



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

**75 Hawthorne Street
San Francisco, CA 94105-3901**

March 8, 2021

Sent by e-mail only

Uduak-Joe Ntuk
State Oil and Gas Supervisor
Geologic Energy Management Division
California Department of Conservation
801 K Street, MS 18-05
Sacramento, CA 95814-3530

Re: Approval of Aquifer Exemption for the Jacalitos and Coalinga Oil Fields, Fresno County, California

Dear Mr. Ntuk:

Based on a thorough review of the supporting documents submitted by the California Department of Conservation, Geologic Energy Management (CalGEM) and the State Water Resources Control Board (SWRCB), the U.S. Environmental Protection Agency (EPA) hereby approves the aquifer exemption request for portions of the Temblor Formation in the Jacalitos and Coalinga Oil Fields, in Fresno County, California.

In accordance with applicable regulations at 40 C.F.R. Parts 144, 145, and 146, we find that this aquifer exemption request is a non-substantial program revision, and the requested formation meets the following federal exemption criteria:

- The portions of the formation proposed for exemption in the field do not currently serve as sources of drinking water; and
- The portions of the formation proposed for exemption in the field cannot now and will not in the future serve as sources of drinking water because they are commercially hydrocarbon-producing.

The approved aquifer exemption boundaries and depths, along with the EPA's analysis and rationale in support of the approval, are detailed in the enclosed Record of Decision. In addition, we are enclosing the application and other documents submitted by the CalGEM and SWRCB to the EPA that were considered in this approval decision. Due to the size of these additional enclosures, we are providing, via email, a link to an electronic folder containing all the remaining documents.

If you have any questions, or if you have any difficulty accessing the electronic folder, please contact David Albright, Manager of our Groundwater Protection Section, at (415) 972-3971.

Sincerely,

Gullatt, Kristin

Digitally signed by Gullatt,
Kristin
Date: 2021.03.08 10:54:18
-08'00'

Tomás Torres
Director, Water Division

Enclosures: Aquifer Exemption Record of Decision for Jacalitos and Coalinga Oil Fields
GIS Shape Files of Approved Aquifer Exemption
Final Jacalitos and Coalinga Exemption Application
Letter from Uduak-Joe Ntuk to David Albright dated March 2, 2021

cc: Jonathan Bishop, Chief Deputy Director, State Water Resources Control Board

US Environmental Protection Agency Region 9
Underground Injection Control (UIC) Program
AQUIFER EXEMPTION RECORD OF DECISION
COALINGA AND JACALITOS OIL FIELDS – TEMBLOR
FORMATION

This Record of Decision (ROD) provides the United States Environmental Protection Agency’s (EPA’s) decision to approve an aquifer exemption (AE) for portions of the Temblor Formation in the Coalinga and Jacalitos Oil Fields, background information concerning the AE request, and the basis for the AE decision.

Primacy Agency: California Geologic Energy Management Division (CalGEM, formerly Division of Oil, Gas, & Geothermal Resources, or DOGGR)

Date of Aquifer Exemption Request Letter To EPA: June 16, 2020

Exemption Criteria: CalGEM requests this exemption because it has determined that it meets the criteria at 40 CFR § 146.4(a) and § 146.4(b)(1).

Substantial or Non-Substantial Program Revision: Non-Substantial

Although EPA must approve all revisions to EPA-approved state Underground Injection Control (UIC) programs, the process differs depending on whether EPA finds the revision to be a substantial or non-substantial program revision. EPA determined that this is a non-substantial program revision because it is associated with an active oil field and is not a state-wide programmatic change or a program revision with unique or significant implications for the State’s UIC program. The decision to treat this AE request as a non-substantial program revision is also consistent with EPA’s “Guidance for Review and Approval of State Underground Injection Control Programs and Revisions to Approved State Programs” (“Guidance 34”), which explains that the determination of whether a program revision is substantial or non-substantial is made on a case-by-case basis.

Current Operators: Aera Energy, Chevron USA, Holmes Western Oil Corp., and Seneca Resources (in the Coalinga Oil Field); Holmes Western Energy (in the Jacalitos Oil Field).

Well/Project Name: Portions of the Temblor Formation in the Coalinga and Jacalitos Oil Fields.

Well/Project Permit Number: There are currently 1,019 Class II enhanced oil recovery (EOR) and produced water disposal wells in the portions of the Temblor Formation that are proposed for exemption. This number is comprised of 1,012 wells within the Coalinga Oil Field (1,001 EOR and 11 water disposal) and 7 wells in the Jacalitos Oil Field (3 EOR and 4 disposal). The State anticipates that there will be additional Class II wells permitted to inject within the portions of the aquifer proposed for exemption.

Well/Project Location: The aquifer proposed for exemption underlies portions of Township 19 South Range 14 East, Township 19 South Range 15 East, Township 19 South Range 16 East, Township 20 South Range 14 East, Township 20 South Range 15 East, Township 20 South

Range 16 East, Township 21 South Range 14 East, Township 21 South Range 15 East, and Township 22 South Range 15 East, Mount Diablo Base and Meridian (MDB&M). See Figure 1.

County: Fresno

State: California

Current Well Class/Type: Class II EOR and produced water disposal.

DESCRIPTION OF PROPOSED AQUIFER EXEMPTION

Aquifer to be Exempted: Portions of the Temblor Formation in the Coalinga and Jacalitos Oil Fields.

Areal Extent of Aquifer Exemption: The areal extent of the existing AE, and the proposed expansion in the Coalinga and Jacalitos Oil Fields is approximately 51,746 acres (including 43,817 acres in the Coalinga Oil Field and 7,930 acres in the Jacalitos Oil Field). This acreage includes 24,041 oil-productive acres (21,630 acres in the Coalinga Oil Field and 2,411 acres in the Jacalitos Oil Field) that EPA exempted at the time California received UIC primacy in 1982, and 27,705 acres comprising the oil producing area outside the existing exemption boundaries (22,187 acres in the Coalinga Oil Field and 5,519 acres in the Jacalitos Oil Field). CalGEM provided GIS shape files that delineate the AE boundaries, which are included in the administrative record for this ROD. See Figure 2 for a depiction of the portions of the formation that are proposed for exemption.

Lithology, Total Dissolved Solids (TDS), Depth, Thickness, Porosity, and Permeability of the Aquifer: The following table presents the lithology, range of TDS levels, depth, thickness, average porosity, and permeability information about the aquifer proposed for exemption.

Formation	Temblor Formation.
Lithology	Thick-bedded, arkosic, marine sandstones, siltstones and claystones with some interbedded pebble and gravel bodies; locally calcareous and fossiliferous.
TDS (mg/L)	Coalinga: 5,720 mg/L (average of 246 samples ranging from 3,024 to 15,455 mg/L). Jacalitos: 8,760 mg/L (average of 10 samples ranging from 5,993 to 11,240 mg/L).
Depth to Top	Coalinga: 0 to 9,325 feet below ground surface (bgs), averaging 2,359 feet bgs, or 2,400 to -9,000 feet relative to mean sea level (msl), averaging -2,984 feet msl. Jacalitos: 1,375 to 8,200 feet bgs, averaging 4,600 feet bgs, or -800 to -7,600 feet msl, averaging -2,878 feet msl.
Thickness	Coalinga: 0 to 1,700 feet (averaging 675 feet). Jacalitos: 0 to 1,100 feet (averaging 502 feet).
Porosity and Permeability	Coalinga: Porosity ranges from 18% to 52%, averaging 32%. Permeability ranges from 0.10 to 4,237 millidarcies (mD), averaging 505 mD. Jacalitos: Porosity ranges from 18% to 37%, averaging 31%. Permeability ranges from 30 to 2,207 mD, averaging 566 mD.

Confining Zone(s): In the Coalinga and Jacalitos Oil Fields, vertical confinement of the Temblor Formation is provided by low-permeability formations, including the Reef Ridge/McLure Shale above, and the Kreyenhagen Shale below the aquifer proposed for exemption. Lateral confinement in the area proposed for exemption is provided by a thinning or

“pinching out” of the Temblor Formation along with a tar seep to the west and northwest, the presence of a low-permeability rock formation to the north and northeast, sealing faults to the south and west, and an inward pressure gradient (i.e., a “pressure sink” caused by the withdrawal of fluids) that provides confinement along the eastern border of the proposed aquifer exemption area. See Figures 3.1 through 3.3.

BACKGROUND

On June 16, 2020, EPA received a letter from CalGEM requesting exemption of portions of the Temblor Formation underlying the Coalinga and Jacalitos Oil Fields, in Fresno County, California. The aquifer exemption request applies to both oil fields because the Temblor Formation is a single continuous hydrocarbon producing zone across both fields. CalGEM reviewed the operator’s request and proposed this AE based on the criteria at 40 CFR §146.4(a) (the portion of the aquifer proposed for exemption does not currently serve as a source of drinking water) and at 40 CFR §146.4(b)(1) (the portion of the aquifer proposed for exemption cannot now and will not in the future serve as a source of drinking water because it is mineral, hydrocarbon, or geothermal energy-producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that, considering their quantity, and location, are expected to be commercially producible). After EPA’s approval of the AE, the exempt formation would not be protected as an “underground source of drinking water” (USDW) under the Safe Drinking Water Act (SDWA), and CalGEM would be authorized, subject to state regulatory requirements, to approve additional Class II injection into portions of the identified formation.

As noted above, a total of 1,019 Class II EOR and produced water disposal wells are currently permitted for injection into the portions of the formation proposed for exemption. Upon EPA’s approval of the AE, injection through these wells will be into an exempt aquifer.

BASIS FOR DECISION

Regulatory Criteria under which the AE is Requested and Approved

40 CFR § 146.4(a) *It does not currently serve as a source of drinking water.*

California State Water Resources Control Board (State Water Board) Concurrence:

In their concurrence on this AE request, the State Water Board determined that the portions of the Temblor Formation that are proposed for exemption do not currently serve as a source of drinking water and are not hydraulically connected to any domestic or public water supply wells. The State Water Board’s determination was based on an evaluation of information about water supply wells in the area, groundwater flow patterns, and confinement of groundwater flow. These reviews demonstrate that the portions of the aquifer proposed for exemption do not currently serve as a source of drinking water because there are no existing drinking water supply wells, public or private, that currently or in the future would draw water from the portions of the Temblor Formation proposed for exemption. In addition, the formation is vertically and laterally confined (i.e., separated) from other USDWs, and no aquifers that serve as sources of drinking water are hydraulically connected to the formation. Further, within the State’s water well search area (described more fully below), the portions of the Temblor Formation that are proposed for exemption are not currently a source of drinking water.

Water Supply Wells: CalGEM's AE request included information about the state's efforts to identify wells in the area proposed for exemption to establish that no drinking water wells draw water from the portions of the aquifer proposed for exemption. The operator searched for wells within a water supply well search area ("study area") that extended more than 3 miles from the administrative boundaries of the Coalinga and Jacalitos Oil Fields. This area was selected because it incorporates the extent of the productive area, the water recharge areas for identified ground water supply wells, and identified ground water barriers. The water supply well search involved searching water well files and information provided by CalGEM, the Department of Water Resources (DWR) GeoTracker Groundwater Ambient Monitoring Assessment (GAMA) database, the California Statewide Groundwater Elevation Monitoring System (CASGEM), the California Natural Resources Agency (CNRA), the U.S. Geological Survey (USGS), and the EPA/USGS/National Water Quality Monitoring Council Water Quality Portal. Additionally, the operators conducted field inspections and reviewed aerial imagery.

The water well study identified 381 potential wells that were located within the surface study area (see Table 1). These 381 wells include: 27 domestic water wells (none of which are used for drinking water purposes); 26 agricultural back-up or industrial wells; 121 agricultural/irrigation wells; 52 monitoring/test wells; 29 corrosion protection wells; 7 industrial wells; and 4 destroyed wells (none of which were used for drinking water purposes).

There are another 115 wells in the study area. Among these, 79 are completed above the confining zone and are therefore isolated from the formation proposed for exemption, 31 are outside of the area proposed for exemption and are isolated from the portion of the formation proposed for exemption by the geologic confining features described below, and 5 are in the previously exempt area.

The nearest municipal water supply well is in the City of Lemoore, approximately 30 miles east of the area proposed for exemption. This well is 1,120 feet deep and is completed in the Alluvium and the Tulare Formation, and is therefore not hydrologically connected to the portion of the formation that is proposed for exemption.

Additionally, CalGEM contacted the City of Coalinga's utility manager as well as utility representatives from other nearby communities (Avenal and Cantua Creek) regarding the proposed AE. Each confirmed that their customers are served by surface water from the Westlands Water District; therefore, they are not served by groundwater from the Temblor Formation.

Groundwater Flow Patterns: Fluid flow in the portions of the Temblor Formation proposed for exemption is generally westward toward the producing wells in the Coalinga and Jacalitos Oil Fields (i.e., from high to low pressure) and away from the boundaries of the area proposed for exemption. This occurs because more fluid is withdrawn from the aquifer than is injected, which is demonstrated by injection and production data and an evaluation of pressure and fluid level data in wells.

Confinement of the Formation to Groundwater Flow: Confinement above the portions of the Temblor Formation that are proposed for exemption is provided by the impermeable layers of the Reef Ridge/McLure Shale. The Reef Ridge Shale, which is shown to be aerially extensive on cross sections provided in the application, averages approximately 400 feet thick in the area

proposed for exemption. The permeability of this interval has been measured as ranging from 0.1 to 0.8 mD, based on data gathered during the drilling of wells in the oil fields. The McLure Shale is shown as being several hundred feet thick in the eastern portions of the cross sections and pinching out in the west. Confinement of fluids is also demonstrated by the accumulation of oil in the Temblor Formation, but not above it, as evidenced by oil saturation and gas accumulations and differences in ground water quality above and below the confining layers. Additional confinement is provided by the Big Blue Formation, which overlies the Temblor Formation where it is present. The Big Blue Formation consists of low-permeability clays and fine-grained sands.

The lower confining zone is the Kreyenhagen Shale, which has a permeability of less than 1 mD, and ranges in thickness from approximately 1,000 feet thick in the eastern part of the proposed area, thinning and pinching out at the western edge of the proposed exemption area.

The Coalinga and Jacalitos Oil Fields consist of a series of rock layers dipping to the east-southeast (known as a “homocline”). Lateral confinement of the Temblor Formation is provided by a pinch out of the Temblor Formation, a low-permeability formation, cross faulting, and an inward pressure gradient. See Figures 3.1 through 3.3.

- *To the west and northwest*, the Temblor Formation “pinches out” and is truncated by the overlapping Reef Ridge/McLure Shale. This pinch out is shown on cross sections that are based on well logs. Tar seeps along the outcrop of the Temblor Formation at this pinch out seal the formation so that fluids cannot flow beyond this boundary. Documentation of this seal is shown by the accumulation of natural gas inside of the tar seeps and the absence of hydrocarbons across the tar seals.
- *To the north and northeast*, confinement is due to the presence of a low-permeability formation, which contains the mineral serpentine, resulting in confined fluid movement within the oil field. Evidence for the confining nature of this formation is based on the absence of oil, change in electric log characteristics in the wells, and core descriptions.
- *To the south and west*, cross faulting provides barriers to fluid and gas movement. Evidence for this confinement is based on pressure differences and water quality differences (e.g., in TDS content) in wells on either side of the faults, which indicate that fluids are not hydraulically connected across the faults. Additionally, the faults juxtapose the oil-bearing Temblor Formation against the shallower Etchegoin Formation to seal the formation and prevent fluid movement. This juxtaposition is evident in cross sections provided in the AE package.
- *To the east*, the lateral boundary of the formation proposed for exemption is defined by an inward pressure gradient caused by differences in the volumes of water and steam injected versus the fluids produced from the fields. Fluid balance data provided by CalGEM in the AE package indicates that more fluid has been withdrawn from the formation than has been injected. Between 1977 and 2016, a total of 3,218,025,516 barrels (bbls) of oil and water have been produced from the Temblor Formation in the Coalinga Oil Field and 2,396,941,339 bbls of water and steam have been injected, for a net withdrawal of 821,084,177 bbls of fluid. During that same time period in the Jacalitos Oil Field, a total of 8,316,314 bbls of oil and water have been produced from the Temblor Formation and 4,147,516 bbls of water and steam have been injected, for a net withdrawal of 4,168,798 bbls of fluid. This withdrawal causes the fluids within the proposed AE area to move toward the producing wells and away from the boundary of the portions of the formation proposed for exemption. Evidence for the existence of this

pressure gradient is presented on pressure gradient maps that are based on static fluid level measurements in wells within the oil field. Based on the 39-year trend of injection and production data in both oil fields, CalGEM expects this trend to continue in the future.

After reviewing information regarding the location of existing drinking water supply wells, groundwater flow within the Temblor Formation, and the lateral and vertical confinement of the formation as described above, EPA concludes that the portions of the Temblor Formation that are proposed for exemption are not currently a source of drinking water and are not hydraulically connected to any domestic or public drinking water supply wells. Therefore, EPA has determined that the portions of the aquifer proposed for exemption meet the criteria at 40 CFR § 146.4(a).

40 CFR § 146.4(b)(1) *It cannot now and will not in the future serve as a source of drinking water because it is mineral, hydrocarbon, or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible.*

CalGEM provided information on hydrocarbon production in the area proposed for exemption along with supporting documentation such as historic production data, the locations of current producing wells, well logs, and core sample data to demonstrate the presence of commercially producible quantities of oil in the Temblor Formation within the Coalinga and Jacalitos Oil Fields.

The Coalinga Oil Field was discovered in 1898. Initial production was from the Moreno Shale, with production in the Temblor Formation beginning in the early 1900s. In 1962, Temblor Formation production was converted to water flood, and steam flood was initiated in 1963. Cyclic steaming began in 1964, and conversion to steam flooding began in the late 1970's and continues today.

The Jacalitos Oil Field was discovered in 1939, with initial production from the Temblor Formation. Pressure maintenance in the Jacalitos Oil Field began in 1945 and water flooding began in 1966; no steam injection has occurred in the Jacalitos Oil Field. Continued development and the extension of the productive area of the Temblor Formation is ongoing.

Between 1977 and 2016, total oil production in the Coalinga Oil Field was 318,258,309 bbls, and total oil production Jacalitos Oil Field was 3,165,358 bbls. The production from both oil fields is predominately from the Temblor Formation, with other zones such as the Etchegoin and the Eocene contributing minor volumes. Figure 4 shows the locations of the 2,992 wells that currently produce from the Temblor Formation in the Coalinga Oil Field and the 169 Temblor Formation wells in the Jacalitos Oil Field.

The presence of hydrocarbons in the Temblor Formation is demonstrated through evaluation of historic production data, well logs, and the physical properties (including the presence of oil) in samples that were collected when wells in the oil fields were drilled. Oil saturations within the Temblor Formation average 28% in the Coalinga Oil Field and range up to 68.7%. In the

Jacalitos Oil Field, the average oil saturation in the Temblor Formation is 20%, with saturation values ranging up to 36.9%.

Based on a review of information such as well logs, production data, the history of oil production, oil saturation, and the implementation of enhanced recovery techniques such as steaming that have the potential to increase the productivity of the Temblor Formation, EPA has determined that the portions of the aquifer proposed for exemption meet the criteria at 40 CFR § 146.4(b)(1).

PUBLIC NOTICE AND COMMENT

CalGEM provided public notice of this proposed AE on July 13, 2018 and held a public hearing on August 15, 2018 in Coalinga, California. The public comment period closed on September 24, 2018. CalGEM provided EPA a summary of the written public comments it received, a copy of the written public comments, a transcript of the public hearing, and CalGEM's written response to the written and verbal comments.

In making this decision, EPA considered all the information submitted by the State, including the written comments submitted to the State during its public comment process. Specific responses not addressed by CalGEM are provided below.

The Center for Biological Diversity wrote to CalGEM and commented that the area of the proposed aquifer exemption overlaps with the habitats of numerous federally listed species and habitats under the federal Endangered Species Act (ESA). In addition, the Center for Biological Diversity commented that migratory birds, that are protected under the Migratory Bird Treaty Act, and the Bald and Gold Eagle Protection Act, may be affected by the activities at the proposed aquifer exemption location. After consideration of this issue, EPA has determined that consultation with U.S. Fish and Wildlife Service and the National Marine Fisheries Service is not required because the AE approval has no effect on any listed threatened or endangered species or the designated critical habitat of such species. EPA's conclusion is based on a number of considerations. First, EPA's approval of the AE is only one preliminary step in the process leading to potential new fluid injection into the aquifer, with many additional steps (including State decisions and actions by third party operators) that must occur prior to injection and prior to any potential effects to protected species or critical habitat that may occur at the surface. Second, the AE approval under the SDWA changes the jurisdictional status of a sub-surface, confined aquifer. No species of concern are known to be present in the subsurface portions of the aquifer considered in EPA's approval action. Thus, EPA approval of the aquifer exemption would not be the cause of potential effects to listed species or designated critical habitat, if any.

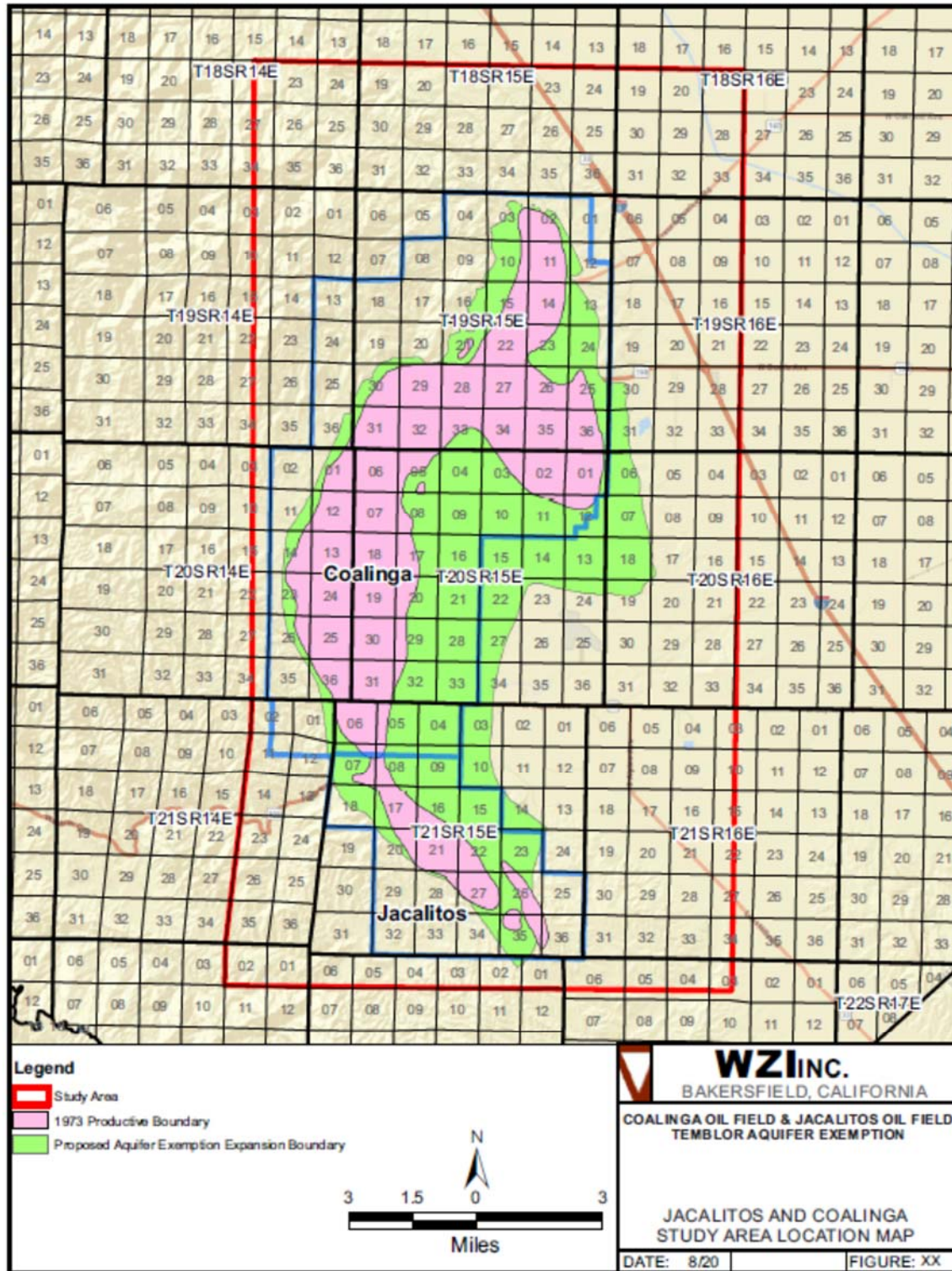
Additionally, the Center for Biological Diversity questioned whether the current AE criteria reflect changing climate conditions and modern water treatment technologies. In considering whether the portions of the aquifer proposed for exemption cannot now and will not in the future serve as a source of drinking water because it is hydrocarbon producing, EPA reviewed data about hydrocarbon production in the portions of the Temblor Formation that are proposed for exemption. Based on a review of historic production data, well logs, and core data, EPA concludes that the formation will continue to be commercially producible into the foreseeable future and meets the existing requirements at 40 CFR § 146.4(b)(1).

CONCLUSION AND DECISION

Based on a review of the entire record, including all written comments submitted to CalGEM during its public comment process, EPA finds that the exemption criteria at 40 CFR § 146.4(a) and § 146.4(b)(1) have been met, and EPA approves the aquifer exemption request as a non-substantial program revision.

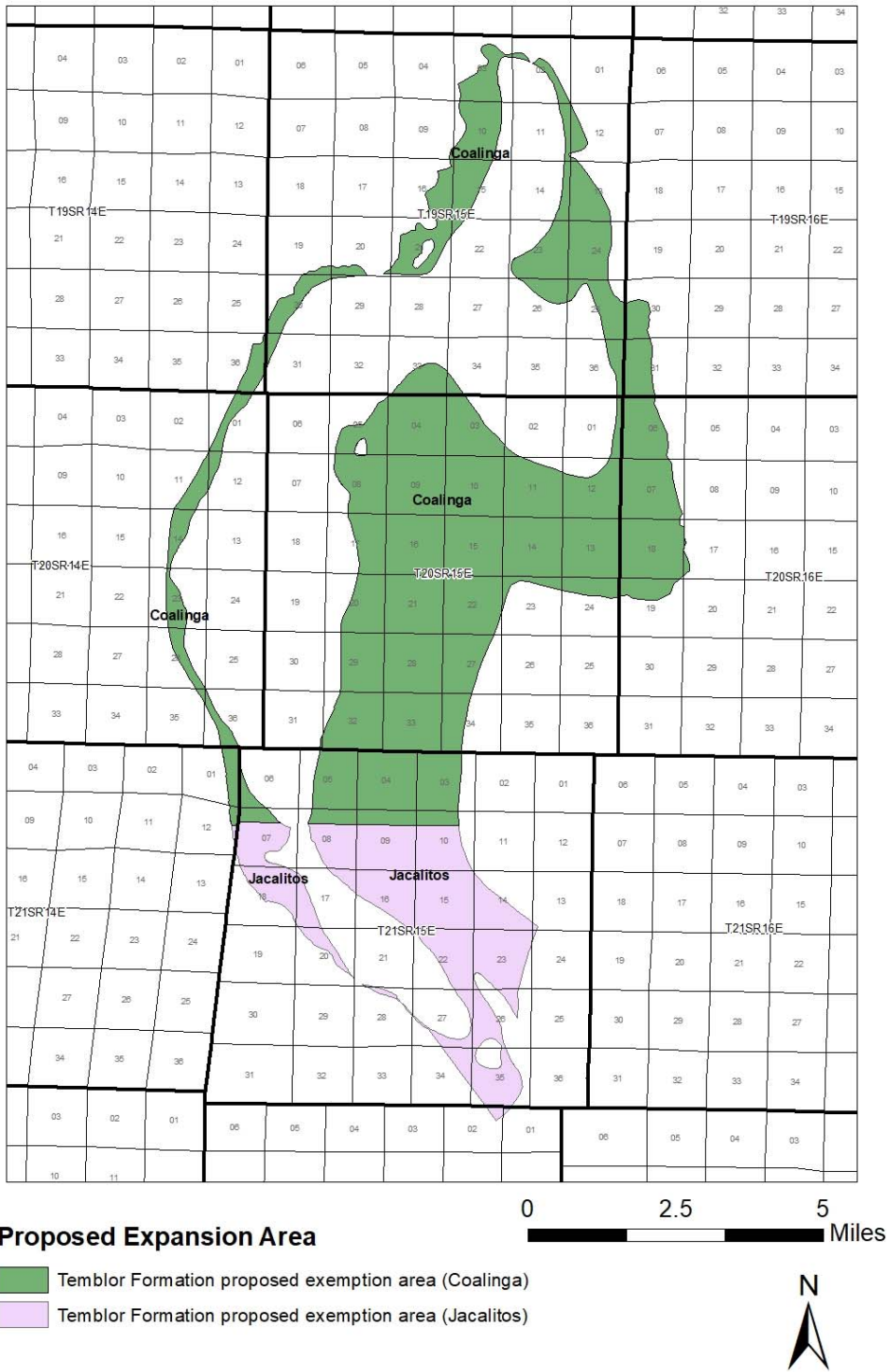
Effective Date: March 8, 2021

Figure 1: Location of the Coalinga and Jacalitos Oil Fields, Fresno County, California



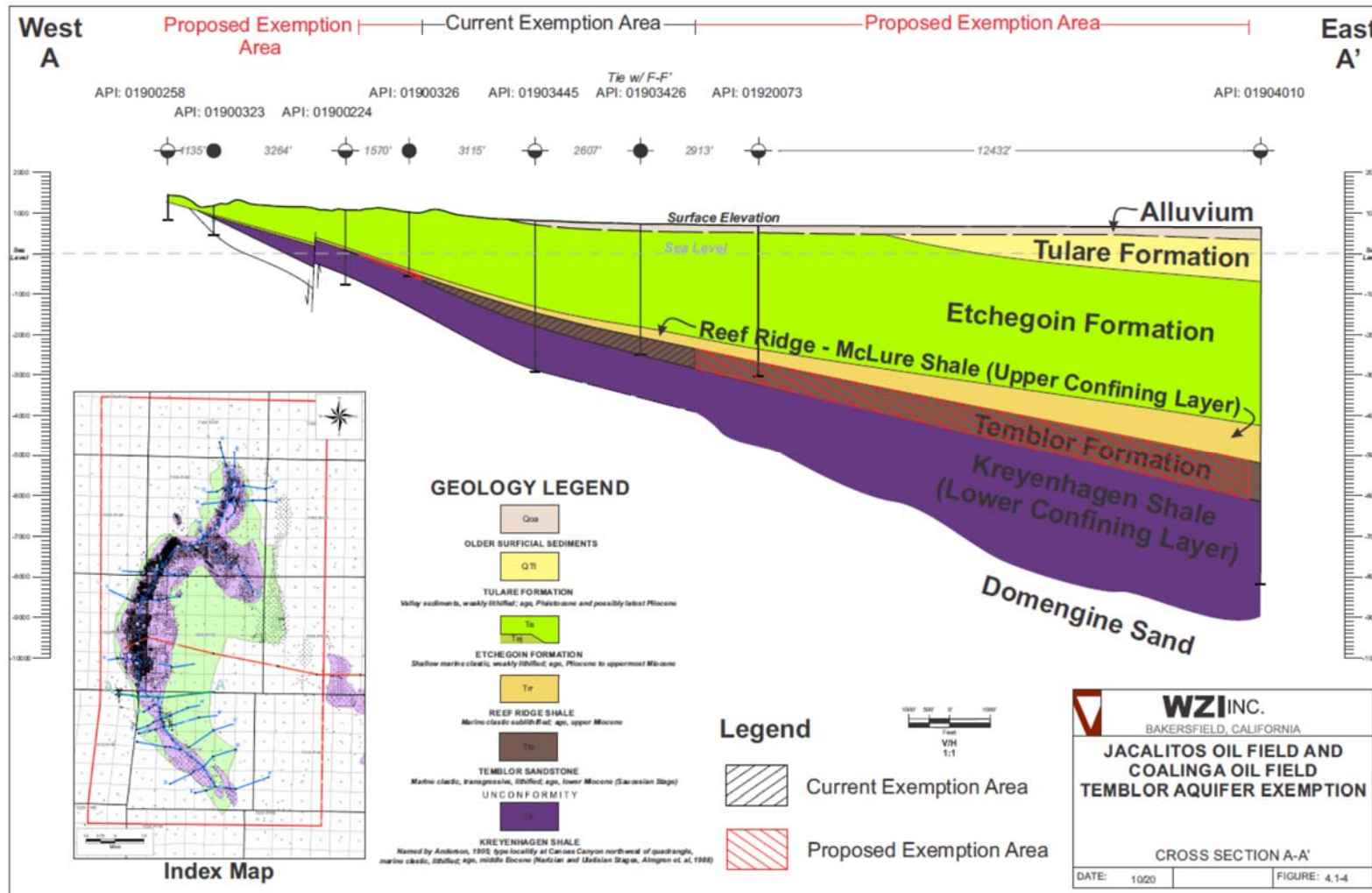
Source: CalGEM’s Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields

Figure 2: Temblor Formation Aquifer Exemption Location Map, Coalinga and Jacalitos Oil Fields, Fresno County, California



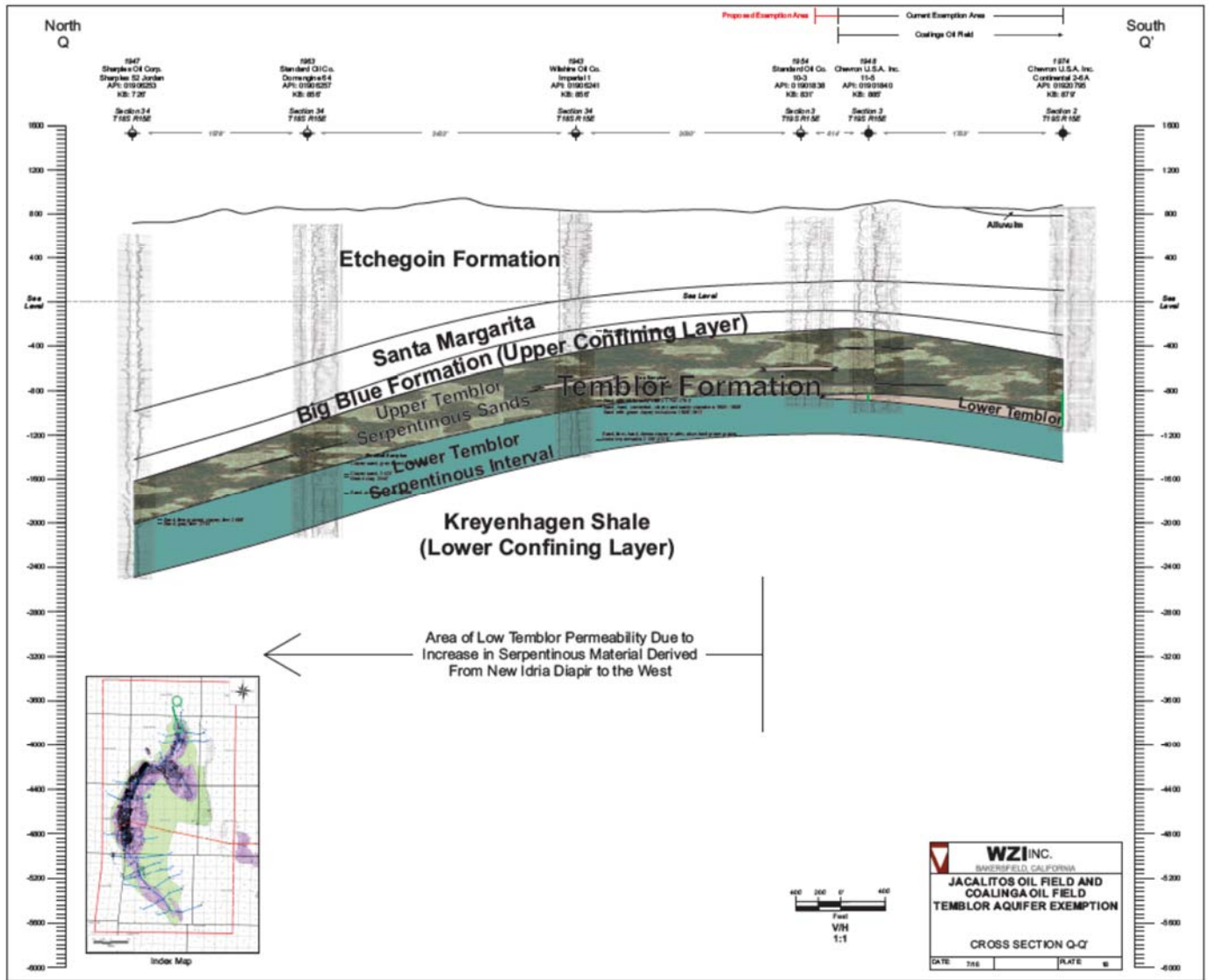
Source: CalGEM's's Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields

**Figure 3.1: Cross Section A-A' across the Temblor Formation Aquifer Exemption Area
Coalinga and Jacalitos Oil Fields, Fresno County, California**



Source: Figure 4.1-4, CalGEM's Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields

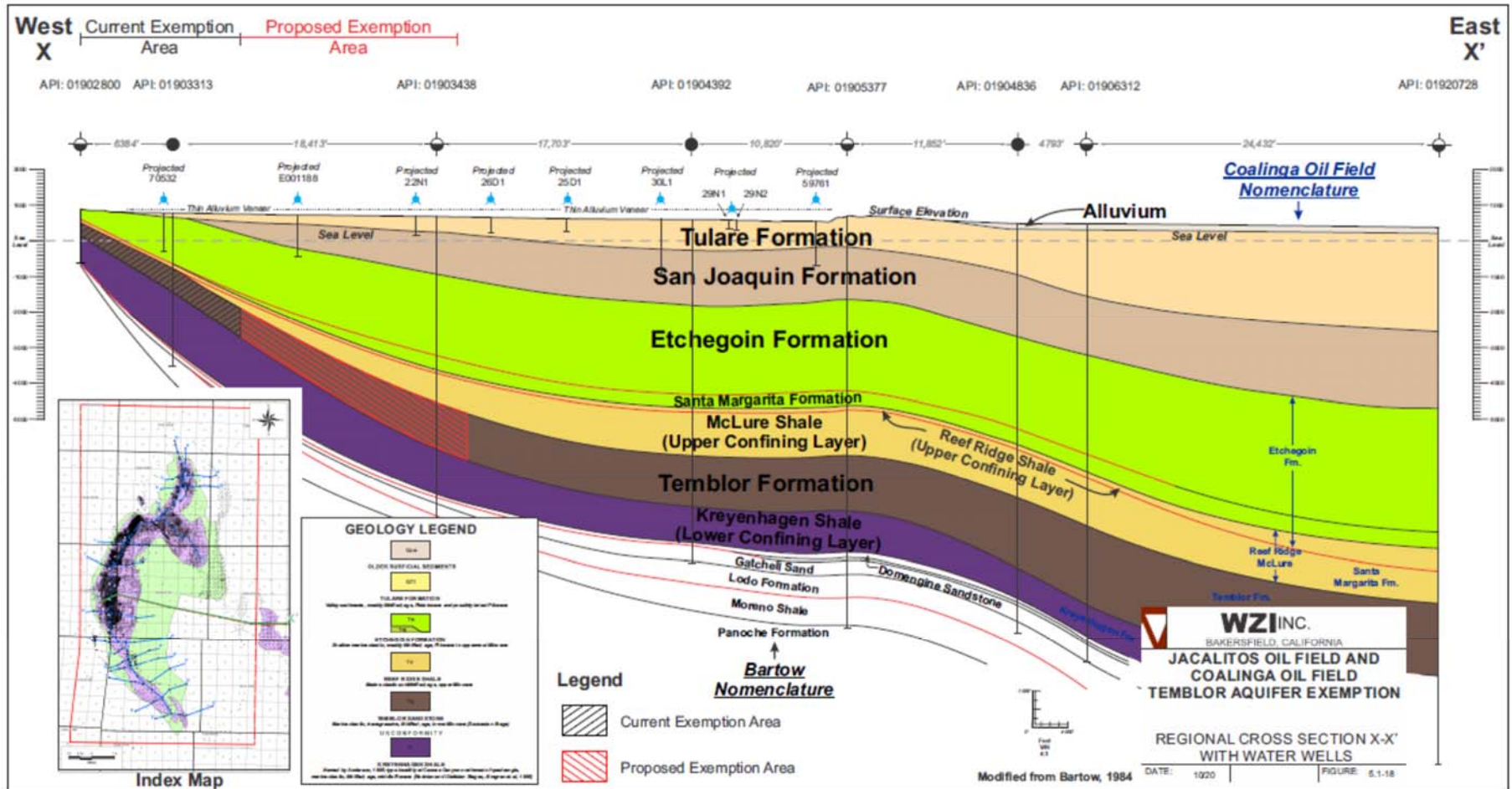
**Figure 3.2: Cross Section Q-Q' across the Tumbler Formation Aquifer Exemption Area
Coalinga and Jacalitos Oil Fields, Fresno County, California**



Source: Figure 6.1-5, CalGEM's Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields

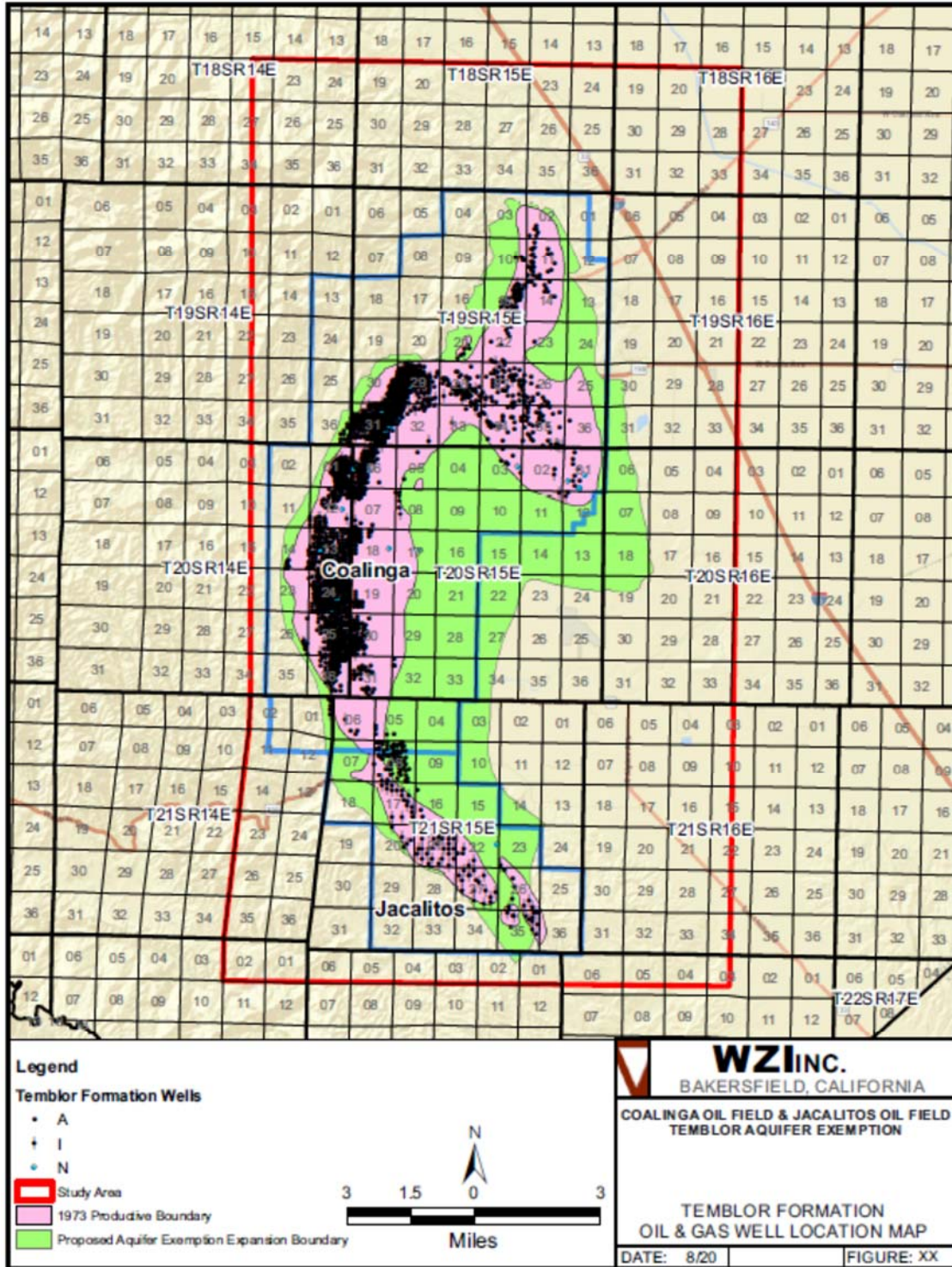
Figure 3.3: Cross Section X-X' across the Temblor Formation Aquifer Exemption Area

Coalinga and Jacalitos Oil Fields, Fresno County, California



Source: Figure 4.1-3, CalGEM's Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields

Figure 4: Temblor Formation Producing Wells, Coalinga and Jacalitos Oil Fields, Fresno County, California



Source: CalGEM's Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields

Table 1: List of Water Supply Wells

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
18S 15E														
JC-1	Section 21, 18S, 15E	21F	559362	2003	310	310	**	**	Cathodic	Etchegoin	DWR	36.348962	-120.347294	
JC-2	Section 22, 18S, 15E	22B1	E0257123	2015	1700	*	**	**	Test Well	Etchegoin	DWR	36.355894	-120.324000	
JC-3	Section 22, 18S, 15E	22B2	E0257294	2016	1530	1505	**	600-1000, 1005-1505	Irrigation	Etchegoin	DWR	36.355909	-120.324075	
JC-4	Section 22, 18S, 15E	22E1	**	**	2085	2085	**	916-2028	Irrigation	Etchegoin	DWR	36.34992870714 23	120.3367920837 11	Date illegible
JC-5	Section 23, 18S, 15E	23A	703240	1999	300	300	**	120-300	Cathodic	Etchegoin	DWR	36.354913	-120.302821	
JC-6	Section 23, 18S, 15E	23E1	**	1952	2379	2379	**	892-2379	Irrigation	Etchegoin	DWR	36.34977999082 94	120.3182025446 03	
JC-7	Section 24, 18S, 15E	24N1	**	1952	2760	2760	**	805-2760	**	San Joaquin / Etchegoin	DWR	36.34264160781 19	120.3009514523 1	
JC-8	Section 27, 18S, 15E	27N	78440	1963	144	144	67	68-144	Domestic	Etchegoin	DWR	36.32881099071 55	120.3369408000 24	
JC-9	Section 27, 18S, 15E	27F	74815	1962	201	201	**	**	Domestic	Etchegoin	DWR	36.33461092691 73	120.3327767432 63	
JC-10	Section 36, 18S, 15E	36F	74821	1962	102	102	9	Dec-54	Test	San Joaquin	DWR	36.320483	-120.295123	
18S 16E														
JC-11	Section 19, 18S, 16E	19M1	**	**	3012	3012	**	852-3012	**	San Joaquin / Etchegoin	DWR	36.34918513	-120.2822132	
JC-12	Section 20, 18S, 16E	20F1	300326	1988	580	838	**	360-600	Irrigation	Tulare/ San Joaquin	DWR	36.348954	-120.256437	
JC-13	Section 20, 18S, 16E	20F2	116460	1964	2315	2265	**	800-2265	Irrigation	San Joaquin / Etchegoin	DWR	36.3490162	-120.2564399	
JC-14	Section 20, 18S, 16E	20N1	300323	1989	1017	1000	300	360-720	Irrigation	Tulare/ San Joaquin	DWR	36.3444262	-120.2633262	
JC-15	Section 20, 18S, 16E	20N2	**	1951	2980	2980	**	**	**	Tulare/ San Joaquin/ Etchegoin	DWR	36.34249289	-120.2642185	
JC-16	Section 20, 18S, 16E	20M1	E0229196	2014	2535	2505	500	840-1000, 1005-1865	Irrigation	San Joaquin / Etchegoin	DWR	36.349162	-120.265075	
JC-17	Section 21, 18S, 16E	21B1	**	1956	1706	1706	**	**	**	San Joaquin / Etchegoin	DWR	36.35364661	-120.2344753	
JC-18	Section 21, 18S, 16E	21N1	**	1947	2015	1982	**	**	**	San Joaquin / Etchegoin	DWR	36.34323647	-120.2460751	
JC-19	Section 29, 18S, 16E	30A	381653	1991	2500	2500	**	1300-2200	Irrigation	San Joaquin / Etchegoin	DWR	36.340783	-120.267758	
JC-20	Section 30, 18S, 16E	30E1	**	1952	3076	3047	**	900-3047	**	San Joaquin / Etchegoin	DWR	36.33699039	-120.2819158	
JC-21	Section 30, 18S, 16E	30R1	**	**	2024	2013	**	575-2024	Irrigation	San Joaquin / Etchegoin	DWR	36.32836484	-120.2673416	
JC-22	Section 31, 18S, 16E	31N	31N001M	1960	**	**	**	**	**	**	CASGEM	36.3138	-120.2799	Outside aquifer exemption area
JC-23	Section 31, 18S, 16E	31P	31P001M	1958	**	**	**	**	**	**	CASGEM	36.3156	-120.2754	No records in Section 31 on Geotracker/GAMA or DWR
JC-24	Section 32, 18S, 16E	32N1	**	**	2270	2259	**	873-2270	**	San Joaquin / Etchegoin	DWR	36.31453422	-120.2634749	
JC-25	Section 33, 18S, 16E	33Q1	**	1948	2115	2115	539	595-2115	Irrigation	Tu/SJ/E	DWR	36.31453422	-120.2347727	
19S 14E														
JC-26	Section 23, 19S, 14E	23F	21686	1967	67	67	dry	**	Stock Well	Cretaceous	DWR	36.260710	-120.419758	
JC-27	Section 35, 19S, 14E	35F1	261451	1987	27	27	16	17-27	Monitoring Well	Cretaceous	DWR	36.232133	-120.421416	WCR: "decommissioned/destroyed; replaced by well 1AR"
JC-28	Section 35, 19S, 14E	35F2	261452	1987	76.5	74	15	0-74	Monitoring Well	Cretaceous	DWR	36.232135	-120.421416	
JC-29	Section 35, 19S, 14E	35F3	261453	1987	71.5	70	35	55-70	Monitoring Well	Cretaceous	DWR	36.232134	-120.421416	
JC-30	Section 35, 19S, 14E	35G1	261458	1987	31.5	30	25	20-30	Monitoring Well	Cretaceous	DWR	36.232842	-120.416923	
JC-31	Section 35, 19S, 14E	35G2	261459	1987	110	110	70	100-110	Monitoring Well	Cretaceous	DWR	36.232841	-120.416923	
JC-32	Section 35, 19S, 14E	35G3	261460	1987	119	119	95	109-119	Monitoring Well	Cretaceous	DWR	36.232843	-120.416923	
JC-33	Section 35, 19S, 14E	35L1	261454	1987	36.5	35	20	25-35	Monitoring Well	Cretaceous	DWR	36.229399	-120.420639	
JC-34	Section 35, 19S, 14E	35L2	261455	1987	46.5	45	38	35-45	Monitoring Well	Cretaceous	DWR	36.229398	-120.420639	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-35	Section 35, 19S, 14E	35L3	261457	1987	102.5	99	70	89-99	Monitoring Well	Cretaceous	DWR	36.229397	-120.420639	
JC-36	Section 36, 19S, 14E	36F1	150305	1985	63.5	63.5	32	35-63.5	Monitoring Well	Kreyenhausen	DWR	36.232420	-120.403094	
JC-37	Section 36, 19S, 14E	36F2	150306	1985	55.5	55	38	40-55	Monitoring Well	Kreyenhausen	DWR	36.232420	-120.403094	
JC-38	Section 36, 19S, 14E	36F3	150307	1985	37	35	25	25-35	Monitoring Well	Kreyenhausen	DWR	36.232420	-120.403094	
JC-39	Section 36, 19S, 14E	36G1	150308	1985	28.5	28	15	18-28	Monitoring Well	Kreyenhausen	DWR	36.232603	-120.398951	
JC-40	Section 36, 19S, 14E	36G2	150309	1985	44.5	43	33	33-43	Monitoring Well	Kreyenhausen	DWR	36.232603	-120.398951	
JC-41	Section 36, 19S, 14E	36G3	150310	1985	95.5	95	36	25-95	Monitoring Well	Kreyenhausen	DWR	36.232603	-120.398951	
19S 15E														
JC-42	Section 2, 19S, 15E	2F	61670	1972	370	370	**	**	**	Oro Loma/ Etchegoin	DWR	36.304767	-120.311562	Well use: possibly cathodic protection, drilled by FARWEST CORROSION CONTROL CO
JC-43	Section 3, 19S, 15E	3H1	E0206304	2013	156	156	**	**	Monitoring Well	Etchegoin	DWR	36.307491	-120.321281	WCR: destroyed
JC-44	Section 3, 19S, 15E	3H2	E0206394	2013	119	119	**	**	Monitoring Well	Etchegoin	DWR	36.307491	-120.321281	WCR:destroyed
JC-45	Section 3, 19S, 15E	3H3	E0206396	2013	170	170	**	**	Monitoring Well	Etchegoin	DWR	36.307359	-120.321914	WCR:destroyed
JC-46	Section 3, 19S, 15E	3H4	E0206398	2013	195	195	**	**	Monitoring Well	Etchegoin	DWR	36.307103	-120.321874	WCR:destroyed
JC-47	Section 3, 19S, 15E	3H5	E0206400	2013	249	249	**	**	Monitoring Well	Etchegoin	DWR	36.307042	-120.321714	WCR:destroyed
JC-48	Section 3, 19S, 15E	3H6	150317	1986	127	127	91	87-127	Monitoring Well	Etchegoin	DWR	36.307333	-120.321829	WCR: destroyed
JC-49	Section 3, 19S, 15E	3H7	150318	1986	116	114	85	73-113	Monitoring Well	Etchegoin	DWR	36.307089	-120.321665	WCR: destroyed
JC-50	Section 3, 19S, 15E	3H8	E0206402	2013	264	264	**	**	Monitoring Well	Etchegoin	DWR	36.306360	-120.322218	WCR: destroyed
JC-51	Section 3, 19S, 15E	3H9	E0206405	2013	244	244	**	**	Monitoring Well	Etchegoin	DWR	36.306720	-120.321862	WCR: destroyed
JC-52	Section 3, 19S, 15E	3H10	E0206407	2013	202	202	**	**	Monitoring Well	Etchegoin	DWR	36.307047	-120.321721	WCR: destroyed
JC-53	Section 3, 19S, 15E	3H11	373741	1993	81	80	70	55-80	Monitoring Well	Etchegoin	DWR	36.307575	-120.321975	WCR: test well, destroyed
JC-54	Section 3, 19S, 15E	E-7	**	**	**	**	**	**	Monitoring Well	**	DWR	36.307637	-120.323338	No records available
JC-55	Section 3, 19S, 15E	E-9	**	**	**	**	**	**	Monitoring Well	**	DWR	36.307460	-120.323637	No records available
JC-56	Section 11, 19S, 15E	11C	65027	1960	2400	1521	300	1070-1519	Irrigation	Etchegoin / Santa Margarita	DWR	36.293183	-120.311573	
JC-57	Section 13, 19S, 15E	13Q080M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.269573	-120.289293	No record on Geotracker/GAMA ,DWR, WQP, or CASGEM
JC-58	Section 14, 19S, 15E	14D1	**	1916	1700	1700	**	**	Industrial	Kreyenhausen	DWR	36.280235	-120.317715	No records available
JC-59	Section 14, 19S, 15E	14F	**	1916	1700	1700	**	**	**	Etchegoin / Santa Margarita / Big Blue/ Temblor	DWR	36.275869	-120.312167	Abandoned
JC-60	Section 25, 19S, 15E	25A	**	1947	1224	1224	360	455-1130	Industrial	San Joaquin/ Etchegoin	DWR	36.250836	-120.287412	No records available
JC-61	Section 25, 19S, 15E	25K001M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.243399	-120.290245	No record on Geotracker/GAMA ,DWR, WQP, or CASGEM
JC-62	Section 26, 19S, 15E	26Q	119654	1968	2350	2346	300	1620-2275	Industrial	Etchegoin	DWR	36.241187	-120.307614	No records available
JC-63	Section 28, 19S, 15E	28F	054519	1977	265	265	128	**	Irrigation	Etchegoin / Santa Margarita	DWR	36.247238	-120.347907	
JC-64	Section 29, 19S, 15E	29K	72595	1962	708	650	**	182-648	Industrial	San Joaquin/ Etchegoin	DWR	36.243872	-120.361794	
JC-65	Section 32, 19S, 15E	32H	559176	2000	300	300	**	**	Cathodic	Tulare/ San Joaquin	DWR	36.231781	-120.356059	
JC-66	Section 36, 19S, 15E	36H	71395	1962	1270	1254	**	414-1254	Industrial	Etchegoin	DWR	36.234704	-120.285452	No records available
19S 16E														
JC-67	Section 4, 19S, 16E	4J	E0284793	2015	2250	2040	527	900-920	Irrigation	Tulare	DWR	36.305144	-120.229629	
JC-68	Section 4, 19S, 16E	4M	e0182008	2013	1980	1960	**	800-1660	Irrigation	Tulare/ San Joaquin	DWR	36.304809	-120.245199	
JC-69	Section 5, 19S, 16E	5D	5D001M	**	**	**	**	**	**	**	GeoTracker Gama	36.309786	-120.262524	No record on Geotracker/GAMA or DWR
JC-70	Section 5, 19S, 16E	5N1	5N001M	1964	1213	*	**	**	**	San Joaquin	USGS	36.301341	-120.264591	No record on Geotracker/GAMA or DWR. Year and depth taken from WQP.
JC-71	Section 6, 19S, 16E	6F	**	1947	2100	2100	**	**	**	Tulare/ San Joaquin	DWR	36.305318	-120.275668	
JC-72	Section 7, 19S, 16E	7D	160507	1986	300	300	**	**	Cathodic	San Joaquin	DWR	36.296456	-120.284281	
JC-73	Section 7, 19S, 16E	7E	560976	1995	300	300	**	0-150	Cathodic	San Joaquin	DWR	36.293202	-120.279823	
JC-74	Section 8, 19S, 16E	8F	e0288083	2015	2160	2120	579	1120-1260, 1280-1680	Irrigation	San Joaquin	DWR	36.290540	-120.255940	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-75	Section 8, 19S, 16E	8R	8R001M	2013	2120	2120	529	**	Irrigation	San Joaquin	CASGEM	36.283472	-120.246722	No WCR on Geotracker/GAMA or DWR. Information found on CASGEM and data.cnra.ca.gov. Link in completion report folder.
JC-76	Section 9, 19S, 16E	9L	e077052	2008	2370	1860	479	840-1860	Irrigation	San Joaquin/ Etchegoin	DWR	36.29033572	-120.243088	
JC-77	Section 9, 19S, 16E	9N1	**	1959	2070	2070	84	86-742	**	Alluvium / Tulare	DWR	36.28475751	-120.2447463	
JC-78	Section 16, 19S, 16E	16L	E0250689	2014	2200	1930	**	870-1430	Irrigation	Tulare/ San Joaquin	DWR	36.275975	-120.238345	
JC-79	Section 16, 19S, 16E	16M1	**	1958	2152	2152	**	**	**	Tulare/ San Joaquin	DWR	36.27353295	-120.2446545	
JC-80	Section 17, 19S, 16E	17C1	**	1958	2074	2074	86	809-2074	**	San Joaquin/ Etchegoin	DWR	36.28065649	-120.2585901	
JC-81	Section 17, 19S, 16E	17P	17P001M	**	**	**	**	**	**	**	CASGEM	36.268816	-120.256774	CASGEM ID: 35604
JC-82	Section 17, 19S, 16E	17F	093707	1981	2050	1720	650	860-1700	Irrigation	San Joaquin/ Etchegoin	DWR	36.276309	-120.256062	Same well as "093707"
JC-83	Section 17, 19S, 16E	17R	123442	1977	2001	1813	**	661-1801	Irrigation	San Joaquin/ Etchegoin	DWR	36.269784	-120.247866	
JC-84	Section 19, 19S, 16E	19A	474927	1996	300	300	**	150-300	Cathodic	Tulare	DWR	36.268072	-120.265007	
JC-85	Section 19, 19S, 16E	19N	358909	1991	160	160	**	**	Cathodic	Tulare	DWR	36.253705	-120.282668	
JC-86	Section 21, 19S, 16E	21C	E0258283	2015	1540	1500	498	620-780, 820-980	Irrigation	San Joaquin	CASGEM	36.268694	-120.239000	CASGEM ID: 50625
JC-87	Section 21, 19S, 16E	21M1	**	1958	2395	2395	**	694-2007	**	San Joaquin	DWR	36.25849181	-120.2440635	
JC-88	Section 21, 19S, 16E	21N001M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.25589141	-120.2443216	No Record
JC-89	Section 28, 19S, 16E	28Q	28Q001M	2015	1840	1830	**	870-1830	Irrigation	San Joaquin	CASGEM	36.24256643	-120.2344468	
JC-90	Section 29, 19S, 16E	29B001M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.2519653	-120.2518169	No Record
JC-91	Section 29, 19S, 16E	29K1	**	1958	2504	2399	**	851-2399	**	San Joaquin/ Etchegoin	DWR	36.24471473	-120.254023	
JC-92	Section 30, 19S, 16E	30D1	**	**	**	**	379	**	Irrigation	**	USGS WSP1360	36.25110487	-120.2812599	
JC-93	Section 31, 19S, 16E	31A	496646	1993	260	250	**	100-250	Cathodic	Alluvium / Tulare	DWR	36.239359	-120.265164	
JC-94	Section 31, 19S, 16E	31H	E0167681	2012	362	362	**	**	Cathodic	Alluvium / Tulare	DWR	36.232207	-120.265002	
JC-95	Section 32, 19S, 16E	32F	E0282099	2015	2184	2164	614	921-1041 1043-1123	Irrigation	San Joaquin/ Etchegoin	DWR	36.236105	-120.255622	
JC-96	Section 32, 19S, 16E	32N1	32N001M	1990	305	305	**	**	Cathodic	Alluvium / Tulare	GeoTracker Gama	36.22721891	-120.2621676	
JC-97	Section 33, 19S, 16E	33D1	**	1958	2152	2152	**	**	**	Alluvium / Tulare/ San Joaquin/ Etchegoin	DWR	36.23769532	-120.2444457	
JC-98	Section 33, 19S, 16E	33N1	33N001M	**	**	**	**	**	**	**	CASGEM	36.227967	-120.246333	CASGEM ID: 20622
JC-99	Section 33, 19S, 16E	33N2	123444	1977	2000	1810	**	860-1704	Irrigation	San Joaquin	DWR	36.22799901	-120.2428991	
20S 14E														
JC-100	Section 2, 20S, 14E	2F	90212	1974	120	100	55	**	Domestic	Etchegoin	DWR	36.216584	-120.418296	
JC-101	Section 3, 20S, 14E	3F1	219408	**	60	60	**	**	Domestic	Cretaceous	DWR	36.216892	-120.435953	
JC-102	Section 3, 20S, 14E	3F2	219407	1985	160	160	12	60-160	Domestic	Cretaceous	DWR	36.216677	-120.436259	
JC-103	Section 10, 20S, 14E	10A	21684	1967	230	212	dry	192-208	Domestic	Cretaceous	DWR	36.20744571	-120.4272843	
JC-104	Section 10, 20S, 14E	10E	E0265630	2015	600	600	**	20-60	Irrigation	Alluvium / Cretaceous	DWR	36.203417	-120.441748	Out of study area
JC-105	Section 10, 20S, 14E	10K	34008	1955	365	365	235	280-348	Test Well	Alluvium	DWR	36.19817853	-120.4311556	Well located in section 10A
JC-106	Section 10, 20S, 14E	10R	8021	1955	70	70	16	25-60	Domestic	Alluvium	DWR	36.19593196	-120.4278909	
JC-107	Section 10, 20S, 14E	10A001M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.20752349	-120.4281524	No records available
JC-108	Section 10, 20S, 14E	10A002M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.20752349	-120.4299615	No records available
JC-109	Section 11, 20S, 14E	11F1	E0265632	2015	100	100	**	20-80	Irrigation	Alluvium / Etchegoin	DWR	36.202311	-120.418657	
JC-110	Section 11, 20S, 14E	11F2	E0265633	2015	75	75	**	20-60	Irrigation	Alluvium / Etchegoin	DWR	36.202412	-120.418373	
JC-111	Section 11, 20S, 14E	11N1	78427	1963	70	*	**	**	Stock Well	Etchegoin	DWR	36.19573958	-120.4247906	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-112	Section 11, 20S, 14E	11N2	78428	1962	162	162	35	24-80	Stock Well	Alluvium / Etchegoin	DWR	36.19502574	-120.4261588	
JC-113	Section 11, 20S, 14E	11N3	91433	1962	52	52	20	36'	Irrigation	Alluvium / Etchegoin	DWR	36.19716726	-120.4263372	
JC-114	Section 11, 20S, 14E	11P1	207840	1987	40	39	23	20-39	Domestic	Alluvium	DWR	36.19722674	-120.4211024	
JC-115	Section 11, 20S, 14E	11P2	499660	1956	62	60	25	40-60	Irrigation	Alluvium	DWR	36.19645342	-120.4188419	
JC-116	Section 10, 20S, 14E	11Q	01901550	1940	230	40	**	14-40	Stock Well	Alluvium / Etchegoin	DOGGR	36.19503495	-120.4162464	
JC-117	Section 13, 20S, 14E	13D	258201	1987	100	80	**	20-60	Domestic	Alluvium / Etchegoin	DWR	36.1921109	-120.4085508	
JC-118	Section 14, 20S, 14E	14B1	78454	1962	75	75	14	14-22	Domestic	Alluvium	DWR	36.19282474	-120.4113466	Well located in section 14B
JC-119	Section 14, 21S, 14E	14B2	E0265631	2015	70	70	**	20-60	Irrigation	Etchegoin	DWR	36.194301	-120.417503	
JC-120	Section 14, 20S, 14E	14B3	**	**	**	**	**	**	Agricultural Backup, Industrial	**	USGS WSP1360	36.19224083	-120.4144531	No records available
JC-121	Section 14, 20S, 14E	14C001M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.19259799	-120.420162	No records on Geotracker/GAMA. EPA WQP shows location as a surface water site.
JC-122	Section 14, 20S, 14E	14L	78452	1962	125	*	dry	**	**	Alluvium / Etchegoin	DWR	36.186182	-120.419243	
JC-123	Section 36, 20S, 14E	36M	246347	1983	200	200		0-80 0-107 0-170	Monitoring	Etchegoin	DWR	36.141954	-120.406465	
20S 15E														
JC-124	Section 2, 20S, 15E	2R	560888	1994	310	310	**	**	Catho	San Joaquin / Etchegoin	DWR	36.210265	-120.302992	
JC-125	Section 4, 20S, 15E	4R	474668	1998	307	307	**	**	Catho	Alluvium / Tulare	DWR	36.20944	-120.338	
JC-126	Section 6, 20S, 15E	6N	474650	1997	275	275	**	**	Cathodic	Etchegoin	DWR	36.209979	-120.390285	
JC-127	Section 7, 20S, 15E	7C	23607	1979	920	892	363	538-892	Industrial	Etchegoin	DWR	36.205510	-120.385985	20S15E7D1, USGS-361220120230601
JC-128	Section 7, 20S, 15E	7F	e0167907	2012	300	300	**	140-300	Cathodic	Tulare	DWR	36.201760	-120.381980	Actual location not available
JC-129	Section 7, 20S, 15E	7K001M	**	1936	**	**	**	**	Monitoring Well	**	GeoTracker Gama	36.201760	-120.381980	No WCR available, only chemical data. Actual location not available.
JC-130	Section 8, 20S, 15E	8E	8E001M	1960	**	**	510	**	**	**	GeoTracker Gama	36.204200	-120.372400	No WCR available. CASGEM ID: 20262
JC-131	Section 8, 20S, 15E	8P	EO152585	2012	1220	1200	**	522-1200	Irrigation	Tulare / San Joaquin	DWR	36.1946688225852	-120.367861975697	
JC-132	Section 8, 20S, 15E	8G	219406	**	900	860	**	300-360	Irrigation	Tulare	DWR	36.2024615573793	-120.360188213953	
JC-133	Section 9, 20S, 15E	9C	9C001M	1986	**	**	332	**	Agricultural Backup, Industrial	**	CASGEM	36.208600	-120.349900	No WCR available. CASGEM ID: 20263
JC-134	Section 9, 20S, 15E	9N	**	**	**	**	**	**	Agricultural Backup, Industrial	**	No Record Available	36.1961597079057	-120.352378256697	No records available
JC-135	Section 10, 20S, 15E	10F	E056567	2007	900	900	**	500-800	**	Tulare	DWR	36.202602	-120.328547	
JC-136	Section 14, 20S, 15E	14K	14K001M	2001	**	**	491	**	Agricultural Backup, Industrial	**	CASGEM	36.184700	-120.309900	CASGEM ID: 35192
JC-137	Section 14, 20S, 15E	14N2	14N002M	1959	**	**	429	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.181900	-120.316000	CASGEM ID: 20264
JC-138	Section 14, 20S, 15E	14N3	14N003M	1968	**	**	404	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.181900	-120.316000	CASGEM ID: 20265
JC-139	Section 15, 20S, 15E	15F	e049363	2007	1020	1020	934	396-934	Irrigation	Tulare	DWR	36.1887201700706	-120.327827544274	20S15E15L1
JC-140	Section 15, 20S, 15E	15G	**	**	1010	1010	**	**	**	Tulare	DWR	36.1886606835455	-120.325210137168	
JC-141	Section 16, 20S, 15E	16A1	**	**	**	**	292	**	Irrigation	**	USGS WSP1360	36.1920942330686	-120.339318751221	WQP listed as "surface water"
JC-142	Section 16, 20S, 15E	16A002M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	CASGEM	36.1936533264498	-120.339353182329	No records available
JC-143	Section 16, 20S, 15E	16C1	**	1951	**	**	280	**	Irrigation	**	DWR	36.1920942330687	-120.348836595245	No records available
JC-144	Section 16, 20S, 15E	16E001M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	USGS WSP1360	36.1889796843207	-120.351866482224	No records available
JC-145	Section 16, 20S, 15E	16M2	**	1950	400	400	340	300-400	Domestic	Tulare	DWR	36.1846750863607	-120.353525723137	
JC-146	Section 16, 20S, 15E	16R	243636	1988	137	138	58	87-135	**	Tulare	DWR	36.18059	-120.33793	
JC-147	Section 17, 20S, 15E	17A1	**	1939	439	439	222	419-439	**	Tulare	DWR	36.1927057672554	-120.356975941595	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-148	Section 17, 20S, 15E	17A2	**	1939	460	460	236	390-450	**	Tulare	DWR	36.1925867942051	120.356083643718	
JC-149	Section 17, 20S, 15E	17B1	**	1951	1002	1002	250	362-1002	Irrigation	Tulare/San Joaquin	DWR	36.1924083346297	120.360783079205	
JC-150	Section 17, 20S, 15E	17C1	17C001M	1951	**	**	312	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.194200	-120.364300	
JC-151	Section 17, 20S, 15E	17F1	30955	1973	500	*	**	**	Destroyed	Tulare/San Joaquin	DWR	36.187666	-120.364337	
JC-152	Section 17, 20S, 15E	17F2	30956	1973	500	*	**	**	Destroyed	Tulare/San Joaquin	DWR	36.187731	-120.364008	
JC-153	Section 17, 20S, 15E	17H1	410093	1992	315	315	**	**	Catho	Tulare/San Joaquin	DWR	36.190475	-120.356568	
JC-154	Section 17, 20S, 15E	17H2	410094	1992	315	315	**	**	Catho	Tulare/San Joaquin	DWR	36.189869	-120.357111	
JC-155	Section 17, 20S, 15E	17H3	0906628	2008	300	300	**	**	Catho	Tulare/San Joaquin	DWR	36.188045	-120.355747	
JC-156	Section 17, 20S, 15E	17H4	E0125698	2010	300	300	**	**	Catho	Tulare/San Joaquin	DWR	36.190833	-120.356667	
JC-157	Section 17, 20S, 15E	17H5	E0167867	2012	300	300	**	140-300	Catho	Tulare/San Joaquin	DWR	36.190833	-120.356666	
JC-158	Section 17, 20S, 15E	17N	080557	1992	1020	980	525	480-980	Domestic	Tulare/San Joaquin	DWR	36.1831879232321	120.372204492033	
JC-159	Section 18, 20S, 15E	18N	70532	1973	1050	1050	**	489-1050	Irrigation	Etchegoin	DWR	36.1834853558578	120.390050449576	
JC-160	Section 20, 20S, 15E	20B1	20B001M	1982	**	**	300	**	**	**	CASGEM	36.179700	-120.363500	
JC-161	Section 20, 20S, 15E	20D001M	**	**	**	**	**	**	**	**	CASGEM	36.178124773569	120.369958000143	No records available
JC-162	Section 20, 20S, 15E	20G	E001188	2002	1140	1070	**	429-1070	Irrigation	San Joaquin/ Etchegoin	DWR	36.1750382692871	120.360307187004	
JC-163	Section 20, 20S, 15E	20N1	20N001M	1960	**	**	450	**	**	**	CASGEM	36.166400	-120.371600	
JC-164	Section 21, 20S, 15E	21D1	**	**	845	845	**	**	**	San Joaquin	DWR	36.1775961898684	120.352276506109	
JC-165	Section 22, 20S, 15E	22D1	**	1937	410	390	182	**	**	Tulare	DWR	36.1777746494438	120.334609008141	
JC-166	Section 22, 20S, 15E	22D2	22D002M	1981	**	**	313	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.180000	-120.336600	
JC-167	Section 22, 20S, 15E	22D3	E0337223	2016	2100	2090	415	686-765845-1003	Irrigation	San Joaquin	DWR	36.17987	-120.336639	
JC-168	Section 22, 20S, 15E	22N1	**	**	522	517	174	152-517	Irrigation	Tulare/San Joaquin	DWR	36.167245534493	120.335144386867	
JC-169	Section 23, 20S, 15E	23D	248659	1983	1041	997	**	397-997	Irrigation	**	CNRA/DWR	36.178794	-120.317043	
JC-170	Section 23, 20S, 15E	23L	23L001M	1986	**	**	260	**	**	**	GeoTracker Gama	36.173100	-120.310400	
JC-171	Section 24, 20S, 15E	24K1	24K001M	1981	**	**	276	**	**	**	CASGEM	36.173100	-120.292100	
JC-172	Section 25, 20S, 15E	25A	25A001M	1958	**	**	311	**	**	**	CASGEM	36.165600	-120.283800	CASGEM ID: 20410
JC-173	Section 25, 20S, 15E	25D1	**	**	364	364	152	**	Irrigation	Alluvium / Tulare	DWR	36.1633789103586	120.298381714327	
JC-174	Section 25, 20S, 15E	25D2	25D002M	1981	**	**	329	**	**	**	GeoTracker Gama/CASGEM	36.163100	-120.300700	CASGEM ID: 20411; Listed by WQP as "Surface Water"
JC-175	Section 25, 20S, 15E	25H001M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.1601840182988	120.28522939122	No records available
JC-176	Section 26, 20S, 15E	26D1	**	1935	425	376	102	165-370	**	Tulare	DWR	36.1632599373082	120.316287158396	
JC-177	Section 26, 20S, 15E	26D003M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.165500	-120.319000	Listed by WQP as "Surface Water"
JC-178	Section 26, 20S, 15E	26F	123434	1977	2008	1888	**	377-1864	Irrigation	Tulare/San Joaquin	DWR	36.158679474872	120.313491291714	
JC-179	Section 26, 20S, 15E	26M1	**	**	233	233	124	**	Irrigation	Alluvium	USGS WSP1360	36.1557360688997	120.317808423729	
JC-180	Section 26, 20S, 15E	26M2	**	1958	**	**	102	165-370	Irrigation	Tulare	DWR	36.1564784734416	120.317179456273	
JC-181	Section 26, 20S, 15E	26P1	E0133708	2011	1120	1120	**	**	Test Well	Tulare/San Joaquin	DWR	36.151719551438	120.31010055978	
JC-182	Section 26, 20S, 15E	26P2	e0214801	2014	1720	1645	372	660-1625	Irrigation	Tulare/San Joaquin	DWR	36.1523144166814	120.311587722909	
JC-183	Section 27, 20S, 15E	27C1	**	1953	507	507	**	177-507	**	Tulare/San Joaquin	DWR	36.1629030181573	120.330980330107	
JC-184	Section 27, 20S, 15E	27E1	**	1936	281	261	128	102-261	**	Tulare	DWR	36.1606425302018	120.334787467716	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-185	Section 27, 20S, 15E	27F	26955	1981	1420	1420	**	600-1420	Irrigation	San Joaquin	DWR	36.1580846096205	120.329195734352	
JC-186	Section 27, 20S, 15E	27H	EO118398	2010	1320	1300	**	400-1300	Irrigation	Tulare/ San Joaquin	DWR	36.1583578434727	120.319781290023	
JC-187	Section 28, 20S, 15E	28A001M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.1631992712853	120.33920241968	No records available
JC-188	Section 28, 20S, 15E	28D1	**	1935	261	256	**	170-252	Irrigation	Tulare	DWR	36.1633194238334	120.352217019584	
JC-189	Section 28, 20S, 15E	28R002M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	CASGEM	36.151786	-120.338410	No records available
JC-190	Section 28, 20S, 15E	28R003M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	CASGEM	36.151685	-120.338097	No records available
JC-191	Section 29, 20S, 15E	29D1	29D001M	1958	**	**	324	**	**	**	CASGEM	36.163100	-120.371300	CASGEM ID: 20417
JC-192	Section 31, 20S, 15E	31F	381661	1991	927	*	230	**	Irrigation	Alluvium / Etchegoin	DWR	36.144308	-120.382077	
JC-193	Section 32, 20S, 15E	32A1	32A001M	1951	399	399	169	**	**	Alluvium / San Joaquin	USGS	36.150790	-120.359000	
JC-194	Section 32, 20S, 15E	32D	41491	1958	1255	1255	198	**	Irrigation	San Joaquin	DWR	36.1482098464464	120.36837867898	
JC-195	Section 32, 20S, 15E	32G	78656	1964	1300	1300	230	510-1300	Irrigation	Etchegoin	DWR	36.145355920916	120.359120311854	
JC-196	Section 32, 20S, 15E	32G001M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	CASGEM	36.1463138545604	120.360610715885	No records available
JC-197	Section 32, 20S, 15E	32H1	**	1940	330	320	**	270-320	Irrigation	Alluvium / Tulare	DWR	36.1457708989154	120.35667850897	
JC-198	Section 33, 20S, 15E	33C1	**	1951	480	480	**	192-480	**	Alluvium / San Joaquin	DWR	36.1483350060953	120.349155129161	
JC-199	Section 33, 20S, 15E	33C002M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.1496306328457	120.349303517185	No records available
JC-200	Section 33, 20S, 15E	33F	17788	1956	800	800	**	250-800	Irrigation	Alluvium / San Joaquin	DWR	36.144934	-120.346901	
JC-201	Section 33, 20S, 15E	33P1	**	1949	382	382	142	310-370	**	Tulare	DWR	36.1384840375311	120.350535216545	
JC-202	Section 33, 20S, 15E	33R	78364	1974	1185	1125	**	500-1125	Irrigation	Tulare/ San Joaquin/ Etchegoin	DWR	36.1397689464743	120.339970409679	
JC-203	Section 34, 20S, 15E	34B1	**	**	212	212	134	**	Irrigation	Alluvium	DWR	36.1492639349638	120.324280557665	No records available
JC-204	Section 34, 20S, 15E	34B002M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.1499321581444	120.325483018591	No records available
JC-205	Section 34, 20S, 15E	34D	**	1960	946	605	**	**	**	Tulare	DWR	36.1489060767367	120.334735595466	
JC-206	Section 34, 20S, 15E	34E	E0163187	2012	1225	1200	**	451-1200	Irrigation	Tulare/ San Joaquin/ Etchegoin	DWR	36.1437188517439	120.33616327207	
JC-207	Section 34, 20S, 15E	34H1	41286	1957	304	304	171	282-301	Domestic	Alluvium / Tulare	DWR	36.1437664409641	120.319459455809	
JC-208	Section 34, 20S, 15E	34H2	112366	1957	507	507	171	282-506	Irrigation	Alluvium / Tulare	DWR	36.1431953703227	120.319459455809	Deepening of 41286
JC-209	Section 34, 20S, 15E	34P1	**	1945	224	224	104	**	**	Alluvium / Tulare	DWR	36.1391026973927	120.331404350058	
JC-210	Section 34, 20S, 15E	34N	34N001M	1963	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.139700	-120.336300	CASGEM ID: 20421
JC-211	Section 34, 20S, 15E	34N002M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.1398310606393	120.334830302849	No records available
JC-212	Section 34, 20S, 15E	34R	34R001M	1975	**	**	243	**	**	**	CASGEM	36.139200	-120.319100	CASGEM ID: 20939
JC-213	Section 35, 20S, 15E	35F1	E0091511	2011	941	*	**	**	Test Well	Tulare/ San Joaquin	WQP	36.143960	-120.309970	
JC-214	Section 35, 20S, 15E	35F2	E0173361	2013	1000	*	**	**	Test Well	Tulare/ San Joaquin	WQP	36.143960	-120.309970	
JC-215	Section 35, 20S, 15E	35D001M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.1490275822484	120.316286496982	No records available
JC-216	Section 36, 20S, 15E	36A1	39835	1956	260	260	180	**	Domestic	Alluvium / Tulare	DWR	36.1488584875166	120.286432537048	
JC-217	Section 36, 20S, 15E	36A2	115745	1965	300	300	192	280-295	Domestic	Alluvium / Tulare	DWR	36.149362	-120.284794	
JC-218	Section 36, 20S, 15E	36E1	E0091450	2011	1070	992	**	360-972	Irrigation	Tulare/ San Joaquin	DWR	36.1445754577061	120.300281000102	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-219	Section 36, 20S, 15E	36E2	**	**	200	200	102	**	Irrigation	Alluvium	DWR	36.1465989386373	-120.299153449443	No records available
JC-220	Section 36, 20S, 15E	36F	**	1959	517	517	**	**	**	Alluvium / San Joaquin	DWR	36.144468	-120.292283	
JC-221	Section 36, 20S, 15E	36G	EO-38691	2006	1020	950	**	346-950	Irrigation	Tulare/ San Joaquin	DWR	36.145765188209	-120.289145122594	
JC-222	Section 36, 20S, 15E	36P	E011263	2002	1000	1000	40	353-1000	Irrigation	Tulare/ San Joaquin	DWR	36.1397213572542	-120.293047438644	
JC-223	Section 36, 20S, 15E	36N1	**	1955	800	800	**	**	**	Tulare/ San Joaquin	DWR	36.1382460914306	-120.299138858819	
JC-224	Section 36, 20S, 15E	36Q1	**	**	235	235	**	**	Irrigation	Alluvium	USGS WSP1360	36.138475661589	-120.288212119607	
20S 16E														
JC-225	Section 2, 20S, 16E	2R1	**	1951	**	**	418.6	**	Irrigation	**	USGS WSP1369 G	36.212055	-120.195379	Outside study area
JC-226	Section 3, 20S, 16E	3F	24912	1977	1800	1645	469	693-1645	Irrigation	**	WQP	36.217920	-120.219820	Outside study area
JC-227	Section 3, 20S, 16E	3R1	**	1951	2110	2110	470	**	Irrigation	**	USGS WSP1360	36.210278	-120.2105556	Outside study area
JC-228	Section 4, 20S, 16E	4F1	61669	1972	371	370	**	**	Monitoring Well	Alluvium / Tulare	WQP	36.217690	-120.237610	
JC-229	Section 4, 20S, 16E	4F2	61672	1972	370	*	**	**	Monitoring Well	Alluvium / Tulare	WQP	36.217690	-120.237610	
JC-230	Section 4, 20S, 16E	4F3	61673	1972	371	370	**	**	Monitoring Well	Alluvium / Tulare	WQP	36.217690	-120.237610	
JC-231	Section 4, 20S, 16E	4F4	61674	1972	370	370	**	**	Monitoring Well	Alluvium / Tulare	WQP	36.217271	-120.237505	
JC-232	Section 4, 20S, 16E	4F5	559042	1997	320	320	**	**	Cathodic	Alluvium / Tulare	WQP	36.217690	-120.237610	
JC-233	Section 4, 20S, 16E	4F6	559043	1997	315	315	**	**	Cathodic	Alluvium / Tulare	WQP	36.217690	-120.237610	
JC-234	Section 4, 20S, 16E	4P1	**	**	1152	1152	315	**	Irrigation	Alluvium / Tulare/ San Joaquin/ Etchegoin	DWR	36.2124376855923	-120.240842064176	
JC-235	Section 4, 20S, 16E	4P2	**	1950	823	*	226	**	Industrial	Alluvium / Tulare/ San Joaquin/ Etchegoin	USGS WSP1369 G	36.213056	-120.237222	
JC-236	Section 4, 20S, 16E	4P3	4P003M	**	**	**	**	**	**	**	GeoTracker Gama	36.2105387431748	-120.24000596421	No records available
JC-237	Section 4, 20S, 16E	4G1	**	1958	2039	1989	**	**	**	Alluvium / Tulare/ San Joaquin/ Etchegoin	DWR	36.2195760686098	-120.235250330812	No records available
JC-238	Section 5, 20S, 16E	5P	559044	1997	315	315	**	**	Catho	Tulare	DWR	36.209882	-120.255622	
JC-239	Section 5, 20S, 16E	5D	5D001M	1968	**	**	**	**	**	**	CASGEM	36.222500	-120.263800	
JC-240	Section 7, 20S, 16E	7A1	**	1955	1740	1740	**	**	**	Alluvium / Tulare/ San Joaquin/ Etchegoin	DWR	36.2072028713795	-120.267729973542	
JC-241	Section 7, 20S, 16E	7R	E0167060	2012	335	335	**	**	Cathodic	Tulare	DWR	36.195989	-120.266002	
JC-242	Section 9, 20S, 16E	9F	559021	1996	320	320	**	**	Cathodic	Tulare	WQP	36.202560	-120.237470	
JC-243	Section 9, 20S, 16E	9L	9L001M	**	**	**	**	**	**	**	CASGEM	36.202800	-120.237700	CASGEM ID: 20955
JC-244	Section 16, 21S, 16E	16H001M	**	1960	1056	1056	**	709-1056	**	Tulare/ San Joaquin	GeoTracker Gama	36.1033367422338	-120.238658969711	No records available
JC-245	Section 18, 20S, 16E	18A	559052	1998	312	312	**	**	Catho	Tulare	DWR	36.194971	-120.26491	
JC-246	Section 18, 20S, 16E	18D	496651	1993	160	160	**	100-160	Catho	San Joaquin	DWR	36.194809	-120.283582	
JC-247	Section 18, 20S, 16E	18F	0906807	2011	400	154	**	**	Catho	Tulare	DWR	36.188087	-120.274466	
JC-248	Section 20, 20S, 16E	20K	20K001M	1958	**	**	**	**	**	**	CASGEM	36.170000	-120.252900	CASGEM ID: 21090
JC-249	Section 20, 20S, 16E	20L1	**	1950	300	300	146	150-300	Irrigation	Tulare/ San Joaquin	DWR	36.1711540371412	-120.259877752223	
JC-250	Section 21, 20S, 16E	21J001M	**	**	**	**	**	**	**	**	CASGEM	36.1708881664011	-120.229899498916	No records available
JC-251	Section 21, 20S, 16E	21L1	**	1956	635	635	175	**	Irrigation	Tulare/ San Joaquin	DWR	36.1710350640909	-120.24262665993	
JC-252	Section 21, 20S, 16E	21Q1	**	1955	1290	1290	**	**	Irrigation	Tulare/ San Joaquin	DWR	36.1681797108839	-120.234060600309	
JC-253	Section 21, 20S, 16E	21R1	**	**	1317	1317	**	**	Irrigation	Tulare/ San Joaquin	DWR	36.1682986839342	-120.230729354901	
JC-254	Section 21, 20S, 16E	21R 2	**	1965	1400	1406	450	806-1406	Irrigation	Tulare/ San Joaquin	DWR	36.1671089534313	-120.229182705247	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-255	Section 28, 20S, 16E	28D1	28D001M	1968	1250	*	**	**	**	**	GeoTracker Gama	36.164167	-120.241667	
JC-256	Section 28, 20S, 16E	28D2	E0091466	2011	1240	1200	**	470-1180	Irrigation	Tulare/ San Joaquin	DWR	36.1637777080231	120.243102552132	
JC-257	Section 28, 20S, 16E	28E	**	1956	278	278	**	80-200	**	Alluvium / Tulare	DWR	36.1603274895647	120.244530228735	
JC-258	Section 28, 20S, 16E	28F1	**	1956	541	541	**	107-283	**	Alluvium / Tulare	DWR	36.1611603009167	120.24238871383	
JC-259	Section 28, 20S, 16E	28F2	**	1956	217	217	**	80-190	**	Alluvium / Tulare	DWR	36.1611603009166	120.240961037226	
JC-260	Section 28, 20S, 16E	28F3	59761	1960	450	450	**	165-434	Domestic	Tulare	DWR	36.159891	-120.238342	
JC-261	Section 29, 20S, 16E	29H	**	1956	304	304	**	80-290	**	Alluvium / Tulare	DWR	36.1605654356652	120.248218393294	
JC-262	Section 29, 20S, 16E	29N1	**	1925	278	278	**	**	**	Alluvium / Tulare	DWR	36.1533080795974	120.262376186279	
JC-263	Section 29, 20S, 16E	29N2	**	1925	305	305	**	63-178	**	Alluvium / Tulare	DWR	36.1531891065472	120.260829536625	
JC-264	Section 30, 20S, 16E	30F	**	1960	803	803	**	**	**	Tulare	DWR	36.159007	-120.274088	
JC-265	Section 30, 20S, 16E	30H001 M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.1614620743942	120.266898023631	No records available
JC-266	Section 30, 20S, 16E	30L1	123433	1977	1537	1533	**	350-1500	Irrigation	Tulare/ San Joaquin	DWR	36.1573531633074	120.277128844515	
JC-267	Section 30, 20S, 16E	30N1	**	1935	335	335	**	**	**	Tulare	DWR	36.1524752682454	120.281530847376	
JC-268	Section 30, 20S, 16E	30N2	**	1958	702	702	**	**	**	Tulare/ San Joaquin	DWR	36.1533080795975	120.280341116873	
JC-269	Section 30, 20S, 16E	30N003 M	**	**	**	**	**	**	**	**	GeoTracker Gama	36.154017	-120.283067	No records available
JC-270	Section 30, 20S, 16E	30N4	E0091445	2010	950	850	**	380-830	Irrigation	Tulare/ San Joaquin	DWR	36.1540219178992	120.281649820426	
JC-271	Section 30, 20S, 16E	30Q1	**	1962	800	800	**	**	**	Tulare/ San Joaquin	DWR	36.1536649987484	120.269871488447	
JC-272	Section 30, 20S, 16E	30Q2	002850	2016	1850	1145	379	580-640 640-820 840-900 905-1025 1025-1425	Irrigation	San Joaquin	DWR	36.153094	-120.27171	
JC-273	Section 30, 20S, 16E	30R	30R001M	1994	**	**	237	**	**	**	CASGEM	36.152067	-120.267192	No records available
JC-274	Section 31, 20S, 16E	31E	**	1976	1008	1008	**	**	**	Tulare/ San Joaquin	DWR	36.1446214876464	120.281588852585	
JC-275	Section 31, 20S, 16E	31F1	**	1955	230	230	60	55-112 140-146 155-206	**	Tulare	DWR	36.14469	-120.274497	
JC-276	Section 31, 20S, 16E	31N1	**	1929	230	230	**	**	**	Alluvium / Tulare	DWR	36.1385357744356	120.280410972609	
JC-277	Section 31, 20S, 16E	31P	29609	1966	504	464	**	224-464	Domestic	Tulare	DWR	36.1397136544118	120.273932632739	
JC-278	Section 32, 20S, 16E	32D1	**	1925	217	217	26	80-217	**	Alluvium / Tulare	DWR	36.1481551275752	120.263135399623	
JC-279	Section 32, 20S, 16E	32D2	**	1948	477	413	**	126-413	**	Tulare	DWR	36.1497256342102	120.263135399623	
JC-280	Section 32, 20S, 16E	32D3	**	1939	247	247	**	60-247	Irrigation	Alluvium / Tulare	DWR	36.1483514409046	120.261564892988	
JC-281	Section 32, 20S, 16E	32D4	**	1925	567	567	23	**	**	Tulare	DWR	36.1497256342102	120.261761206318	
JC-282	Section 32, 20S, 16E	32F	**	1950	1918	1918	**	**	**	Alluvium / Tulare/ San Joaquin	DWR	36.145047	-120.255654	
JC-283	Section 32, 20S, 16E	32N1	**	1950	305	305	**	**	**	Tulare	DWR	36.1397136544118	120.263135399623	
JC-284	Section 32, 20S, 16E	32P	EO-38689	2006	1020	1000	40	390-1000	Irrigation	Tulare	DWR	36.1406952210587	120.255479179777	
JC-285	Section 36, 20S, 16E	36Q1	**	1951	1500	*	477.8	**	**	**	WQP	36.139848	-120.183490	Outside aquifer exemption area
21S 14E														
JC-286	Section 14, 21S, 14E	14E	103039	1976	1310	1266	588	563-1246	Test Well	Etchegoin	WQP	36.105470	-120.431672	
JC-287	Section 14, 21S, 14E	14F1	793931	2002	160	160	45	60-160	Domestic	Etchegoin	WQP	36.103560	-120.426200	
JC-288	Section 14, 21S, 14E	14F2	793932	2002	180	180	45	40-180	**	**	WQP	36.103560	-120.426200	
JC-289	Section 14, 21S, 14E	14F3	**	**	**	**	**	**	**	**	DWR	36.104760	-120.426914	No records available
21S 15E														
JC-290	Section 1, 21S, 15E	1E1	**	1930	225	225	**	**	**	Alluvium / Tulare	DWR	36.1295053612841	120.306520645416	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-291	Section 2, 21S, 15E	2A	E0305474	2016	1110	1050	**	590-910 910-1030	Irrigation	Tulare/ Etchegoin	DWR	36.136583	-120.308192	
JC-292	Section 2, 21S, 15E	2C	E0091510	2011	1004	*	**	**	Test Well	Tulare/ Etchegoin	DWR	36.136414	-120.317494	
JC-293	Section 2, 21S, 15E	2J	E0315033	2016	1050	1020	**	520-840 880-1000	Irrigation	Tulare/ Etchegoin	DWR	36.12791	-120.310188	
JC-294	Section 3, 21S, 15E	3D1	**	1929	201	201	**	**	**	Tulare	DWR	36.13480582117 73	-120.3424459846 93	
JC-295	Section 3, 21S, 15E	3F	3F001M	1981	**	**	326	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.129400	-120.334900	
JC-296	Section 3, 21S, 15E	3M1	**	1930	237	237	**	**	Irrigation	Tulare	DWR	36.12891642129 59	-120.3426422980 22	
JC-297	Section 3, 21S, 15E	3M2	**	1945	316	316	125	128-304	**	Tulare	DWR	36.12695328800 21	-120.3424459846 93	
JC-298	Section 3, 21S, 15E	3M3	**	1951	1216	1156	**	360-1156	**	Tulare/ Etchegoin	DWR	36.12695328800 22	-120.3400902247 4	
JC-299	Section 3, 21S, 15E	3R	3R001M	1945	316	316	126	**	**	Alluvium /Tulare	GeoTracker Gama	36.12377141206 19	-120.3280025822 61	
JC-300	Section 4, 21S, 15E	4D001M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.13405068360 7	-120.3586976292 36	No records available
JC-301	Section 4, 21S, 15E	4N2	4N002M	1958	**	**	424	**	Agricultural Backup, Industrial	**	CASGEM	36.124700	-120.361300	
JC-302	Section 4, 21S, 15E	4N004M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.12377141206 19	-120.3595542351 98	No records available
JC-303	Section 4, 21S, 15E	4Q001M	**	**	**	**	**	**	Agricultural Backup, Industrial	**	WQP	36.125200	-120.352000	WQP listed as "surface water"
JC-304	Section 6, 21S, 15E	6K	75052	1962	1310	1024	237	420-600 604-1024	Irrigation	Etchegoin	DWR	36.128825	-120.387542	
JC-305	Section 7, 21S, 15E	7F	077294	1981	110	100	**	60-100	Domestic	Etchegoin	DWR	36.115726	-120.389337	
JC-306	Section 8, 21S, 15E	8F	410095	1992	350	350	**	**	Catho	Alluvium / Etchegoin	DWR	36.115371	-120.371056	
JC-307	Section 8, 21S, 15E	8F001M	**	1992	350	350	**	**	Cathodic	Alluvium / Etchegoin	GeoTracker Gama	36.11620472606 33	-120.3722605569 69	No records available
JC-308	Section 8, 21S, 15E	8G1	**	**	1420	1420	**	**	Irrigation	Etchegoin	DWR	36.11595974155 68	-120.3691445974 89	
JC-309	Section 8, 21S, 15E	8G2	E0337232	2017	1039	*	**	**	Domestic/Destr oyed	Alluvium / Etchegoin	DWR	36.117500	-120.369722	Abandoned
JC-310	Section 9, 21S, 15E	9F1	717138	2000	200	200	150	170-200	Monitoring	Etchegoin	DWR	36.115034	-120.352447	
JC-311	Section 9, 21S, 15E	9F2	717139	2000	300	*	**	**	Test Well	Alluvium / Etchegoin	DWR	36.115355	-120.352591	
JC-312	Section 9, 21S, 15E	9F3	717140	2000	**	**	**	**	Monitoring/Dest royed	*	DWR	36.115025	-120.353482	
JC-313	Section 9, 21S, 15E	9F4	E0301966	2015	178	172	**	152-172	Monitoring	Etchegoin	DWR	36.114968	-120.353005	
JC-314	Section 9, 21S, 15E	9F5	E0302004	2014	208	208	**	**	Destroyed	Etchegoin	DWR	36.115614	-120.352982	
JC-315	Section 9, 21S, 15E	9F6	E0302008	2014	170	170	**	**	Monitoring/Dest royed	Etchegoin	DWR	36.115023	-120.355322	
JC-316	Section 10, 21S, 15E	10A1	**	1951	904	904	**	400-904	Irrigation	Etchegoin	DWR	36.12086757479 14	-120.3283114249 77	
JC-317	Section 10, 21S, 15E	10B	10B002M	**	**	**	**	**	Agricultural Backup, Industrial	**	CASGEM	36.122200	-120.334300	No records available
JC-318	Section 10, 21S, 15E	10D1	10D001M	1963	**	**	**	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.122200	-120.343200	WQP listed as "surface water"
JC-319	Section 10, 21S, 15E	10D2	399280	1993	650	630	**	480-630	Domestic	Etchegoin	DWR	36.120991	-120.341064	
JC-320	Section 10, 21S, 15E	10F	**	1953	608	608	**	251-603	Irrigation	Etchegoin	DWR	36.115514	-120.335982	
JC-321	Section 10, 21S, 15E	10K	10K001M	1974	**	**	284	**	Agricultural Backup, Industrial	**	GeoTracker Gama	36.112500	-120.334000	WQP listed as "surface water"
JC-322	Section 11, 21S, 15E	11B1	**	1957	1000	1000	**	**	**	Alluvium / Tulare/ Etchegoin	DWR	36.11968969481 51	-120.3139805519 33	
JC-323	Section 11, 21S, 15E	11D	542940	1996	1000	930	**	450-930	Irrigation	Tulare/ Etchegoin	DWR	36.11968969481 51	-120.3239925317 31	
JC-324	Section 11, 21S, 15E	11J	E0133959	2013	1000	1000	**	Abandone d	Test Well	Tulare/ Etchegoin	DWR	36.11360398160 43	-120.3096616586 86	Abandoned
JC-325	Section 12, 21S, 15E	12B	E0287296	2015	1260	1240	**	420-1240	Irrigation	Etchegoin	DWR	36.121944	-120.295000	
JC-326	Section 12, 21S, 15E	12F	**	1952	950	950	**	**	Irrigation	Alluvium / Tulare	DWR	36.115643	-120.299557	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-327	Section 12, 21S, 15E	12M1	**	1945	400	400	**	114-382	**	Tulare	DWR	36.1160219724145	-120.304305158276	
JC-328	Section 12, 21S, 15E	12Q1	**	1947	338	338	**	**	**	Tulare	DWR	36.1085980540763	-120.292312674807	
JC-329	Section 12, 21S, 15E	12Q2	492617	1994	930	900	**	495-900	Irrigation	Tulare/ Etchegoin	DWR	36.108851	-120.295495	
JC-330	Section 14, 21S, 15E	14F1	262514	1990	500	480	80	380-480	Domestic	Etchegoin	DWR	36.100594	-120.317161	
JC-331	Section 14, 21S, 15E	14F2	341504	1990	440	440	320	360-440	Domestic	San Joaquin	DWR	36.100879	-120.317646	
JC-332	Section 14, 21S, 15E	14F3	146999	1978	350	340	**	0-80 80-100 100-240 240-340	Stock	Etchegoin	DWR	36.100898	-120.317464	
JC-333	Section 14, 21S, 15E	14J1	083495	1982	160	150	**	130-150	Domestic	Alluvium / Tulare	DWR	36.098664	-120.310761	
JC-334	Section 20, 21S, 15E	20K	0942951	2007	60	30	7	20-30	Domestic	Etchegoin	DWR	36.0840420164961	-120.367693999472	No records available
JC-335	Section 26, 21S, 15E	26L1	**	1950	804	804	**	348-804	Irrigation	Etchegoin	DWR	36.0693845367002	-120.319914422475	
JC-336	Section 34, 21S, 15E	34K	499661	1996	62	60	20	40-60	Irrigation	Alluvium	DWR	36.0558691981871	-120.332477976585	
21S 16E														
JC-337	Section 3, 21S, 16E	3F	E0250765	2014	1470	1450	**	**	**	Tulare/ San Joaquin	DWR	36.130075	-120.226994	
JC-338	Section 3, 21S, 16E	3N1	51972	1969	607	607	209	393-603	Irrigation	Tulare	DWR	36.124713	-120.233656	
JC-339	Section 3, 21S, 16E	3N2	E066550	2006	1000	980	**	370-858 939-980	Irrigation	Tulare	DWR	36.122947	-120.23508	
JC-340	Section 4, 21S, 16E	4D	496846	1992	**	**	**	**	Destroy	**	DWR	36.135431	-120.251277	
JC-341	Section 4, 21S, 16E	4E1	**	1950	358	358	**	**	**	Tulare	DWR	36.131497	-120.251533	
JC-342	Section 4, 21S, 16E	4F	52561	1970	1000	997	210	292-997	Irrigation	Tulare	DWR	36.130267	-120.245070	
JC-343	Section 5, 21S, 16E	5D	E0322267	2016	1220	1200	405	638-1200	Irrigation	Tulare/ San Joaquin	DWR	36.136654	-120.271549	
JC-344	Section 5, 21S, 16E	5M	E0126569	2011	1200	1140	332	510-730 760-1120	Irrigation	Tulare	DWR	36.127097	-120.271617	
JC-345	Section 5, 21S, 16E	5N1	**	1934	296	296	**	**	**	Tulare	DWR	36.124404	-120.269672	
JC-346	Section 6, 21S, 16E	6E	E0173362	2013	900	*	**	**	Test Hole	Tulare	DWR	36.12994	-120.28585	
JC-347	Section 6, 21S, 16E	6N1	768905	2002	520	515	350	475-515	**	Tulare	DWR	36.124755	-120.287396	
JC-348	Section 6, 21S, 16E	6N2	768927	2002	510	500	300	400-500	**	Tulare	DWR	36.124366	-120.288928	
JC-349	Section 7, 21S, 16E	7F	**	1945	320	320	155	208-245 245-255	**	Tulare	DWR	36.116917	-120.282956	
JC-350	Section 7, 21S, 16E	7N1	**	1945	320	320	96	**	**	Tulare	DWR	36.109322	-120.287955	
JC-351	Section 8, 21S, 16E	8E1	1785	1950	463	463	**	323-463	Irrigation	Etchegoin	DWR	36.116993	-120.269669	
JC-352	Section 8, 21S, 16E	8E2	E0091511	2011	1208	1202	**	482-1182	Irrigation	Etchegoin	DWR	36.115499	-120.271357	
JC-353	Section 8, 21S, 16E	8E3	E0091493	2011	1200	*	**	**	Test Hole	Etchegoin	DWR	36.115485	-120.271413	
JC-354	Section 8, 21S, 16E	8F1	**	1950	354	354	**	124-354	Irrigation	Tulare/ Etchegoin	DWR	36.117161	-120.265318	
JC-355	Section 8, 21S, 16E	8F2	716906	2000	1005	*	**	**	Test Hole	Etchegoin	DWR	36.116225	-120.264845	
JC-356	Section 8, 21S, 16E	8N	E0212449	2014	1690	1275	428	590-790 815-1255	Irrigation	Etchegoin	DWR	36.108525	-120.270941	
JC-357	Section 9, 21S, 16E	9A	275494	1991	935	875	**	**	Irrigation	Tulare/ Etchegoin	DWR	36.122498	-120.236176	
JC-358	Section 9, 21S, 16E	9E	E0272404	2015	2440	2420	414	740-860	Irrigation	Etchegoin	DWR	36.115443	-120.251664	
JC-359	Section 15, 21S, 16E	15D	E0248524	2014	2020	1980	420	600-920 960-980	Irrigation	Tulare/ San Joaquin	DWR	36.107093	-120.235591	
JC-360	Section 15, 21S, 16E	15R1	**	1945	500	300	80	115-245 245-288	**	Tulare	DWR	36.095583	-120.219893	
JC-361	Section 16, 21S, 16E	16H1	**	1960	1047	1047	**	**	**	Alluvium / Tulare	DWR	36.102903	-120.238358	
JC-362	Section 16, 21S, 16E	16K	E0125887	2011	1200	960	355	560-780 820-940	Irrigation	Tulare/ San Joaquin	DWR	36.100833	-120.244722	
JC-363	Section 16, 21S, 16E	16N	E0194453	2013	1300	1170	404	630-670 670-830 830-870	Irrigation	Tulare	DWR	36.09415	-120.252385	
JC-364	Section 16, 21S, 16E	16Q	E0196934	2013	1010	1000	435	600-1000	Irrigation	Tulare	DWR	36.09425	-120.243512	
JC-365	Section 17, 21S, 16E	17B	286907	1989	1004	1004	**	442-1004	Irrigation	Tulare	DWR	36.108023	-120.260257	
JC-366	Section 17, 21S, 16E	17E1	E0133864	2013	1402	1402	**	**	Test Hole	Tulare	DWR	36.103581	-120.26875	
JC-367	Section 17, 21S, 16E	17E2	E0133880	2013	1020	1000	**	460-1000	**	Tulare	DWR	36.103424	-120.269226	
JC-368	Section 17, 21S, 16E	17H	E037011	2005	1020	1000	**	480-1000	Irrigation	Tulare	DWR	36.101002	-120.254007	
JC-369	Section 17, 21S, 16E	17K	E02593015	2015	2500	2475	458	861-1002 1007- 1328	Domestic/Irrigat ion	Tulare	DWR	36.100048	-120.261016	

Map Number	Location	Well number	Well Completion Report Number	Date Drilled	Depth Drilled (feet)	Depth Completed (feet)	Water Depth (feet)	Screened Interval	Well Type	Zone	Source	Latitude	Longitude	Notes
JC-370	Section 18, 21S, 16E	18D	E049362	2007	1030	1010	50	316-1010	Irrigation	Tulare	DWR	36.10771	-120.289627	
JC-371	Section 21, 21S, 16E	21F	**	1947	650	650	**	**	**	Alluvium /Tulare	DWR	36.088198	-120.247001	
JC-372	Section 22, 21S, 16E	22B1	E0129436	2011	1200	1070	412	480-560 590-1050	Irrigation	Tulare	DWR	36.093595	-120.226695	
JC-373	Section 22, 21S, 16E	22B2	E0152582	2012	1050	975	**	480-975	Irrigation	Tulare	DWR	36.093692	-120.226577	
JC-374	Section 22, 21S, 16E	22D	78576	1963	1154	1154	215	527-964 932-1132	Irrigation	Tulare	DWR	36.090066	-120.235871	
JC-375	Section 22, 21S, 16E	22L1	**	1955	939	939	**	**	**	Alluvium /Tulare	DWR	36.084686	-120.229159	
JC-376	Section 22, 21S, 16E	22P	E0197720	2014	1250	1240	**	441-1240	Irrigation	Tulare/ San Joaquin	DWR	36.079487	-120.22753	
JC-377	Section 22, 21S, 16E	22Q1	**	1960	1370	1370	**	**	**	Alluvium /Tulare/ San Joaquin	DWR	36.080993	-120.224823	
JC-378	Section 27, 21S, 16E	27F	**	1947	471	471	**	**	**	Alluvium /Tulare	DWR	36.074097	-120.229284	
JC-379	Section 27, 21S, 16E	27H1	**	1960	1056	1056	**	**	**	Alluvium /Tulare	DWR	36.074235	-120.219946	
JC-380	Section 27, 21S, 16E	27H2	144783	1978	525	516	**	407-516	Domestic	Tulare	DWR	36.072367	-120.218834	
22S 16E														
JC-381	Section 4, 22S, 16E	4K	0900159	2004	100	100	10	**	Irrigation	Alluvium	DWR	36.041395	-120.242225	

Legend:

- *: Likely equal to or approximate to drilled depth
- ** : Data unavailable/ unknown

Source: CalGEM's Aquifer Exemption Application for the Coalinga and Jacalitos Oil Fields