IT EXISTS.
------------------------	------------------------

CERTI	FICA	TION	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 W. KENTUCKY

ADDRESS

Signed

WELL DRILLER/AUTHORIZED REPRESENTATIVE

WOODLAND 10/03/02

E ZIP 133783-C57A C-57 LICENSE NUMBE STATE

CA

DWR 188 REV. 11-97

ORI	GINA	۱L
File	with	<b>DWR</b>

# STATE OF CALIFORNIA

# WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page 2	ot	2			
_		WW7 88 %	т	7119 1	į

Owner's Well No. 7448-1	<sup>No.</sup> 726740
Date Work Began <u>8/26/2002</u> , E	inded 9/6/2002
Local Permit Agency GLENN CNTY H	
Permit No. MW-139-02	Permit Date 8/21/2002

DWR USE ONLY DO NOT FILL	117	
	L	
STATE WELL NO/STATION NO.		
LATITUDE LONGITUDE		
APN/TRS/OTHER		

Permit No.	MW-139-02 Permit Date 8/21/2002	APN/TR	S/OTHER
	GEOLOGIC LOG	1	
ORIENTATION ( ✓ )  DEPTH FROM SURFACE	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING ROTARY — FLUID MUD  DESCRIPTION		
Ft. to Ft.	Describe material, grain, size, color, etc.		
	GRAVEL	Address 25 MI SOF C/R 24 & . 75 MI EOF	C/R V V .
575 605	MIXED COLORED CLAY W/SAND AND GRAVEL	City CA	
		City O/	
		County GLENN	
<u> </u>		APN Book 037 Page 360 Parcel 060	<u>)                                    </u>
<u> </u>	+	Township 22 N Range 2 W Section 15	<u> </u>
		Latitude I	DEG. MIN. SEC.
		LOCATION SKETCH	DEG. MIN. SEC.  ACTIVITY (∠)
		NORTH NORTH	NEW WELL
			MODIFICATION/REPAIR Deepen Other (Specify)
			DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")  PLANNED USES (∠)
		WEST	WATER SUPPLY
			MONITORING< TEST WELL CATHODIC PROTECTION
			HEAT EXCHANGE DIRECT PUSH
			INJECTION VAPOR EXTRACTION SPARGING
		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.	REMEDIATION
		WATER LEVEL & YIELD OF COMP	LETED WELL
		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	
		DEPTH TO FIRST WATER (FL) BELOW SURFAL DEPTH OF STATIC WATER LEVEL (Ft) & DATE MEASURED	
TOTAL DEPTH OF	BORING 600 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
	COMPLETED WELL 578 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN  May not be representative of a well's long-term yie	• •

DEPTH POPE CASING (S)					DE		ANNULAR MATERIAL									
FROM SUF		BORE - HOLE	T		<u>(</u>							URFACE		,	TY	PE .
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT ( <u>✓</u> )	BEN- TONITE ( <u>✓</u> )	E FILL (≰)	FILTER PACK (TYPE/SIZE)
0	230	12					ACCESS TB	1			0	220	✓			SAND SLURRY
0	297	12	<b>√</b>				SCH 40	2			220	230		✓.		CHIPS
297	307	12		✓			SS SCREE	2		.030	230	385			<b>√</b>	#8 GRD SAND
307	318	12	<b>√</b>				SCH 40	2			385	505	1			SAND SLURRY
											505	600			<b>V</b>	#8 GRD SAND

•	ATTA	CHN	IENTS	(∠)
---	------	-----	-------	-----

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- --- Soil/Water Chemical Analysis \_ Other \_
- ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

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 W. KENTUCKY

ADDRESS

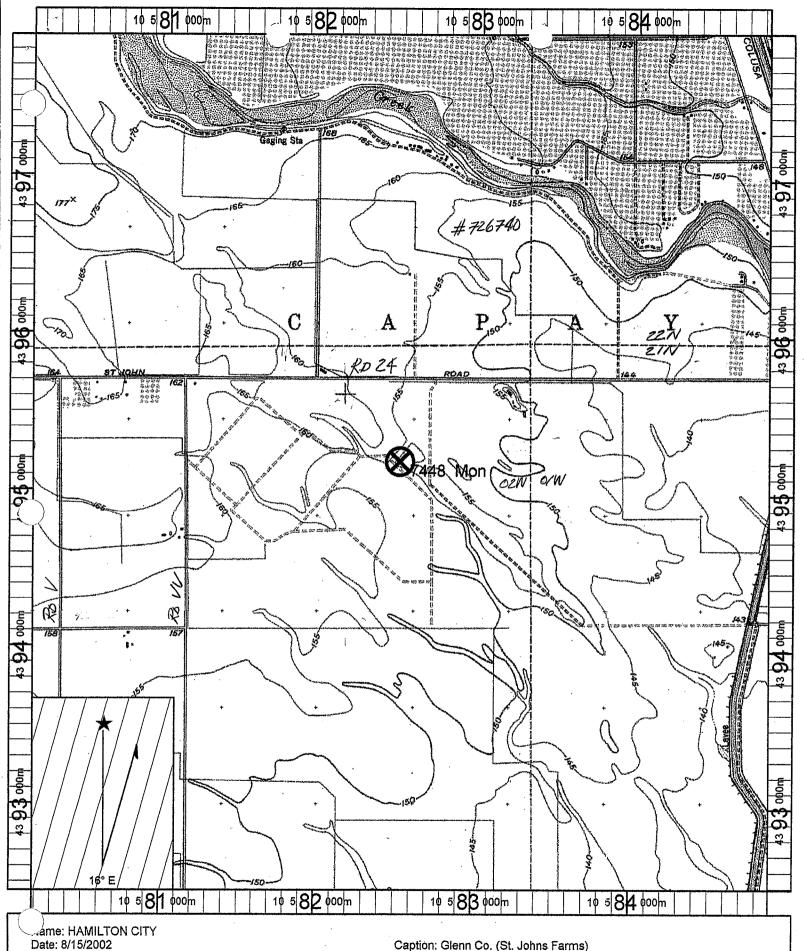
CITY

WELL DRILLER/AUTHORIZED REPRESENTATIVE

10/03/02 DATE SIGNED

95695 ZIP CA STATE 133783-C57A C-57 LICENSE NUMBER

DWR 188 REV. 11-97



Scale: 1 inch equals 2000 feet

Caption: Glenn Co. (St. Johns Farms) Job# 7448 Mon APN: 037-360-**0**6

Page 1 of 2

STATE, OF CALIFORNIA.

# WELL COMPLETION REPORT

Select to Instruction Plany local

No.726741

Owner's Well No. 7448-7

Date Work Regnn | 8/26/2002

. Ended 9/6/2002

Local Termin Agency - GLERN ONTY HEALTH DEPT

Fermit No. MW-139-02

7-139-02 Permit Date - 8/31/2002

T 54명 USE (하다) — DO 1801 원교 가고 úan ned≟ LONG TUDE APPLOBATIONAL

		GEOLOGIC LOG —————	•	
ORFNIAL	ON 14 ;	V VERTICA HORIZONTAL SIGLE (SESCIEN)		
958174	L 03.1	METHOD ROTARY FULL MUD		
SURFA		DESCRIPTION		
		Describe material, gram, 327 John 312	WELL LOCATION—	
0		WELL GRADED SAND WISILT AND FINE GRVL	Address 25 MI SOF C/R 24 3 75 M EOF C/	'R V V
(0		WELL GRADED SAND WITH FINE GRAVEL	Cik GA	
20		POORLY GRADED SAND AND GRAVEL	County GCENN	
50		PCORLY GRADED SND AND GRV1 WITAN CLY	AFN Book 037 L Page 360 Parcel 050	
-60		POGRLY GRADED SAND WITH GRAVEL	Fownship 22 N Range 2 W Section 35	(6)
.70		PCORLY GRADED GRAVEL	Littende	
80	100	GRAY/BROWN CLAY WITH SAND AND GRAVEL		DEG MAN GEO
100	110	PODRLY GRADED SAND	LOCATION SKETCH	→ ACTIVITY W
110		POORLY GRADED SAND WITH FINE GRAVEL	į	WOODINGATION REPAIR
120		POORLY GRADED GRAVEL		Deuse
150		GRAVEL AND SAND WIYELLOW STICKY CLAY	[	- Capac Sovery
160	190	YELLOW CLAY WITH GRAVEL AND SAND	Į.	DESTROY Access
190	200	POORLY GRADED GRAVEL WISAND AND CLAY		GASTROIN Dyroboe Priter autor en a Merchant Unider 1650: OGCO 1065
200	230	YELLOW CLAY WITH SAND AND GRAVEL		PLANNED USES(v)
230	240	YELLOW SILTY CLAY		WATER SHIPPLY
240	250	YELLOW SILTY CLAY W/SAND AND GRAVEL	[S   8	Somesso Public Impagos scalatos
250	260	SMALL GRAVEL WITH SAND AND SILTY CLAY	\$ 8 P	Votation to ✓
260	270	POORLY GRACED GRAVEL WITH SAND		TEST MELL
270	280	POORLY GRADED GRAVEL		tatoriquip Protectings.
280	300	GRAVEL		HEAT SXCHANCS
300	300	GRAVEL WITH FINE SAND		GREST RUGH
310	340	GRAVEL		MAROR EXTRACTION
340	350	TUSCAN ROCK WITH GRAVEL AND SAND		9P44(01)(0
350	370	TUSCAN ROCK W/SANDSTONE, QUARTZ,	\$0.54	368603005
		OTHER METAMORPHICS, TUFF, BASALT, SANC		OFnER (\$420 Fr
370	380	COARSE SAND	Becorary 19 (ANY 5) WA CHATE & COMPANIE.	
380	450	TUSCAN AND METAMORPHIC RCK WISND, CLY	WATER LEVEL & VHILD OF COMPLI	ETED WELL
450	460	SILTSTONE WITH GRAVEL OUARTZ, RED	DEPTH TO PROT WATER IN PERSON SURFACE	i
		TCHERT, ÁND VÖLCÁNÍOS	DERIN OF STATE	
460	555	MIXED COLORED CLAY WITH GRAVEL	WATER LEVEL (H) Z DATE MEANAIRED	
Section Library	011111	HOLONG 125 Great	SOUMATED KELD 1 (APPARA PERF LYPS)	
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119	124	15	✓	SCH 40	2		
ZONE	2						

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١	46	80			<b>~</b>	#8 GRD \$AND
l	20	100		~		CHPS
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١	119	125		-		CHIPS
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ATTACHMENTS . . . Overage that Wan Combinate Diagrah. Geographical Flog 55 ŞelfAlater Chemical Analysis Taylor ATTACH ADDITIONAL PROPERTION IN TISASTL

 CERTIFICATION STATEMENT the antinograed itempy that the concern complete and a pointer to the security between once twist MAME\_EATON DRILLING CO. (PERSON ARM OR CORPORATION OF PERSON PARATES)

20 W KENTUCKY ACCRECA STATE OF THE STATE OF

CAAJDOCW 95636 133783 C57A 10/03.02 59478 S (\$1,00) ю-671 оные бом<u>аве</u>

Page 2 of 2

STATE OF CATHOGRAY

# WELL COMPLETION REPORT

Sofer to Destroy of Francisco. No. 726741

Owner's Well No. 7448-2

Date Work Regatt 8:26/2002  $E_{\rm talgd}$  9/6/2002

Local Permit Agency | GLENNIONTY REALTH DEPT | \_\_\_\_

GEOLOGIC 1000 - Permit Date 8/21/2002 Permit No. MW-139-02

 $|\underline{WNB}|$  CDS ONLY - 50 (ight fall  $n_{\rm t} \pm$ STATE WELL NOV STATION NO <u>j</u>ariosi PONTINGE. <u>গ্ল- সমূচ প্রটিনট্রী</u>

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			WATER LEVEL		FE WEAGUAGE	
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;			WEST		<u> </u>	Elements Public Lifequitor Sifeting
			1.			PLANNED CS(S(x)) WATER SUPPLY
						Procedures and Manages Enter 1986/LCG/C UCG1
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_						One (Specify)
						RCD 1/24T/05/89PA/P Drepat
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			Lauruge	-		
			Township 22 N	Range 2 W	Seestan 15	
_			APS Book 037	Page 360	Parcel (969	
į			City CA Cones GLENN			
		Y W/SAND AND GRAVE.		SOF CIRILET	75°M° EÖF (	0/₹ V V
555 575	GRAVEL	grant tige value is a	<u> </u>	WELL	LOCATION-	
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46	80			. 🗸	,#8 GRC ŞĄNO ∫
80	100		. "		CHIPS
100	119			. V	#8 GRO SAND
119	125				CHIPS

Grolagia ung W48 Commission Segmen Gabbaya ad Legista SchWaler Chambe, Analysis

ATTACHMENTS ...

AT FACE INDOORS IN DEPARTS ON HE IT ENTRY

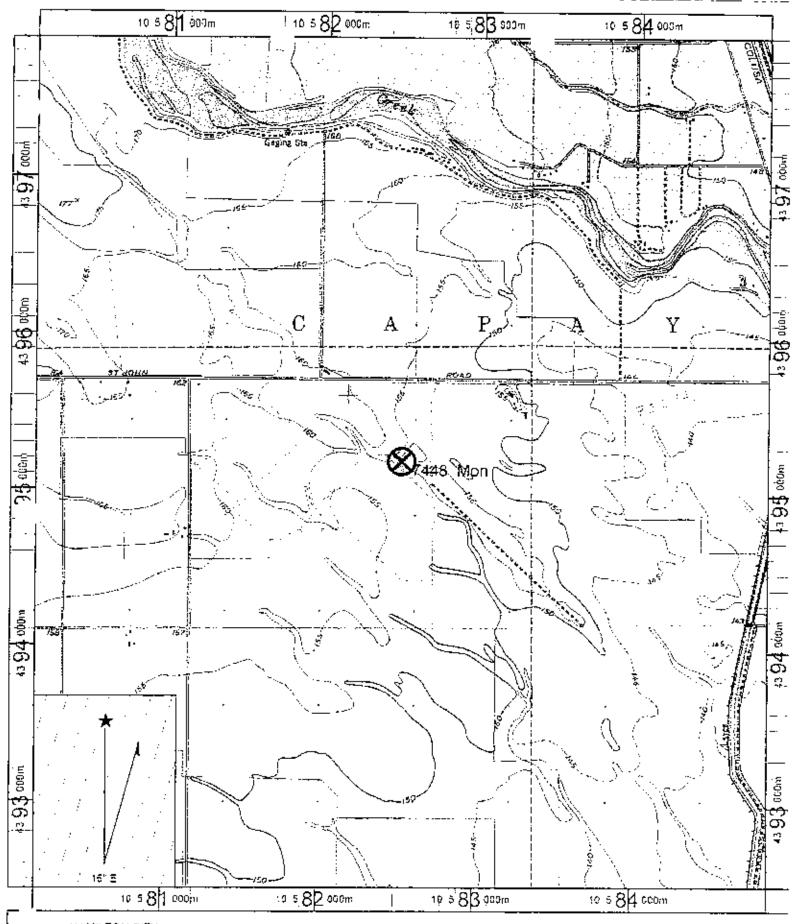
28 W. KENTUCKY ADURESS Digitar

 CERTIFICATION STATEMENT = the underlighed self-) tractice reports complete and accorded to the self-) by according also self-NAME - EATON DRIGGING CO (PERSON FIRM OR CORPORATION) (TYPED OR PRINCE).

WELL OFFICER SUT-COMEC SERVECENTAINS

WOODLAND CITY 10/03/02 CATE SIGNAC

95699 33783-C57A georginerase modesea



tame: HAMILTON CITY

Date: 8/15/2002 Scale: 1 inch equals 2000 feet Caption, Glenn Co. (St. Johns Farms) Job# 7448 Men APN: 037-350-06

Page	9	of	12
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WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E044112 Owner's Well No. 7987 \_, Ended7/28/2006 Date Work Began <u>7/12/2006</u> Local Permit Agency GLENN COUNTY HEALTH DEPT

	DIME	USE	ONI Y		no	NO	T F <u>I</u>	LL	IN .	
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		STATE	WEL	L NO.	STA	rion	NO.			
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_	LATITU	JDE			L	ONG	TUDE			
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			APN/	rrs/c	THER	2				

Permi	t No. IVI	W248-06 Permit Date 0/14/2000	
		GEOLOGIC LOG	
ORIENTAT	TION (🗸)	✓ VERTICAL — HORIZONTAL — ANGLE(SPECIFY)	
Order		DRILLING MOTARY FLUID MUD	
DEPTH SURF		DESCRIPTION	
Ft. to		Describe material, grain, size, color, etc.	MOST I LOCATION
0		TOP SOIL	Address .5 MI SOF RD 24 & .67 MI EOF RD S
3	20	SAND AND GRAVEL	City CA
20	110	3/4" GRAVEL WITH YELLOW BROWN CLAY	County GLENN
110	150	YELLOW BROWN CLAY	APN Book 023 Page 220 Parcel 005
150	290	YELLOW BROWN CLAY WITH SAND AND	Township 21 N Range 2 W Section 4 18
		GRAVEL	Latitude
290	330	LOOSE GRAVEL WITH SAND	DEG. MIN. SEC. DEG. MIN. SEC.
330		SOFT GRAY CLAY WITH SAND AND GRAVEL	LOCATION SKETCH ACTIVITY (\(\neq\))
460	500	BRITTLE YELLOW AND GRAY CLAY MIX WITH	MODIFICATION/REPAIR
		COARSE SAND	— Deepen
500	620	BRITTLE YELLOW CLAY WITH SAND AND	Other (Specify)
300	020	GRAVEL	
620	920	BRITTLE GRAY CLAY WITH SAND AND GRAVEL	— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
920	1200	SOFT SILTY GRAY CLAY WITH SAND STREAKS	l I
920	1200	SOLI SIELI GIVAL CEAL WILL OF THE STREET	PLANNED USES (∠) WATER SUPPLY
<u> </u>			
			Some stic — Public — Irrigation — Industrial
			MONITORING →
<u> </u>	·		TEST WELL CATHODIC PROTECTION
	÷ .		HEAT EXCHANGE
			DIRECT PUSH
			INJECTION
			VAPOR EXTRACTION
	_		SPARGING
			Illustrate or Describe Distance of Well from Roads, Buildings,
			Pences, 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
TOTAL	EDTH OF	BORING 1200 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE
TOTALD	EPTH OF	BORING 1200 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)
TOTAL D	EPTH OF	COMPLETED WELL 948 (Feet)	May not be representative of a well's long-term yield.

DEPTH		CASING (S)							DEPT	ГН		ANNULAR MATERIAL			
FROM SURFACE	BORE - HOLE		YPE	<u> </u>	a a		INTERNAL	GAUGE	SLOT SIZE	FROM SUI	RFACE	CE-	BEN-	TY	<u>PE</u>
Ft. to Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIF	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. to	Ft.	MENT		FILL ( <u>√</u> )	FILTER PACK (TYPE/SIZE)
ZONE 1				-	Ī						1 7 5 5 7 7 1 2 7 1 1 1 1 1 1	7.55			la saranggang a
+2.5 57	14	1				PVC F480	2.5	SCH 80				, 13			i the title is regard to the
57 67	14		√		Γ	PVC F480	2.5	SCH 80	.030				L.		
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ZONE 2		$\vdash$		1				÷							winderskingen in t
+2 165	- 14	1	-	<del>                                     </del>	<u> </u>	PVC F480	2.5	SCH 80			Me:	k+		دعو	

+2 165 14 V P	VC F480   2.5   SCH 80	1/ext 1+	age
ATTACHMENTS (\(\perceq\))	CERTIFICATIO		The state of the state of
Geologic Log	1, the undersigned, certify that this report is complete and accurate to	the best of my knowledge and belie	sf.
Well Construction Diagram	NAME EATON DRILLING CO.	D)	
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED 20 WEST KENTUCKY AVE	WOODLAND	CA 95695
— Soil/Water Chemical Analysis	ADDRESS AM	CITY	STATE ZIP
Other	Signed Mark Damon	09/05/06	C57 A HIC -

STATE OF CALIFORNIA

# WELL COMPLETION REPORT Refer to Instruction Pamphlet

Page	10	of	12

No. E044112

Owner's Well No. 7987 Date Work Began <u>7/12/2006</u>

Ended 7/28/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW248-06 Permit Date 6/

Permit Date 6/14/2006

STATE WELL NO./ STATION NO. LATITUDE

Permi	L 140. 141	GEOLOGIC LOG	-	
ORIENTAT	rion (≰)	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)		
		DRILLING METHOD ROTARY FLUID MUD		
DEPTH SURF		DESCRIPTION		
Ft. to	Ft.	Describe material, grain, size, color, etc.	WELL LOCATION—	
0	3	TOP SOIL	Address .5 MI SOF RD 24 & .67 MI EOF RD	S
3		SAND AND GRAVEL	City CA	
20	110	3/4" GRAVEL WITH YELLOW BROWN CLAY	County GLENN	
110	150	YELLOW BROWN CLAY	APN Book 023 Page 220 Parcel 005	
150	290	YELLOW BROWN CLAY WITH SAND AND	Township 21 N Range 2 W Section 4	
		GRAVEL	Totitudo	1 1
290		LOOSE GRAVEL WITH SAND		DEG. MIN. SEC.
330		SOFT GRAY CLAY WITH SAND AND GRAVEL	LOCATION SKETCH	ACTIVITY (∠)
460		BRITTLE YELLOW AND GRAY CLAY MIX WITH	NORTH -	✓ NEW WELL
400	500	COARSE SAND		MODIFICATION/REPAIR  —— Deepen
500		BRITTLE YELLOW CLAY WITH SAND AND		Other (Specify)
500	620			
		GRAVEL		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
620		BRITTLE GRAY CLAY WITH SAND AND GRAVEL		Under "GEOLOGIC LOG")
920	1200	SOFT SILTY GRAY CLAY WITH SAND STREAKS		PLANNED USES (∠)
			t.	WATER SUPPLY
	-		EST.	Domestic Public Industrial
			Will EA	MONITORING →
				TEST WELL
				CATHODIC PROTECTION
				HEAT EXCHANGE
<del>                                     </del>		1		DIRECT PUSH
	<del></del>		·	INJECTION —
				VAPOR EXTRACTION
			south -	SPARGING REMEDIATION
			Illustrate or Describe Distance of Well from Roads, Buildings,	OTHER (SPECIFY)
			Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (GPECIFT)
			WATER LEVEL & YIELD OF COMPL	ETED WELL
			DEPTH TO FIRST WATER (Ft.) BELOW SURFAC	E
<del>                                     </del>			DEPTH OF STATIC	
			WATER LEVEL (Ft.) & DATE MEASURED _	
<u> </u>		1200	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 1200 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
TOTAL D	EPTH OF	COMPLETED WELL <u>948</u> (Feet)	May not be representative of a well's long-term yield	d

DEPTH		CASING (S) DEPTH						тн	ANNULAR MATERIAL				
FROM SURFACE	BORE - HOLE	TYP	E (스)					FROM St				TY	PE
Ft. to Ft.	DIA. (Inches)	BLANK	CON- PUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	) Ft.	# <u>#</u> 3	BEN- TONITE	FILL (Y)	FILTER PACK (TYPE/SIZE)
165 175	14			PVC F480	2.5	SCH 80	.030	0	41	✓			SAND SLURRY
175 269	14	1		PVC F480	2.5	SCH 80		41	45		✓		BENTONITE C
269 279	14	V		PVC F480	2.5	SCH 80	.030	45	99		,	✓	SRI#8 SAND
279 289	14	1		PVC F480	2.5	SCH 80		99	104		_		BENTONITE C
ZONE 3	5							104	130			~	SRI#8 SAND
+1.5 673.5	5 14	1	++-	PVC F480	2.5	SCH 80		130	135		<b></b>		BENTONITE C

ATTACHMENTS (∠)
Geologic Log
— Well Construction Diagram
Geophysical Log(s)
— Soil/Water Chemical Analysis
Other
TACH ADDITIONAL INCODMATION IS IT SYISTS

	CERTIFICATION	STATEMENT	
report is con	plete and accurate to the	best of my knowledge and b	elief

WELL DRILLER/AUTHORIZED REPRESENTATIVE

WOODLAND CA 09/05/06 DATE SIGNED

CA SUCCESTATE ZIP

C57 A HIC - 133783

STATE OF CALIFORNIA

# WELL COMPLETION REPORT Refer to Instruction Pamphlet

Page	11	of	12	
1 450		O.	~~	

Owner's Well No. 7987

No. E044112

Ended 7/28/2006 Date Work Began 7/12/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW248-06
Permit Date 6/

Permit Date 6/14/2006

NOT FILL USE ONLY STATE WELL NO./ STATION NO. LONGITUDE LATITUDE APN/TRS/OTHER

Perm	it No. <u>M</u>	W248-06 Permit Date 6/14/2008	
	·····	GEOLOGIC LOG	
ORIENTA'	TION (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)	
		DRILLING METHOD ROTARY FLUID MUD	
DEPTH SURF		DESCRIPTION	
Ft. to		Describe material, grain, size, color, etc.	WELL LOCATION-
0		TOP SOIL	Address .5 MI SOF RD 24 & .67 MI EOF RD S
3		SAND AND GRAVEL	City CA
20	110	3/4" GRAVEL WITH YELLOW BROWN CLAY	County GLENN
110		YELLOW BROWN CLAY	APN Book 023 Page 220 Parcel 005
150	290	YELLOW BROWN CLAY WITH SAND AND	Township 21 N Range 2 W Section 4
		GRAVEL	Latitude
290	330	LOOSE GRAVEL WITH SAND	DEG. MIN. SEC. DEG. MIN. SEC.
330	460	SOFT GRAY CLAY WITH SAND AND GRAVEL	LOCATION SKETCH ACTIVITY (\(\neq\)) -
460		BRITTLE YELLOW AND GRAY CLAY MIX WITH	MODIFICATION/REPAIR
		COARSE SAND	—— Deepen
500	620	BRITTLE YELLOW CLAY WITH SAND AND	— Other (Specify)
	-	GRAVEL	DESTROY (Describe
620	920	BRITTLE GRAY CLAY WITH SAND AND GRAVE	DESTROY (Describe Procedures and Materia Under "GEOLOGIC LOG
920		SOFT SILTY GRAY CLAY WITH SAND STREAKS	
			WATER SUPPLY
			Under the second
			MONITORING -
-			TEST WELL.
			CATHODIC PROTECTION
			HEAT EXCHANGE
			DIRECT PUSH
			INJECTION
			VAPOR EXTRACTION — SPARGING —
			SOUTH REMEDIATION
			Hustrata on Describe Distance of Well from Roads Buildings
	<u> </u>		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
mom it s	TIPITITI CT	DORDIG 1200	ESTIMATED YIELD * (GPM) & TEST TYPE
		BORING 1200 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft)
TOTAL	EPTH OF	COMPLETED WELL 948 (Feet)	May not be representative of a well's long-term yield.

DEF	тн						C.A	ASING (S)			DE	PTH	ANNULAR MATERIAL			
FROM SU		BORE - HOLE	Т	YPE	∃ (:	۷)						URFACE			TY	PE
		DIA.	ANK	SCREEN	÷8	PIPE	MATERIAL /	INTERNAL	GAUGE	SLOT SIZE			CE-	BEN-	<u> </u>	FILTER PACK
Ft. to	) Ft.	(Inches)	1	뽔	S S	J .	GRADE	DIAMETER!	OR WALL THICKNESS	IF ANY (Inches)	Ft.	to Ft.	MENT	TONITE		(TYPE/SIZE)
			岡	Ŋ	7	FE		(					<u>(√)</u>	(₹)	$(\mathcal{X})$	
673.5	683.5	14	ļ	<b>√</b>	1		PVC F480	2.5	SCH 80	.030	135	327			~	SRI#8 SAND
683.5	693.5	14	1	1			PVC F480	2.5	SCH 80		327	335		✓		BENTONITE C
693.5	703.5	14	Г	1	1		PVC F480	2.5	SCH 80	.030	335	647	1			SAND SLURRY
703.5	713.5	14	1	$\top$	1	T	PVC F480	2.5	SCH 80	!	647	653		V		BENTONITE C
ZONE	4				T	Т					653	715	,	1	7	SRI#8 SAND
+1	928	14/8-3/4	7	┪	<del> </del>	$\vdash$	PVC F480	2.5	SCH 80		715	736		<b>-</b>		BENTONITE C

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

— Other .		
ATTACH ADDITIONAL	INFORMATION	IE IT EVISTS

CERTIFICATIO	N STATEME	NT

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

ADDRESS

Signed

WELL DRILLER/AUTHORIZED REPRESENTATIVE

D9/05/06

DATE SIGNED

ZIP

STATE C57 A HIC - 133783 C-57 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

STATE OF CALIFORNIA

# WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page	12	٥f	12
1 420	14	υı	

Owner's Well No. 7987

No. E044112

Date Work Began 7/12/2006

. Ended 7/28/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW248-06 Permit Date 6

	DWR	USE	ONLY		DO	NOT	FILL	<u> IN</u>	
		$\overline{1}$							<u> </u>
STATE WELL NO./ STATION NO.									
	LATIT	UDE			L	ONGITU	IDE		
				Ĺ	1		_1_	1 1	
APN/TRS/OTHER									

Permi	t No. M	W248-06 Permit Date 6/14/2006	APN/TRS	OTHER
		GEOLOGIC LOG	•	
ORIENTAT	'ION (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING MOTARY FLUID MUD		
DEPTH SURF		DESCRIPTION		
Ft. to	Ft.	Describe material, grain, size, color, etc.	TOTAL TOTAL TOTAL	
0	3	TOP SOIL	Address .5 MI SOF RD 24 & .67 MI EOF RD	) S
3	20	SAND AND GRAVEL	City CA	
20	110	3/4" GRAVEL WITH YELLOW BROWN CLAY	County GLENN	
110	150	YELLOW BROWN CLAY	APN Book 023 Page 220 Parcel 005	
150	290	YELLOW BROWN CLAY WITH SAND AND	Township 21 N Range 2 W Section 4	
		GRAVEL	Latitude	1 1
290	330	LOOSE GRAVEL WITH SAND	DEG. MIN. SEC.	DEG. MIN. SEC.
330	460	SOFT GRAY CLAY WITH SAND AND GRAVEL	LOCATION SKETCH NORTH	ACTIVITY (∠) —
460	500	BRITTLE YELLOW AND GRAY CLAY MIX WITH	North	MODIFICATION/REPAIR
		COARSE SAND		MODIFICATION/REPAIR  —— Deepen
500	620	BRITTLE YELLOW CLAY WITH SAND AND		Other (Specify)
i		GRAVEL		DECEMBER 1
620	920	BRITTLE GRAY CLAY WITH SAND AND GRAVEL		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
920	1200	SOFT SILTY GRAY CLAY WITH SAND STREAKS		PLANNED USES ( $\angle$ )
				WATER SUPPLY
			WEST EAST	Domestic Public Industrial
			N m	MONITORING →
				TEST WELL
	`	·		CATHODIC PROTECTION
1			•	HEAT EXCHANGE
				DIRECT PUSH
				INJECTION
			•	SPARGING
-			south -	REMEDIATION
			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.	OTHER (SPECIFY)
			WATER LEVEL & YIELD OF COMPL	ETED WELL
i			DEPTH TO FIRST WATER (Ft.) BELOW SURFAC	E
			DEPTH OF STATIC WATER LEVEL(Ft.) & DATE MEASURED	
			ESTIMATED YIELD * (GPM) & TEST TYPE	
TOTAL DE	EPTH OF I	BORING 1200 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
		COMPLETED WELL 948 (Feet)	May not be representative of a well's long-term yield	i i
			ATLANT THE SE TEPTEDETHALITY OF A WOULD LOTIS TOTHE YEST	··

DEPTH	CASING (S)					DEPTH		ANNULAR MATERIAL							
FROM SURFACE		BORE - HOLE	T		<u>(&lt;)</u>	-				FROM	SURFACE			T <u>\</u>	PE
Ft. to Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR		INTERNAL DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT (🗹)	BEN- TONITE	Fill (⊻)	FILTER PACK (TYPE/SIZE)	
928 938	8-3/4		✓		PVC F480	2.5	SCH 80	.030	736	902	1			SAND SLURRY	
938 948	8-3/4	1	1		PVC F480	2.5	SCH 80		902	914		✓		BENTONITE C	
		Г							914	964			✓	SRI#8 SAND	
									964	977		V	,	BENTONITE C	
									977	1200			V	NATIVE FILL	

_	ATTACHMENTS	(⊻)

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

\_ Other ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICA	TION	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

ADDRESS WOODLAND

WELL DRILLER/AUTHORIZED REPRESENTATIVE

09/05/06

STATE ZIP C57 A HIC - 13378

DWR 188 REV. 11-97

ORIGINAL File with DWR	WULL COMPLETIO		<u> </u>	_
Aug II and Onder's Well No. 1 (276 <u>122)   4</u>	No. 801	406	1 <u>777444</u> 61 824	4-co- 720
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	mon area of a of Sall good		<u>32 % 90 mor-</u>	<del></del>
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Anna Carana (Anna)	1 PO BOX 47	l <b>.</b>	ZAMOTa,	CA 95698,
	Landre	Borcher	s 1/25/n	1 5/2268
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# Department of Water Resources /изрег Deep



# Casing

# Deep Well

Project Fo	Borejiole Dia.	Lype	Material Grade	Inter <u>nai Dia</u>	Gaarge	530t S <u>aze</u>
473-450		Blank	Steel	2"	Sch 40	
452 - 442		Screen	Steel	2".	Scn 40	020
4.42 = =		Slank	Steel	2"	Sch 40	
203		Blank	Steel	l''	Sch 40	
Middle~Well						
Fig. to Fi	Borchote Dia	Type	Material Grade	Internal Dia	Сище	Slot Size
:53 - 132		Blank	Steel	2"	Sch 40	
132 - 122		Screen	Steel	2"	Sch 40	020
12.7 = -		Blank	Steel	2"	5ah 40	
143		8lank	Steel	1"	Sep 40	

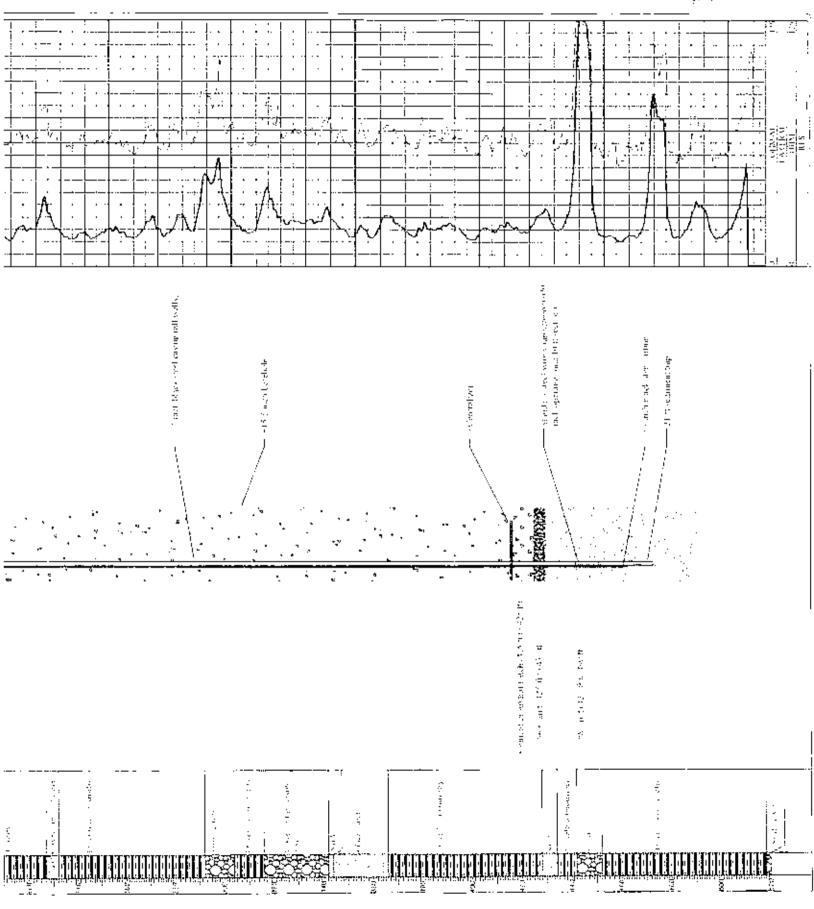
# Shallow Wall

	F) (0 f)	Boreliole Dia.	NO.	Material Gaide	<u>intern</u> ai <u>Dia</u>	Gauge	, Sjer Siza
/	F5 = 54		Blank	Steel	2"	Sch 40	
	54 - 44		Screen	Steel	1"	Sch 40	0.25
	44 - 7		<b>Blank</b>	Steel	2"	Sch 40	
	65		Blank	Steel	§	Sch 40	

# Annular Material

 $\underline{F_S = to \cdot FL} = \underline{Type}$ 

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STATE OF CALIFORNIA RESPONDED SCHOOLS AND STATE RESPONDED STATE STATE OF WATER RESPONDED STATE S	And agen up one to a feet and agen up one to a feet and and agen up one to a feet and agen up one to a feet and agen up one to a feet and agen up one to a feet and agen up one to a feet and agen up one to a feet and agen and agen agen at a feet and agen and agen agen agen agen agen agen agen agen
104 P.C	Management of the management o



AUG 08 2002 WELL COMPLETION REPORT

STATE OF CALIFORNIA

Refer to Instruction Pamphlet

Page 1 o	しつ		
Owner!	Well	No	7450

Permit No. MW134-02

№.726724 ABC

Date Work Began 7/11/2002 Local Permit Agency GLENN COUNTY HEALTH DEPT.

. Ended 7/19/2002

Permit Date 6/25/2002

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DWR USE ONLY DO NOT FILL IN

GEOLOGIC LOG ORIENTATION (土) ✓ VERTICAL \_\_\_\_ HORIZONTAL \_\_\_ ANGLE \_ DRILLING REVERSE \_ FLUID WATER DEPTH FROM DESCRIPTION SURFACE Describe material, grain, size, color, etc. to Address .4 MI N OF C/R 33 & W OF C/R 20 BROWN/YELLOW CLAY 0 36 STICKY BROWN/YELLOW CLAY 20 City CA 36 48 PALE OLIVE CLAY County GLENN 60 DARK YELLOW/BROWN CLAY 48 Parcel 010 APN Book 023 \_\_\_ Page 190 60 80 SUBANGULAR TO ROUNDED GRAVEL Township 21 N Range 2 W Section 33 ጸበ 100 SILTY SANDY CLAY Latitude MIN. DEG. MIN. 100 133 SILTY SANDY CLAY WITH ROUNDED GRAVEL SEC DEG SEC LOCATION SKETCH -ACTIVITY (∠) 160 POORLY GRADED, ROUNDED TO 133 NORTH ✓ NEW WELL SUBROUNDED GRAVEL MODIFICATION/REPAIR 190 DUSKY YELLOW/BROWN SILTY CLAY 160 --- Deepen ---- Other (Specify) 209 DUSKY YELLOW/BROWN SILTY CLAY WITH 190 SIL AND SAND DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG" 209 229 MEDIUM BROWN/YELLOW CLAY 229 240 POORLY SORTED GRAVEL WITH VERY PLANNED USES (∠) COARSE SAND WATER SUPPLY \_ Domestic \_\_\_ - Public 240 250 GRAVEL Irrigation \_\_\_ Industrial 250 260 : YELLOW/BROWN CLAY MONITORING --260 270 BLUE/GREEN CLAY TEST WELL. 270 280 GRAVELLY CLAY CATHODIC PROTECTION 280 290 | BLUE/GREEN CLAY AND GRAVELLY SAND HEAT EXCHANGE DIRECT PUSH 310 BLUE/GREEN CLAY 290 INJECTION 310 320 GRAVEL AND CLAY VAPOR EXTRACTION 330 BLUE/GREEN SILTY CLAY 320 SPARGING 330 340 CLAY AND GRAVEL SOUTH REMEDIATION . 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, OTHER (SPECIFY) \_ 430 BLUE/GREEN CLAY 340 EXTENSOMETE 430 469 BLUE/GREEN CLAY WITH GRAVEL AND SAND 469 529 GREEN/BLUE CLAY WATER LEVEL & YIELD OF COMPLETED WELL 529 549 GRAVEL AND SAND DEPTH TO FIRST WATER (Ft.) BELOW SURFACE DEPTH OF STATIC 589 VERY STICKY BLUE/GREEN CLAY WITH FINE S 549 WATER LEVEL (Ft.) & DATE MEASURED 689 BLUE/GREEN CLAY WITH COARSE SAND 589 ESTIMATED YIELD \* .... \_\_ (GPM) & TEST TYPE TOTAL DEPTH OF BORING 1020 TEST LENGTH\_\_\_\_\_ (Hrs.) TOTAL DRAWDOWN\_ TOTAL DEPTH OF COMPLETED WELL 974.2 May not be representative of a well's long-term yield.

	EPT		BODE					CA	CASING (S)				DEPTH			ANNULAR MATERIAL			
FROM SURFACE			BORE - HOLE	TYPE (<)							FROM SI	JRFACE			TY	PΕ			
Ft. 1	to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	NUG 1	(X)	(V)	FILL ( <u>✓</u> )	FILTER PACK (TYPE/SIZE)		
MON	1	1										0	40	<b>✓</b>			SAND SLURRY		
0	)	161.1	36/18					ACCESS TB	1	SCH 40		0	95,5		<b>V</b>		HALLIBURTON		
0	וַ	140	36/18	1	Ī			BLCK PIPE	2	SCH 40		95.5	210			1	#8 GRD SAND		
140	1	150	18		~			STL STEEL	2		.020	210	507.5		~		HALLIBURTON		
150	•	171.1	18	<b>√</b>				BLCK PIPE	2	SCH 40		507.5	577			~	#8 GRD SAND		
MOM	1	2										577	796		1		HALLIBURTON		

 ATTACHMEN	TS (∠)
 Geologic Log	
164 11 0	

\_\_ Other

DWR 188 REV. 11-97

Well Construction Diagram

Geophysical Log(s)

--- Soil/Water Chemical Analysis

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

	CERTIFICATION	STATEMENT
• *	CENTIFICATION	DIAMETER AND INTERNET

I, the undersigned, certify that this	report is complete and accura	ate to the best of my knowledge ar	ıd belief.

NAME EATON DRILLING CO.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. KENTUCKY WOODLAND 95695 Mark STATE 08/07/02 133783-C57A Lamon

C-57 LICENSE NUMBER

	ORIGINA			AFIC	. 0 8		000	STATE	OF CALIFO	ORI	VIA		DWR.	USE	ONLY -	DO	NOT FILL IN
	File with			AUU	00	Δ	WELL	COMP	PLETI( Instruction	$\sum_{Pm}$	N REPOR	T		STA	TE WELL N	IO/STAT	ION NO.
	Page 2 of 3 Owner's		7450					•	·· <b>72</b> 6		•			1		1	
	Date Work			02		E.	nded 7/19/20	002	120	•	<b>4</b> 7		LATITU	DE		LC	DNGITUDE
_				SIENN	COL	EI NT	Y HEALTH	DEPT						-	1   1		
	Permit	No. M	W134-0	2			Permit	Date 6/2	25/2002			_			APN/TRS	S/OTHER	
		- 101	·	GEOL	OGIC	L	OG Permit			7							
	ORIENTAT	ION (≰)	_ <b>-</b> VE	RTICAL	H	ORIZ	ONTAL/	ANGLE	_(SPECIFY)								
	DEPTH	` ′	DRILLING METHOD	REV	ERSE		FL	UID WAT	ER								
	SURF				D	ES	CRIPTION										
	. Ft. to	Ft. 705	GRAVE		e mate	riai,	, grain, size	, color, el	c,	+	Address .4 MI N		WELL,	LQC	CATION		
	705		BLUE/		V CLA	Y	<del></del>					I OF	- C/R 33 & V	V OF	- C/R S	<del></del>	
	780						RAVEL ANI	D COARS	SE SAND		City <u>CA</u> County <u>GLENN</u>						
	790		BLUE/0							۱ ۱	APN Book 023		Dawa 100		1 010	·	
	850	870	POORI	LY SO	RTED	SL	BANGULA	R TO R	DUNDED	기ㅜ	Corregation 21 N						
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į	1000	1020	SAND	AND G	RAVE	<u>:L</u>				-						ļ	— Other (Specify)
			<u> </u>							-							DESTROY (Describe Procedures and Materials Jnder "GEOLOGIC LOG"
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			<u> </u>					· · · · · · · · · · · · · · · · · · ·		-							NNED USES(∠) RSUPPLY
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					····			<del></del>		-   h	Fences, Rivers, etc. and necessary. PLEASE B	attaci E AC	n a map. Use additi CCURATE & CO	onat p MPLI	ETE.		KTENSOMETE
			!							Г	WATE	R LI	EVEL & YIEL	D O	F COMP	LETED	WELL
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								44.0.4.4.4.4.4.4.		1	NATER LEVEL		٠.				
	TOTAL DE	PTH OF	BORING .	1020	(Fe	et)					ESTIMATED YIELD * TEST LENGTH						
	TOTAL DE						(Feet)				May not be repre						
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	DEPT FROM SUF		BORE - HOLE	TYPE	(1)		C.A	ASING (S)	<del>' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </del>		T		DEPTH ROM SURFACE	-	ANN		MATERIAL PE
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	Ft. to	Ft.	(Inches)	BLANK	CON- DLICTOR FILL PIPE		GRADE	DIAMETER (Inches)	OR WAL		IF ANY (Inches)		Ft. to Ft.	- 1		1	FILTER PACK (TYPE/SIZE)
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_	550	571.1	18	1			CK PIPE	2		40	)						
3]	EXT	1	26/40				ALC BIBE		06:	4.5						ļ	
	0	869	36/18			Bl	CK PIPE	4	SCH	40		<u> </u>				<u> </u>	
1		ATTACH Geologic	IMENTS Log	(⊻) -	<del></del>		I, the undersia	med certify th	at this report	is c	CERTIFICA complete and accurate		N STATEME best of my knowle		nd belief		
	l =	Well Con	struction Di	agram			NAME EA	ATON DRI	LLING CC	)				u			
	) —		cal Log(s)	Analyeie			20 W. KE	NTUCKY	JK CORPOR	ATIO	ON) (TYPED OR PRI	NIEC	) WOODL	AND	<u> </u>	CA	95695
	$\overline{}$	Other	. Chambal	, maryoro		.	ADDRESS	m / I	amion				CITY		07/02	STATE	ZIP 133783-C57A
	ATTACH ADD	ITIONAL IN	IFORMATIO	N, IF IT E	XISTS.		Signed/_ WEL			R	EPRESENTATIVE				SIGNED		C-57 LICENSE NUMBER

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS. DWR 188 REV. 11-97

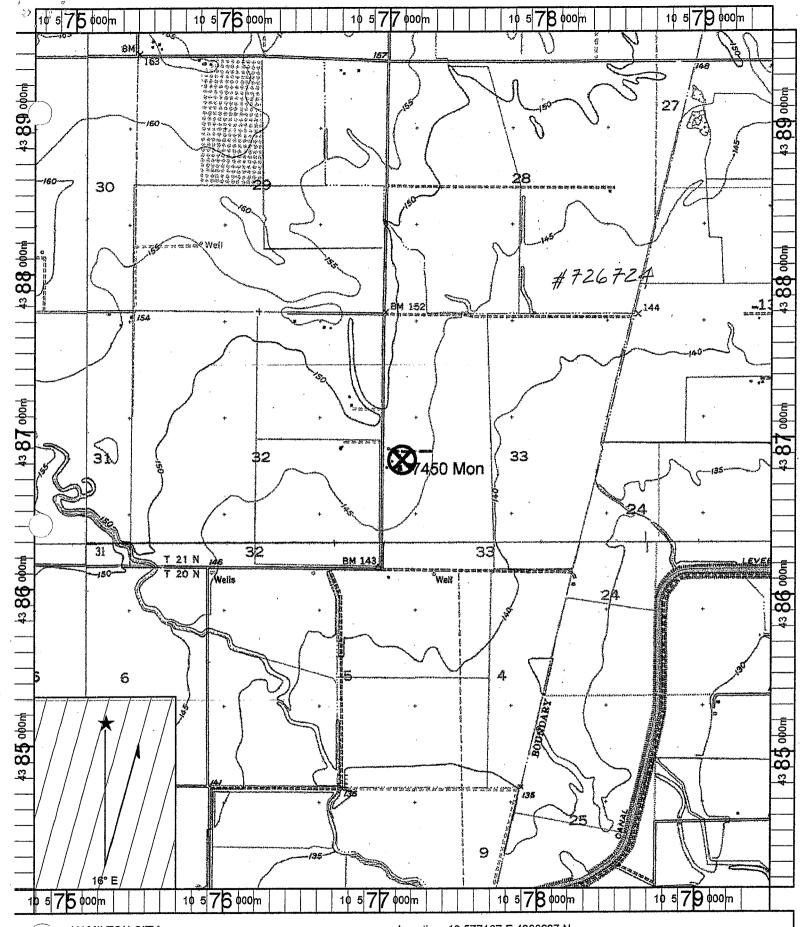
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AUG 08 2002 ORIGINAL DWR USE ONLY -- DO NOT FILL IN STATE OF CALIFORNIA File with DWR WELL COMPLETION REPORT STATE WELL NO./ STATION NO. Refer to Instruction Pamphlet Page 3 of 3 No. 726724 Owner's Well No. 7450 \_\_\_\_\_, Ended 7/19/2002 LATITUDE LONGITUDE Date Work Began 7/11/2002 Local Permit Agency GLENN COUNTY HEALTH DEPT APN/TRS/OTHER Permit No. MW134-02 Permit Date 6/25/2002 GEOLOGIC LOG VERTICAL \_\_\_\_ HORIZONTAL \_\_\_ ANGLE \_\_\_\_ (SPECIFY) ORIENTATION (✓) DRILLING REVERSE - FLUID WATER DEPTH FROM DESCRIPTION SURFACE Describe material, grain, size, color, etc. to Address 4 MI N OF C/R 33 & WOF C/R 20 BROWN/YELLOW CLAY 0 36 STICKY BROWN/YELLOW CLAY 20 City CA 48 PALE OLIVE CLAY 36 County GLENN 60 DARK YELLOW/BROWN CLAY 48 APN Book 023 Page 190 Parcel 010 80 SUBANGULAR TO ROUNDED GRAVEL 60 Township 21 N \_\_ Range 2 W Section 33 80 100 SILTY SANDY CLAY Latitude DEG. MIN. DEG MIN 133 SILTY SANDY CLAY WITH ROUNDED GRAVEL SEC SEC. 100 LOCATION SKETCH -ACTIVITY (∠) 160 POORLY GRADED, ROUNDED TO 133 NORTH ✓ NEW WELL SUBROUNDED GRAVEL MODIFICATION/REPAIR 190 DUSKY YELLOW/BROWN SILTY CLAY 160 - Deepen --- Other (Specify) 209 DUSKY YELLOW/BROWN SILTY CLAY WITH 190 SIL AND SAND **DESTROY** (Describe 209 229 MEDIUM BROWN/YELLOW CLAY Procedures and Materials Under "GEOLOGIC LOG" 229 240 POORLY SORTED GRAVEL WITH VERY PLANNED USES(∠) COARSE SAND WATER SUPPLY Domestic \_\_ Public 240 250 GRAVEL Irrigation \_\_\_ Industrial 260 YELLOW/BROWN CLAY 250 MONITORING ---260 270 BLUE/GREEN CLAY TEST WELL 270 280 GRAVELLY CLAY CATHODIC PROTECTION 280 290 BLUE/GREEN CLAY AND GRAVELLY SAND HEAT EXCHANGE. DIRECT PUSH. 290 310 BLUE/GREEN CLAY INJECTION . 320 GRAVEL AND CLAY 310 VAPOR EXTRACTION . 320 330 BLUE/GREEN SILTY CLAY SPARGING . 330 SOUTH 340 CLAY AND GRAVEL REMEDIATION . 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. OTHER (SPECIFY) \_ 340 430 BLUE/GREEN CLAY EXTENSOMETE 430 469 BLUE/GREEN CLAY WITH GRAVEL AND SAND WATER LEVEL & YIELD OF COMPLETED WELL 469 529 GREEN/BLUE CLAY 529 549 GRAVEL AND SAND DEPTH TO FIRST WATER (Ft.) BELOW SURFACE DEPTH OF STATIC 589 VERY STICKY BLUE/GREEN CLAY WITH FINE SA 549 WATER LEVEL (Ft.) & DATE MEASURED 689 BLUE/GREEN CLAY WITH COARSE SAND 589 ESTIMATED YIELD \* \_\_\_\_ \_\_\_ (GPM) & TEST TYPE TOTAL DEPTH OF BORING 1020 TEST LENGTH ..... (Hrs.) TOTAL DRAWDOWN \_\_ TOTAL DEPTH OF COMPLETED WELL 974.2 May not be representative of a well's long-term yield.

DE	PTH		BORE - HOLE					ĊA	ASING (S)			DEI FROM SI	PTH .		ANNI	ULAR	MATERIAL
FROM	FROM SURFACE				YPE				INTERNAL	GAUGE	SLOT SIZE	FROM S			( <u></u>		PE
Ft. 1	to I	Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. to	.IAUG	NENT (X)	BEN- TONITI	FILL ( <u>Z</u> )	FILTER PACK (TYPE/SIZE)
869		890	18		<b>√</b>			MILLSLOT	4			0	40	✓			SAND SLURRY
890	9	74.2	18	<b>√</b>				BLCK PIPE	4	SCH 40		0	95.5		✓		HALLIBURTON
												95.5	210				#8 GRD SAND
												210	507.5		<b>V</b>		HALLIBURTON
	Ī											507.5	577		1	<b>V</b>	#8 GRD SAND
												577	796				HALLIBURTON

ATTACHMENTS (∠)  — Geologic Log  Well Construction Diagram	I, the undersigned, certify that this report is complete and accurate to the beautiful NAME EATON DRILLING CO.		
Geophysical Log(s) — Soil/Water Chemical Analysis	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED) 20 W. KENTUCKY	WOODLAND	CA 95695
— Other ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	ADDRESS  Signed WELL DRILLER/AUTHORIZED REPRESENTATIVE	08/07/02 DATE SIGNED	STATE ZIP 133783-C57A C-57 LICENSE NUMBER
DUD 100 DEV 11 07	(A) ODAGE IC NEEDED LIGE NEVE CONCECUTIVE V NUMBER	ED FORM	

١



ne: HAMILTON CITY

∟\_(e: 8/7/2002

Scale: 1 inch equals 2000 feet

Location: 10 577107 E 4386837 N

Caption: Glenn County Job# 7450 Mon APN: 23-19-1

# STATE OF CALIFORNIA - RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES NORTHERN DISTRICT

PROJECT Glenn County AB 303 Monitoring Well Project FEATURE Extensometer/Triple Completion Monitoring Well LOCATION Glenn County, County Road S and County Road 30

HOLE NUMBER GC\_AB 303-1 TOTAL DEPTH 1020 ft 7/12/02 DATE STARTED

NUMBER OF COMPLETIONS \_\_3\_ TYPE OF HOLE Reverse Rotary

CONTRACTOR

DRILL FOREMAN Gary From

UTM COORDINATES 577199, 4387045 NAD 83

а

DATE COMPLETED 7/24/02

COMMENTS

TYPE OF RIG INSPECTED BY Test hole drilled to 1020 ft.; well

36 in. Borehole Bentonite Cement Grout (0-36 ft.) 24 in. Black Steel Conductor Casing 95.5 ft 2 in. Black Steel Casing 140 ft 10 ft. Wire Wrap Stainless Steel Screen 0.02 in. Opening #8 Sand 150 ft. 161.1 ft 1 in. Air-Lift Access 171.1 ft 20 ft. Sediment Trap 210 ft 18 in. Diameter Borehole 2 in. Black Steel Casing 1 in. Air-Lift Access Bentonite 328 ft. 458.2 ft.: 4 in. casing 16.0 ft. Compression Section: 4 in. casing 461.3 ft.: 2 in. casing 15.4 ft. Compression Section: 2 in. casing 74.2 ft.: 4 in. casing 476.7 ft.: 2 in. casing 10 ft. Wire Wrap Stainless Steel Screen 507.5 ft 0.02 in. Opening 540 ft #8 Sand 550 ft. 571.1 ft 20 ft. Sediment Trap 577 ft 4 in. Black Steel Casing Bentonite 15.8 ft. Compression Section 747.9 ft 763.7 ft 796 ft Mill Slot Well Screen 869 ft #8 Sand 890 ft. 929.3 ft Bentonite with 25% Lime 974.2 ft 1020 ft.

Q

#726724

## STATE OF CALIFORNIA THE RESOURCES AGENCY

Do not fill in

## DEPARTMENT OF WATER RESOURCES WATER WELL DRILLERS REPORT

No. 315494

e of Intent No.	State Well No.
Local Permit No. or Date <u>B5768</u>	Other Well No. 90215-1
Educative limit No. of Date	(12) WELL LOG: Total depth 155 ft. Completed depth 145 ft.
	from ft. to ft. Formation (Describe by color, character, size or material)
	0 - 15 Brn sandy clay
(2) LOCATION OF WELL (See instructions):	15 - 25 Brn sandy clay and gravel
(=)	25 - 34 Grey clay and sand
	34 - 40 Clay
Well address if different from above	40 - 55 Clay sand and gravel
· -	55 - 68 Gravel <b>(</b>
Distance from cities, roads, railroads, fences, etc.  APN#: 23-08-041	68 - 130 Gravel and CARY
AFN#: 25-00-041	130 - 155 Graves
	- 1
(3) TYPE OF WORK:	- ^ \
See Attached   New Well \( \frac{1}{2} \) Deepening [	- \\
	-/
1	
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Destruction (Describe destruction materials and pro	(1)
cedures in Item 12)	
(4) PROPOSED USE:	V- C. (S)
Domestic	
Irrigation	4 // 205/
Industrial	Q-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Test Well	
Municipal	
Other	
WELL LOCATION SKETCH (Pescibe) Monitorin	-(0)
	1 />- (*)
11 17 1441	
1/3 (2) 1/3	
Cable Air Diameter of bore 100 to 155	
Other Bucket Recked from 10 to 155	
(7) CASING INSTALLED: (8) PERPORATIONS:	9 -
Steel Plastic Oncrete Type of perforation or size of serven	_
From The Dia. Gage or Room To Slot	_
ft. ft. wall to size	_
0 120 6 3/16 120 140 .050	) –
140 145 6 3/16	_
140 143 0 3/10	_
(9) WELL SEAL:	
Was surface sanitary seal provided? Yes No I If yes, to depth 110	it — Y (SD)
A	ft
Method of sealing	Work started 3-22 19 89 Completed 3-24 19 89
(10) WATER LEVELS:	WELL DRILLER'S STATEMENT: 153
· ·	This well was drilled under my jurisdiction and this report is true to the
Standing level after well completion	best of my knowledge and beliefs Z
(11) WELL TESTS:	Signed Muchae D Maggin
Was well test made? Yes No X If yes, by whom?	(Well Drillers)
Type of test Pump Bailer Air lift A	NAME Maggiora Bros. Drilling, Inc. 595 Air From firm, Brown attion) (Typed or printed)
to water at start of test A.	
Discharge gal/min after hours Water temperature Chemical analysis made? Yes  No  If yes, by whom?	City Watsonville, CA ZIP 95076
Was electric log made Yes □ No ☒ If yes, attach copy to this report	License No. 249957 Date of this report 6-30-89
The same of the sa	TOTAL TOTAL

ORI	Giit#	#
File	with	<b>DWR</b>

MAR 0 2 2004 WELL STATE OF CALIFORNIA COMPLETION REPORT

Page 1 of 1	
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Owner's Well No. 7617 MON

No. 726894

A 11 111		***	7 400					-
Date	Wat	k Red	ran '	12/1	10/2	200	23	

\_\_\_\_\_, Ended 12/17/2003

Date	WOIK	Defig	ŢĮ.	12/10/	2.00	_
T a	ani D		٨	~~~	GI	EN

Local Permit Agency GLENN COUNTY HEALTH DEPT.
Permit No. MW 188-03 Permit Date 12/16/2003

DWR JUSE ONLY	- DO NOT FILL IN						
2111 03N-	al M						
STATE WELL NO STATION NO.							
LATITUDE	LONGITUDE						
APN/TRS/OTHER							

ſ		GEOLOGIC LOG	1	
ORIENTAT	, ,	VERTICAL HORIZONTAL ANGLE (SPECIFY) DRILLING ROTARY FLUID MUD		
DEPTH SURF		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.		
0	2	TOPSOIL	Address 50 FT N OF C/R 25 & 3.5 M E OF I	-5
2	70	SAND AND GRAVEL	City CA	
70	82	YELLOW BROWN CLAY W/SAND AND GRAVEL	County GLENN	and the second s
82	100	SAND AND GRAVEL	APN Book 024 Page 020 Parcel 015	
100	190	YELLOW BRWN CLY W/SND AND GRVL STRKS	Township 21 N Range 3 W Section 1	
190	230	BLUE CLAY W/SAND AND GRAVEL STREAKS	Latitude	· · · · · · · · · · · · · · · · · · ·
230	254	SAND AND GRAVEL	DEG. MIN. SEC.	DEG. MIN. SEC.
254	324	BLUE CLAY WITH SAND	LOCATION SKETCH	ACTIVITY (\(\alpha\)
324	340	SAND AND GRAVEL	NONTH	✓ NEW WELL
340	780	BLUE CLAY W/SAND AND GRAVEL STREAKS		MODIFICATION/REPAIR  Deepen
780	800	BLACK SAND AND GRAVEL		Other (Specify)
800	808	DARK GRAY BRITTLE CLAY		
808	830	BLACK SAND AND GRAVEL	,	DESTROY (Describe Procedures and Materials
830	894	BRITTLE DARK GRAY CLAY WITH SAND		Under "GEOLOGIC LOG")
894		BLACK SAND AND GRAVEL		PLANNED USES (∠) WATER SUPPLY
920		LIGHT GRAY CLAY W/SAND AND GRVL STRKS	TS TS	Domestic Public
1038		BLACK SAND WITH SMALL GRAVEL	WEST	Irrigation Industrial
1066		LIGHT GRAY CLAY WITH SAND STREAKS		MONITORING  ✓
				TEST WELL
				HEAT EXCHANGE
			,	DIRECT PUSH
				INJECTION
<u> </u>				VAPOR EXTRACTION
			SOUTH	SPARGING
			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.	REMEDIATION OTHER (SPECIFY)
			WATER LEVEL & YIELD OF COMPL	ETED WELL
	***************************************		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	5
			DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURED	
ļi		4500	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 1530 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	(Ft.)
TOTAL DE	PTH OF C	COMPLETED WELL 255 (Feet)	May not be representative of a well's long-term yield	' '

	DEPTH RORE - CASING (S)					DEPTH ANNULAR MATERIAL									
FROM SU	RFACE	BORE - HOLE		YPE			INITETALIAI	041105	01.07.075	FROM	SURFACE		Т.		PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT ( <u>x</u> )	BEN- TONITI	F FILL (✓)	FILTER PACK (TYPE/SIZE)
0	235	6-5/8	<b>√</b>			PVC	2	SCH 40		0	204	✓			SAND SLURRY
235	245	6-5/8		1		PVC	2	SCH 40	.030	204	263			✓	#8 GRD SAND
245	255	6-5/8	1			PVC	2	SCH 40		263	271		<b>1</b>		CHIPS
										271	360			<b>V</b>	#8 GRD SAND
										360	1530	✓			SAND SLURRY

ATTACHMENTS ( \( \sigma \)	CERTIFICATION	STATEMENT -	
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the be	st of my knowledge and belief.	
Well Construction Diagram	NAME EATON DRILLING CO.		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		
Soil/Water Chemical Analysis	20 W. KENTUCKY AVE	WOODLAND	CA 95695
Other	ADDRESS	CITY	STATE ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed	12/18/03	C57 A HIC - 1337
TI INGIT REDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57 LICENSE NUMBE

ODIOINAL	Commission (1994) - Africa - Salah (1994) - Africa - Afri			e e e e e e e e e e e e e e e e e e e	a de la regionalista de la regionalista de la regionalista de la regionalista de la regionalista de la regiona		21N	<b>J</b> 03	ယ့္က-	23
ORIGINAL File with DWR	· •	WELL	COMP		ON REPOR	T Z	2+1 N	230	- 50  23	D(1-3)11
Page of Owner's Well No	WELL A		Refer to In	». 8∩1	101LBC		701 (PC	1. CET 0	م رمار	WED TO BOL
Date Work Began		$\frac{3}{a}$	9/02	001	14047P1		LATITUD	E ,	162	LONGITUDE
\ Local Permit Ag	. ,	o Nec	sith	Nep	<i>F</i> .	_		A PN/7	RS/OTHE	<u> </u>
Permit No	GEOLOGIC LO	Permit	Date 3/1	2/02			Brown of			<u> </u>
ORIENTATION (∠)			ANGLE	(CDECIEVA						
~	DRILLING KOTATU	')	LUID TO	(SPECIFY)						
DEPTH FROM SURFACE	DE%	CRIPTION	7	200						
Ft. to Ft.	Describe materia		and	%\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	* july / /	$\rho$	WELPIC	CATION		
20 30	med to Coa	130- 3	3// 3/		Address	15	AN AN AN AN AN AN AN AN AN AN AN AN AN A	7.1	•	
30 38	grave w/ Fine	20 C	odrse_	Sand	County GL	ens				
38 39	gravel and s	and			APN Book 🕰			Parcel _	D/4-	- 4
40 60	gravel with	ane.	1 - Cat	Sand	Township	Rang	e North	Section .	1_	L I WEST
60 70	gravel & Sav		<u> </u>	10 /O	1011		SEC.	Longitue	DEG.	MIN. SEC.
70 80	gravel by med.	Sand &	clay			CATION S —— NORTH			1 1	ACTIVITY (∠) — (NEW WELL
80 140	It Brown to tan	Clay w	Grave	755					мог	DIFICATION/REPAIR
150 160	Sand Warare	4 clay		414						Deepen Other (Specify)
160 170	Gravel & Tan	to Brown		dwg						. DESTROY (Describe
170 180	Zan/Brow da		ave			lv				Procedures and Materials Under "GEOLOGIC LOG
180 190	Clay & Gravel (	w/ mod.	Sond	.,	- Ka	X				ANNED USES (∠)
190 220	Grave W/ Ed	N ZOB	John C	Jan	M	l				ER SUPPLY Domestic Public
320 330	arive winor a	MODIAL	140 310	امره الأد	EST	CO.P.	d 30		EAST	Irrigation Industria MONITORING
330 340	GAVE W/ ZAV	Brow	in day	<del>, (0, 1</del>	<b>7</b> \$				ω	TEST WELL
340 360	Clay	•	<del></del>	401					CATH	HODIC PROTECTION HEAT EXCHANGE
360 370 370 460	dianes minimon	7	s ex slav	F.Sand						DIRECT PUSH
460 500	Clay W/minor	nonte :	2 62 54	Land						INJECTION  'APOR EXTRACTION
1	Chy Commission	~:X:3X(130		J					ĺ	SPARGING
	· · · · · · · · · · · · · · · · · · ·		<del></del>	<del>,</del>	Illustrate or Describe	— SOUT⊦ Distance of	Well from Roa	ds, Building	5,	REMEDIATION OTHER (SPECIFY)
This well a	as constructed		Complet	TONS	Fences, Rivers, etc. an necessary. PLEASE B	a attach a n BE ACCURA	TE & COMP	ionai paper i LETE.	<u>'                                    </u>	OTHER (OF EON 1)
	191,5°	93.			WATEI	R LEVEL	& YIELD	OF COM	PLETE	D WELL
	1				DEPTH TO FIRST W	ATER	(Ft.) Bi	ELOW SURF	ACE	
i	<u> </u>				DEPTH OF STATIC WATER LEVEL		_ (Ft.) & DATE	E MEASURE	D	
TOTAL DEPOSIT OF	nonnya ZAO (R. A)	420'			ESTIMATED YIELD *					
TOTAL DEPTH OF	COMPLETED WELL 39.3	(5 (Feet)			* May not be repre				•	.)
				1	Tring not be repre	senimioe o	j u wen s w	ig-ieim yie		
DEPTH FROM SURFACE	BORE- HOLE TYPE (∠)		CASING (S)	1		FROM	EPTH SURFACE	All		R MATERIAL TYPE
44	HOLE TYPE(\(\sigma\))	MATERIAL /	INTERNAL	GAUGE					EN-	EU TED DAOK
Ft. to Ft.	SCREEN (supply)  SCREEN CON- DUCTOR FILL PIPE	GRADE	DIAMETER (Inches)	OR WALL THICKNES		Ft.	to Ft.	MENT TO	VITE FILL ∠) (∠	TYPE/SIZE)
393, 363 373, 50		teel	2"	Sch40	,		339			#8 Sano
373 363		<u>5. ,                                    </u>	2"	() ()	0.020	339	200			
191,142,166-152		teel	2"	5049	0.020	127	84	~		#8 Sand
170, 152, 160, 147		100)	211	Sch 40	5 3.020	84	33	3		# 8 5and
72 42	X   _	5,3.	24	,	0.020	33	0	V		2007
.	HMENTS ( $\stackrel{\checkmark}{\sim}$ )	I, the und	ersigned, ce	rtify that th	CERTIFICA	TION ST. e and acci	ATEMENT urate to the	best of m	v knowle	A 101110
Geologic		NAME	50ec	tru	n Exnla	cat	ion )	In	Dr	
	nstruction Diagram sical Log(s)		SOI, FIRM, OR C	ORPORATION)	(TYPED OR PRINTED)	<u>، س.</u>	<u> </u>		1	0-100
	er Chemical Analyses	1 <u>P.O</u>	CK !	1 / 1	4/1		<u> Am</u>	<del>M</del>	LA	95698
Other	1	ADDRESS	Thank	اسيا	Borcho	11	CITY	4/18/	/ STAT	5/2268
ATTACH ADDITIONAL	INFORMATION, IF IT EXISTS.	Signod WELL	DRILLER/AUTHO	RIZED REPRESE	INTATIVE		<del>D</del> A	E SIGNED	UP	C-57 LICENSE NUMBER

### Department of Water Resources Van Tol Deep

# 80/404

### Casing

### Deep Well

	Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
	393.5-373		Blank	Steel	2"	Sch 40	
N	• • • • • • • • • • • • • • • • • • • •		Screen	Steel	2"	Sch 40	.020
4	373 – 363 363 – +1'		Blank	Steel	2"	Sch 40	

### Middle Well

Ft. to Ft.	Borehole Dia.	Туре	Material Grade	Internal Dia	Gauge	2101 21Ze
191.5 – 170		Blank	Steel	2"	Sch 40	
170 – 160		Screen	Steel	2"	Sch 40	.020
160 – 152		Blank	Steel	2"	Sch 40	
152 – 142		Screen	Steel	2"	Sch 40	.020
142 - +1.5'		Blank	Steel	2"	Sch 40	

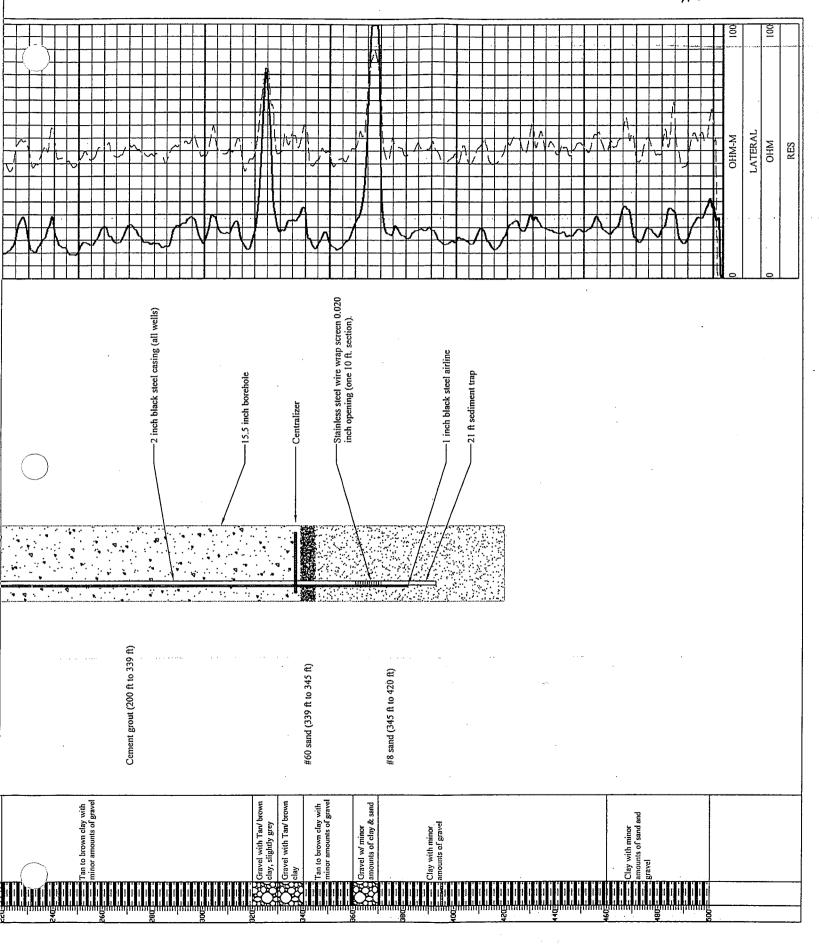
### Shallow Well

Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
93.5 – 72		Blank	Steel	2"	Sch 40	
72 – 42		Screen	Steel	2"	Sch 40	.020
42 - +2		Blank	Steel	2"	Sch 40	

### Annular Material

Ft. to Ft.	Type .
393.5 - 353	#8 Sand
353 - 345	#60 Sand
345 - Surface	Cement Grout

Spectrum Exploration, Inc. DRILL FOREMAN Randy Criner Kelly Staton INSPECTED BY CONTRACTOR Test hole drilled to 500 ft.; well completed to 393 ft. Borehole reamed to 15.5 inch diameter from 40 ft. to 420 ft. Stainless steel wire wrap screen 0.020 inch opening (three 10 ft. sections). Upper borehole reamed out to 16 inch diameter and 40 ft. depth Stainless steel wire wrap screen 0.020 inch opening (two 10 ft. sections). Black steel conductor casing ‡ inch wall thickness to 40 ft. Sanitary grout seal to 40 ft. depth NUMBER OF COMPLETIONS Ingersoll Rand Direct Rotary 1 inch black steel airline STATE OF CALIFORNIA—KESOURCES AGENCY DEPARTMENT OF WATER RESOURCES 1 inch black steel airline 21 ft sediment trap -21 ft sediment trap TYPE OF HOLE TYPE OF RIG COMMENTS Centralizer Centralizer NORTHERN DISTRICT Well A - Van Tol Site . . 3/20/02 DATE COMPLETED 3/29/02 420 ft DATE STARTED HOLE NUMBER 談 TOTAL DEPTH · . . · . Cement grout (84 ft to 127 ft) Cement grout (gs to 32 ft) #60 sand (127 ft to 132 ft) #8 sand (132 ft to 200 ft) #60 sand (32 ft to 36 ft) #8 sand (36 ft to 84 ft) 570561, 4391143 LOCATION Glenn County, County Rd 27 and County Rd M FEATURE Triple Completion Monitoring Well PROJECT Stony Creek Recharge Pilot Project UTM COORDINATES UTM 10 NAD 83 Cravel and fine to Coarse-grained sand Cravel with minor amount of elay and sand Poorly graded medium sand, sub-angular to 100 Lt. brown to tan clay with gravel and sand Gravel and tan to brown Gravel and medium to Poorly graded gra Poorly graded gravel with fine to med. sand Tan/brown clay with gravel and med. sand Gravel with tan to brown clay DESCRIPTION Sand with gravel and Tan/brown clay with Gravel with fine to coarse-grained sand coarse sand gravel clay LITHOLOGY DEPTH (A.)



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WELL C

STATE OF CALIFORNIA

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Page 1 of 6	MAI	3	1	40
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Owner's	Well No. 77	786
W 11.12.02 N		

No. 816224

Date Work Began 3/7/2005

, Ended3/14/2005

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. IRW280-04
Permit Date 1

Parmit Data 11/4/2004

<del></del>	DWR	USE	ONLY		DO	NOT	FIL	.L	IN	-
2	ديدا	10	BL	9-	- 7	34				
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						L		l.		
	LATIT	JDE			L	ONGIT	UDE			
				L	<u></u>			1		
			APN/	TRS/C	THER					

CA STATE

C57 A HIC - 133783 C-57 LICENSE NUMBER

remme	110	GEOLOGIC LOG				
ORIENTAT	ION (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD				
DEPTH F						
SURFA		<b>DESCRIPTION</b> Describe material, grain, size, color, etc.				
Ft. to		TOPSOIL	Address .1 MI No	OF RD 33 & 4	PUCASE PE	TOUR RD
6		SAND AND SMALL GRAVEL	City CA	<u> </u>		
24		TAN CLAY	County GLENN			
33		SANDY BROWN CLAY WITH SAND AND GRAVE		D 120	D 1 000	
- 33		STREAKS		Page 130	Parcel 009	<u></u>
45	00	SAND AND GRAVEL WITH BROWN CLAY STREA	Township 21 N	Kanges vv	_ Section 54	1
90	115	SANDY YELLOW CLAY	Latitude	I IN SEC.	•	DEG. MIN. SEC.
				ATION SKETCE	[ <del></del>	ACTIVITY (🗹)
145		SAND AND GRAVEL		— NORTH —		→ NEW WELL
152		SANDY YELLOW CLAY				MODIFICATION/REPAIR
210		TAN CLAY WITH SAND				Deepen Other (Specify)
333		SAND AND SMALL GRAVEL				
342;		TAN CLAY WITH SAND				DESTROY (Describe
400		TAN CLAY WITH SAND AND GRAVEL STREAKS				DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
440		TAN CLAY WITH SAND				PLANNED USES (∠)
580	585	SAND AND GRAVEL	_			WATER SUPPLY
585¦	620	TAN CLAY WITH SAND	WEST	•	EAST	Domestic Public Industrial
620	635	SAND AND GRAVEL	>		ய	MONITORING -
635	650	SANDY TAN CLAY				TEST WELL
650	656	SAND AND GRAVEL	CIPTHY	erita e di tanta de la compania	,	CATHODIC PROTECTION
656	678	SANDY TAN CLAY	The Control of the Co	game of the second seco		HEAT EXCHANGE
678		SAND AND GRAVEL				DIRECT PUSH
688	750	SANDY TAN CLAY			•1	INJECTION — VAPOR EXTRACTION —
750		TAN CLAY	. '	0.5		SPARGING
860		SANDY TAN CLAY WITH SAND AND GRAVEL		- SOUTH		REMEDIATION
+		STREAKS	Fences Rivers etc and	Distance of Well from Road attach a map. Use additi	onal paper if	OTHER (SPECIFY)
960		BROWN CLAY WITH HARD CLAY STREAKS	necessary. PLEASE B	E ACCURATE & CO	MPLETE.	
1100		BLUE CLAY WITH SAND	WATEF	LEVEL & YIELI	OF COMPL	ETED WELL
1140		SAND WITH BLUE CLAY STREAKS	DEPTH TO FIRST V	/ATER (Ft.)	BELOW SURFAC	Œ
1170		BLUE CLAY WITH BRITTLE CLAY STREAKS	DEPTH OF STATIC			
1170	1200	BEOL GLAT WITH BITTIEL GLAT GITTER	WATER LEVEL	(Ft.) & DA	TE MEASURED .	
<u> </u>		1000	ESTIMATED YIELD *	(GPM)	R TEST TYPE	
TOTAL DI	EPTH OF	BORING 1020 (Feet)	TEST LENGTH	(Hrs.) TOTAL DRA	AWDOWN	(Ft.)
TOTAL DI	EPTH OF	COMPLETED WELL 980 (Feet)	May not be repr	esentative of a well'	s long-term yiel	d.
		CLOTHE (O)		<u> </u>	A BID	TIT AD MATERIAL

DEPTH PORE CASING (8)								DEP	ANNULAR MATERIAL							
FROM SUR		BORE - HOLE	T		( <						FROM SU	RFACE			TY	PE
		DIA. (Inches)	ANK	SCREEN	CON-	PIPE	MATERIAL / GRADE	INTERNAL DIAMETER	GAUGE OR WALL	SLOT SIZE IF ANY			CE- MENT	BEN- TONITE	FILL	FILTER PACK (TYPE/SIZE)
Ft. to	Ft	•	BL	SS	ᅙ	분		(inches)	THICKNESS	(Inches)	Ft. to	FL	( <u>v</u> )	(₹)	(₹)	(11703120)
ZONE	1										0	40	✓			SAND SLURRY
0;	60	12	<b>√</b>		_		PVC F-480	2.5	SCH 80		40	45		✓		BENTONITE C
601	70	12		1			PVC F-480	2.5	SCH 80	.030	45	100			✓	SRI#8 SAND
70;	80	12	<b>√</b>				PVC F-480	2.5	SCH 80		100	105		<b>√</b>		BENTONITE C
ZONE;	2										105	135	✓			SAND SLURRY
0;	620	12/10	7	Г			PVC F-480	2.5	SCH 80		135	560			4	GRAVEL FILL

0; 620 12/10 V P	/C F-480	2.5	SCH 80	1	35   560	
ATTACHMENTS (∠)	1			CERTIFICATION		
Geologic Log		d, certify that	this report is comp	ete and accurate to the	best of my knowledg	je and belie
Well Construction Diagram	NAME EAT	ON DRILL	ING CO.	DATE OF CONTENT		
Geophysical Log(s)				TYPED OR PRINTED)	WOODLAND	١
. Soil/Water Chemical Analysis	20 W. KEN	OCKY A	(E		CITY	
Other	9	//a. L	Lamon			/23/05
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.		ORILLER/AU	THORIZED REPRE	SENTATIVE		E SIGNED

DWR 188 REV. 11-97

STATE OF CALIFORNIA

### WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page	2	of	6	

No. 816224

Owner's Well No. 7786 , Ended3/14/2005 Date Work Began 3/7/2005 Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. IRW280-04
Permit Date 1 Permit Date 11/4/2004

DWR USE ONLY	DO NOT FILL IN							
2111/03	W - 34							
STATE WELL	NO./ STATION NO.							
LATITUDE	LONGITUDE							
APN/TRS/OTHER								

T CHILL	110	GTOY OCYCY OC		· · · · · ·
		GEOLOGIC LOG		
ORIENTAT	ION ( <u>✓</u> )	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD		
DEPTH F		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.	WELL TOO TOO	
0,		TOPSOIL	Address 1 MI NOF RD 33 & 4 MI WOF DE	TOUR RD
6;	24	SAND AND SMALL GRAVEL	City CA	
24		TAN CLAY	County GLENN	
33	45	SANDY BROWN CLAY WITH SAND AND GRAVE	APN Book 024 Page 130 Parcel 009	
		STREAKS	Township 21 N Range 3 W Section 34	
45	90	SAND AND GRAVEL WITH BROWN CLAY STREA	Latitude	
90	145	SANDY YELLOW CLAY	DEG. MIN. SEC.  LOCATION SKETCH	DEG. MIN. SEC. ACTIVITY (\(\(\(\(\(\(\(\)\)\)\))
145	152	SAND AND GRAVEL	NORTH	✓ NEW WELL
152	210	SANDY YELLOW CLAY		MODIFICATION/REPAIR
210		TAN CLAY WITH SAND		Deepen
333	342	SAND AND SMALL GRAVEL		Other (Specify)
342		TAN CLAY WITH SAND		DESTROY (Describe
400	440	TAN CLAY WITH SAND AND GRAVEL STREAKS		DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
440	580	TAN CLAY WITH SAND		PLANNED USES (∠)
580		SAND AND GRAVEL		WATER SUPPLY
585	620	TAN CLAY WITH SAND	WEST	Domestic Public Industrial
620¦	635	SAND AND GRAVEL	≥ 	MONITORING →
. 635¦	650	SANDY TAN CLAY		TEST WELL
650¦	656	SAND AND GRAVEL		CATHODIC PROTECTION
656 l	678	SANDY TAN CLAY		HEAT EXCHANGE
678	688	SAND AND GRAVEL		DIRECT PUSH INJECTION
688	750	SANDY TAN CLAY	÷	VAPOR EXTRACTION
750		TAN CLAY		SPARGING
860	960	SANDY TAN CLAY WITH SAND AND GRAVEL	SOUTH	REMEDIATION
		STREAKS	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	OTHER (SPECIFY)
960	1100	BROWN CLAY WITH HARD CLAY STREAKS		
1100		BLUE CLAY WITH SAND	WATER LEVEL & YIELD OF COMPLI	
1140		SAND WITH BLUE CLAY STREAKS	DEPTH TO FIRST WATER (Ft.) BELOW SURFAC	E .
1170	1200	BLUE CLAY WITH BRITTLE CLAY STREAKS	DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURED _	
i			ESTIMATED YIELD * (GPM) & TEST TYPE	
TOTAL DI	EPTH OF	BORING_1020 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
TOTAL DI	EPTH OF	COMPLETED WELL 980 (Feet)	May not be representative of a well's long-term yield	
L		(-17)	Trans that an indication of a transfer to the Asset	

DEPTH	BODE		CASING (S)							DEPTH		ANNULAR MATERIAL			
FROM SURFACE	BORE - HOLE	TYPE (<)			,	0.7770144			FROM SURFACE					<u> </u>	
Ft. to Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	.I GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to	Ft.	CE- MENT	BEN- TONITE	FILL (Y)	FILTER PACK (TYPE/SIZE)	
620 630	10		1		PVC F-480	2.5	SCH 80	.030	560	590	✓			SAND SLURRY	
630 650	10	✓	1		PVC F-480	2.5	SCH 80		590 ¦	720			V	SRI#8 SAND	
650 660	10		1	1	PVC F-480	2.5	SCH 80	.030	720	900	✓			SAND SLURRY	
660 680	10	1	1		PVC F-480	2.5	SCH 80		900	1020			ν.	SRI#8 SAND	
680 690	10		7	1	PVC F-480	2.5	SCH 80	.030							
690 710	10	7	$\vdash$	++	PVC F-480	2.5	SCH 80								

	2.0 001.00		<u> </u>
— ATTACHMENTS (∠) — Geologic Log — Well Construction Diagram	I, the undersigned, certify that this report is complete and accurate to the NAME_EATON_DRILLING_CO.		
Geophysical Log(s) Soil/Water Chemical Analysis	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)  20 W. KENTUCKY AVE.	WOODLAND	CA 95695
Other	ADDRESS Marky amon	CITY 05/23/05	STATE ZIP C57 A HIC - 133783
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57 LICENSE NUMBER

STATE OF CALIFORNIA WELL COMP

LE	$\mathbf{I}$	.ON	KEP	OR
		_		

REPORT	
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PORT	<b>21V</b>
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Page 3 of 6	Refer	to Instruction Pamphlet
		No. 816224
Owner's Well No. 7786		···· 0 1022 <del>4</del>
2/7/2005	T 1 13/14/2005	

\_\_, Ended3/14/2 Date Work Began 3/7/2005

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. IRW280-04 Permit Date 1

Permit Date 11/4/2004

DWR US	ONLY	00	NOI		117			
2111	63	us "	- 34	1				
STATE WELL NO./ STATION NO.								
LATITUDE			ONGITUD	<u> </u>				
		Ш						
	APN/TF	RS/OTHER	t					

		GEOLOGIC LOG				
ORIENTAT	TION (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)				
		DRILLING MOTARY FLUID MUD				
DEPTH SURF		DESCRIPTION				
Ft. to	Ft.	Describe material, grain, size, color, etc.	····	WELL I	OCATION-	
0	-	TOPSOIL	Address .1 MI NO	F RD 33 & .4 N	MOF DE	TOUR RD
6		SAND AND SMALL GRAVEL	City CA			
24		TAN CLAY	County GLENN			
33		SANDY BROWN CLAY WITH SAND AND GRAVE	APN Book 024	Page 130	Parcel 009	
		STREAKS	Township 21 N	Range3 W	Section 34	
45	90	SAND AND GRAVEL WITH BROWN CLAY STRE	ALatitude		_	<u> </u>
90		SANDY YELLOW CLAY	DEG. MIN	SEC. TION SKETCH		DEG. MIN. SEC. ——ACTIVITY (⊻) ——
145		SAND AND GRAVEL	LOCA	NORTH		✓ NEW WELL
152	210	SANDY YELLOW CLAY				MODIFICATION/REPAIR
210		TAN CLAY WITH SAND				— Deepen
333	342	SAND AND SMALL GRAVEL				Other (Specify)
342		TAN CLAY WITH SAND				.— DESTROY (Describe Procedures and Materials
400	440	TAN CLAY WITH SAND AND GRAVEL STREAKS			-	Procedures and Materials Under "GEOLOGIC LOG")
440	580	TAN CLAY WITH SAND				PLANNED USES (∠)
580	585	SAND AND GRAVEL				WATER SUPPLY
585	620	TAN CLAY WITH SAND	WEST		AST	Domestic Public Industrial
620	635	SAND AND GRAVEL	≥		ជា	MONITORING →
635	650	SANDY TAN CLAY				TEST WELL
650	656	SAND AND GRAVEL				CATHODIC PROTECTION
656	678	SANDY TAN CLAY				HEAT EXCHANGE
678	688	SAND AND GRAVEL				DIRECT PUSH
688	750	SANDY TAN CLAY				VAPOR EXTRACTION
750	860	TAN CLAY				SPARGING
860	960	SANDY TAN CLAY WITH SAND AND GRAVEL	Illustrate or Describe Dis	- SOUTH	Puildings	REMEDIATION
		STREAKS	Fences, Rivers, etc. and at necessary. PLEASE BE	tach a map. Use addition	nal paper if	OTHER (SPECIFY)
960	1100	BROWN CLAY WITH HARD CLAY STREAKS				
1100	1140	BLUE CLAY WITH SAND		LEVEL & YIELD		
1140		SAND WITH BLUE CLAY STREAKS	DEPTH TO FIRST WA	TER (Ft.) E	BELOW SURFAC	E
1170		BLUE CLAY WITH BRITTLE CLAY STREAKS	DEPTH OF STATIC			
	! <u>.</u>	1	WATER LEVEL	• •		
TOTAL	EDTH OF	BORING 1020 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE (Ft)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft)			
		BORING 1020 (Feet)  COMPLETED WELL 980 (Feet)	May not be repres			
TOTALD	er in Or	COMITETED WELD COOL (Leet)	May not be repres	emanve oj a wens	iong-term yieu	**

DEP	DEPTH ROPE CASING (S)						DEPTH ANNULAR MATERIAL				MATERIAL					
FROM SU		BORE - HOLE	T		= (⊻						FROM SU	RFACE		1	TY	PE
ļ		DIA. (Inches)	¥		ż	E E	MATERIAL / GRADE	INTERNAL DIAMETER	GAUGE OR WALL	SLOT SIZE IF ANY			CE- MENT	BEN-	FILL	FILTER PACK
Ft. to	Ft	(IIICIICS)	温	SCREEN	CON	싎	GRADE	(inches)	THICKNESS	(Inches)	Ft. to	Ft	(✓)	(⊻)	(X)	(TYPE/SIZE)
ZONE	3		_		<u> </u>						0	40	✓			SAND SLURRY
0;	930	12/10	1	$\vdash$			PVC F-480	2.5	SCH 80		40	45		<b>✓</b>		BENTONITE C
930	960	10		1	1		PVC F-480	2.5	SCH 80	.030	45	100			<b>1</b>	SRI#8 SAND
960	980	10	~	-			PVC F-480	2.5	SCH 80		100	105		~		BENTONITE C
<del>                                     </del>			<del>                                     </del>	┢	t	$\vdash$					105	135	✓			SAND SLURRY
			_		$\vdash$						135 ;	560				GRAVEL FILL

 ATTACHMENTS	(∠)	
Contonio Log		

- \_ Well Construction Diagram
- \_ Geophysical Log(s)

\_\_ Other \_\_

Soil/Water Chemical Analysis

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICA	TION	STATEM	ENT

CA

STATE

E ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER

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 W. KENTUCKY AVE.

ADDRESS
Signed

WELL ROULE PROJUCT DEPOSED TATALY. 05/23/05 DATE SIGNED

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORI	GINA	۸L
File	with	<b>DWR</b>

Page 1 of A

007 1 7 2002**WELL** 

STATE OF CALIFORNIA

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	nstruc	tion	Pamphlet	

No. 726739, A

Owner's Well No. 7449 \_\_\_\_\_, Ended 8/23/2002 Date Work Began 8/19/2002

Local Permit Agency GLENN CNTY HEALTH DEPT Permit No. MW133-02

Permit Date 6/25/2002

	DWR .	JSE_	ONLY.		DO	NOT	FIEL	IN	
2	IN	0	41	V -	- 1	21		L	
		STAT	E WEL	L NO.	/STA	TION N	10.	•	
	1 .	1		][		1 1	1		
	LATITU	DE			L	ONGIT	UDE		
		1:	1 . [						
			APN/	TRS/C	THE	₹			

GEOLOGIC LOG	
ORIENTATION (  VERTICAL HORIZONTAL ANGLE (SPECIF	n
DRILLING ROTARY FLUID MUD	
SURFACE DESCRIPTION  Ft. to Ft. Describe material, grain, size, color, etc.	
0 10 WELL GRADED SAND AND GRAVEL	Address SOF C/R 25 & EOF C/R D
10 20 LIGHT BROWN CLAY	City CA
20 30 LIGHT BROWN CLAY W/FINE SAND AND GRV	County GLENN
30 40 WELL GRADED GRVL W/SND AND LT BRN CL	Y APN Book 024 Page 200 Parcel 210
40 50 WELL GRADED SND AND GRVL W/SOME CLY	Township 21 N Range 4 W Section 12
50 60 LIGHT BROWN CLAY WITH SAND AND GRAVE	Latitude
60 70 BROWN CLAY WITH SAND AND GRAVEL	DEG. MIN. SEC. DEG, MIN. SEC.
70 80 TAN CLAY	LOCATION SKETCH ACTIVITY (\(\neq\))
80 100 BROWN CLAY	MODIFICATION/REPAIR
100 110 LIGHT BROWN CLAY	Deepen
110 120 LIGHT BROWN CLY W/SAND, GRAVEL, SILT	— Other (Specify)
120 130 LT BRN CLY W/FINE SILTSTONE, SAND, GRV	DFSTROY (Describe
130 140 LT BROWN CLAY W/FINE SAND AND GRAVEL	DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
140 160 LT BRN CLAY W/SAND, GRAVEL, SILTSTONE	PLANNED USES(∠)
160 170 SAND WITH LIGHT BROWN CLAY	WATER SUPPLY
170 190 SILSTONE WITH TAN CLAY AND SAND	V S S S S S S S S S S S S S S S S S S S
190 200 FINE SAND WITH COARSE SAND AND TAN C	Y   ≥ monitoring ✓
200 220 LT BRN CLAY W/SILTSTONE, SAND, GRAVEL	TEST WELL
220 230 WELL GRADED SAND WITH CLAY	CATHODIC PROTECTION
230 250 POORLY GRADED SAND AND GRAVEL	HEAT EXCHANGE
250 260 PPORLY GRADED SAND WITH FINE GRAVEL	DIRECT PUSH
260 270 POORLY GRADED SAND WITH CLAY	VAPOR EXTRACTION
270 280 WELL GRADED SND W/FINE GRVL, TAN CLAY	SPARGING
280 300 SILSTONE WITH SAND	SOUTH REMEDIATION
300 310 SILT WITH SAND AND GRAVEL	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.
310 320 POORLY GRADED SAND WITH CLAY	
320 340 WELL GRADED SAND WITH FINE GRAVEL	WATER LEVEL & YIELD OF COMPLETED WELL
340 350 WELL GRADED SAND W/SILSTONE, TAN CLA	<del></del>
350 360 SILT WITH SAND, GRAVEL, AND CLAY	DEPTH OF STATIC  WATER LEVEL
360 400 GRAVEL WITH SILTSTONE	ESTIMATED YIELD * (GPM) & TEST TYPE
TOTAL DEPTH OF BORING 640 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)
TOTAL DEPTH OF COMPLETED WELL 629 (Feet)	May not be representative of a well's long-term yield.

DEPT	Н	DODE		CASING (S)								TH	ANNULAR MATERIAL						
FROM SURFACE		BORE - HOLE			( <u>Y</u>									1	TY	PΕ			
F4 40 F4		DIA. (Inches)	BLANK	SCREEN	CON-	븝	MATERIAL / GRADE	INTERNAL DIAMETER	GAUGE OR WALL	SLOT SIZE IF ANY	FROM SURFACE								
Ft. to	Ft.	, ,	릶	ပ္တို	25	딆		(Inches)	THICKNESS	(Inches)	Ft. to	Ft.	(⊻)	(1)	(₹)	(TYPE/SIZE)			
ZONE	1										0	208	1			SAND SLURRY			
0	240	12-1/4	П				ACCESS TB	1			208	219		<b>✓</b>		CHIPS			
0	247	12-1/4	1				SCH 40	2			219	323			<b>V</b>	#8 GRD SAND			
247	257	12-1/4		<b>V</b>			STL STEEL	2		.030	323	548	<b>✓</b>			SAND SLURRY			
257	278	12-1/4	V				SCH 40	2			548	559		~		CHIPS			
ZONE	2										559	640			7	#8 GRD SAND			

-	ATTACHMENTS	(⊻)
---	-------------	-----

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soll/Water Chemical Analysis
- ... Other .. ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

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

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

20 W. KENTUCKY

WELL DRILLER/AUTHORIZED REPRESENTATIVE

10/01/02 DATE SIGNED CA

STATE

WOODLAND

133783-C57A C-57 LICENSE NUMBER

### STATE OF CALIFORNIA

## WELL COMPLETION REPORT Refer to Instruction Pamphlet

Page 2 of 2

0

No. 726739

lwner's Well No	), <u>/443</u>	
ate Work Began	8/19/2002	Ended 8/23/200

Local Permit Agency GLENN CNTY HEALTH DEPT Permit No. MW133-02

Permit Date 6/25/2002

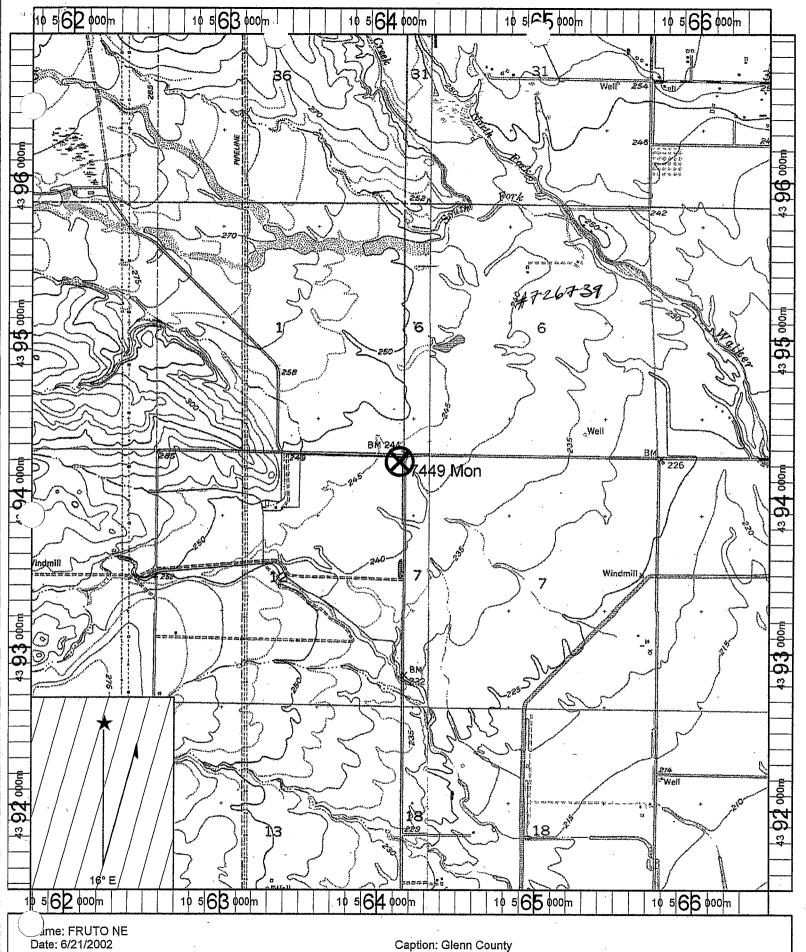
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<u>.</u>	ŀ	.  -	-	ŀ	ŀ	<u> -  -  -  -  -  -  -  -  -  -  -  -  -  </u>	ŀ	·  -	
			APN/	TPS/C	THE	₽			

E ZIP 133783-C57A C-57 LICENSE NUMBER

f	******	GEOLOGIC LOG	•			
ORIENTA		VERTICAL HORIZONTAL ANGLE (SPECIFY) DRILLING METHOD ROTARY FLUID MUD				
DEPTH SURF	FROM	DESCRIPTION				
Ft. to		Describe material, grain, size, color, etc.	<u> </u>	WELL TO	~ A TT ( ) N	
400	510	SILTSTONE, SAND WITH GRAVELS	Address SOF C/R	<u>25 &amp; EÖF C/R Y</u>	CATION	
510	530	COARSE SAND	City CA			
530	540	GRAVEL	County GLENN			
540	550	GRAVEL WITH COARSE SAND	APN Book 024	Page 200	Parcel 210	
550	560	SILTSTONE WITH GRAVEL AND SAND	Township 21 N	Range 4 W	Section 12	
560	570	COARSE SAND			occion <u></u>	1 1
570	580	MEDIUM GRAINED SAND	Latitude	SEC.		DEG. MIN. SEC.
580		COARSE SAND AND GRAVEL	LOCAT	TION SKETCH-		ACTIVITY (\(\angle\)
				NORTH		✓ NEW WELL
						MODIFICATION/REPAIR Deepen
<del> </del>		The second secon				Other (Specify)
-						
			ĺ			DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
ļ						PLANNED USES(∠)
<u> </u>			l <sub>tt</sub>		<b>-</b>	WATER SUPPLY  Domestic Public
			WES		AST	irrigation Industrial
			<b>&gt;</b>		m	MONITORING →
			i			TEST WELL
		,				CATHODIC PROTECTION
						HEAT EXCHANGE
						DIRECT PUSH
						INJECTION
		A STATE OF THE STA				VAPOR EXTRACTION SPARGING
				SOUTH		REMEDIATION
			Illustrate or Describe Distan	nce of Well from Roads, B	<i>naner</i> if	OTHER (SPECIFY)
<u> </u>			Fences, Rivers, etc. and attac necessary. PLEASE BE A	CCURATE & COMP	LETE.	
			WATER L	EVEL & YIELD	OF COMPL	ETED WELL
			DEPTH TO FIRST WAT	ER (Ft.) BEL	OW SURFACE	1
			DEPTH OF STATIC			
			WATER LEVEL			
		DODDIG 640	ESTIMATED YIELD *			
		BORING 640 (Feet)	TEST LENGTH	• •		• •
TOTAL DE	SPTH OF (	COMPLETED WELL 629 (Feet)	May not be represer	ntative of a well's lo	ng-term yield	d.
<del> </del>						

DEP	BODE					CA	SING (S)			DE	PTH		ANNI	ULAR	MATERIAL	
FROM SURFACE		BORE - HOLE DIA.	$\overline{}$	YPE	<u> </u>	<u>( )</u>		INTERNAL	GAUGE	SLOT SIZE	FROM S			l ==«.		PE I
Ft. to Ft.		(Inches)	BLANK	SCREEN	CON-	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. t	o Ft.	CE- MENT	BEN- TONITI		FILTER PACK (TYPE/SIZE)
0	240	12-1/4					ACCESS TB	1			00	208	1			SAND SLURRY
0	598	12-1/4	<	1			SCH 40	2			208	219		<b>√</b>	<u></u>	CHIPS
598	608	12-1/4		<b>√</b>		П	STL STEEL	2		.030	219	323			<b>✓</b>	#8 GRD SAND
608	629	12-1/4	~				SCH 40	2			323	548	1			SAND SLURRY
											548	559				CHIPS
											559	640			V	#8 GRD SAND

ATTACHMENTS (∠)	CERTIFICATION	ON STATEMENT											
Geologic Log	I, the undersigned, certify that this report is complete and accurate to t	I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.											
Well Construction Diagram	NAME EATON DRILLING CO.												
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTE												
Soil/Water Chemical Analysis	20 W. KENTUCKY	WOODLAND	<u>CA</u>										
Other	ADDRESS	CITY	STATE										
	signed / Wy roady	10/01/02	<u>1</u>										
ATTACH ADDITIONAL INFORMATION, IF IT EXIST	S. WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED											



Scale: 1 inch equals 2000 feet

Caption: Glenn County Job# 7449 APN: 24-200-21

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ORIGINA File with Page 1 of 3	L DWR	JAN 0	8	20t	39		WELL.	STATE	OF CALIFO	DRN <b>)</b> N	IIA REPOR	т	2. DWR US	E ONI	ŭ -	- DO	NOT FILL IN
Page 1 of 3	<b>;</b>					,		Refer to In	struction .	Pam	iphlet . (1)	<u>.</u>		TATE	VELL N	O./ STA	TION NO.
Owner's	Well ING	<u>, 0404</u>						No	∘E01	0	3388 AV	Ì				1	
Date Worl	c Began	11/23/2	009		<u> </u>	, En	ded 12/3/2	2009					LATITUDE	:		L	ONGITUDE
Local P	ermit A	gency (	3leni				alth Dept					_		بلــــــــــــــــــــــــــــــــــــ			
Permi	t No. <u>N</u>	<u>IW 319-0</u>	<u> </u>				Permit	Date11/	19/2009			_		Α	PN/TRS	/OTHER	<b>!</b>
			GE	OLO	OGIC	CLC	)G ——			•							
ORIENTAT	TON (✓)	_✓ VE	ERTIC	AL _	— н	ORIZO	ONTAL	ANGLE	_(SPECIFY)								
DEPTH	FROM	DRILLING METHOD	$\frac{1}{2}$ RC	<u>AT</u>	RY_		F	LUID MUD									
SURF	ACE	4	D		D	ESC	CRIPTION	e, color, ei									
Ft. to	Ft. 5	Top so	il	we	maie	ariui,	grum, siz	e, color, el		<del> </del>	11 70! Cof	-	oad 25 & 70' W	CAT	[ON_		
5		Sand a		irav	el							П	0au 25 & 70 W	01 170	au D		
65		Sandy									city <u>CA</u> County GLENN						
170		Sand a								1	•		n 200		1 001		
180		Sandy											_ Page <u>200</u> _ Range4 W				A-2-41
230		Sand a									atitude		- Range-t vv	Section	on 14		11 5 1
260		Sandy								1 -	DEG. N				-	DEG.	MIN. SEC.
275		Sand a			_						Loc	CA	TION SKETCH-				CTIVITY (∠) -
280		Sandy								ŀ			NORTH			ı	NEW WELL
370		Sand a								١.	271	7	" MIST				FICATION/REPAIR Deepen
380		Sandy	_					,		1	4761 S	$\langle$	un s				Other (Specify)
515	540	Sand w	/ith s	ma	ll gra	vel					V., \	•	me.				
540	650	Sandy	blue	cla	ý wit	h sn	nall grave	I			·Wia	Q	911			[ — <u>[</u>	DESTROY (Describe Procedures and Mater Under "GEOLOGIC LO
650¦	879	Sandy	blue	cla	<u>-</u> у						$\sim 0.0$	<b>~</b>					
879	900	Small	grave	el							MUR						NNED USES (∠ R SUPPLY
900¦	950	¦Sandy	blue	cla	у					WEST	<i>\\</i> \\ .				ST	<u>                                  </u>	Domestic — Public Irrigation — Indust
950¦	1080	Blacks	and							₹					ā		
" I		1															MONITORING —¥ TEST WELL —
1		1														CATHO	DIC PROTECTION_
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-										<u> </u>			SOUTH	D . 1 1 1			REMEDIATION
!		!								F	ences, Rivers, etc. and	atta	nce of Well from Roads, ach a map. Use additiona	l paper	if	(	OTHER (SPECIFY)_
1		!								ne	ecessary. PLEASE BI	E A	CCURATE & COMP	LETE.			
											WATER	R L	EVEL & YIELD	OF C	OMPL	ETED	WELL
į		İ								D	EPTH TO FIRST V	VA٦	rer (Ft.) BE	LOW S	URFAC	E	
ļ		i i									EPTH OF STATIC						
1		1 .								•			(Ft.) & DATE				
TOTAL DE	PTH OF	BORING.	108	0	— (Fe	eet)				1			(GPM) & T				
TOTAL DE							(Feet)			'			_(Hrs.) TOTAL DRAW ntative of a well's l			٠,	
										_	may not be repre	-36	manre of a wen's n	Jiig-ie	in yee	ш.	
DEPT	гн	BORE -					C	ASING (S)				ı	DEPTH		ANN	ULAR	MATERIAL
FROM SU	RFACE	BORE - HOLE	TY	PE (	<u>뜻</u> 끪							F	FROM SURFACE			T\	/PE
		DIA. (Inches)	BLANK	힑송	DUCTOR FILL PIPE	N	MATERIAL / GRADE	INTERNAL DIAMETER	GAUGE OR WAL	L,	SLOT SIZE IF ANY	┝		CE- MENT	BEN- TONIT	F 5111	FILTER PACK
Ft. to	Ft.	` ,		် ၂၀	울린		G, C 1.2.2	(Inches)	THICKNE	SS	(Inches)	ı	Ft. to Ft.	( <u>✓</u> )	( <u>√</u> )	( <u>√</u> )	(TYPE/SIZE)
Zone	1											Г	0 265	<b>√</b>			Sand Slurry
0;	520	10-3/4	<b>V</b>		$\prod$	P۷	'C	2.5	SCH	80			265 285		✓		Bentonite Sea
520¦	530	10-3/4	1 1	<b>√</b>	$\prod$	P۷	′C	2.5	SCH			Γ	285 480			<b>√</b>	SRI#8 Sand
530¦	590	10-3/4	<b>V</b>			P۷	′C	2.5	SCH	80			480 496		<b>V</b>		Bentonite Sea
590¦	600	10-3/4		<b>√</b>		PV		2.5	SCH				496 658			<b>V</b>	SRI#8 Sand
600¦	630	10-3/4	1			P۷	'C	2.5	SCH	80			658 675		<b>V</b>		Bentonite Sea
		IMENTS	(∠)	_		71	-						ON STATEMENT				
	<ul> <li>Geologic</li> <li>Well Co</li> </ul>	Log nstruction D	iaoram	1			I, the undersi	gned, certify th ATON DRI	at this report	is c	complete and accurate	e to	the best of my knowled	ige and	belief.		
		ical Log(s)	nagi ali	•			(PER	SON, FIRM, C	R CORPOR		ON) (TYPED OR PRI	NTI					<del></del>
_	- Soil/Wate	r Chemical		sis			20 WES	T KENTUC	KY AVE				WOODLAN CITY	ID		CA	95695 ZIP
ATTACH ADI		NEODMATIC		IT C	//CTC	-	Signed	Mark	<u>Dam</u>	· ·	z		1	2/31/0	9	STATE	C57 A HIC - 1337
ATTACH ADI	JI IUNAL I	NEUKMAII	JIV, II	II EX	1018.		WE	LL DRILLER/A	UTHORIZED	RE	PRESENTATIVE		DA	TE SIG	NED		C-57 LICENSE NUMBE

JAN 0 8 2009 ORIGINAL USE ONLY STATE OF CALIFORNIA File with DWR WELL COMPLETION REPORT Refer to Instruction Pamphlet STATE WELL NO./ STATION NO. Page 2 of 3 No. E0103388 Owner's Well No. 8434 Date Work Began 11/23/2009 Ended 12/3/2009 LATITUDE LONGITUDE Local Permit Agency Glenn County Health Dent APN/TRS/OTHER Permit No. MW 319-09 \_ Permit Date \_11/19/2009 GEOLOGIC LOG VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) ORIENTATION (✓) DRILLING ROTARY — FLUID MUD DEPTH FROM DESCRIPTION SURFACE Describe material, grain, size, color, etc. to Address 70' Sof Road 25 & 70' Wof Road D 5 Top soil 0 5 65 Sand and gravel City CA 65 170 Sandy brown clay County GLENN 170 180 Sand and gravel APN Book 024 Page 200 \_\_ Parcel <u>021</u> 180 230 Sandy brown clay Township 21 N Range 4 W Section 12 230 260 Sand and gravel Latitude DEG, MIN. DEG. MIN. 260 i 275 Sandy brown clay SEC -ACTIVITY (∠) t LOCATION SKETCH-275 280 Sand and gravel NORTH ✓ NEW WELL 280 370 Sandy brown clay MODIFICATION/REPAIR 370 380 Sand and gravel - Deepen - Other (Specify) 380 515! Sandy blue clay 515! 540! Sand with small gravel DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG" 650! Sandy blue clay with small gravel 540 879 | Sandy blue clay 650 PLANNED USES (∠) 879 900 ¦ Small gravel WATER SUPPLY \_\_\_ Domestic \_\_\_ 950 ¦ Sandy blue clay 900 \_ Irrigation \_\_\_\_ Industrial 950 1080 | Black sand MONITORING --TEST WELL CATHODIC PROTECTION. HEAT EXCHANGE DIRECT PUSH INJECTION VAPOR EXTRACTION SPARGING. SOUTH REMEDIATION . 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. 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 TOTAL DEPTH OF BORING 1080 TEST LENGTH \_\_\_\_\_ (Hrs.) TOTAL DRAWDOWN\_ TOTAL DEPTH OF COMPLETED WELL 1070 (Feet) May not be representative of a well's long-term yield. CASING (S) ANNULAR MATERIAL DEPTH DEPTH BORE HOLE FROM SURFACE FROM SURFACE TYPE (土) TYPE CON-UCTOR DIA. INTERNAL GAUGE SLOT SIZE SCREEN BLANK MATERIAL / BEN-FILTER PACK (Inches) DIAMETER OR WALL IF ANY GRADE MENT TONITE FILL Ft. Ft. (TYPE/SIZE) Ft. (Inches) THICKNESS (Inches) to <u>(√</u>)  $(\checkmark)$  $(\underline{\checkmark})$ 630 i 640 10-3/4 **PVC** 2.5 SCH 80 .030 675 870 SRI#8 Sand 10-3/4 640 660 **PVC SCH 80** 2.5 870 911 Bentonite Seal Zone 2 977 1080 SRI#8 Sand 955 10/8  $\mathbf{0}$ PVC 2.5 SCH 80 975 8-3/4 955 PVC 2.5 SCH 80 .030 8-3/4 975 1030 PVC 2.5 **SCH 80** ATTACHMENTS (∠) CERTIFICATION STATEMENT Geologic Log 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) Well Construction Diagram . Geophysical Log(s) 20 WEST KENTUCKY AVE WOODLAND - Soil/Water Chemical Analysis CITY STATE \_\_ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

Signed

12/31/09

C57 A HIC - 13378

C-57 LICENSE NUMBER

JAN 0 8 2009 **ORIGINAL** USE ONLY --- DO STATE OF CALIFORNIA File with DWR WELL COMPLETION REPORT Refer to Instruction Pamphlet STATE WELL NO./ STATION NO. Page 3 of 3 No. E0103388 Owner's Well No. 8434 Date Work Began 11/23/2009 , Ended 12/3/2009 LATITUDE LONGITUDE Local Permit Agency Glenn County Health Dept Permit No. MW 319-09 GEOLOGIC LOG

Permit Date 11/19/2009 APN/TRS/OTHER ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) ORIENTATION (✓) DRILLING METHOD ROTARY \_\_\_\_ FLUID MUD DEPTH FROM DESCRIPTION SURFACE Describe material, grain, size, color, etc. Address 70' Sof Road 25 & 70' Wor Road D 5 Top soil 0 5 65 Sand and gravel City CA 65 170 Sandy brown clay County GLENN 180 Sand and gravel 170 APN Book 024 Page 200 \_ Parcel <u>021</u> 180 230 Sandy brown clay Township 21 N Range 4 W Section 12 230 260 Sand and gravel Latitude\_ DEG. MIN. DEG. MIN. 260 i 275 Sandy brown clay SEC -ACTIVITY (∠) LOCATION SKETCH. 275 i 280 Sand and gravel NORTH ✓ NEW WELL 280 370 Sandy brown clay MODIFICATION/REPAIR 370 380 Sand and gravel - Deepen - Other (Specify) 380 515 | Sandy blue clay 540 ! Sand with small gravel 515 DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG" 540 650 ! Sandy blue clay with small gravel 650 879 Sandy blue clay PLANNED USES (∠) 879 900 | Small gravel WATER SUPPLY \_\_\_\_ Domestic \_\_\_\_ Public \_\_\_\_ Irrigation \_\_\_\_ Industrial 900 950 | Sandy blue clay 950 1080 | Black sand MONITORING → TEST WELL \_ CATHODIC PROTECTION. HEAT EXCHANGE DIRECT PUSH\_ INJECTION VAPOR EXTRACTION SPARGING. SOUTH REMEDIATION . 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. 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\_ TOTAL DEPTH OF BORING 1080 TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.) TOTAL DEPTH OF COMPLETED WELL 1070 (Feet) May not be representative of a well's long-term yield. CASING (S) ANNULAR MATERIAL DEPTH DEPTH FROM SURFACE BORE HOLE FROM SURFACE TYPE (✓) TYPE DIA. SCREEN INTERNAL BLANK MATERIAL / GAUGE SLOT SIZE BEN-FILTER PACK GRADE DIAMETER OR WALL IF ANY MENT TONITE FILL to Ft. Ft. to Ft. (TYPE/SIZE) (Inches) THICKNESS (Inches) (<u>~</u>) (1) (1) 1030 8-3/4 1050 **PVC** SCH 80 .030 1050 8-3/4 1070 **PVC** 2.5 **SCH 80** ATTACHMENTS (∠) CERTIFICATION STATEMENT Geologic Log I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief. NAME\_EATON DRILLING CO. Well Construction Diagram (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED) \_ Geophysical Log(s) 20 WEST KENTUCKY AVE WOODLAND Soil/Water Chemical Analysis 95695 CITY STATE ZIP \_\_\_\_ Other \_

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

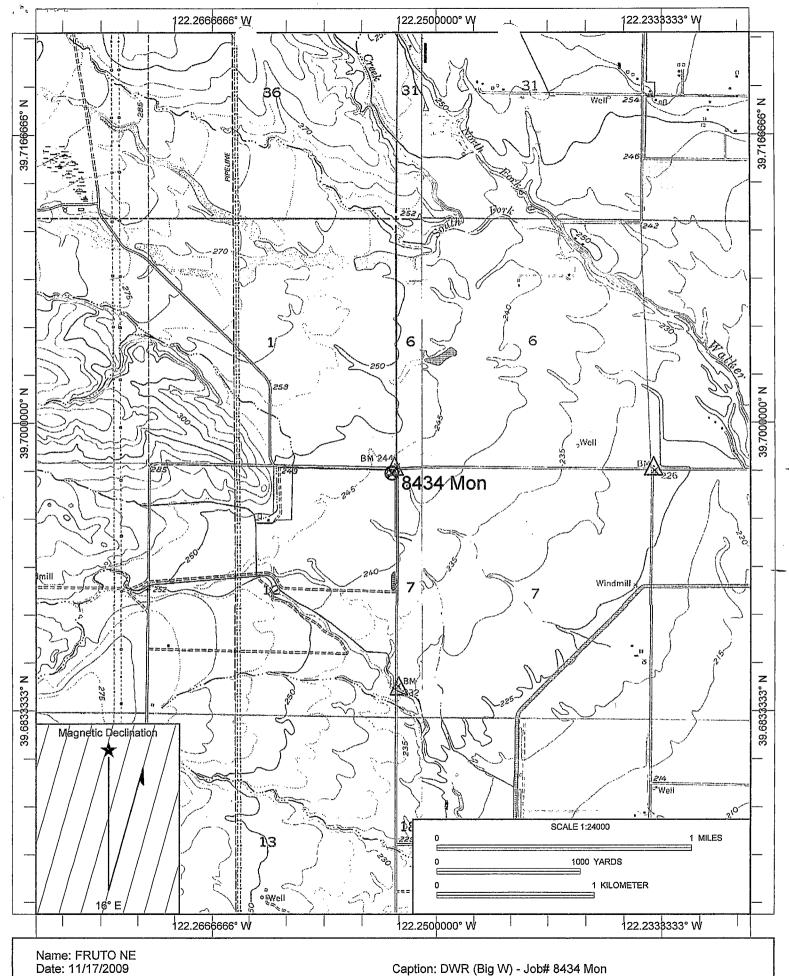
)ai

12/31/09

DATE SIGNED

C57 A HIC - 13378

C-57 LICENSE NUMBER



Scale: 1 inch equals 2000 feet

Caption: DWR (Big W) - Job# 8434 Mon APN: 024-200-021

T21N R4W s12

**ORIGINAL** STATE OF CALIFORNIA File with DWR WELL COMPLETION REPORT Refer to Instruction Pamphlet STATE WELL NO./ STATION NO. Page 1 of 5 No. E0103616 ABC Owner's Well No. 8432 LATITUDE LONGITUDE Date Work Began 11/13/2009 , Ended 11/20/2009 Local Permit Agency Glenn County Health Dept Permit No. <u>IRW 533-09</u> APN/TRS/OTHER \_ Permit Date \_11/5/2009 GEOLOGIC LOG VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)

DRILLING ROTARY — ELLID MI ID ORIENTATION (✓) DEPTH FROM DESCRIPTION SURFACE Describe material, grain, size, color, etc. Ff Address 80' Eof Hwy 45 & .97 Mi Nof Rd 23 0 5 Top soil 5 76 Brown clay City CA 76 112 Sand and gravel County GLENN 112 132 Brown clay APN Book 032 Page 260 Parcel 005 138 Gravel with brown clay 132 Township 22 N Range 1 W \_ Section 21 138 180 Brown clay Latitude\_ DEG. MIN. SEC.

LOCATION SKETCH 180 i 204 Sand and gravel DEG MIN. SEC -ACTIVITY (∠) 204 246 Brown clay NORTH ✓ NEW WELL 246 270 Sand and gravel MODIFICATION/REPAIR 270 290 Sandy brown clay --- Deepen 290 304 ! Sand and gravel -- Other (Specify) 314! Brown clay 304 DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG" 314 338 | Sand and gravel 338 356 Brown clay PLANNED USES (∠) 396 Sandy brown clay with gravel 356 WATER SUPPLY Domestic — Public
 Irrigation — Industrial 396 546 Brown clay 546 582 Gravel with sand MONITORING -582 592 Brown clay TEST WELL 592 604 Sand and gravel CATHODIC PROTECTION. 604 626 Brown clay HEAT EXCHANGE DIRECT PUSH 626 648 Sand and gravel INJECTION 860 Sandy brown clay 648 VAPOR EXTRACTION . 860 892 Gravel with brown clay streaks SPARGING 892 1170 Black sand with blue clay streaks SOUTH REMEDIATION 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. 1170 1200 Black sand OTHER (SPECIFY) 1400 Blue clay 1200 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 TOTAL DEPTH OF BORING 1210 \_\_\_\_ (Hrs.) TOTAL DRAWDOWN\_\_\_\_\_ TOTAL DEPTH OF COMPLETED WELL 1156 (Feet) May not be representative of a well's long-term yield. CASING (S) ANNULAR MATERIAL DEPTH FROM SURFACE FROM SURFACE TYPE (1) TYPE BLANK INTERNAL GAUGE OR WALL SLOT SIZE DIA' MATERIAL / BEN-CF-DIAMETER FILTER PACK (Inches) TONITE FILL MENT Ft. Ft. to (Inches) THICKNESS to Ft. (TYPE/SIZE) (⊻) **(**✓)  $(\checkmark)$ Zone 0 i 64 Sand Slurry 14 **√** 0 89 PVC 2.5 **SCH 80** 64 ¦ 73 Bentonite Seal 89 99 14 **PVC** 2.5 **SCH 80** .030 73 i 120 SRI#8 Sand 99 109 14 PVC 2.5 **SCH 80** 120 130 Bentonite Seal 2 Zone SRI#8 Sand 130 ¦ 170 189 PVC n SCH 80 180 Bentonite Seal 170 i ATTACHMENTS (∠) CERTIFICATION STATEMENT Geologic Log I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief. NAME EATON DRILLING CO. Well Construction Diagram Geophysical Log(s) (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

\_ Other \_

- Soil/Water Chemical Analysis

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

Mark Danion

WOODLAND

01/06/10

95695

C57 A HIC - 13378

STATE

20 WEST KENTUCKY AVE

ORIGINAL STATE OF CALIFO	
ORIGINAL STATE OF CALIFO	DRNIA DWR USE ONLY DO NOT FILL IN
File with DWR  Page 2 of 5  STATE OF CALIFORM  WELL  COMPLETIO  Refer to Instruction	
Page 2 of 5  Refer to Instruction	·
Owner's Well No. 8432 No. <b>E01</b>	03616
Date Work Began 11/13/2009 , Ended 11/20/2009	LATITUDE LONGITUDE
Local Permit Agency Glenn County Health Dept	APN/TRS/OTHER
Permit No. IRW 533-09  GEOLOGIC LOG  Permit Date 11/5/2009	AFWINGIOTIEN
	Ţ
ORIENTATION (\(\sigma\)) VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)	
DEPTH FROM METHOD ROTARY FLUID MUD	
SURFACE  Ft. to Ft.  Describe material, grain, size, color, etc.	
0 5 Top soil	Address 80' Eof Hwy 45 & .97 Mi Not Rd 23
5 76 Brown clay	City CA
76 112 Sand and gravel	County GLENN
112 132 Brown clay	APN Book 032 Page 260 Parcel 005
132 138 Gravel with brown clay	Township 22 N Range 1 W Section 31
138 180 Brown clay	Latitude
180 204 Sand and gravel	DEG. MIN. SEC. DEG. MIN. SEC.  LOCATION SKETCH ACTIVITY ( $\swarrow$ ) —
204 246 Brown clay	NORTH NEW WELL
246 270 Sand and gravel 270 Sandy brown clay	MODIFICATION/REPAIR
270; 290; Sandy brown clay 290; 304; Sand and gravel	. — Deepen — Other (Specify)
304 314 Brown clay	
314 338 Sand and gravel	DESTROY (Describe Procedures and Materials
338¦ 356¦ Brown clay	Under "GEOLOGIC LOG"
356 Sandy brown clay with gravel	PLANNED USES (∠) WATER SUPPLY
396 546 Brown clay	Domestic — Public
546 582 Gravel with sand	
582, 592, Brown clay	MONITORING → TEST WELL
592 604 Sand and gravel	DATHODIC PROTECTION
604 626 Brown clay	HEAT EXCHANGE
626 648 Sand and gravel	DIRECT PUSH INJECTION
648 860 Sandy brown clay	VAPOR EXTRACTION
860 892 Gravel with brown clay streaks	SPARGING
892 1170 Black sand with blue clay streaks 1170 1200 Black sand	Illustrate or Describe Distance of Well from Roads, Buildings,
1200 Black Sand	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.
1200 1400 Blue clay	WATER LEVEL & YIELD OF COMPLETED WELL
	DEPTH TO FIRST WATER———— (Ft.) BELOW SURFACE
1 1	DEPTH OF STATIC
	WATER LEVEL (Ft.) & DATE MEASURED
TOTAL DEPTH OF BORING 1210 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE
TOTAL DEPTH OF COMPLETED WELL 1156 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)
TOTAL BELLIT OF GOTAL BELLE (1666)	May not be representative of a well's long-term yield.
DEPTH BORE - CASING (S)	DEPTH ANNULAR MATERIAL
I FROM SURFACE   LIGHT   TYPE (V)	DEPTH ANNULAR MATERIAL FROM SURFACE TYPE SLOT SIZE
GRADE DIAMETER OR WAL	L IF ANY   MENT TONITE FILL   FILTER PACK
	SS (Inches) Ft. to Ft. $(\checkmark)$ $(\checkmark)$ $(\checkmark)$ $(\checkmark)$
189 199 14 V PVC 2.5 SCH	
199 255 14 V PVC 2.5 SCH 255 265 14 V PVC 2.5 SCH	
255   265   14   \(\sigma\)   PVC   2.5   SCH   265   320   14 \(\sigma\)   PVC   2.5   SCH	60 .030   417   473   SRI#6 Salid
320; 330 14 V PVC 2.5 SCH	
330 370 14 V PVC 2.5 SCH	
ATTACHMENTS (\(\neq\))	CERTIFICATION STATEMENT
Geologic Log	is complete and accurate to the best of my knowledge and belief.
— Well Construction Diagram  — Geophysical Log(s)  — Well Construction Diagram  NAME _EĂTON DRILLING CO  (PERSON, FIRM, OR CORPOR	J. ATION) (TYPED OR PRINTED)
Soil/Water Chemical Analysis 20 WEST KENTUCKY AVE	WOODLAND CA 95695
— Other ADDRESS ATTACH ADDRESS ATTACH ADDRESS ATTACH ADDRESS ATTACH ADDRESS	CITY STATE ZIP 01/06/10 C57 A HIC - 13378
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

ORIGINAL File with DV	۷R	JAN		2009		STATE O	OF CALIFO		REPOR	T I	DWR US	SE ONL	. <u>Y</u>	<u>- DO</u>	NOT FILL IN	<del>'</del>
Page 3 of 5	***	<b>V</b> ,		7	<b>***</b>		ILE III Istruction F			`	S	TATE W	VELL NO	D./ STAT	TION NO.	<del></del> -
Owner's We	eli No.	8432				•	∘ E01	-			1 1	1		ı	1 1 1	
Date Work B	egan _	11/13/20			., Ended 11/20/	<u>/2009</u>		•-	, , ,		LATITUDE		·	LC	ONGITUDE	——————————————————————————————————————
					y Health Dept					_			L L	OTUED		Ш
Permit N	No. <u>IR</u>			2014	Permit	Date	5/2009			_		Ar	PN/TRS/	OTHER		
					C LOG			T								
ORIENTATION	N ( <u>✓</u> )	→ VE DRILLING	RTICAL	— Н	HORIZONTAL ——			]								
DEPTH FRO		DRILLING METHOD	KUL		DESCRIPTION	LUID <u>MUD</u>		I I								
SURFACE Ft. to	Ft.				DESCRIPTION terial, grain, size	e, color, et	c	Ċ								
0¦	5	Top soi	il					Ad	dress 80' Eof	Hw <u>y 45</u> 8	<b>VELLLI</b> 2.9 <u>7 Mil</u>	REATE	0 <u>N</u>			
5		Brown							CA CA							
76		Sand a		ivel					unty GLENN							
112		Brown						AP	N Book 032_							
132		Gravel		rown (	<u>clay</u>				wnship 22 N							
138		Brown						Lat	titude	SEC			_	1	1	
204		Sand a Brown		ivei				—	DEG. N	AIN. SEC CATION S				DEG.	MIN. SEC. CTIVITY (⊻)	
246		Sand a		wel .				$\vdash$		- NORTH					NEW WELL	
270		Sandy I											i		ICATION/REPAIR	Ł
290!		Sand a													— Deepen — Other (Specif	fy)
304!		Brown														
314		Sand a		vel										<u> </u>	DESTROY (Describ Procedures and Ma	oe aterials
338		Brown									*			L	Jnder "GEOLOGIC	LOG"
356				clay v	with gravel										NNED USES ( R SUPPLY	( کے
396¦	546	Brown	clay					EST					EAST	0	Domestic — Pub rrigation Inde	olic
546¦	582	Gravel	with sa	and_				WE					7	"	rrigation MONITORING	
582		Brown													TEST WELL	
592		Sand a		vel										CATHO	DIC PROTECTION	
604		Brown												ŀ	HEAT EXCHANGE	
626		Sand a													DIRECT PUSH INJECTION	
648		Sandy I												VAPO	OR EXTRACTION	
860					clay streaks					201711					SPARGING	
		Black s		ith biu	ue clay streaks	i		Illus	strate or Describe D	SOUTH -	from Roads,	Buildings		٠ _	REMEDIATION	
		Blue cla						Fenc nece	ces, Rivers, etc. and essary. PLEASE BI	attach a map. E ACCURATE	Use additiona & COMP	l paper i	if		OTHER (SPECIFY)	_
1200	1400	Diue oi	ду						WATE	R LEVEL &	z YIELD	OF CO	MPL	ETED	WELL	
	<del> </del>			-				DEF	PTH TO FIRST V						**	
<u> </u>	!				-			DEP	PTH OF STATIC							
									TER LEVEL							
TOTAL DEPT	u of i	PORING.	1210	(F	'eet)			1	TIMATED YIELD *							
TOTAL DEPT									ST LENGTH May not be repre							
									auy not be repre	esentative of	u wens n	ng-ter	m yiei	<i>ı</i> .		
DEPTH		BORE -			<b>C</b> .	ASING (S)				DEP	TH		ANNU	LAR	MATERIAL	
FROM SURFA	/CE	BORE - HOLE DIA.	TYPE	(소)	MATERIAL /	INTERNAL	GAUGE	,	SLOT SIZE	FROMSU	RFACE	05	DEN	TY	PE	
Ft. to F	=t.	(Inches)	BLANK	CON- DUCIOR FILL PIPE	GRADE	DIAMETER	OR WALL	L	IF ANY	Ft. to	Ft.	CE- MENT	BEN-	FILL	FILTER PAC (TYPE/SIZE)	
				<u> </u>	1	(Inches)	THICKNES		(Inches)			(₹)	( <u>✓</u> )	<u>(^)</u>		
	380 400	14 14	1		PVC	2.5	SCH 8		.030	675	736		7	<b>√</b>	SRI#8 Sanc	
Zone	3	14	<b>V</b>	-	PVC	2.5	SCH 8	80		736 1 746 1	746 1204			-V	Bentonite S SRI#8 Sand	
	549	14			PVC	2.5	SCH 8	80		1204	1210		<b>√</b>		Bentonite S	
549	559	14			PVC	2.5	SCH 8		.030							
559 <sub> </sub>	595	14	1		PVC	2.5	SCH 8	80						-		
		MENTS	(∠) -						CERTIFICA	TION STA	TEMENT	· —	'			=
	ieologic Vell Con:	Log struction Di	iagram		I, the undersign	gned, certify the ATON DRIL	at this report	is con	mplete and accurate	e to the best of	my knowled	ige and i	belief.			
		al Log(s)	Legium.		(PER	SON, FIRM, O	R CORPORA		) (TYPED OR PRI	•				_		—
		r Chemical	Analysis		20 WEST		KY AVE			W	OODLAN CITY	ID		CA STATE	95695 ZIP	—
	Other   1						<u>James</u>		DECENTATIVE			1/06/1			057 A HIC - 13	
					1 VVC1	TE DELIFERIA	O I FIONIZED	· NEFT	VESEIVIVIIVE			IE OIGN	100	,		

ORIGINAL
File with DWR JAN 0 8 2009 WELL COMPLETION REPORT
Page 4 of 5
Owner's Well No. 8432
Date Work Began 11/13/2009
Local Permit Agency Glenn County Health Dept
Permit No. IRW 533-09
Permit Date 11/5/2009

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				ADM	TOOK	THE	_				

		GEOLOGIC LOG	<del></del>	
ORIENTA	TION (≰)	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)	t .	
DEPTH	FROM	DRILLING METHOD ROTARY FLUID MUD	l l	
SUR	ACE	DESCRIPTION  Describe authorized action and an address at the second action and action and action ac		
Ft. to		Describe material, grain, size, color, etc.  Top soil		
5			Address 80' Eof Hwy 45 & .97 Mi Nof Rd 23	
		Brown clay	City CA	
76		Sand and gravel	County GLENN	
112		Brown clay	APN Book 032 Page 260 Parcel 005	
132		Gravel with brown clay	Township 22 N Range 1 W Section 31	
138		Brown clay	Latitude	<u>l                                     </u>
180		Sand and gravel	DEG. MIN. SEC.  LOCATION SKETCH	DEG. MIN. SEC. —ACTIVITY (⊻) —
204		Brown clay	NORTH NORTH	ACTIVITI (▼) —
246		Sand and gravel		MODIFICATION/REPAIR
270		Sandy brown clay		Deepen
290¦		Sand and gravel	*	Other (Specify)
304¦		Brown clay		DESTROY (Describe
314¦	338	Sand and gravel		<ul> <li>DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"</li> </ul>
338	356	Brown clay		PLANNED USES(∠)
356	396	Sandy brown clay with gravel		WATER SUPPLY
396¦	546	Brown clay	MEST EAST	Domestic Public
546	582	Gravel with sand	WE EA	Irrigation Industrial
582	592	Brown clay		MONITORING → TEST WELL
592¦	604	Sand and gravel		CATHODIC PROTECTION.
604	626	Brown clay		HEAT EXCHANGE
626	648	Sand and gravel		DIRECT PUSH
648		Sandy brown clay		INJECTION
860		Gravel with brown clay streaks		VAPOR EXTRACTION
892		Black sand with blue clay streaks	south —	SPARGING REMEDIATION
1170		Black sand	Illustrate or Describe Distance of Well from Roads, Buildings,	OTHER (SPECIFY)
1200		Blue clay	Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	
1200	1100	Dido ciay	WATER LEVEL & YIELD OF COMPL	ETED WELL
1			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	<u>:</u>
			DEPTH OF STATIC	
1	,		WATER LEVEL (Ft.) & DATE MEASURED	
		1210	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 1210 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	_ (Ft.)
TOTAL D	EPTH OF (	COMPLETED WELL 1156 (Feet)	May not be representative of a well's long-term yield	d

	PTH	BODE -					C	ASING (S)				D	EPTI	4		ANN	ULAR	MATERIAL
FROM SURFACE		BORE - HOLE	T		<u> (</u>						F	FROM					TY	PE
Ft. to	o Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	EILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		Ft.	to	Ft.	CE- MENT ( <u>~</u> )	BEN- TONITI	F FILL ( <u>√</u> )	FILTER PACK (TYPE/SIZE)
595		14		√			PVC	2.5	SCH 80	.030			1					
605	631	14	<b>✓</b>				PVC	2.5	SCH 80				1					
631	641	14		<b>√</b>			PVC	2.5	SCH 80	.030			-					
641	661	14	7				PVC	2.5	SCH 80									
Zone	1																	
0	859	14/8	7				PVC	2.5	SCH 80				Ī					

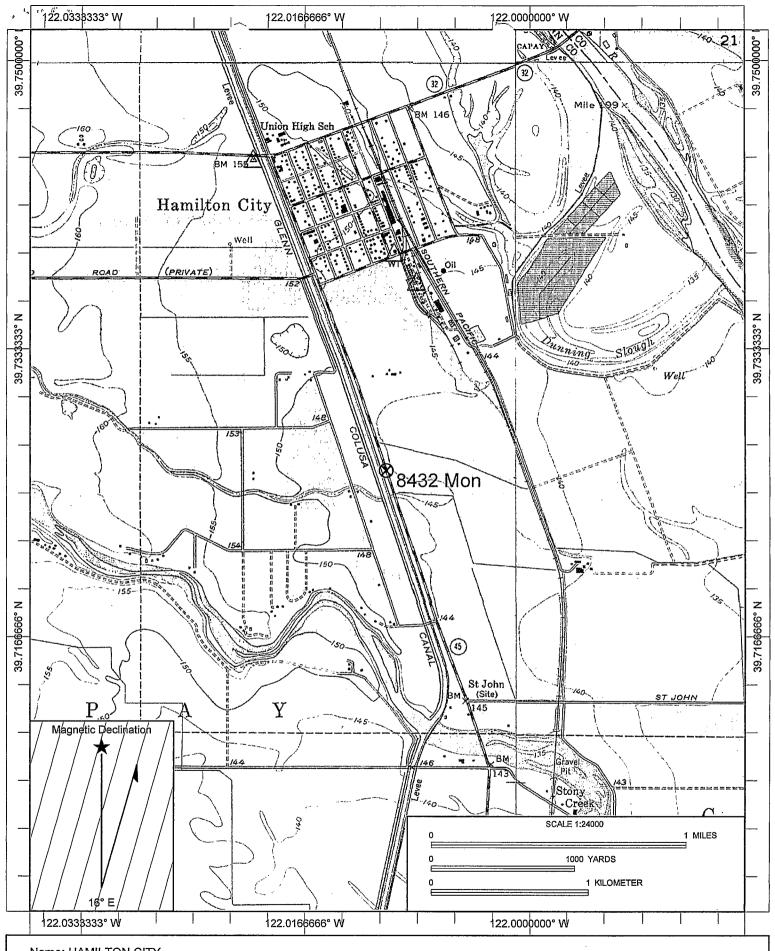
ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -		
— Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief.		
Well Construction Diagram	NAME EATON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
- Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA	95695
Other	ADDRESS // / \ ~	CITY	STATE	E ZIP
TTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Marke ) cumon	<u>01/06/10</u>		C57 A HIC - 13378
TACH ADDITIONAL INFONVIATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED		C-57 LICENSE NUMBER

a b co	$\mathcal{C}_{L^{\alpha}}$							
ORIGINAL File with DWR	JAN 0 8 2009 WELL	STATE OF				SE ONLY -	DO	NOT FILL IN
		Refer to Instru				TATE WELL N	O./ STAT	TION NO.
Page 5 of 5 Owner's Well No		-		3616				
Date Work Began		2009		,5010	LATITUD	<u>                                     </u>	L	L L L L L L L L L L L L L L L L L L L
						1 1 1 1	ı	
Permit No. IF	gency Glenn County Health Dept RW 533-09 Permit	D . 11/5/2	วกกด		- [	APN/TRS	OTHER	
Permit No. 11	GEOLOGIC LOG	Date			-			
ORIENTATION (∠)	→ VERTICAL — HORIZONTAL — A DRILLING DOTA DV		PECIFY)					
DEPTH FROM		UID MUD						
SURFACE Ft. to Ft.	DESCRIPTION  Describe material, grain, size	, color, etc.						
	Top soil	,,		Address 80' Fof	Hwy 45 & .97 Mi	RCATION3		
	Brown clay			City CA	11Wy 10 C .07 W	110111020	•	
	Sand and gravel			County GLENN				
	Brown clay			-	Page <u>260</u>	Damas! 005		
132 138	Gravel with brown clay					Section 31		
	Brown clay			Latitude	Kange <u></u>	Section 51	i	
	Sand and gravel			DEG. M	IN. SEC.	•	DEG.	MIN. SEC.
	Brown clay			Loc	CATION SKETCH			CTIVITY (🗹) 🗕
	Sand and gravel				NORTH -		]_ <del>_</del> _	NEW WELL
	Sandy brown clay	1.00-11						FICATION/REPAIR —— Deepen
	Sand and gravel							Other (Specify)
	Brown clay						-	
	Sand and gravel				r		— [	DESTROY (Describe Procedures and Materia
	Brown clay						'	Jnder "GEOLOGIC LOG
	Sandy brown clay with gravel							NNED USES (∠)
	Brown clay		<sub>E</sub>	_		L.	I — E	R SUPPLY Domestic Public
	Gravel with sand		MEGA	Ú <b>Š</b>		EAS	<u> </u>	rrigation Industria
	Brown clay		[			_		MONITORING -
	Sand and gravel						L	TEST WELL
	Brown clay							DIC PROTECTION
	Sand and gravel						'	HEAT EXCHANGE —— DIRECT PUSH
	Sandy brown clay							INJECTION
							VAPO	OR EXTRACTION
	Gravel with brown clay streaks							SPARGING
	Black sand with blue clay streaks			Illustrate or Describe D	— SOUTH ————————————————————————————————————	Buildings,	] ,	REMEDIATION
1	Black sand			Fences, Rivers, etc. and necessary. PLEASE BI	attach a map. Use addition E ACCURATE & COM	al paper if PLETE.		OTHER (SPECIFY)
1200 1400	Blue clay		—— T	WATER	LEVEL & YIELD	OF COMPI	FTFD	XX/ET I
	<u> </u>							**EDL
	I				/ATER (Ft.) BE	ELOW SURFAC	E	
	1			DEPTH OF STATIC WATER LEVEL	(Ft.) & DATE	E MEASURED _		
	1		1		(GPM) &			
TOTAL DEPTH OF	BORING 1210 (Feet)		1		(Hrs.) TOTAL DRAV		(Ft.)	
TOTAL DEPTH OF	COMPLETED WELL 1156 (Feet)				esentative of a well's			
			<u>-</u>	1		1		
DEPTH	BORE - CA	SING (S)			DEPTH FROM SURFACE	ANN	ULAR	MATERIAL
FROM SURFACE	BORE - TYPE (<)   MATERIAL /	INTERNAL	GALICE	SI OT SIZE	FROM SURFACE			PE
F F.	DIA. (Inches) SCREEN AND OF SC	DIAMETER	GAUGE OR WALL	SLOT SIZE IF ANY		CE- BEN- MENT TONIT	E FILL	FILTER PACK
Ft. to Ft.		(inches) T	HICKNESS	(Inches)	Ft. to Ft.	(∠) (∠)	( <u>v</u> )	(TYPE/SIZE)
859 879	8-3/4	2.5	SCH 80	0.030	l			
879¦ 990	8-3/4 ✓ PVC	2.5	SCH 80		l			
990; 1010	8-3/4 ✓ PVC	2.5	SCH 80	030				

DEPTH .	BORE -			C	ASING (S)			DEPTH		ANNU	JLAR	MATERIAL
FROM SURFACE	HOLE		투 (쏫)					FROM SURFACE			TY	PE
Ft. to Ft.	DIA, (Inches)	BLANK	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft. to Ft.	CE- MENT	BEN- TONITE	E FILL (⊻)	FILTER PACK (TYPE/SIZE)
859 879	8-3/4	<b>*</b>		PVC	2.5	SCH 80	.030	i				
879¦ 990	8-3/4	<b>1</b>		PVC	2.5	SCH 80						
990¦ 1010	8-3/4		1	PVC	2.5	SCH 80	.030					
1010; 1116		~		PVC	2.5	SCH 80						
1116; 1135	8-3/4	~		PVC	2.5	SCH 80	.030					
1135 1156	8=3/4	V		PVC	2.5	SCH 80						

	<u> </u>	1 1
	- ATTACHMENTS (∠)	CERTIFIC
	Geologic Log	I, the undersigned, certify that this report is complete and accur
	Well Construction Diagram	NAME EATON DRILLING CO.
l .	Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR F
	Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE
	Other	ADDRESS // \
1		Signed Mark & James

1	ATTACHMENTS (∠)	CERTIFICATION	STATEMENT —		
	Geologic Log	I, the undersigned, certify that this report is complete and accurate to the b	est of my knowledge and belief.		
	Well Construction Diagram	NAME EATON DRILLING CO.			
	Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
	Soil/Water Chemical Analysis	20 WEST KENTUÇKY AVE	WOODLAND	CA	95695
	— Other —	ADDRESS / /	CITY	STATE	ZIP
	ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Mark Dames	01/06/10	<u>C</u> !	<u>57 A HIC - 1337</u> 8
	ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-/	57 LICENSE NUMBER
	DWR 188 REV. 11-97 IF ADDITION	IAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBER	RED FORM		



Name: HAMILTON CITY

Date: 11/2/2009

Scale: 1 inch equals 2000 feet

Caption: DWR (Hamilton City) - Job# 8432 Mon APN: 032-260-005

APN: 032-260-005 T22N R1W s31

# WELL STATE OF CALIFORNIA COMPLETION REPORT Refer to Instruction Pamphlet

Page	1	of	4	
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038764

Owner's Well No. 7950		No.	E(
Date Work Began 3/2/2006	Ended3/20/2006		

2210	UZ	U + O						
STATE WELL NO./ STATION NO.								
LATITUDE LONGITUDE								

Local P	ermit A	gency GLENN COUNTY HEALTH DEPT W243-06 Permit Date 2/28/2006	APN/TRS/OTHER
Permi	t Noivi	GEOLOGIC LOG	
ORIENTAT		✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING METHOD ROTARY — FLUID MUD	
DEPTH SURF		DESCRIPTION	
Ft. to		Describe material, grain, size, color, etc.	WELL LOCATION
0		TOP SOIL	Address 100' SOF RD 204 & 50' EOF RD 205
18		SAND AND GRAVEL	City CA
25		TAN CLAY	County GLENN
35		SAND AND GRAVEL	APN Book 037 Page 090 Parcel 008
95		TAN CLAY WITH SAND STREAKS	Township 22 N Range 2 W Section 1
186		SAND AND GRAVEL	Latitude
244		SANDY BROWN CLAY	DEG. MIN. SEC. DEG. MIN. SEC.  LOCATION SKETCHACTIVITY (∠)
278		SAND AND GRAVEL	NORTH NEW WELL
380		SILTY BLUE CLAY	MODIFICATION/REPAIR
525		SAND AND GRAVEL	Deepen
540		SILTY BROWN CLAY	Other (Specify)
550		SAND AND GRAVEL	DESTROY (Describe
578		SILTY BROWN CLAY WITH SAND STREAKS	Procedures and Materials Under "GEOLOGIC LOG")
682		SAND AND SMALL GRAVEL	PLANNED USES (∠)
735	780	SILTY TAN CLAY	WATER SUPPLY
780		SAND AND SMALL GRAVEL	U Domestic Public Industrial
834		SILTY GRAY BLUE CLAY WITH SAND STREAKS	MONITORING →
936	1100	COARSE SAND WITH SILTY GRAY BLUE	TEST WELL
		CLAY STREAKS	CATHODIC PROTECTION
			HEAT EXCHANGE
			DIRECT PUSH
			NAPOR SYTRACTION
			VAPOR EXTRACTION SPARGING
-			SOUTH REMEDIATION
			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
		BORING 1100 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft)
TOTAL DE	EPTH OF	COMPLETED WELL 1060 (Feet)	May not be representative of a well's long-term yield.

DEPT	Н	BORE -					C	ASING (S)	,		DE	ANNULAR MATERIAL				
FROM SUR	RFACE	HOLE	_T	ΥPI		<u>/)</u>					FROMS	URFACE			TY	PE .
Ft. to	Ft	DIA. (Inches)	BLANK	SCREEN	NOS!	DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to Ft.	CE- MENT ( <u>√</u> )	BEN- TONITE	FILL ( <u>×</u> )	FILTER PACK (TYPE/SIZE)
ZONE	1										0	32	<b>√</b>			SAND SLURRY
0	70	14	✓	1			PVC F480	2.5	SCH 80		32	100			√	SRI#8 SAND
70	80	14		1			PVC F480	2.5	SCH 80	.030	100	188	✓			SAND SLURRY
80	90	14	1	1			PVC F480	2.5	SCH 80		188	191		<b>V</b>		BENTONITE C
ZONE	2										191	440			<b>V</b>	SRI#8 SAND
0	210	14	7				PVC F480	2.5	SCH 80		440	671	✓			SAND SLURRY

	VC 1 400   2.5   301100	440 ; 6/1 🗸	SAND SLURRY
ATTACHMENTS (∠)  — Geologic Log  — Well Construction Diagram	I, the undersigned, certify that this report is complete and accurate NAME_EATON_DRILLING_CO.	to the best of my knowledge and belief	f.
Geophysical Log(s) Soil/Water Chemical Analysis	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINT 20 WEST KENTUCKY AVE	TED) WOODLAND	CA 95695
Other	ADDRESS  Signed  WELL DRILLER/AUTHORIZED REPRESENTATIVE	CITY 05/03/06 DATE SIGNED	STATE ZIP  C57 A HIC - 133783  C-57 LICENSE NUMBER
TEN 100 DELL 11 05			

### STATE OF CALIFORNIA

### WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Owner's Well No. 7950

No. E038764

OTTICL S TVOIL TTO	<del></del>
Date Work Began 3/2/2006	Ended3/20/2006

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW243-06 Permit Date 20

GEOLOGIC LOG

Permit Date 2/28/2006

<u> </u>		DWR	USE	ONLY		_DO	NOT	FILL	IN.	
				1						
Ι.	-		STA	TE WE	LL NO	/STA	tion n	Ο.		
	1.					ı	1.1	1 1		
Ι.		LATIT	JDE			L	ONGITU	JDE		
		1		1						
-				APN	J/TRS/	THE	> '' '			

ORIENTA	ΓΙΟΝ (≰)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) DRILLING METHOD ROTARY FLUID MUD				
DEPTH SURF		DESCRIPTION				
Ft. to		Describe material, grain, size, color, etc.	WELL LOCATION—			
0		TOP SOIL	Address 100' SOF RD 204 & 50' EOF RD 20	)5		
18		SAND AND GRAVEL	City CA			
25		TAN CLAY	County GLENN			
35		SAND AND GRAVEL	APN Book 037 Page 090 Parcel 008			
95	186	TAN CLAY WITH SAND STREAKS	Township 22 N Range 2 W Section 1			
186	244	SAND AND GRAVEL	Latitude	l		
244	278	SANDY BROWN CLAY		DEG. MIN. SEC.		
278	380	SAND AND GRAVEL	LOCATION SKETCH NORTH	— ACTIVITY (∠) —— ✓ NEW WELL		
380	525	SILTY BLUE CLAY		MODIFICATION/REPAIR		
525	540	SAND AND GRAVEL		— Deepen		
540	550	SILTY BROWN CLAY		Other (Specify)		
550	578	SAND AND GRAVEL	,	DESTROY (Describe		
578	682	SILTY BROWN CLAY WITH SAND STREAKS		<ul> <li>DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")</li> </ul>		
682	735	SAND AND SMALL GRAVEL	·	PLANNED USES (∠)		
735	780	SILTY TAN CLAY		WATER SUPPLY		
780	834	SAND AND SMALL GRAVEL	EST (ST	Domestic Public Industrial		
834	936	SILTY GRAY BLUE CLAY WITH SAND STREAKS	≥ ±	MONITORING -		
936	1100	COARSE SAND WITH SILTY GRAY BLUE		TEST WELL		
		CLAY STREAKS		CATHODIC PROTECTION		
				HEAT EXCHANGE		
				DIRECT PUSH		
				INJECTION		
				VAPOR EXTRACTION SPARGING		
-		ALL WILLIAM SALES CO.	SOUTH	REMEDIATION		
			Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if	OTHER (SPECIFY)		
			necessary. PLEASE BE ACCURATE & COMPLETE.			
			WATER LEVEL & YIELD OF COMPLI	ETED WELL		
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE			
			DEPTH OF STATIC WATER LEVEL(Ft.) & DATE MEASURED _			
		4400	ESTIMATED YIELD * (GPM) & TEST TYPE			
		BORING 1100 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft)			
TOTAL DE	EPTH OF (	COMPLETED WELL 1060 (Feet)	May not be representative of a well's long-term yield	1.		

DE	PTH		BORE -					C	ASING (S)			DEPTH			ANNULAR MATERIAL			
FROMS	SURFA	CE	HOLE DIA.	T	YPE	<u> (</u>			INTERNAL	041105	SLOT SIZE	FROM	รับ	RFACE		1	TY	(PE
Ft.	to Ft	2	(Inches)	BLANK	SCREEN	NOS T	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	GAUGE OR WALL THICKNESS	IF ANY (Inches)	Ft.	to	Ft.	CE- MENT ( <u>√</u> )	BEN- TONITE	FILL (✓)	FILTER PACK (TYPE/SIZE)
210	) 2	220	14		√			PVC F480	2.5	SCH 80	.030	671		674		<b>V</b>		BENTONITE C
220	) (	360	14	✓				PVC F480	2.5	SCH 80		674	Į.	729			<b>√</b>	SRI#8 SAND
360	) (	370	14		√			PVC F480	2.5	SCH 80	.030	729	)	755		<b>V</b>	,	BENTONITE C
370	i i	380	14	✓				PVC F480	2.5	SCH 80		755	5	1100				SRI#8 SAND
ZONE	1	3											Ť					
0	7	700	14	<b>√</b>				PVC F480	2.5	SCH 80			i					

ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -	
— Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief	ī.
Well Construction Diagram	NAME EATON DRILLING CO.		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)		
Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA
Other	ADDRESS an / \_	CITY	STA
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed //art ( ) auron		
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	

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D)					_
•	WOODLA	ND	CA	95695	
	CITY		STATE	ZIP	_
		05/03/06	C5	7 A HIC - 133	783
		ATE SIGNED	C-5	7 LICENSE NUME	3FR

## WELL COMPLETION REPORT

Page 3	of 4	
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Owner'

Date W Local

Per

h DWR	WELL	COMPLETION	REPORT	$oxed{oxed}$			1				
of 4	.,	Refer to Instruction Pamph	let			STA	TE WEL	T NO.	STATIO	N NO.	
's Well No. 7950		No. <b>E0387</b>	64								
ork Began <u>3/2/2006</u>	Ended3/20/2	006		ــــ ا	LATI	TUDE			LON	GITUD	E
Permit Agency GLENN CO	,		· · · · · · · · · · · · · · · · · · ·	Ш	Ш				<u></u>		
mit No. MW243-06	Dormit	Date 2/28/2006		L			APN/	TRS/OT	HER		
mit No.		Date									

		GEOLOGIC LOG		
ORIENTAT		✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING MOTARY FLUID MUD		
DEPTH SURF		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.	WELL LOCATION—	
0		TOP SOIL	Address 100' SOF RD 204 & 50' EOF RD 20	95
18		SAND AND GRAVEL	City CA	
25		TAN CLAY	County GLENN	
35		SAND AND GRAVEL	APN Book 037 Page 090 Parcel 008	
95	186	TAN CLAY WITH SAND STREAKS	Township 22 N Range 2 W Section 1	
186	244	SAND AND GRAVEL	Latitude	l <u>j</u>
244	278	SANDY BROWN CLAY	DEG. MIN. SEC.	DEG. MIN. SEC.
278	380	SAND AND GRAVEL	LOCATION SKETCH	ACTIVITY ( <u>&lt;</u> ) —
380	525	SILTY BLUE CLAY		MODIFICATION/REPAIR
525	540	SAND AND GRAVEL		Deepen
540	550	SILTY BROWN CLAY	·	Other (Specify)
550	578	SAND AND GRAVEL		DECEDOY (Deceribe
578	682	SILTY BROWN CLAY WITH SAND STREAKS		<ul> <li>DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")</li> </ul>
682	735	SAND AND SMALL GRAVEL		PLANNED USES (∠)
735	780	SILTY TAN CLAY		WATER SUPPLY
780	834	SAND AND SMALL GRAVEL	MEST EAST	Domestic Public Industrial
834	936	SILTY GRAY BLUE CLAY WITH SAND STREAKS	A P	
936	1100	COARSE SAND WITH SILTY GRAY BLUE		MONITORING
		CLAY STREAKS	·	CATHODIC PROTECTION
				HEAT EXCHANGE
				DIRECT PUSH
				INJECTION
				VAPOR EXTRACTION SPARGING
			SOUTH -	REMEDIATION
			Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if	OTHER (SPECIFY)
			necessary. PLEASE BE ACCURATE & COMPLETE.	
			WATER LEVEL & YIELD OF COMPLI	ETED WELL
	-		DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	=
			DEPTH OF STATIC	
			WATER LEVEL (Ft.) & DATE MEASURED	
TOTAL DI	DTH OF	BORING 1100 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
			TEST LENGTH (Hrs.) TOTAL DRAWDOWN	
TOTAL DI	SPIHOF	COMPLETED WELL 1060 (Feet)	May not be representative of a well's long-term yield	7.

DEF	PTH	BORE -					C	ASING (S)			DEPTH		н		ANNU	ЛAR	MATERIAL				
FROMS	URFACE	HOLE	Т	ΥP	<u> (</u>					0, 07 0,75	FROM SURFACE								1	T	PE
Ft. to	> Ft,	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT (\(\sums)	BEN- TONITE	FILL (✓)	FILTER PACK (TYPE/SIZE)				
700				√			PVC F480	2.5	SCH 80	.030	0		32	✓			SAND SLURRY				
710	720	14	✓	1			PVC F480	2.5	SCH 80		32		100			✓	SRI#8 SAND				
ZONE	4										100		188	✓			SAND SLURRY				
0		14	1				PVC F480	2.5	SCH 80		188		191		<b>V</b>		BENTONITE C				
810		14		✓			PVC F480	2.5	SCH 80	.030	191		440			<b>√</b>	SRI#8 SAND				
820	1040	14	<b>V</b>				PVC F480	2.5	SCH 80		440		671	✓			SAND SLURRY				

ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -		
— Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief.	•	
— Well Construction Diagram	NAME EATON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
Soil/Water Chemical Analysis	20 WEST KENTUCKY AVE	WOODLAND	CA	95695
Other	ADDRESS (	CITY	STATE	ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed Mark Damon	05/03/06		<u> 7 A HIC - 13378</u>
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED	C-57	7 LICENSE NUMBE

### 1 - 1 - 10 - 10 **ORIGINAL** File with DWR

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Page 4	of 4				
_		 	7050		

Page 4 of 4	Refer	to Instruction Pamphlet
Owner's Well No. 7950		No. E038764
	, Ended 3/20/2006	
Local Permit Agency GLENN CO		
Permit No. MW243-06	Permit Dat	e 2/28/2006
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	DWR	USE	ONLY		DO	NOT	FILL	IN .	
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L		STAT	E WEL	L NO.	STAT	TION N	0.		
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		GEOLOGIC LOG				
ORIENTA"	ΓΙΟΝ (≼)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD				
DEPTH SURF		DESCRIPTION				
Ft. to		Describe material, grain, size, color, etc.				
0	18	TOP SOIL	Address 100' SOF	RD 204 & 50	EOF RD 20	)5
18	25	SAND AND GRAVEL	City CA			
25	35	TAN CLAY	County GLENN			
35	95	SAND AND GRAVEL	APN Book 037	Page 090	Parcel 008	
95	186	TAN CLAY WITH SAND STREAKS	Township 22 N	Range 2 W	Section 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
186	244	SAND AND GRAVEL	Latitude	- runge- <u></u>	- Beedon -	
244	278	SANDY BROWN CLAY	DEG. MIN			DEG. MIN. SEC.
278	380	SAND AND GRAVEL		TION SKETCH		ACTIVITY (∠) —
380	525	SILTY BLUE CLAY		No.tin		
525	540	SAND AND GRAVEL				MODIFICATION/REPAIR  —— Deepen
540	550	SILTY BROWN CLAY				Other (Specify)
550	578	SAND AND GRAVEL				DEOTDOY (Dil
578	682	SILTY BROWN CLAY WITH SAND STREAKS				<ul> <li>DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")</li> </ul>
682	735	SAND AND SMALL GRAVEL				PLANNED USES (∠)
735	780	SILTY TAN CLAY				WATER SUPPLY
780	834	SAND AND SMALL GRAVEL	TSE		LST.	Domestic Public Industrial
834	936	SILTY GRAY BLUE CLAY WITH SAND STREAKS	\$		2	MONITORING -
936	1100	COARSE SAND WITH SILTY GRAY BLUE				MONITORING —— TEST WELL ——
		CLAY STREAKS				CATHODIC PROTECTION
						HEAT EXCHANGE
						DIRECT PUSH
						INJECTION VAPOR EXTRACTION
						SPARGING
				- SOUTH -	D 41	REMEDIATION
			Illustrate or Describe Dis. Fences, Rivers, etc. and att necessary. PLEASE BE	tach a map. Use addition	nal paper if	OTHER (SPECIFY)
			WATER 1	LEVEL & YIELD	OF COMPLI	ETED WELL
			DEPTH TO FIRST WA	TER (Ft.) B	ELOW SURFACE	E
		· ·	DEPTH OF STATIC WATER LEVEL	(Ft.) & DAT	E MEASURED	Plant of the ball of the control of
		200000	ESTIMATED YIELD *	(GPM) &	TEST TYPE	
		BORING 1100 (Feet)	TEST LENGTH	(Hrs.) TOTAL DRAV	WDOWN	(Ft.)
TOTAL DI	EPTH OF	COMPLETED WELL 1060 (Feet)	May not be represe	entative of a well's	long-term yield	I.
			<del></del>	<del></del>	<del></del>	· · · · · · · · · · · · · · · · · · ·

DEF		BODE		CASING (S) DEPTH						PTH	ANNULAR MATERIAL					
FROM SU	JRFACE	BORE - HOLE DIA.		YPE		<u> </u>	MATERIAL /	INTERNAL	GAUGE	SLOT SIZE	FROM SI	FROM SURFACE TYPE		(PE		
Ft. to	) Ft	(Inches)	BLANK	SCREEN	SON	FILL PIPE	GRADE	DIAMETER (Inches)	OR WALL THICKNESS	IF ANY (Inches)	Ft. t	o Ft.	CE- MENT (✓)	BEN- TONITE		FILTER PACK (TYPE/SIZE)
1040	1050	14		>			PVC F480	2.5	SCH 80	.030	671	674		<b>V</b>		BENTONITE C
1050	1060	14	1				PVC F480	2.5	SCH 80		674	729			✓	SRI#8 SAND
											729	755		<b>√</b>	,	BENTONITE C
											755	1100			<b>V</b>	SRI#8 SAND

ATTACHMENTS (∠)	CERTIFICATION	STATEMENT -		
Geologic Log	I, the undersigned, certify that this report is complete and accurate to the	best of my knowledge and belief	f.	
— Well Construction Diagram	NAME EATON DRILLING CO.			
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
<ul> <li>Soil/Water Chemical Analysis</li> </ul>	20 WEST KENTUCKY AVE	WOODLAND	<u>CA</u>	95695
Other	ADDRESS   ADDRESS	CITY	STATE	
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS	Signed Mark Dauron	<u>05/03/06</u>		C57 A HIC - 13378
ATTACTACE MOVAE IN CAMATICA, II TI EXCEN	WELL DRILLER/AUTHORIZED REPRESENTATIVE	DATE SIGNED		C-57 LICENSE NUMBE

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Owner's Well No. 7451 MON

Page 1 of #3

### STATE OF CALIFORNIA

### WELL COMPLETION REPORT

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Instruction	rampniei		2 6
No. <b>72</b> 6	789	All	5,0

<del></del>	No. 726789 HID
Ended 1/20/2003	·····

Date Work Began	1/13/2003 ,	Ended 1/20/2003
Local Permit A	gency GLENN COU	NTY HEALTH DEPT

Permit No. MW 135-02 Permit Date 7/30/2002

DWR USE ONLY	DO	NOT.	FILL	IN				
ZZN/OZW	- 15	M	1 1					
STATE WELL	L NOJSTA	TION NO	).					
			11					
LATITUDE		ONGITU	DE					
APN/TRS/OTHER								

CA

02/24/03 DATE SIGNED

STATE

133783-C57A C-57 LICENSE NUMBE

[		GEOLOGIC LOG	•			
ORIENTAT	TION (≰)	VERTICAL HORIZONTAL ANGLE (SPECIFY)				
DEPTH		DRILLING METHOD REVERSE FLUID WATER				
SURF		<b>DESCRIPTION</b> Describe material, grain, size, color, etc.				
Ft. to		GRAVEL WITH CLAY	Address .2 MI SC	WELL WELL	LOCATION	ATU OT
20		BROWN CLAY WITH GRAVEL	1	P WICKDA	43 IVII EU-	+1F1 O1.
30		GRAVEL WITH SAND AND CLAY	City CA County GLENN		<del></del>	
70	95	TAN CLAY	APN Book 037	Dags 230	D1 010	······································
95		GRAVEL WITH SAND AND TAN CLAY	Township 22 N			
110		TAN CLAY STRINGER	Latitude	_ Kange 2_ vv	Section 10	i ı
112		GRAVEL WITH SAND AND TAN CLAY	DEG. MIN			DEG. MIN. SEC.
115	140	GRAVEL	LOCA	ATION SKETCE	1	ACTIVITY (∠) —
140	166	TAN SILTY CLAY		NORTH		
166	180	GRAVEL (UPPER TUSCAN FORMATION)				MODIFICATION/REPAIR Deepen
180	206	GRAVEL WITH BLUE CLAY				Other (Specify)
206	300	BLUE/GREEN CLAY				DESTROY (Describe
300	320	BLUE/GREEN CLAY WITH SAND				DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
320	340	BLUE/GREEN CLAY WITH SANDSTONE	1			PLANNED USES(∠)
340	360	CLAY WITH SAND STONE AND GRAVEL				WATER SUPPLY
360	375	GRAVEL WITH SAND	WEST		\ST	Domestic Public Industrial
375	420	CLAY WITH SAND AND GRAVEL	<b>≥</b>		Ē	MONITORING -
420	480	BLUE CLAY WITH SAND AND GRAVEL				TEST WELL
480	500	BLUE CLAY				CATHODIC PROTECTION
500	505	SANDSTONE WITH GRAVEL				HEAT EXCHANGE
505	520	BLUE CLAY WITH MUDSTONE	]			DIRECT PUSH INJECTION
520	540	GRAVEL WITH SAND				OTTOR EXTRACTION
540	580	BLUE CLAY				SPARGING
580	640	BROWN CLAY	Illustrate or Describe Dis	- SOUTH	. Ruildings	REMEDIATION
640	660	BLUE/GREEN CLAY	Fences, Rivers, etc. and at necessary. PLEASE BE	tach a map. Use addition	onal paper if	OTHER (SPECIFY)
660		BLUE/GREEN SILTSTONE				
740		BLUE/GREEN CLAY		LEVEL & YIEL		-
760		BROWN/BLACK SANDSTONE	DEPTH TO FIRST WA	\TER (Ft.)	BELOW SURFACE	<b>.</b>
780	880	BROWN/BLACK SILTY SANDY CLAY	DEPTH OF STATIC WATER LEVEL	(E+) & DA	TE MEASI IDED	
			ESTIMATED YIELD * _	` '		
TOTAL DE	PTH OF	BORING 880 (Feet)	TEST LENGTH			
		COMPLETED WELL 401 (Feet)	May not be repres	· ·		* *
			,			

	DE	PTI	н	DODE					CA	ASING (S)				DEPT	ГН		ANN	JLAR	MATERIAL
	FROM S			BORE - HOLE	T	YPE	(⊻	)							RFACE			TY	PE
	Ft. t	to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft.	to	Ft.	CE- MENT ( <u>V</u> )	BEN- TONITI	FILL ( <u>✓</u> )	FILTER PACK (TYPE/SIZE)
- 1	ZONE		1											0	30	1			SAND SLURRY
9	0	H	89.9	18					AIR LINE	1			3	0	100			✓	#8 GRD SAND
`	0	) [	60	18	✓				BLACK PIP	2			10	0	124	✓			SAND SLURRY
1	60		70	18		~			S.S. WIRE	2		.020	12	4	164			✓	PEA GRAVEL
1	70	!	91	18	<b>V</b>		Γ		BLACK PIP	2			16	4	186	1			SAND SLURRY
	ZONE		2										18	6	258		ANE		#8/GRDSAND

	ATTACHMENTS	( <u>∠</u> )
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- 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 W. KENTUCKY WOODLAND

ADDRESS CITY

WELL DRILLER/AUTHORIZED REPRESENTATIVE IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL							
File with	DWR						
Page 2 of	13						

### STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refe	r	to.	Instruc	tion	F	ar	nph	let

Refer	to In	struc	tion	Pamp	hle	2
	Bl.	_	^^	70	^	

Owner's Well No. 7451 MON	
	Ended 1/20/2003

<sup>1₀.</sup>726789

Local Permit Agency GLENN COUNTY HEALTH DEPT.
Permit No. MW 135-02 Permit Date 7

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	GEOLOGIC LOG	•	
ORIENTAT	TION (✓)		
	DRILLING REVERSE FLUID WATER		
DEPTH SURF	ACE DESCRIPTION		
Ft, to		WELL LOCATION	
0;		Address2 MI SOF WYO RD & .45 MI EOF	4TH ST.
20	30 BROWN CLAY WITH GRAVEL	City CA	
30	70 GRAVEL WITH SAND AND CLAY	County GLENN	
70	95 TAN CLAY	APN Book 037 Page 230 Parcel 010	
95	110 GRAVEL WITH SAND AND TAN CLAY	Township 22 N Pages 2 W Santian 15	
110	112 TAN CLAY STRINGER	Latitude	! !
112	115 GRAVEL WITH SAND AND TAN CLAY	DEG. MIN. SEC.	DEG. MIN. SEC.
115	140 GRAVEL	LOCATION SKETCH	ACTIVITY (✓) —
140	166 TAN SILTY CLAY		MODIFICATION/REPAIR
166	180 GRAVEL (UPPER TUSCAN FORMATION)		— Deepen
180	206 GRAVEL WITH BLUE CLAY		Other (Specify)
206	300 BLUE/GREEN CLAY		DECTROY (December
300	320 BLUE/GREEN CLAY WITH SAND		DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
320	340 BLUE/GREEN CLAY WITH SANDSTONE		PLANNED USES(∠)
340	360 CLAY WITH SAND STONE AND GRAVEL		WATER SUPPLY
360	375 GRAVEL WITH SAND	WEST	Domestic Public Industrial
375	420 CLAY WITH SAND AND GRAVEL	≱	_ !
420	480 BLUE CLAY WITH SAND AND GRAVEL		MONITORING →
480	500 BLUE CLAY		CATHODIC PROTECTION
500	505 SANDSTONE WITH GRAVEL	·	HEAT EXCHANGE
505	520 BLUE CLAY WITH MUDSTONE		DIRECT PUSH
520	540 GRAVEL WITH SAND		INJECTION
540	580 BLUE CLAY		VAPOR EXTRACTION SPARGING
580	640 BROWN CLAY	SOUTH	REMEDIATION
640	660 BLUE/GREEN CLAY	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.	OTHER (SPECIFY)
660	740 BLUE/GREEN SILTSTONE	necessary. PLEASE BE ACCURATE & COMPLETE.	
740	760 BLUE/GREEN CLAY	WATER LEVEL & YIELD OF COMPL	ETED WELL
760	780 BROWN/BLACK SANDSTONE	DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	
780	880 BROWN/BLACK SILTY SANDY CLAY	DEPTH OF STATIC	
<u> </u>		WATER LEVEL (Ft.) & DATE MEASURED	
TOTAL DI	EDTH OF PORIS 880	ESTIMATED YIELD * (GPM) & TEST TYPE	
	SPITH OF BORING 880 (Feet)	TEST LENGTH(Hrs.) TOTAL DRAWDOWN	· ·
TOTAL DE	EPTH OF COMPLETED WELL 401 (Feet)	May not be representative of a well's long-term yield	<i>l</i> .
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Λ[	0	)	210	18	✓	1			BLACK PIP	2			L	277	326			<b>√</b>	PEA GRAVEL
	210	)	220	18		~			S.S. WIRE	2		.020		326	345	✓			SAND SLURRY
Ī	220		241	18	1	1			BLACK PIP	2				345	422			>	#8 GRD SAND
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Ì	0	7	179.6	18					AIR LINE	1				444	880		NA A	$\mathcal{O}(0)$	PEA GRAVEL

· ATTACHMENTS ( 🗹	_		j
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- 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 W. KENTUCKY
ADDRESS
CITY 95695 CA ZIP WELL DRILLER/AUTHORIZED REPRESENTATIVE STATE 02/24/03 DATE SIGNED 133783-C57A C-57 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR
Page 3 of #3

STATE OF CALIFORNIA

WELL COMPLETION REPORT

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	No.	79	6	7	Q	۵

Owner's	Well No.	7451 MON
		/13/2003

120109 Ended 1/20/2003

Local Pe	rmit Ag	ency	GLENN	C
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OUNTY HEALTH DEPT

Permit No. MW 135-02

Permit Date <u>7/30/2002</u>

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	GEOLOGIC LOG				
ORIENTATION (✓)	✓ VERTICAL HORIZONTAL ANGLE (SPECIFY)				
	DRILLING REVERSE FLUID WATER				
DEPTH FROM SURFACE	DESCRIPTION				
Ft. to Ft.	Describe material, grain, size, color, etc.	<u> </u>	WELL 1		
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	BROWN CLAY WITH GRAVEL	City CA			
	GRAVEL WITH SAND AND CLAY	County GLENN			
	TAN CLAY	APN Book 037	_Page 230	Parcel 010	
	GRAVEL WITH SAND AND TAN CLAY	Township 22 N			
110 112	TAN CLAY STRINGER	Latitude		_ 50011011	
112 115	GRAVEL WITH SAND AND TAN CLAY	DEG. MIN			DEG. MIN. SEC.
115 140	GRAVEL	LOCA	TION SKETCE NORTH		ACTIVITY (∠) —
140 166	TAN SILTY CLAY				MODIFICATION/REPAIR
166 180	GRAVEL (UPPER TUSCAN FORMATION)				— Deepen
180 206	GRAVEL WITH BLUE CLAY				Other (Specify)
206 300	BLUE/GREEN CLAY	1			DESTROY (Describe
300 320	BLUE/GREEN CLAY WITH SAND				DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
320 340	BLUE/GREEN CLAY WITH SANDSTONE				PLANNED USES(∠)
340 360	CLAY WITH SAND STONE AND GRAVEL	}			WATER SUPPLY
360 375	GRAVEL WITH SAND	WEST		ST	Domestic Public Irrigation Industrial
375 420	CLAY WITH SAND AND GRAVEL	\$		<b>∆</b>	
420 480	BLUE CLAY WITH SAND AND GRAVEL	1		•	MONITORING
	BLUE CLAY				CATHODIC PROTECTION
500 505	SANDSTONE WITH GRAVEL				HEAT EXCHANGE
505 520	BLUE CLAY WITH MUDSTONE				DIRECT PUSH
520 540	GRAVEL WITH SAND	1			INJECTION
540 580	BLUE CLAY	1			VAPOR EXTRACTION SPARGING
580 640	BROWN CLAY		- south		REMEDIATION
640 660	BLUE/GREEN CLAY	Illustrate or Describe Dist Fences, Rivers, etc. and att necessary. PLEASE BE	<i>ance of Well from Roads,</i> ach a map. Use additio	, <i>Buildings</i> , nal paper if	OTHER (SPECIFY)
660 740	BLUE/GREEN SILTSTONE	necessary. PLEASE BE	ACCURATE & CON	APLETE.	
740 760	BLUE/GREEN CLAY	WATER	LEVEL & YIELI	OF COMPL	ETED WELL
760 780	BROWN/BLACK SANDSTONE	DEPTH TO FIRST WA	TER (Ft.) B	ELOW SURFACE	Ē
780 880	BROWN/BLACK SILTY SANDY CLAY	DEPTH OF STATIC			
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	D	EPT	н і	BODE					CA	ASING (S)				DEP	TH		ANNU	JLAR	MATERIAL
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1														186	258			¥	#8 GRD SAND

ATTAC	HMENTS	(	⊻	)
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- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis \_ Other \_

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

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NAME EATON DRILLING CO.

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

20 W. KENTUCKY

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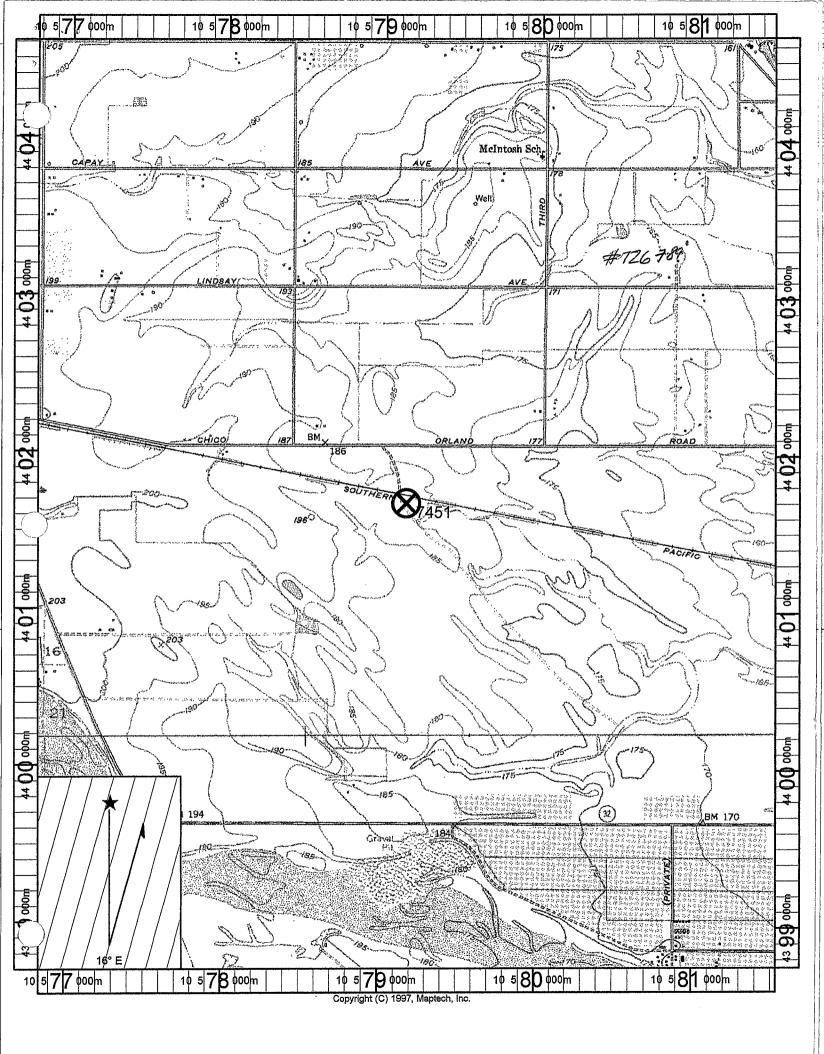
STATEMENT

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WELL DRILLER/AUTHORIZED REPRESENTATIVE

WOODLAND	CA	95695
CITY	STATE	ZIP
00/04/00	400	700 0574



Page 1 of 1

### 80 AUTO DE CALFEDGUIA

### WELL COMPLETION REPORT

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Owner's Well No. 7451 EXT

Pate Wesk Began, 1/24/2003.

Ended 1/31/2003

Ureal Ferric Agency - GLENN COUNTY HEALTH DEPT

Person No. MW 135-03. Fermit Date 7/30/2002

No.726790

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– GEOLOGIC LOG – OR ENTATION (\* ) - 🗸 VERNOT. HORIZONTAL L ANGLE (\$95,07%)

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20	30 BROWN CLAY WITH GRAVEL	Cas CA	
30	70 GRAVEL WITH SAND AND CLAY	County GLENN	
70	95 TAN CLAY	APN Book 037 Page 230 Parcel 010	I
95	110 GRAVEL WITH SAND AND TAN CLAY	Townshap 22 N Range 2 W Section 16	:
110	112 TAN CLAY STRINGER	untitude	
112	115 GRAVEL WITH SAND AND TAN CLAY	GEG MILL 390	DDG MW 200
115	140 GRAVEL	LOCATION SKUTCH	
740	:55 TAN SILTY CLAY	100	√ newweet i
195	180 GRAVEL (UPPER TUSCAN FORMATION)		MODRISON, ON THERA N
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205	300 BLUE/GREEN CLAY		
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320	340 BLUE/GREEN CLAY WITH SANDSTONE		Chartosococo Josh
340	360 CLAY WITH SANDSTONE AND GRAVEL		PLANNED I SES(v.) WATER SUPPLY
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ATTACHMENTS (12) ( -Compatible Web (Contraction Talegram) Celebration Coper CoRM to 1 Thorse and less places Other ATTROM RECEIVED INFORMATION, IT IT ENGINE

CERTIFICATION STATEMENT = I, by under good, cally but this report of complete an acceptation asset of my an woody accident ways. BATON DRILLING CO.
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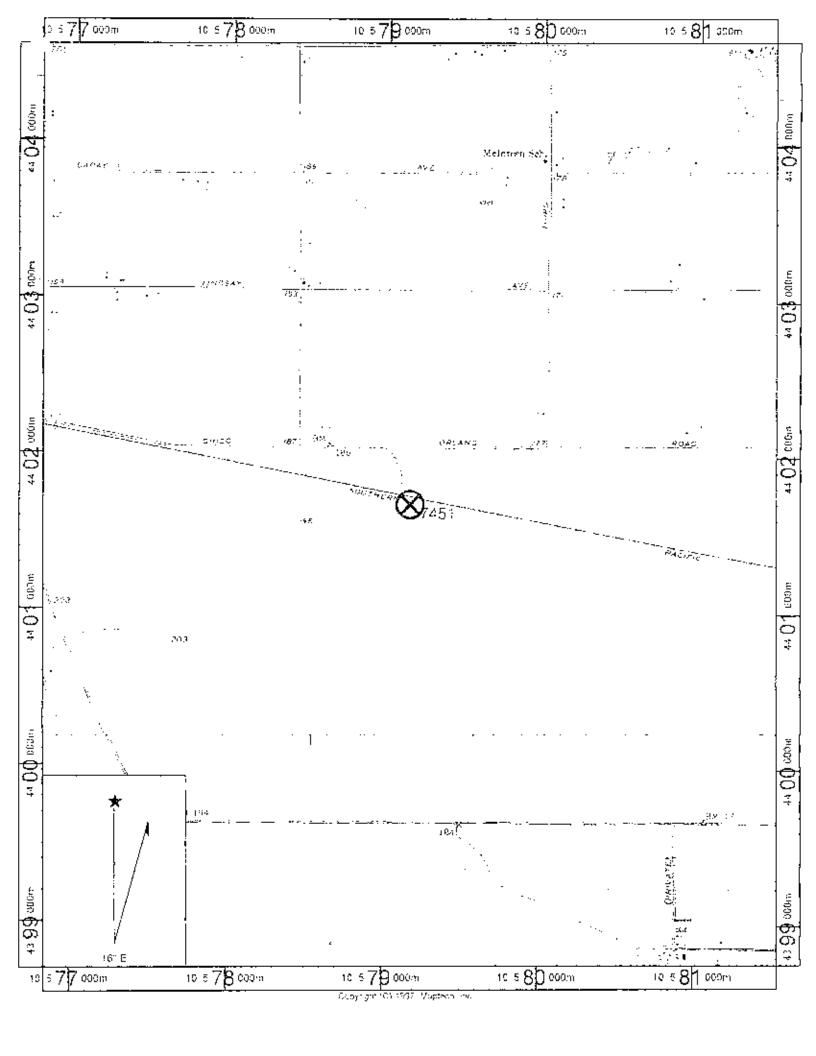
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BENTONTE #8 GRO SANO SAND SUBRRY



Date Work Began 7/28/2006 Page 9 of 12 Owner's Well No. 7988

STATE OF CALIFORNIA WELL

No. E044014

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	-	APN/TRS/OTHER				0				<b>8</b>	DEG. MIN. SEC	TACTIVITY (Y) —	-K NEW WELL	MODIFICATION/REPAIR  Deepen	Other (Specify)	Adraga O VOGTO	Procedures and Materials	DI AMMIEN TISES (1)	WATER SUPPLY		TOTINGN	TEST WELL	CATHODIC PROTECTION	HEAT EXCHANGE	DIRECT PUSH	VAPOR EXTRACTION	SPARGING	REMEDIATION	OTHER (SPECIFY)	ETED WELL	у			— (Ft.)	ď.	
4014		APN/TR				A 125' SOF BO & WELL MOCATION D	Address 123 SOT IND 8 & .23 WILLOW AND CO.	City CLENN	APN Book 044 Page 330 Parcel 014	Range 2 W	Latitude SEC.	LOCATION SKETCH —————								F21								SOUTH ————————————————————————————————————	instruct of Essential Allowards of Teneral Foundations, percentages, 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.	ELD *	— (Hrs.) TOT	May not be representative of a well's long-term yield	
No. E044014	GI ENN COI INTY HEALTH DEPT	9-06 Permit Date 6/21/2006	- GEOLOGIC LOG	VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING POTARY	DESCRIPTION	CLAY WITH SAND	O AND GRAVEL	35 LOOSE GRAVEL WITH SAND	70 LOOSE GRAVEL WITH SAND AND YELLOW	/ STREAKS	OW CLAY WITH SAND AND GRAVEL	300 SILTY YELLOW GRAY CLAY WITH SAND AND	ÆL	385 SILTY BLUE GRAY CLAY WITH SAND AND	VEL	TLE GRAY AND BROWN CLAY MIX WITH		O AND SMALL GRAVEL WITH GRAY CLAY		AY WITH SAND AND LARGE GRAVEL		I GRAY BLUE CLYA WITH SAND STREAKS	840 COARSE BLACK SAND	/ BLUE CLAY	930 COARSE BLACK SAND WITH GRAVEL AND	MINIMUM GRAY CLAY STREAKS	- GRAY CLAY	RSE BLACK SAND	GRAY CLAY WITH SAND STREAKS				7007		ETED WELL 1049 (Feet)	
Owner's Well No. 7988	Date Work Began 1120/2000	Dermit No MW 249-06		Z) Z	EPTH FROM SURFACE	0 TO RED	20 SANE	20 35 LOOS		CLAY	200 250 SILTY		GRAVEL	300 385 SILTY	GRAV	385 420 BRITT	SAN	440 SANI		495 645 GRAY	STRE	820 SOF			850 930 COAF		976 SOF	1042 COAF	1042 1200 SOFT					TOTAL DEPTH OF BORING 1200	TOTAL DEPTH OF COMPLETED WELL 1048	

DEPTH		ממ				7)	CASING (S)			нтазс	ANINE	LAR M.	ANNULAR MATERIAL
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F. 5		DIA. (Inches)	BLANK	CON- CON- CCN-	메리기	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft to Ft	CE- BEN-	급 (	FILTER PACK (TYPE/SIZE)
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+2.5	55	14	>			PVC F480	2.5	SCH 80				<del> </del>	The state of the s
55	92	14		>	E	PVC F480	2.5	SCH 80	.030	 			
92	9/	14	>		<u> </u>	PVC F480	2.5	SCH 80				; L	A STANDARD AND STANDARD STANDA
ZONE	7				-					1 1	C		
+5	165	4	>		$\Box$	PVC F480	2.5	SCH 80		Nex	1 aa	97	
TA T	ATTACHMENTS	SLN	(7)	1					CERTIFICAL	CERTIFICATION STATEMENT	D		
9	Geologic Log	1				I, the undersig	ned, certify the	at this report is co	omplete and accurate	the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief	lge and belief.		
<u>*</u>	ell Constru	Cilgu	Jagran	c		NAME_EA	NAME EATON DRILLING CO.	LING CC.					
<u>യ്</u> 	Geophysical Log(s)	Log(s)				(PERS	30N, FIRM, OF	<b>CORPORATION</b>	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)	пер)			
ගි 	Soil/Water Chemical	hemical	1 Analysis	ksis		20 WEST	20 WEST KENTUCKY AVE	Y AVE		WOODLAND		გ	95695
Other	her					ADDRESS	1 / //	, ,		CITY		STATE	ZIP
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ALL MAN ADDITIONAL INFORMATION OF THE PROPERTY	NVALL HVI CI	71.68	114, 11-1	ביינים	j		L DRILLER/AI	WÉLL DRILLER/AUTHORIZED ŘEPRESENTATIVE	RESENTATIVE	DA	DATE SIGNED	ાર 	C-57 LICENSE NUMBER

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.
DWR. 188 REV. 11-97 IF ADDIT

FEXISTS. Signed "IMAIL W.CAMLOOL SIGNED REPRESENTATIVE WELL DRILLERAUTHORIZED REPRESENTATIVE IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Page 10 of 12

Owner's Well No. 7988

Local Permit Agency GLENN COUNTY HEALTH DEPT
Permit No. MW 249-06 Date Work Began 7/28/2006

		_
COMPLETION REPORT	Refer to Instruction Pamphlet	
WELL		
	ETION REPO	MPLETION REPO

E044014

STATE WELL NO.	_	JOE		CTI TO COTING
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	STATE WELL NO./ STATION NO.	STATE WELL NO./ STATION I		ATE WELL NO./ STA

Permit No. MW 249-06 Permit Date 6/21/2006	APN/TRS/OTHER
EOLOGIC LOG	
ORIENTATION (±) VERTICAL - HORIZONTAL - ANGLE (SPECIFY) DRILLING POTABOY	
DEPTH FROM METHOD KOLAKI NECONDATION	
SURFACE Describe material, grain, size, color, etc.	
0 10 RED BROWN CLAY WITH SAND	Address 125' SOF RD 9 X 23 MI EGHRD P
10 20 SAND AND GRAVEL	
20 35 LOOSE GRAVEL WITH SAND	County GLENN
35 70 LOOSE GRAVEL WITH SAND AND YELLOW	APN Book 044 Page 330 Parcel 014
	Range 2 W
200 YELLO	D -
YELLOW GRAY CLAY WITH SAND	DEG. MIN. SEC.
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GRAVI	
300 385 SILTY BLUE GRAY CLAY WITH SAND AND	Alcharacter and the Control of the C
ᆸ	Other (Specify)
385 420 BRITTLE GRAY AND BROWN CLAY MIX WITH	A NOTESTA
SAND	Procedures and Materials
420 440 SAND AND SMALL GRAVEL WITH GRAY CLAY	i i
495 645 GRAY CLAY WITH SAND AND LARGE GRAVEL	ST — Domestic — Public — Intrastica — Industrial
STRE/	
840 COAR	CATHODIC PROTECTION
850 GRAY	HEAT EXCHANGE
850 930 COARSE BLACK SAND WITH GRAVEL AND	DIRECT PUSH
976 SOFT	SPARGING -
1042 COAR	Minimals or Describe Distrins of Wall from Roads Buildings
1042 1200 SOFT GRAY CLAY WITH SAND STREAKS	Authority of Learning Listance of New York Committee of New York Specify
	WATER LEVEL & VIEID OF COMPLETED WELL
	TEALIN LINE LAW A ARREST OF COURSE AREA TO LAW.
	DEPTH TO FIRST WATER (Ft) BELOW SURFACE
	DEPTH OF STATIC   WATER LEVEL(Ft.) & DATE MEASURED
	HESTIMATED * CHEVE TEST AND THE CHEVEN STEED THE CHEVEN S
TOTAL DEPTH OF BORING 1200 (Feet)	(Hrs.) TOT
TOTAL DEPTH OF COMPLETED WELL 1049 (Feet)	representative of a well's long-term yield.

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ANNULAR MATERIAL	TYPE	FILTER PACK (TYPE/SIZE)	SAND SLURRY	BENTONITE C	SRI#8 SAND	SAND SLURRY	BENTONITE C	SRI#8 SAND	
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		GAUGE OR WALL THICKNESS	SCH 80	SCH 80		SCH 80	SCH 80	SCH 80	
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C		MATERIAL / GRADE	PVC F480	PVC F480		PVC F480	PVC F480	PVC F480	
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	TYPE (	SCREEN	>				>		-
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agoa	캺	DIA. (Inches)	`	ľ					MENT
王	RFACE	ď	175	185	9	414	434	455	ATTACHMENTS
DEPTH	FROM SURFACE	ţ, t	165	175	ZONE	41.5	414	434	

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( T) GIVENTURE ( T)	Geologic Log	Well Construction Diagram	Geophysical Log(s)	Soil/Water Chemical Analysis	— Other	ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	DWR 188 REV. 11-97 IF ADDITION	

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

NAME\_EATON DRILLLING CO.

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

20 WEST KENTUCKY AVE
ADDRESS

NOODLAND
OITY
09/01/06

DATE SIGNED

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

STATE ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER

Page 11 of 12

Date Work Began 7/28/2006 Owner's Well No. 7988

REPORT WELL

STATE OF CALIFORNIA
COMPLETION REJ
Refer to Instruction Pamphlet
No. E044014

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2	_	STATE WELL NO./ STATION NO.	-	<b>CONGITUDE</b>		
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LONGITUDE	APN/TRS/OTHER		RD P		014	n 18		ACTIVITY (<)	MEN WELL	MODIFICATION/REPAIR —— Deepen	— Other (Specify)	akimaa() VOGTSEC	Procedures and Material	Under GEULUGIC LUG	WATER SUPPLY	S Domestic Public Industria	ECTINOM	TEST WELL	CATHODIC PROTECTION	HEAT EXCHANGE	DIRECT PUSH	VAPOR EXTRACTION	SPARGING		f OTHER (SPECIFY) —	MPLETED WELL	URFACE	RED	丑	(Ft) (Ft)	n yield.
TATION TO THE TOTAL TOTA	AP		Address 125' SOF RD 9 & 23 MIEOFRD P	City CA	A DN Book 044 Dans 330 Dans 1014	Range 2_W	Latitude   SEC.	LOCATION SKETCH ————————————————————————————————————								153	·							SOUTH	Ittistrate of Describe Distance of Well from Kotax, Buttangs, 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	* QTE	Hrs.) TOT	May not be representative of a wears tong-term
006 Ended8/3/2006	Agency (al ENN COUNLY HEALTH DEPT   MW 249-06   Permit Date 6/21/2006   Permit	METHOD ACTARY TOUD MUD  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION	10 RED BROWN CLAY WITH SAND	20 SAND AND GRAVEL 35 I OOSE GRAVEL WITH SAND	70 LOOSE GRAVEL WITH SAND AND YELLOW		200 YELLOW CLAY WITH SAND AND GRAVEL 250 SILTY YELLOW GRAY CLAY WITH SAND		GRAVEL	385 SILTY BLUE GRAY CLAY WITH SAND AND	GRAVEL	420 BRITTLE GRAY AND BROWN CLAY MIX WITH	SAND	440 SAND AND SMALL GRAVEL WITH GRAY CLAY	495 LARGE GRAVEL WITH SAND	645 GRAY CLAY WITH SAND AND LARGE GRAVEL	STREAKS	820 SOFT GRAY BLUE CLYA WITH SAND STREAKS	840 COARSE BLACK SAND	850 GRAY BLUE CLAY	30 COARSE BLACK SAND WITH GRAVEL AND	Z	976 SOFT GRAY CLAY	SOA	00 SOFT GRAY CLAY WITH SAND STREAKS					TOTAL DEPTH OF BORING <u>1200</u> (Feet) TOTAL DEPTH OF COMPLETED WELL 1049 (Feet)	
Owner's Well No. 1999 Date Work Began 7/28/20	Local Permit Permit No.	ORIENTATION (¥)  DEPTH FROM SURFACE Ft. to Ft.	0	2 9			200 2			300		385 4,		420 4		495 6					850 93			ļ	1042 1200					TOTAL DEPTH OF BORIN TOTAL DEPTH OF COMP	

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ANNULAR MATERIAL	TYPE	FILTER PACK	(IXPE/SIZE)	SAND SLURRY	BENTONITE C	SRI#8 SAND	BENTONITE C	SRI#8 SAND	SAND SLURRY				95695	ZIP	C57 A HIC - 133783
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DEPTH	FROM SURFACE		I I	188	396	399	481	490	630	ION STA	to the best o	TED)	>		
		SLOT SIZE IF ANY	(juches)			020		020		CERTIFICATION STATEMENT	the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief. NAMF EATON DRILLING CO.	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)			
		GAUGE OR WALL	THICKNESS		SCH 80	SCH 80	SCH 80	SCH 80	SCH 80		at this report is con LING CO.	R CORPORATION)	CY AVE	,	Bullon
CASING (S)		INTERNAL DIAMETER	(luches)		2.5	2.5	2.5	2.5	2.5		the undersigned, certify that this report I	ION, FIRM, OF	20 WEST KENTUCKY AVE	11/2 /	
ζγ.		MATERIAL / GRADE			PVC F480	PVC F480	PVC F480	PVC F480	PVC F480		I, the undersig	(PERS	20 WEST	ADDRESS ON	Sinned
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000		DIA. (Inches)			840.5 14/8-3/4	}	8-3/4	8-3/4	8-3/4	ATTACHMENTS	Geologic Log Well Construction D	Geophysical Log(s)	SoilWater Chemical		
F	RFACE	đ		4	840.5	850.5	900	910	989	ATTACE	<ul> <li>Geologic</li> <li>Well Cor</li> </ul>	Geophysi	- Soil/Wate	Other	
DEPTH	FROM SURFACE	1	1	ZONE	Ŧ	840.5	850.5	006	910			-			

STATE ZIP CS7 A HIC - 133783 C-57 LICENSE NUMBER

Page 12 of 12

Date Work Began 7/28/2006 Owner's Well No. 7988

STATE OF CALIFORNIA
COMPLETION
Refer to Instruction Pamphlet
No. E04401 WELL

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DO NOT FILL IN		STATE WELL NO! STATION NO.	_	LONGITUDE	_	
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Late Work Began 1120/2000 Finded July 2000		
Permit No. MW 249-06 Permit Date 6/21/2006	5/21/2006	APN/TRS/OTHER
CEOLOGIC LOG		
ORIENTATION (4) 4 VERTICAL — HORIZONTAL —— ANGLE — DRILLING DOTADO	— (specify)	
DESCRIPTION		
Ft to Ft Describe material, grain, size, color,	etc.	
20 SAND	Address 125' SOF RD 9 & .23 MI EOF RD	- KD P
35	County GI FINN	
35 70 LOOSE GRAVEL WITH SAND AND YELLOW	A DN Book 044 Days 330	Darrol 014
	Township 22 N Range 2 W	Section 18
200 YELLC	Latitude	
250 SILTY		DEG, MIN. SEC.
250 300 SILTY YELLOW GRAY CLAY WITH SAND AND		_
GRAV		MODIFICATION/REPAIR
300 385 SILTY BLUE GRAY CLAY WITH SAND AND	AND	uedeeQ ——
GRAVEL		Other (Specify)
385 420 BRITTLE GRAY AND BROWN CLAY MIX WITH	MIX WITH	DESTROY (Describe
SAND		Procedures and Materials
440 SAND	SAY CLAY	PLANNED TISES ( / )
495 LARGE		WATER SUPPLY
495 645 GRAY CLAY WITH SAND AND LARGE GRAVE	GRAVEL G	Domestic Public Irrination Industrial
STRE		CENCON I
820 SOFT	STREAKS	TEST WELL
840 COAR		CATHODIC PROTECTION
850		HEAT EXCHANGE
SE BLACK SAND	L AND	DIRECT PUSH
		WARDE EXTRACTION
976 SOFT		SPARGING
1042 COARSE BLACK SAND		REMEDIATION
1042 1200 SOFT GRAY CLAY WITH SAND STREAKS	AKS Fences, Rivers, let and attach a map. Use additional paper if	if OTHER (SPECIFY)
	iteessaly. Likeuse de Accorate & Comunet	
	WATER LEVEL & YIELD OF COMPLETED WELL	OMPLETED WELL
	DEPTH TO FIRST WATER (Ft) BELOW SURFACE	SURFACE
	DEPTH OF STATIC  WATER LEVEL	SURED
	(GPM) & TEST TYPE	YPE_
TOTAL DEPTH OF BORING 1/200 (Feet)  TOTAL DEPTH OF COMPLETED WELL 1049 (Feet)	TEST LENGTH —— (Hrs.) TOTAL DRAWDOWN.  Mov not be renresentative of a well's lanc-term vield	\ \rightarrow \text{(Ft)} \ \text{rm vield}
	s Store carear to to communicate to contract.	in Frees.

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	ANNULAR MATERIAL	TYPE		FILTER PACK (TYPE/SIZE)	BENTONITE C	SRI#8 SAND	BENTONITE C	NATIVE FILL				1000
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	.deb.	FROM SURFACE		£. 8	795	797	1062	1068	 	CERTIFICATION STATEMENT	to the best of	
			IZE		030		030			IFICAT	accurate	OR PRINT
			SLOT SIZE	IF ANY (Inches)			•			CERT	nplete and	) (түрер
			GAUGE	OR WALL THICKNESS	SCH 80	SCH 80	SCH 80	SCH 80			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)
	CASING (S)		INTERNAL	DIAMETER (Inches)	2.5	2.5	2.5	2.5			, the undersigned, certify that this report is NAME EATON DRILLING CO.	(PERSON, FIRM, OR CORPO
	CA		MATERIAL /	GRADE	PVC F480	PVC F480	PVC F480	PVC F480			I, the undersign	(PERS
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	1000	- HOE	DIA.		8-3/4			8-3/4		MENTS (	Geologic Log Well Construction Diag	cal Log(s)
	Į	SEACE		귚	666	1019	1029	1049		ATTACHMENTS	Geologic Well: Con	Geophysic
	DEPT	FROM SURFACE		£. 5	989	666	1019	1029	 			
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(子)	I, the undersigned, certify that this r	agram     NAME EATON DRILLING	(PERSON, FIRM, OR COR	Analysis   20 WEST KENTUCKY AN	ADDRESS M	Wall		IN BOLL CECEBON OF BOACO INCITIONA BI
T ATTACHMENTS (<)	Geologic Log	Well Construction Diagram	Geophysical Log(s)	Soil/Water Chemical Analysis	Other		ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	DWR 188 REV 11-97

09/01/06 DATE SIGNED WOODLAND 

STATE ZIP C57 A HIC - 133783 C57 LICENSE NUMBER

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Page 1 of #3

## STATE OF CALIFORNIA COMPLETION REPORT

Owner's Well No. 7677 MON

No. 726922

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Local Permit Agency	GLENN COUNTY HEALTH DEPT.
Permit No. MW207	04 5 5
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Permit Date 5/3/2004

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STATE	WELL NO! STATIO	N NO.								
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		GEOLOGIC LOG		
ORIENTATI		✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)  DRILLING ROTARY FLUID MUD		
SURFA		DESCRIPTION		
Ft. to	Ft	Describe material, grain, size, color, etc.		and the second
<b>0</b> i	20	SAND AND GRAVEL	Address 75 FT N OF C/R 18 & 9 MI E OF C	/R P
20	60	TAN SILTY CLAY	City CA	5°
60	70	SAND AND GRAVEL	County GLENN	
70	120	TAN SILTY CLAY	APN Book 046 Page 310 Parcel 060	
120	160	SAND AND GRAVEL	Township 22 N Range 2 W Section 30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
160	220	TAN/BROWN SILTY CLAY	Latitude	1 1
220	240	MED-CRS SAND	DEG. MIN. SEC.	DEG. MIN. SEC.
240	260	MED-CRS SAND WITH CLAY	LOCATION SKETCH NORTH	ACTIVITY (🗹)
260	320	TAN SILTY CLAY	NORTH	NEW WELL
320	360	POORLY GRD VOLCANIC SAND		MODIFICATION/REPAIR  Deepen
360	380	POORLY SRTD SAND IN A VOLCANIC ASHY CL	<b>V</b>	Other (Specify)
380	400	POORLY GRD SAND AND GRAVEL		
400		POORLY SRTD SAND AND GRAVEL W/CLAY		DESTROY (Describe Procedures and Materials
480	520	MED-CRS SAND WITH CLAY		Under "GEOLOGIC LOG"
520	540	POORLY GRD SAND		PLANNED USES (∠) WATER SUPPLY
540	580	TAN CLAY	WEST	Domestic Public
580	620	POORLY GRD SAND AND GRAVEL	1≅ వ	Irrigation Industria
620	640	TAN/BLUE CLAY W/POORLY GRD GRAVEL		MONITORING
640		BLUE CLAY W/POORLY GRD SAND		CATHODIC PROTECTION
660		NED-CRS SAND W/METAMORPHIC GRAVEL		HEAT EXCHANGE
680	760	BLUE CLAY W/SAND AND GRAVEL		DIRECT PUSH
760		TAN/BROWN CLAY	ŀ	INJECTION
780		DARK BLUE/GRAY CLAY W/FINE SAND		VAPOR EXTRACTION
800		MED-CRS SAND W/BLUE CLAY	SOUTH —	SPARGING REMEDIATION
820		MED-CRS BLACK SAND AND GRAVEL	Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if	OTHER (SPECIFY)
900		TUSCAN CLAY AND ASH W/SOME FINE SAND	necessary. PLEASE BE ACCURATE & COMPLETE.	
		1	WATER LEVEL & YIELD OF COMPL	ETED WELL
;		I	DEPTH TO FIRST WATER (Ft.) BELOW SURFAC	E
. 1		I	DEPTH OF STATIC	
+		1	WATER LEVEL (Ft.) & DATE MEASURED _	
mom:	DVIIV 05	nonnya 920	ESTIMATED YIELD * (GPM) & TEST TYPE	
		BORING 920 (Feet)	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	(Pt.)
TOTAL DE	PTH OF	COMPLETED WELL 900 (Feet)	May not be representative of a well's long-term yield	<i>t</i>
·····				

١		DEPT	гн	BORE -					C	ASING (S)				ם	EPTI	Н		ANNU	JLAR	MATERIAL
١	FROM	SUI	RFACE	HOLE	-	YPE	<u>( '</u>	<u>, m</u>					F	FROM SURFACE				/PE		
	Ft.	to	Ft	DIA. (Inches)	BLANK	SCREEN	S S S S S S S S S S S S S S S S S S S	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGË OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		FL	to	Ft	CE- MENT (✓)	BEN- TONITE	FILL (≰)	FILTER PACK (TYPE/SIZE)
I	ZON	E	1											Ç	) i	31	1			SAND SLURRY
L		0;	45	12	>				PVC	2.5	SCH 80			31	l	88			✓	#8 GRD SAND
I		I5¦	55	12		1			PVC	2.5	SCH 80	.030		88	}	114	1			SAND SLURRY
ľ	-	55¦	60	12	<b>✓</b>				PVC	2.5	SCH 80			114	) i	291			~	#8 GRD SAND
T	. 6	30¦	70	12		<b>V</b>			PVC	2.5	SCH 80	.030		291		307	✓.	$\sim 1$	77	SAND SLURRY
	7	'0 ¦	80	12	✓				PVC	2.5	SCH 80			307		725		<b>ر</b> ن	V	PEA GRAVEL

_	ATTACHMENTS	(∡)
---	-------------	-----

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

	Other		
ATTACH ADD	TIONAL	INFORMATION,	IF IT EXISTS.

DWR 188 REV. 11-97

		CDACATA ACTION	DATERIALITY
I, the und	ersigned, certify that this repo	ort is complete and accurate to the	best of my knowledge and belief.
****	FATON DRILLING C	'n	

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

20 W. KENTUCKY AVE

06/01/04

WOODLAND

CA STATE E ZIP C57 A HIC - 133783 C57 LICENSE NUMBER

95695

WELL DRILLER/AUTHORIZED REPRESENTATIVE IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

— DO NOT FILL IN DWR USE ONLY STATE OF CALIFORNIA GINAL WELL COMPLETION REPORT We with DWR STATE WELL NO./ STATION NO. Refer to Instruction Pamphlet Page 2 of #3 No. 726922 Owner's Well No. 7677 MON LONGITUDE LATITUDE \_, Ended 5/14/2004 Date Work Began <u>5/6/2004</u> Local Permit Agency GLENN COUNTY HEALTH DEPT APN/TRS/OTHER Permit Date 5/3/2004 Permit No. MW207-04 GEOLOGIC LOG ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) ORIENTATION (≤) DRILLING ROTARY \_\_ FLUID MUD **DEPTH FROM** DESCRIPTION SURFACE Describe material, grain, size, color, etc. Address 75 FT N OF C/R 18 & 9 M E OF C/R P 20 SAND AND GRAVEL 0 City CA 60 TAN SILTY CLAY 20 County GLENN 70 SAND AND GRAVEL 60 i Page 310 Parcel <u>060</u> 120 TAN SILTY CLAY APN Book 046 70 Township 22 N 160 SAND AND GRAVEL Range 2 W Section 30 120 220 TAN/BROWN SILTY CLAY 160 Latitude DEG. MIN DEG. SEC MIN. 240 MED-CRS SAND 220 -ACTIVITY (∠) LOCATION SKETCH 260 MED-CRS SAND WITH CLAY ✓ NEW WELL 240 320 TAN SILTY CLAY MODIFICATION/REPAIR 260 \_\_\_ Deepen 360 POORLY GRD VOLCANIC SAND 320 Other (Specify) 380 POORLY SRTD SAND IN A VOLCANIC ASHY CL 360 400 POORLY GRD SAND AND GRAVEL DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG" 380 480 POORLY SRTD SAND AND GRAVEL WICLAY 400 520 MED-CRS SAND WITH CLAY PLANNED USES (∠) 480 WATER SUPPLY 540 POORLY GRD SAND 520 \_ Domestic \_ Public Irrigation \_\_\_\_ Industrial 580 TAN CLAY 540 620 POORLY GRD SAND AND GRAVEL MONITORING -580 640 TAN/BLUE CLAY W/POORLY GRD GRAVEL TEST WELL 620 CATHODIC PROTECTION . 660 BLUE CLAY W/POORLY GRD SAND 640 HEAT EXCHANGE 680 NED-CRS SAND W/METAMORPHIC GRAVEL 660 DIRECT PUSH 760 BLUE CLAY W/SAND AND GRAVEL 680 INJECTION 780 TAN/BROWN CLAY VAPOR EXTRACTION 760 SPARGING. 800 DARK BLUE/GRAY CLAY W/FINE SAND 780 REMEDIATION. 820 MED-CRS SAND W/BLUE CLAY 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. 800 OTHER (SPECIFY) 900 MED-CRS BLACK SAND AND GRAVEL 820 1020 TUSCAN CLAY AND ASH W/SOME FINE SAND 900 WATER LEVEL & YIELD OF COMPLETED WELL DEPTH TO FIRST WATER (Ft) BELOW SURFACE DEPTH OF STATIC WATER LEVEL -\_ (Ft.) & DATE MEASURED \_ (GPM) & TEST TYPE. ESTIMATED YIELD \* ... TOTAL DEPTH OF BORING 920 \_ (Hrs.) TOTAL DRAWDOWN\_ TEST LENGTH ..... May not be representative of a well's long-term yield. TOTAL DEPTH OF COMPLETED WELL 900 (Feet) ANNULAR MATERIAL CASING (S) DEPTH DEPTH BORE HOLE FROM SURFACE **TYPE** FROM SURFACE TYPE (<u>\(\(\(\(\)\)\)</u>) BEN-L PIPE SLOT SIZE CE-INTERNAL GAUGE SCREEN DIA. MATERIAL FILTER PACK MENT TONITE FILL DIAMETER IF ANY (TYPE/SIZE) GRADE (Inches) FŁ to Ft (Inches) THICKNESS Ft. to  $(\checkmark)$ (₹) SAND SLURRY 789 725 2 ZONE #8 GRD SAND 789 920 **SCH 80** <u>12</u> **PVC** 2.5 0 130 2004 030 AUG 1 2.5 **SCH 80** 130 140 12 **PVC SCH 80** 2.5 12 140 150 **PVC** - 79 .030 04 1.84 **SCH 80** 2.5 12 150 160 **PVC SCH 80** 2.5

CERTIFICATION STATEMENT

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

160

250

Geologic Log

12

ATTACHMENTS (∠)

Well Construction Diagram

**PVC** 

NAME EATON DRILLING CO.

<b></b>							`								T EU	IN	
,						STAT	E OF CALIFO	RNIA	-	OPT I	=	- DWR USE ONLY	1 1	00 NO			
SINAL				7	VEI	T COM	PLETIC	)N 1		ORT	ــــا	STATE WEI	L NO./S	HOTATE	NO.		
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nor's Well No	7677	MON				/14/2004	720	<b></b>		ì	Г	LATITUDE	1	1 1	1_1	111	
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1 Domit Age	encv 3		CUL	JINI	I	Permit Date	5/3/2004				-	OWNER					ı
Permit No. MV		GEOL	OGI	C L	OG -			-									
	<b>√</b> \	FRTICAL -		HORE	ZONTA	L ANGLE	(SPECIFY	0									
RIENTATION (🗹)	DRILLIN	ROTA	ARY			FLUID !!	NUD	_									
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240 260	OME	)-CRS S	SANI	D W	ITH	CLAY		一			IAC	JKIII		MODI	FICATIO	NREPAIR	1
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		==/	~ ~ ^	1 N II 1	W				Illustra	te or Describe I	Dista	ance of Well from Roads, Bu	ildings, aper if		отн	ER (SPECIFY)	-
							RAVEL	-	Fences, necessa	KIVEIS, CIC. WILL	DTF A	CCURATE & COMPLI	LIE		en w	er.I.	
900 1	020 T	USCAN	CL	AY A	ND	ASH W/SO	ME FINE S	AND		WATE	RI	LEVEL & YIELD O	F COM	ILTET	יייי עום	VI. 12.1	
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	,	1				178 <b>6</b> o	-		DEPT	H OF STATIC R LEVEL	; 	(Ft.) & DATE N	MEASUR	ED	343.5	****	
	** !	- 4	¥. mi x -	god ga	Arranda 24 p		力上			MATED YIELD	•	(GPM) & TE	ST TYP	Æ			
		0	220			<del></del>	7		١			ALINE ) TOTAL DRAWL	DOWN_	vield.	(PE)		
TOTAL DEPT	H OF B	ORING =	ED V	VEI I	(Fee				M	ay not be rep	pres	sentative of a well's lo	ng-tern			ATEDIAL.	
TOTAL DEPT	HOFC	OMPLET					A STNC (S)				$\parallel$	DEPTH		ANNU	TYF	IATERIAL PE	
DEPTH		BORE -			<del></del> T		ASING (S)				$\parallel$	FROM SURFACE	CE-	BEN-		FILTER P	ACK
FROM SURF	ACE	HOLE		PE ()		MATERIAL /	INTERNAL	GAUG OR WA		SLOT SIZE	11	Ft to Ft	1	TONITE	FILL (🗸)	(TYPE/SI	Æ)
	Pt.	(Inches)	BLANK	SA SE C		GRADE	(inches)	THICKN		(Inches)	41		(X)	-		SAND SL	URRY
				8	9=	PVC	2.5	SCH		030	닉	31 88	+		7	#8 GRD	SAND
250	260 275	12 12		十	$T^{\dagger}$	PVC	2.5	SCH	1 80		7	88 114	1	<b> </b>	-	#8 GRD	SAND
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0	850	12/10	1 1	_	4-1	PVC	2.5	SCI	H 80	.03	0	291 307 307 725	. 1	+ 1	ستال	PEA GR	AVEL
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880				닌		<del></del>			nort in a	<ul> <li>CERTIFI</li> <li>omplete and ac</li> </ul>	ICA ccura	ate to the best of my know	rledge ar	nd belief.			
	ATTAC	HMENTS : Log	(≰.	,		I, the unde	EATON DRI	hat this re	CO.	N) (TYPED OF	R PR	RINTED)			CA	9569	5
1	9.		Diagra	am.		I NAME			CDATIC	かい いりととし ひじ		WOODL	RAID		VΛ	2000	

Page 1 of 2

AUG 05 2003

WELL COMPLETION REPORT

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Re	fer	•	to	I	nstruc	tio	n	F	aı	np	hlet

Owner's Well No. 7565 \_, Ended 7/18/2003 Date Work Began 7/11/2003

No. 726839 BC

Local Permit Agency GLENN COUNTY HEALTH DEPT.
Permit No. MW 162-03 Permit Date 6

Permit Date 6/30/2003

DWR	USE QNLY	DO NOT	FILL IN
ZZN	103m	TO/14	
	STATE WE	LL NO / STATION N	10.
1 1 1			
LATIT	UDE	LONGIT	JDE
	APN	I/TRS/OTHER	

E ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER

· · · · · · · ·		GEOLOGIC LOG	•				
ORIENTA'		✓ VERTICAL HORIZONTAL ANGLE (SPECIFY) DRILLING ROTARY FLUID MUD					
DEPTH SURF		DESCRIPTION					
Ft. to		Describe material, grain, size, color, etc.					
0	2	TOPSOIL	Address .25 MI E OF C/R P & 20 F I S OF C	/R 6			
2	38	GRAVEL WITH COBBLES	City CA				
38	115	LARGE GRAVEL WITH YELLOW CLAY	County GLENN				
115	135	LARGE GRAVEL WITH SAND	APN Book 044 Page 130 Parcel 110				
135	240	YELLOW/BROWN CLAY WITH SAND AND GRVL	Township 22 N Range 3 W Section 1				
240	400	GRAVEL WITH GRAY/BLUE CLAY	Latitude	1 1			
400	460	BLUE CLAY WITH SAND AND GRAVEL STRKS	DEG. MIN. SEC,	DEG. MIN. SEC.			
460	540	SAND AND GRAVEL WITH BLUE CLAY STRKS	LOCATION SKETCH	ACTIVITY (∠) —			
540	590	BRITTLE BLUE CLAY WITH SAND	, , , , , , , , , , , , , , , , , , ,				
590	640	SND AND GRVL WITH BRITTLE BLU CLY STRK		MODIFICATION/REPAIR Deepen			
640	800	BRITTLE BLUE CLAY WITH SAND STREAKS		Other (Specify)			
				DECETOOV (Deceribe			
				DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")			
				PLANNED USES(∠)			
				WATER SUPPLY			
			WEST EAST	Domestic Public Irrigation Industrial			
				1			
	<u> </u>			MONITORING			
	<u></u>		•	CATHODIC PROTECTION			
				HEAT EXCHANGE			
				DIRECT PUSH			
				INJECTION			
				VAPOR EXTRACTION			
<del> </del>			SOUTH	SPARGING REMEDIATION			
<u> </u>			Illustrate or Describe Distance of Well from Roads, Buildings,	OTHER (SPECIFY)			
ļi			Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.				
			WATER LEVEL & YIELD OF COMPL	ETED WELL			
			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	E			
,			DEPTH OF STATIC				
-		A CAMPAGE OF THE CONTRACTOR OF	WATER LEVEL (Ft.) & DATE MEASURED _				
TOTAL DE	DTU OF 1	BORING 515 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE				
1		400	TEST LENGTH (Hrs.) TOTAL DRAWDOWN				
101AL DE	TIN OF (	COMPLETED WELL 490 (Feet)	May not be representative of a well's long-term yield	d.			

DEF	тн	BODE		CASING (S)										ANNULAR MATERIAL			
FROM SU	JRFACE	BORE - HOLE	T		<u>(√)</u>					FR	OM S	PTH URFACE		,	TY	PΕ	
Ft, to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		≓t. to	o Ft.	CE- MENT ( <u>✓</u> )	BEN- TONIT	E FILL ( <u>√</u> )	FILTER PACK (TYPE/SIZE)	
ZONE	1										0	40	✓		<u> </u>	SAND SLURRY	
0	60	13	✓			PVC	2-1/2	SCH 80			40	103			✓	#8 GRD SAND	
60	70	13		<b>√</b>		PVC	2-1/2	SCH 80	0.030		103	230	.10	46	1 75	SÁND SLURRY	
70	80	13	1			PVC	2-1/2	SCH 80			230	314	JUL	T,	1.	#8 GRD SAND	
ZONE	2										314	436	1			SAND SLURRY	
0	270	13	✓			PVC	2-1/2	SCH 80			436	515			1	#8 GRD SAND	

		400   010	
ATTACHMENTS ( / )	CERTIFICATIO	ON STATEMENT -	
Geologic Log	i, the undersigned, certify that this report is complete and accurate to the		f.
Well Construction Diagram	NAME EATON DRILLING CO.		
Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTE	ED)	
Soil/Water Chemical Analysis	20 W. KENTUCKY AVE.	WOODLAND	
Other	ADDRESS - May H	CITY	;

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

#### STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page 2 of		
Owner's	Well No.	7565

No. 726839

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ת	ate	X	/ork	. •	Reo	an		7/1	1	/20	00

, Ended 7/18/2003

Local Permit Agency GLENN COUNTY HEALTH DEPT.

Permit No. MW 162-03 Permit Date 6/30/2003 DWR USE ONLY --- DO NOT FILL IN STATE WELL NO./ STATION NO. LATITUDE LONGITUDE APN/TRS/OTHER

Permi	t No. IVI	VV 102-03 Permit Date 0/30/2003		
		GEOLOGIC LOG		1
ORIENTAT	TION (≰)	✓ VERTICAL HORIZONTAL ANGLE (SPECIFY)		
		DRILLING ROTARY FLUID MUD		
DEPTH SURF		DESCRIPTION		
Ft. to		Describe material, grain, size, color, etc.	WELL TOCAMION	
0	2	TOPSOIL	Address .25 MI E OF C/R P & 20 FT S OF C	/R 6
2	38	GRAVEL WITH COBBLES	City CA	
38	115	LARGE GRAVEL WITH YELLOW CLAY	County GLENN	
115	135	LARGE GRAVEL WITH SAND	APN Book 044 Page 130 Parcel 110	
135	240	YELLOW/BROWN CLAY WITH SAND AND GRVL	Township 22 N Range 3 W Section 1	
240	400	GRAVEL WITH GRAY/BLUE CLAY	Latitude	1 1
400	460	BLUE CLAY WITH SAND AND GRAVEL STRKS	DEG. MIN. SEC.	DEG. MIN. SEC.
460	540	SAND AND GRAVEL WITH BLUE CLAY STRKS	LOCATION SKETCH  NORTH	ACTIVITY (∠) —
540	590	BRITTLE BLUE CLAY WITH SAND	NOM	l
590	640	SND AND GRVL WITH BRITTLE BLU CLY STRK		MODIFICATION/REPAIR  — Deepen
640	800	BRITTLE BLUE CLAY WITH SAND STREAKS		Other (Specify)
			•	
				DESTROY (Describe     Procedures and Materials     Under "GEOLOGIC LOG")
1				
				PLANNED USES (∠) WATER SUPPLY
l			ST ST	Domestic Public
<del>                                     </del>			WE	Irrigation Industrial
<del> </del>				MONITORING →
H				TEST WELL CATHODIC PROTECTION
<u> </u>			•	HEAT EXCHANGE
<del> </del>				DIRECT PUSH
				INJECTION
<del> </del>			,	VAPOR EXTRACTION
<del>-</del>			SOUTH -	SPARGING
ļ			Illustrate or Describe Distance of Well from Roads, Buildings.	REMEDIATION OTHER (SPECIFY)
	-		Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	
			WATER LEVEL & YIELD OF COMPI	ETED WELL
	-		DEPTH TO FIRST WATER (Ft.) BELOW SURFACI	<b>=</b>
			DEPTH OF STATIC	
			WATER LEVEL (Ft.) & DATE MEASURED _	
TOTAL DE	י שר נודמי	BORING 515 (Feet)	ESTIMATED YIELD * (GPM) & TEST TYPE	
		inn	TEST LENGTH (Hrs.) TOTAL DRAWDOWN	` '
TOTAL DE	PIH OF (	COMPLETED WELL 490 (Feet)	May not be representative of a well's long-term yield	d

DEF		BODE -		CASING (S)						DE	ANNULAR MATERIAL					
FROM St	JRFACE	BORE - HOLE		YPE	<u> </u>			INTERNAL	OALICE	SLOT SIZE	FROM	SURFACE		Γ	TY	PE
Ft. to	Ft.	DIA. (Inches)	BLANK	SCREEN	CON	FILL PIPE	MATERIAL / GRADE	DIAMETER (Inches)	GAUGE OR WALL THICKNESS	IF ANY (Inches)	Ft.	to Ft.	CE- MENT	BEN- TONIT	FILL ( <u>/</u> )	FILTER PACK (TYPE/SIZE)
270	280	13		<	1		PVC	2-1/2	SCH 80	0.030	0	40	✓			SAND SLURRY
280	290	13	✓	1			PVC	2-1/2	SCH 80		40	103				#8 GRD SAND
ZONE	3										103	230	100	13	LU	SAND SLURRY
0	470	13	<b>V</b>	1	Γ		PVC	2-1/2	SCH 80		230	314	OO	1	<b>V</b>	#8 GRD SAND
470		13		<b>V</b>		T	PVC	2-1/2	SCH 80	0.030	314	436	<b>√</b>			SAND SLURRY
480	490	13	<b>V</b>	<u> </u>	Π		PVC	2-1/2	SCH 80		436	515			~	#8 GRD SAND

•	ATTACHMENTS	(V)

- Geologic Log
- Well Construction Diagram
- \_ Geophysical Log(s)
- ---- Soil/Water Chemical Analysis \_\_\_ Other \_

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION S	STA	ATEN	ΛENT

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 W. KENTUCKY AVE.

ADDRESS

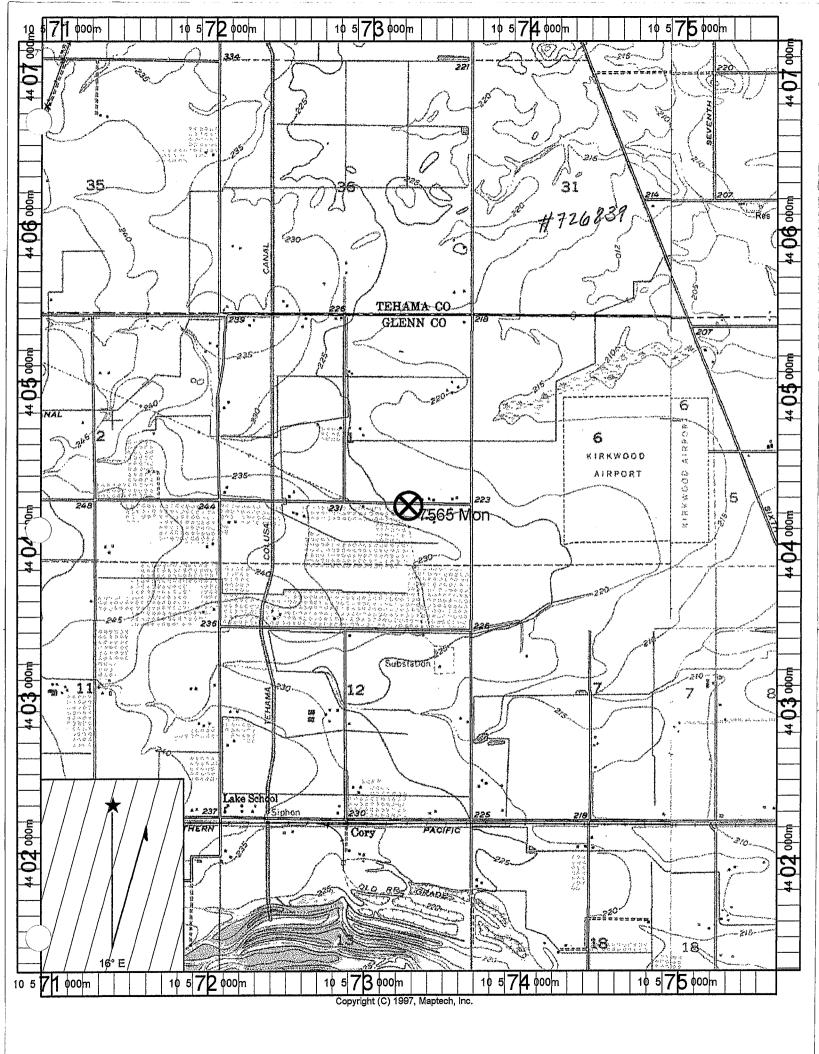
CITY

08/04/03 DATE SIGNED

E ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER STATE

CA

DWR 188 REV. 11-97



IGINAL e with DWR

Page 1 of §3

STATE OF CALIFORNIA

WELL COMPLETION REPORT

No. 726923

Refer to Instruction Pamphlet

Owner's Well No. 7678 MON Ended 5/27/2004 Date Work Began <u>5/17/2004</u>

Local Permit Agency GLENN COUNTY HEALTH DEPT.

Permit No. MW208-04 Permit Date <u>5/3/2004</u>

2 DWR USE	DNLY	三 DO	NOT	FILL						
CTAT.		NO LET	TON N		1					
SIAII	WELL	NO./ 51/	HON N	J.	<i>!</i>					
LATITUDE LONGITUDE										
		1								
	APN/TRS/OTHER									

Companies   Comp	GEOLOGIC LOG	<u></u>
Describe material grain, size, color, etc.	DRILLING ROTARY FLUID MUD	מי
10	SURFACE DESCRIPTION	
10		Address 125 ET N OF HWY 32 & 1000 ET F OF C/R N
20		
401 50 MED-CRS SAND W/GRAVEL 50 60 MED-CRS SAND 60 70 LARGE GRAVEL W/FINE-CRS SAND 70 80 MED-CRS SAND W/GRAVEL 70 80 MED-CRS SAND W/GRAVEL 80 120 TAN SILTY CLAY 130 TAN SILTY CLAY W/SAND AND GRAVEL 130 TAN SILTY CLAY W/SAND AND GRAVEL 130 TAN SILTY CLAY W/SAND AND GRAVEL 130 TAN SILTY CLAY W/MED-CRS SAND 150 250 MED-CRS SAND W/GRAVEL 270 280 TAN SILTY CLAY W/MED-CRS SAND 280 300 TAN SILTY CLAY W/MED-CRS SAND 310 320 TAN SILTY CLAY W/MED-CRS SAND 340 350 TAN SILTY CLAY W/MED-SAND 350 360 TAN SILTY CLAY W/MED SAND 360 380 SAND 380 410 TAN SILTY CLAY W/MED-SAND 380 410 TAN SILTY CLAY W/MED-CRS SAND 410 420 MED SAND W/CLAY, HARD SPOT 240 FT 420 440 TAN SILTY CLAY W/MED-CRS SAND 460 490 MED-CRS SAND 460 490 MED-CRS SAND 460 TAN SILTY CLAY 460 TAN SI		
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ACTIVITY (2)   AUTOMOTORIO   ACTIVITY (2)   ACTI	50 60 MED-CRS SAND	
70	60: 70 LARGE GRAVEL W/FINE-CRS SAND	, .
120	70 80 MED-CRS SAND W/GRAVEL	DEG. MIN. SEC. DEG. MIN. SEC.
120	80 120 TAN SILTY CLAY	
130	120 130 TAN SILTY CLAY W/SAND AND GRAVEL	
150	130 140 MED SAND W/SILTY TAN CLAY	
150   250   MED-CRS SAND W/GRAVEL   250   270   TAN SILTY CLAY	140 . 150 MED SAND	Other (Specify
270   280   TAN SILTY CLAY W/MED-CRS SAND 280   300   TAN SILTY CLAY 300   310   TAN SILTY CLAY W/MED-CRS SAND 310   320   TAN SILTY CLAY W/MED SAND 320   340   TAN SILTY CLAY W/MED SAND 340   350   TAN SILTY CLAY W/MED SAND 360   380   SAND 380   410   TAN SILTY CLAY W/MED SAND 410   420   MED SAND W/CLAY, HARD SPOT ② 420 FT 420   440   TAN SILTY CLAY W/MED-CRS SAND 440   460   TAN SILTY CLAY W/MED-CRS SAND 440   460   TAN SILTY CLAY W/MED-CRS SAND 440   460   TAN SILTY CLAY W/MED-CRS SAND 450   520   TAN STICKY CLAY 460   490   MED-CRS SAND 490   520   TAN STICKY CLAY 520   540   MED SAND W/SOME GRAVEL 540   590   TAN STICKY CLAY 570   630   TAN/BLUE CLAY 570   630   TAN/BLUE CLAY 570   630   TAN/BLUE CLAY 571   TAN/BLUE CLAY 571   TAN/BLUE CLAY 572   TAN/BLUE CLAY 573   TAN/BLUE CLAY 574   TEST WATER   (Ft.) & DATE MEASURED 575   CRAW   CREEN   C		
270   280   TAN SILTY CLAY W/MED-CRS SAND 280   300   TAN SILTY CLAY 300   310   TAN SILTY CLAY W/MED-CRS SAND 310   320   TAN SILTY CLAY W/MED-CRS SAND 320   340   TAN SILTY CLAY W/MED SAND 340   350   TAN SILTY CLAY W/MED SAND 360   360   TAN SILTY CLAY W/MED SAND 360   380   SAND 380   410   TAN SILTY CLAY W/MED SAND 380   410   TAN SILTY CLAY W/MED-CRS SAND 410   420   MED SAND W/CLAY, HARD SPOT ② 420 FT 420   440   TAN SILTY CLAY W/MED-CRS SAND 440   460   TAN SILTY CLAY W/MED-CRS SAND 440   460   TAN SILTY CLAY 460   490   MED-CRS SAND 490   520   TAN STICKY CLAY 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 520   540   MED SAND W/SOME GRAVEL 540   590   TAN STICKY CLAY 550   630   TAN/BLUE CLAY 550   630   TAN/BLUE CLAY 550   630   TAN/BLUE CLAY 550   630   TAN/BLUE CLAY 560   630   TAN/BLUE CLAY 570   630   TAN/BLUE CLAY 580   700   7	250 270 TAN SILTY CLAY	DESTROY (Describe Procedures and Mat
280   300   TAN SILTY CLAY  300   310   TAN SILTY CLAY W/MED-CRS SAND  310   320   TAN SILTY CLAY W/MED SAND  320   340   TAN SILTY CLAY W/MED SAND  340   350   TAN SILTY CLAY W/MED SAND  350   360   TAN SILTY CLAY W/MED SAND  360   380   SAND  380   410   TAN SILTY CLAY W/MED SAND  410   420   MED SAND W/CLAY, HARD SPOT	270 280 TAN SILTY CLAY W/MED-CRS SAND	
300 310 TAN SILTY CLAY W/MED-CRS SAND 310 320 TAN SILTY CLAY 320 340 TAN SILTY CLAY W/MED SAND 340 350 TAN SILTY CLAY W/MED SAND 350 360 TAN SILTY CLAY W/MED SAND 360 380 SAND 380 410 TAN SILTY CLAY 410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT 420 440 TAN SILTY CLAY 440 460 TAN SILTY CLAY 460 490 MED-CRS SAND 460 490 MED-CRS SAND 490 520 TAN STICKY CLAY  WATER LEVEL & YIELD OF COMPLETED WELL 540 590 TAN STICKY CLAY 550 630 TAN/BLUE CLAY 570 630 TAN/BLUE CLAY 570 630 TAN/BLUE CLAY 570 CTAL DEPTH OF BORING 860 (Feet)  OTAL DEPTH OF BORING 860  (Fe)  Domestic Public Inigation Industrial Monotrains of well inigation Industrial Monotrains of I	280, 300, TAN SILTY CLAY	
320 340 TAN SILTY CLAY W/MED SAND 340 350 TAN SILTY CLAY W/CRS-FINE SAND AND GRVL 350 360 TAN SILTY CLAY W/MED SAND 360 380 SAND 380 410 TAN SILTY CLAY 410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT 420 440 TAN SILTY CLAY W/MED-CRS SAND 440 460 TAN SILTY CLAY W/MED-CRS SAND 460 490 MED-CRS SAND 490 520 TAN STICKY CLAY 520 540 MED SAND W/SOME GRAVEL 520 540 MED SAND W/SOME GRAVEL 540 590 TAN STICKY CLAY 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 FOREIGN SAND 590 630 TAN/BLUE CLAY 590 FOREIGN SAND 590 630 TAN/BLUE CLAY 590 630 TAN/BLUE CLAY 590 FOREIGN SAND 590 FOREIGN	300 310 TAN SILTY CLAY W/MED-CRS SAND	
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340 350 TAN SILTY CLAY W/CRS-FINE SAND AND GRVI 350 360 TAN SILTY CLAY W/MED SAND 360 380 SAND 380 410 TAN SILTY CLAY 410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT 420 440 TAN SILTY CLAY W/MED-CRS SAND 440 460 TAN SILTY CLAY 460 490 MED-CRS SAND 490 520 TAN STICKY CLAY 520 540 MED SAND W/SOME GRAVEL 540 590 TAN STICKY CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 630 TAN/BLUE CLAY 550 640 MED SAND W/SOME GRAVEL 550 650 TAN STICKY CLAY 550 650 TAN STICKY CLAY 550 650 TAN/BLUE CLAY 550 650 TAN/BLUE CLAY 550 650 TAN/BLUE CLAY 550 650 TAN/BLUE CLAY 550 650 TAN/BLUE CLAY 550 TAN/	320, 340, TAN SILTY CLAY W/MED SAND	
360 380 SAND  380 410 TAN SILTY CLAY  410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT  420 440 TAN SILTY CLAY W/MED-CRS SAND  440 460 TAN SILTY CLAY  460 490 MED-CRS SAND  490 520 TAN STICKY CLAY  520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  550 630 TAN/BLUE CLAY  TOTAL DEPTH OF BORING 860 (Feet)  OTAL DEPTH OF BORING 860 (Feet)  DIRECT PUSH INJECTION VAPOR EXTRACTION VAPOR EXTRACTION SPARGING SOUTH Remaining the properties of Describe Distance of Well from Roads, Buildings, Remediation of Separation of The Remaining South Remediation of The Remediat	340' 350 TAN SILTY CLAY W/CRS-FINE SAND AND GR	VII
380   3410   TAN SILTY CLAY  410   420   MED SAND W/CLAY, HARD SPOT @ 420 FT  420   440   TAN SILTY CLAY W/MED-CRS SAND  440   460   TAN SILTY CLAY  460   490   MED-CRS SAND  490   520   TAN STICKY CLAY  520   540   MED SAND W/SOME GRAVEL  540   590   TAN STICKY CLAY  590   630   TAN/BLUE CLAY  TOTAL DEPTH OF BORING   860   (Feet)  TEST LENGTH   (Hrs.) TOTAL DRAWDOWN   (Ft.)	350 360 TAN SILTY CLAY W/MED SAND	HEAT EXCHANGE.
410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT  420 440 TAN SILTY CLAY W/MED-CRS SAND  440 460 TAN SILTY CLAY W/MED-CRS SAND  460 490 MED-CRS SAND  490 520 TAN STICKY CLAY  520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  550 630 TAN/BLUE CLAY  COTAL DEPTH OF BORING 860 (Feet)  COTAL DEPTH OF BORING 860 (Feet)  410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT  SPARGING REMEDIATION SPARGING REMEDIATION OTHER (SPECIFY) OTHER (SPECIFY		The state of the s
410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT  420 440 TAN SILTY CLAY W/MED-CRS SAND  440 460 TAN SILTY CLAY  460 490 MED-CRS SAND  490 520 TAN STICKY CLAY  520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  590 630 TAN/BLUE CLAY  TOTAL DEPTH OF BORING 860  (Feet)  SOUTH  SOUTH  SOUTH  REMEDIATION  OTHER (SPECIFY)  DEPTH TO FIRST WATER (Ft.) BELOW SURFACE  DEPTH OF STATIC  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.)	380 410 TAN SILTY CLAY	The state of the s
420 440 TAN SILTY CLAY W/MED-CRS SAND  440 460 TAN SILTY CLAY  460 490 MED-CRS SAND  490 520 TAN STICKY CLAY  520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  590 630 TAN/BLUE CLAY  COTAL DEPTH OF BORING 860  (Feet)  COTAL DEPTH OF BORING 860  (Feet)  REMEDIATION	410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT	
440 460 TAN SILTY CLAY  460 490 MED-CRS SAND  490 520 TAN STICKY CLAY  520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  590 630 TAN/BLUE CLAY  OTAL DEPTH OF BORING 860  (Feet)  OTHER (SPECIFY)  Fences, Rivers, etc. and attach a map. Use additional paper if Beccessary. 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.)	420 440 TAN SILTY CLAY W/MED-CRS SAND	SOUTH REMEDIATION
460 490 MED-CRS SAND  490 520 TAN STICKY CLAY  520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  590 630 TAN/BLUE CLAY  OTAL DEPTH OF BORING 860 (Feet)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)	440 460 TAN SILTY CLAY	Fences, Rivers, etc. and attach a map. Use additional paper if OTHER (SPECIFY)
520 540 MED SAND W/SOME GRAVEL  540 590 TAN STICKY CLAY  590 630 TAN/BLUE CLAY  OTAL DEPTH OF BORING 860  (Feet)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)	460 490 MED-CRS SAND	necessary. PLEASE BE ACCURATE & COMPLETE.
540   590   TAN STICKY CLAY  590   630   TAN/BLUE CLAY  OTAL DEPTH OF BORING 860 (Feet)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)	490 520 TAN STICKY CLAY	WATER LEVEL & YIELD OF COMPLETED WELL
590 630 TAN/BLUE CLAY  OTAL DEPTH OF BORING 860 (Feet)  TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)	520 540 MED SAND W/SOME GRAVEL	DEPTH TO FIRST WATER (Ft) BELOW SURFACE
OTAL DEPTH OF BORING 860 (Feet)  TEST LENGTH	540 590 TAN STICKY CLAY	
TEST LENGTH(Hrs.) TOTAL DRAWDOWN(Ft)	590 630 TAN/BLUE CLAY	
The state of the s	000	
May not be representative of a well's long-term yield.		
	TOTAL DELITION CONTRETED WELL GIVE (Feet)	May not be representative of a well's long-term yield.

DEP1	ГН	BORE -					C/		DEPTH			ANNULAR MATERIAL					
FROM SU	RFACE	HOLE	Т	YPE	(	<u> </u>				f			JRFACE		,	, T	PE
Ft. to	Ft	DIA. (Inches)	BLANK	SCREEN	85 20 20 20 20 20 20 20 20 20 20 20 20 20	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	Ft	to	) Ft	CE- MENT (✓)	BEN- TONITI (✓)	FILL (⊻)	FILTER PACK (TYPE/SIZE)
ZONE	1											0	30	✓			SAND SLURRY
0	50	12	1		Ι.		PVC	2.5	SCH 80	,	3	30	80		17		#8 GRD SAND
50	60	12		1	1		PVC	2.5	SCH 80	.030		30	99	\ <u>\</u> \\	V'		CHIPS
60	70	12	1		Γ	Г	PVC	2.5	SCH 80		(	99 ¦	225			~	#8 GRD SAND
ZONE	2		Γ		Г	Π					22	25 ¦	248		~		CHIPS
0	130	12	7				PVC	2.5	SCH 80		24	18	625			<b>V</b>	#8 GRD SAND

<ul> <li>ATTACHMEN</li> </ul>	TS (	∡)	
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- Geologic Log
- Well Construction Diagram
- \_ Geophysical Log(s)
- Soil/Water Chemical Analysis

\_ Other ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

— CERTIFICA	TION S'	TATEMENT

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 W. KENTUCKY AVE

WOODLAND

95695 CA

06/01/04

E ZIP C57 A HIC - 133783 C-57 LICENSE NUMBER

/GINAL STATE OF CALIFORNIA USE ONLY --- DO NOT e with DWR WELL COMPLETION REPORT - 1 age 2 of #3 Refer to Instruction Pamphlet STATE WELL NO./ STATION NO. Owner's Well No. 7678 MON No. 726923 Date Work Began <u>5/17/2004</u> Ended 5/27/2004 LATITUDE LONGITUDE Local Permit Agency GLENN COUNTY HEALTH DEPT. Permit No. <u>MW208-04</u> Permit Date <u>5/3/20</u>04 APN/TRS/OTHER GEOLOGIC LOG ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY) ORIENTATION (✓) DRILLING ROTARY FLUID MUD **DEPTH FROM** SURFACE DESCRIPTION Describe material, grain, size, color, etc. 630 640 MED SAND Address 125 FT N OF HWY 32 & 1000 FT E OF C/R N 640 650 BLUE CLAY W/MED-CRS SAND City CA 650 690 BLUE CLAY County GLENN 690 700 MED-CRS SAND VALUE AND E APN Book 046 \_\_ Page <u>150</u>\_\_ \_ Parcel <u>036</u> 700 710 BLUE/TAN CLAY Township 22 N Range 3 W Section 24 710 740 MED SAND Latitude 740 800 BRITTLE BLUE CLAY DEG. MIN. SEC. DEG. MIN. SEC LOCATION SKETCH ACTIVITY (∠) 800 820 MED-CRS SAND NORTH ✓ NEW WELL 820 880 BRITTLE BLUE CLAY MODIFICATION/REPAIR 880 900 MED SAND W. CLAY — Deepen 900 950 BLUE CLAY Other (Specify) 1020 VOLCANIC ASH AND CLAY 950 DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG") WMED CRS SAND PLANNED USES (∠) 30 30C 1+46 4 WATER SUPPLY 300 4.64 WITH DORS SAND \_ Domestic \_ Industria Irrigation \_ 2.A. 2 117 MONITORING -TEST WELL. 340 - : CO 1 a . YOUR GIVE SAND IND ( CATHODIC PROTECTION THE SAND HEAT EXCHANGE At. ... Bui walk DIRECT PUSH ATH TAK SE TV- 1 to 300 INJECTION I'M ASTO SAME WILL AS VAPOR EXTRACTION 416 AKC SPOY # 470 FT SPARGING. 420 440 TAN SETY CLAS WAS DIRE VAL - SOUTH REMEDIATION. 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. \$40 460 TAN SILTY CLAN OTHER (SPECIFY) 490 MED-CRS 54ND 460 190 SZULTAN STICKY CLAY WATER LEVEL & YIELD OF COMPLETED WELL 540! MED SAND WISOME GRAVEL 520i DEPTH TO FIRST WATER-- (Ft) BELOW SURFACE FOR TAN STICKY CLAY DEPTH OF STATIC WATER LEVEL .... - (Ft.) & DATE MEASURED \_ ESTIMATED YIELD \*\_ \_ (GPM) & TEST TYPE\_ TOTAL DEPTH OF BORING 860 TEST LENGTH \_\_\_\_ \_\_ (Hrs.) TOTAL DRAWDOWN\_ TOTAL DEPTH OF COMPLETED WELL 840 (Feet) May not be representative of a well's long-term yield. CASING (8) **DEPTH** ANNULAR MATERIAL RORE DEPTH CON. CON. IL PIPE (7) FROM SURFACE FROM SURFACE HOLE SCREEN DIA. INTERNAL MATERIAL / GALIGE BLANK SLOT SIZE CE-BEN-(Inches) DIAMETER OR WALL FILTER PACK GRADE IF ANY MENT TONITE FILL Pt to R (Inches) (inches) THICKNESS Ft. to Ft (TYPE/SIZE) (⊻) (₹) 130 150 12 **PVC** 2.5 **SCH 80** SAND SLURRY .030 625 772 150 170 12 **PVC** 2.5 #8 GRD SAND **SCH 80** 860 772 i

Geologic Log

180

**195** 

800

3

12

12

12/10

ATTACHMENTS (∠)

**PVC** 

**PVC** 

PVC

2.5

2.5

2.5

**SCH 80** 

**SCH 80** 

**SCH 80** 

170

180

0

ZONE

CERTIFICATION STATEMENT

.030

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

**(IGINAL** STATE OF CALIFORNIA ile with DWR WELL COMPLETION REPORT Refer to Instruction Pamphlet STATE WELL NO / STATION NO Page 3 of #3 No. 726923 Owner's Well No. 7678 MON Date Work Began 5/17/2004 Ended 5/27/2004 LATITUDE LONGITUDE Local Permit Agency GLENN COUNTY HEALTH DEPT Permit No. MW208-04 APN/TRS/OTHER Permit Date 5/3/2004 **GEOLOGIC LOG** ✓ VERTICAL \_\_\_\_ HORIZONTAL --- ANGLE \_\_\_\_(SPECIFY) ORIENTATION (≤) DRILLING ROTARY - FLUID MUD DEPTH FROM DESCRIPTION SURFACE Describe material, grain, size, color, etc. Address 125 FT N OF HWY 32 & 1000 FT E OF C/R N 10 POORLY GRD SAND 0 10 20 SAND AND GRAVEL City CA 20 40 GRAVEL WICRS SAND County GLENN 50 MED-CRS SAND W/GRAVEL 40 Parcel 036 APN Book 046 Page 150 50 60 MED-CRS SAND Township 22 N \_ Range3 W Section 24 60 70 LARGE GRAVEL W/FINE-CRS SAND Latitude\_ DEG. MIN. 70 80 MED-CRS SAND W/GRAVEL MIN SEC SEC ACTIVITY (Z) LOCATION SKETCH 80 120 TAN SILTY CLAY NORTH ✓ NEW WELL 120 130 TAN SILTY CLAY W/SAND AND GRAVEL MODIFICATION/REPAIR 130 140 MED SAND W/SILTY TAN CLAY Deepen - Other (Specify) 140 150 ! MED SAND 150 250 MED-CRS SAND W/GRAVEL DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG" 250 270 TAN SILTY CLAY 270 280 ! TAN SILTY CLAY W/MED-CRS SAND PLANNED USES (∠) 280 300 TAN SILTY CLAY WATER SUPPLY 300 310 TAN SILTY CLAY WIMED-CRS SAND Domestic Public Industria Irrigation 310 320 TAN SILTY CLAY MONITORING → 340 TAN SILTY CLAY W/MED SAND 320 TEST WELL 340 350 TAN SILTY CLAY W/CRS-FINE SAND AND GRVI ATHODIC PROTECTION 350 360 TAN SILTY CLAY WIMED SAND **HEAT EXCHANGE** DIRECT PUSH 360 380 SAND INJECTION 380 410 TAN SILTY CLAY VAPOR EXTRACTION 410 420 MED SAND W/CLAY, HARD SPOT @ 420 FT SPARGING. 420 440 TAN SILTY CLAY W/MED-CRS SAND SOUTH REMEDIATION 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. 440 460 TAN SILTY CLAY OTHER (SPECIFY) 460 490 MED-CRS SAND WATER LEVEL & YIELD OF COMPLETED WELL 490 520 TAN STICKY CLAY 520 540 MED SAND W/SOME GRAVEL - (Ft.) BELOW SURFACE 540 590 TAN STICKY CLAY DEPTH OF STATIC WATER LEVEL. \_\_ (Ft.) & DATE MEASURED \_ 590 630 ' TAN/BLUE CLAY \_\_\_ (GPM) & TEST TYPE ESTIMATED YIELD \* ..... TOTAL DEPTH OF BORING 860 \_\_\_ (Hrs.) TOTAL DRAWDOWN\_ TOTAL DEPTH OF COMPLETED WELL 840 (Feet) May not be representative of a well's long-term yield. CASING (S) ANNULAR MATERIAL DEPTH DEPTH FROM SURFACE BORE -PUCTOR C FROM SURFACE TYPE ( HOLE SCREEN DIA INTERNAL SLOT SIZE MATERIAL / CE-REN-DIAMETER FILTER PACK (Inches) OR WALL IF ANY GRADE MENT TONITE FILL Ft. Ft. to (TYPE/SIZE) THICKNESS to (inches) (⊻) (∠) 800 820 10 2.5 **SCH 80 PVC** 30 SAND SLURRY 030 0 820 840 10 #8 GRD SAND **PVC** 2.5 **SCH 80** 30 80 Mehips 80 99 225 #8 GRD SAND 99 24**M**G

ATTACHMENTS (∠) Geologic Log

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

225

248

CERTIFICATION STATEMENT

625

**CHIPS** 

#8 GRD SAND

	•		221	1/030	U-28
ORIGINAL File with DWR	WELL COMPLETION	ON REPORT	ZZNO	13 WZ	8 P(1-3)K1
Page of A	Refer to Instruction  No. 0	•	TOUAL	ATE WELL NO.	STATION NO.
Owner's Well No	Ended SU	1439ABC	LATITUDE	WEZL	LONGITUDE
Local Permit Agency Glenn	Co Nealth Dep	<del>1</del>		APN/TRS/O	THER
Permit No GEOLOGIC	LOG Permit Date <u> </u>	<del></del>	Server of		
	ORIZONTAL ANGLE (SPECIFY)				
METHOD	DESCRIPTION FLUID				
Ft. to Ft. Describe mate	rial, grain size, color, etc. 📐		MELL LO	CATION —	
10 55 Crs sand to	nded gravel subrad	Address	3180V		<del></del>
56 70 light greenis	th brown clay	County (10)	<u>مر</u>		
70 120 rellowish-or	ange brown clay	APN Book <u>D45</u> Township 15	Page 340	Parcel <i>DC</i> Section	) <u>5</u>
140, 158 grn torange &	lay w/ crs of & sand	Latitude	NORTH	Longitude	, WEST
158 162 CVS 9+2 Sar	101 Oxid. to Bubrnd.		SEC. ION SKETCH -		ACTIVITY ( $\succeq$ )  NEW WELL
162 190 gm 8 bysne c	silt stone 4 few gravel		NONTH .		MODIFICATION/REPAIR
770 700 05 501-30	lenses				Deepen Other (Specify)
280 285 crs md-ana	aular Sand Sand W 50% clay		2 2		DESTROY (Describe
	2. sand w/ 10% cley		X Enterskitz		Procedures and Materials Under "GEOLOGIC LOG")
290 340 50% Crs sai	nd 150% orange lovel	<b>M</b>	x t		PLANNED USES (∠) WATER SUPPLY
340 400 orange form	un clay-	<u></u>	H	<u> </u>	Domestic Public Irrigation Industrial
400 410 orng brun	clay 4070 drk	Co. Rd		EAST	MONITORING
410 490 greenish yel					CATHODIC PROTECTION
1490 500 Bright blue	-green clay tot				HEAT EXCHANGE DIRECT PUSH
					INJECTION VAPOR EXTRACTION
	******		SOUTH		SPARGING
		Illustrate or Describe Dista Fences, Rivers, etc. and att necessary. PLEASE BE A	nce of Well from Road ach a map. Use additio CCURATE & COMPI	ls, Buildings, mal paper if ETF	OTHER (SPECIFY)
i i		WATER LI	EVEL & YIELD	OF COMPLE	TED WELL
This well was construct	ted w/ 3 completion	DEPTH TO FIRST WATER	R (Ft.) BEI	LOW SURFACE	
1=deep -2= moderate	3=Shallow 1	DEPTH OF STATIC WATER LEVEL			
TOTAL DEPTH OF BORING 500 (FO	<b>中</b> (1)	ESTIMATED YIELD *	, ,		
TOTAL DEPTH OF COMPLETED WELL	721 (Feet)	TEST LENGTH * May not be represent.			_ (Ft.)
DEPTH BORE	CASING (S)		DEPTH	ANNU	LAR MATERIAL
FROM SURFACE HOLE TYPE(∠)		1 11	ROM SURFACE	OF   DEL	TYPE
DIA. (Inches) SCHEEN SCHEEN BEANK SCHEEN LINE BLOOK CON.	MATERIAL / INTERNAL GAUGE GRADE DIAMETER OR WAL (Inches) THICKNE	L IF ANY	Ft. to Ft.		FILL FILTER PACK (TYPE/SIZE)
421,310400, surface X	Steel 2" Schi	10 4	30 373.5	(\(\times\)	#8 sand
400 390 X	Steel 2" Sch4	0 .020 3	735 30H	V	
. 311270 290, Surface X	Steel 2" Schi	$\frac{10}{1020}$	04 25 <b>8</b>	<u></u>	#8 Sand
,71,30 50, Surface X	Steel 2" Sch		09 23		#8 Sand
50 130   X   X   X   X   X   X   X   X   X	Steel 2" Schi	U DZC Z — CERTIFICATIO	N STATEMENT		DEC 9 1 2007
Geologic Log	I, the undersigned, certify that the	nis report is complete an	d accurate to the t	pest of my kno	Wedge and belief.
Well Construction Diagram	NAME (PERSON, FIRM, OR PORPORATION)	(TYPED OR, PRINTED)	)16/1 (Lt	1000	7
Geophysical Log(s)     Soil/Water Chemical Analyses	11 4.0; YOUX	471	ZAMOI	-a (	A 95698
Other	- ADDRESS Charles	Ronnhor	Siry 5	1/02	STATE ZIP
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed WELL DRILLER/AUTHORIZED REPRES	ENTATIVE	DATE	SIGNED	C-57 LICENSE NUMBER

## Department of Water Resources Olivares Deep Well

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Ca	CI	n	σ
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## # 801439

## Deep Well

Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
421 - 400		Blank	Steel	2"	Sch 40	
400 - 390		Screen	Steel	2"	Sch 40	.020
390 – +"		Blank	Steel	2"	Sch 40	
411 - +"		Blank	Steel	1"	Sch 40	

### Middle Well

Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
311 - 290	,	Blank	Stee1	2"	Sch 40	
290 - 270		Screen	Steel	2"	Sch 40	.020
270 – +		Blank	Stee1	2"	Sch 40	
301 - +		Blank	Steel	1"	Sch 40	

### Shallow Well

	Ft. to Ft.	Borehole Dia.	Type	Material Grade	Internal Dia	Gauge	Slot Size
	71 – 50		Blank	Steel	2"	Sch 40	
	50 - 30		Screen	Steel	2"	Sch 40	.020
	30 - +		Blank	Steel	2"	Sch 40	
,	61 - +		Blank	Steel	1"	Sch 40	

## **Annular Material**

Ft. to Ft. Type

				V-design design of blood of the special states of the special stat		
· <del></del>			S	FATE OF CALIFORNL DEPARTMENT OF NORTHEI	STATE OF CALIFORNIA - RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES NORTHERN DISTRICT	STATE WELL NUMBERS: 22N03W28P0IM 22N03W28P03M 22N03W28P03M
PR	PROJECT Stony Creek Recharge Pilot Project	e Pilot Project	HOLE NUMBER	Well A - Olivarez Site	NUMBER OF COMPLETIONS 3	CONTRACTOR Spectrum Exploration, Inc.
	FEATURE Triple Completion Monitoring Well	onitoring Well	TOTAL DEPTH	430 ft.	TYPE OF HOLE Direct Rotary	
<u> </u>	LOCATION Glenn County, County Rd 20 and Interstate 5	ity Rd 20 and Interstate 5	DATE STARTED	7/17/02	TYPE OF RIG Ingersoll Rand	Debbie Spangler/ INSPECTED BY Kelly Staton
IJ	UTM COORDINATES UTM 10 NAD 83 567946, 4397861	10 NAD 83 567946, 4397861	DATE COMPLETED 4/26/02	TED_4/26/02	COMMENTS Test hole drilled to 500	Test hole drilled to 500 ft.; well completed to 421 ft.
(f) HTq	PESCRIPTION			<u> </u>	Upper borehole reamed out to 18 inch	
	Coarse subrounded	Canant proper fac to 23 8)		1	10 40 ft.  Black steel conductor casing 1/4 inch	
inning P		fu cap (g) to g units)				
ininipi	Coarse sand to coarse	#60 sand (23 ft to 27 ft)				
inigiiii		#8 sand (27 ft to 69 ft)		тиници	Stainless steel wire wrap screen 0.020 inch opening (two 10 ft sections)	
mijin			x., xx			
	Lt. greenish brown clay				l inch black steel airline	
					21 ft sediment trap	
			4		-	A. A.
	brown clay					
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000				9	-	
				• · · · · · · · · · · · · · · · · · · ·		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
15021				•		
	Mixture of green and orange clay					
						1
	Green and orange clay		: .*			
			•			1
	Coarse quartz sand	Cement grout (69 ft to 234 ft)				
			•			1,1
ille Ille	j					
			•	• • • • • • • • • • • • • • • • • • • •		
						- /-
	Green clay and siltstone with a few gravel lenses			/		1
				/	To the second se	

