



PROGRAM COORDINATORS

Robert McClellon, REHS
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Willy Ng, REHS
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Michael Kith, REHS
Melissa Nissim, REHS

January 27, 2020

Kusalakari Corporation
9698 S. Priest Road
French Camp, CA 95231

**RE: Soil Suitability/Nitrate Loading Study and Addendum
9698 S. Priest Rd, French Camp
APN 193-220-15, SR0081180**

The San Joaquin County Environmental Health Department (EHD) has reviewed the Soil Suitability/Nitrate Loading Study (SSNL) dated September 4, 2019 and its addendum dated November 20, 2019 for the above noted location and has the following comments for your consideration.

The SSNL Study was prepared to determine the suitability of the above noted location for onsite wastewater treatment system (OWTS) usage and the potential impact of nitrate to groundwater for existing residence and the proposed development project. The proposed development project includes Monastery/Meditation Retreat Center and functions that will generate 1,041.00 gallons of waste water per day from the following activities:

- a. Wastewater generated from 2 volunteers daily.
- b. Wastewater generated from 3 bedroom residence daily.
- c. Wastewater generated from 10 congregants on weekdays and 40 congregants on weekends (no kitchen use).
- d. Wastewater generated from 185 congregants with kitchen use 4 times per year.
- e. Wastewater generated from 47 retreat guests with overnight stay 65 days per year.
- f. Wastewater generated from 2 visitors 65 days per year.

The estimated nitrate loading from the existing and proposed usage shows a potential for nitrate impact to groundwater above water quality objectives. According to SSNL Study, the estimated nitrate loading from this existing and proposed OWTS usage is 14.47 mg/L-N. In addition, the onsite water well already shows an elevated Nitrate-Nitrogen level of 22.6 mg/l. The drinking water standard for Nitrate-Nitrogen is 10.0 mg/l.

Based on the information provided, the EHD can make the following findings:

1. The SSNL Study supports the suitability for OWTS usage with the following conditions:
 - a) The potential impact of the Nitrate to groundwater shall be mitigated. OWTS shall utilize supplemental treatment and meet performance requirements in Section 10.9 of Regional Water Quality Control Boards OWTS Policy (Boards Policy).
 - b) A Registered Civil Engineer shall submit complete engineered design plan to EHD for approval prior to issuance of building permit. Fee will be based on the current fee schedule at time of payment.
 - c) The two percolation tests conducted at the site indicate the soil percolate wastewater at rate of 2.38 and 2.19 minute per inch. This rate requires a 20 foot separation between bottom of dispersal system and ground water. Historical data show ground water to be at 14 feet in 1983 and 23 in 1993.
 - d) Annual permit is required. Fee for annual operating permit is due at time of OWTS permit application.

- e) To monitor the effectiveness of the supplemental treatment system, quarterly sampling of the effluent and under leach field is required. The first sampling shall be done six (6) months after the OWTS installation. Sampling results shall be submitted to EHD for review. The EHD may reduce the sampling frequency after one year of sampling.
- 2. The data indicates the onsite water well has elevated level of nitrate and may not be a suitable source for the potable water supply for new development. A potable water supply that can provide a consistent source of safe and clean water adequate for human consumption, cooking, and sanitary purposes for the proposed new home needs to be established prior to the issuance of building permits (2016 CA Plumbing Code, Section 601.2).
- 3. The provision of a reliable potable water source and documentation that the parcel can accommodate the OWTS and 100% replacement area for this development project within the required setbacks from any water well must be submitted prior to the issuance of a building permit. The site map must be drawn to scale and must show the location of all buildings, driveways, OWTS, the OWTS replacement areas and any water wells within 200 feet of the proposed OWTS and replacement areas.

Any deviation from the above development project or the above-mentioned OWTS usage shall require a new Soil Suitability and Nitrate Loading Study.

If you have any questions please contact Michael Kith, REHS, Program Coordinator, at (209) 468-3444 or mkith@sjgov.org.



Michael Kith, REHS
Program Coordinator

cc: Brian McNamara
Abby Rocco, Live Oak Geo Environmental, Inc.

ADDRESS

9695 S. Priest Rd

PA #

1800177

APN

193-220-15

SU#

PERC TEST DATE	PARCEL OR LOT #.	Perc Hole #	DEPTH (feet)	PERC RATE (min/inch)	COMMENTS
8-7-19	193-220-15	1	3.26	2.38	pass 20 foot separation required from groundwater
8-7-19	193-220-15	2	3.49	2.19	pass

DATE SAMPLED	TYPE OF WELL	NITRATE mg/L	DBCP ug/L	EDB ug/L	COMMENTS (other address for well sampled)
8-2-19	Domestic	22.6	ND	ND	Nitrate over daily water MCL 10mg/L

NITRATE LOADING
RESULT (mg/L - N)12.98SR #: SR 0081180SR Date: 9-23-19

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
SERVICE REQUEST

Type of Business or Property			FACILITY ID #		SERVICE REQUEST # SR0081180	
OWNER / OPERATOR Kusalakari Corporation CHECK if BILLING ADDRESS <input checked="" type="checkbox"/>						
FACILITY NAME Kusalakari Property						
SITE ADDRESS <small>Street Number</small> 9698		<small>Direction</small> S.		<small>Street Name</small> Priest Rd.		<small>City</small> French Camp <small>Zip Code</small> 95231
HOME or MAILING ADDRESS (If Different from Site Address) c/o Brian McNamara <small>Street Number</small> 58793				<small>Street Name</small> Road 225		
CITY North Fork			STATE CA		ZIP 93643	
PHONE #1 (415) 293-9192		<small>EXT.</small>		APN # 193-220-15		LAND USE APPLICATION # PA-1800177
PHONE #2 ()		<small>EXT.</small>		BOS DISTRICT		LOCATION CODE

CONTRACTOR / SERVICE REQUESTOR

REQUESTOR Abby Racco CHECK if BILLING ADDRESS <input type="checkbox"/>	
BUSINESS NAME Live Oak GeoEnvironmental	PHONE # <small>EXT.</small> (209) 369-0375
HOME or MAILING ADDRESS 407 W. Oak St.	FAX # ()
CITY Lodi	STATE CA ZIP 95240

BILLING ACKNOWLEDGEMENT: I, the undersigned **property** or **business owner**, **operator** or **authorized agent of same**, acknowledge that all site and/or project specific ENVIRONMENTAL HEALTH DEPARTMENT hourly charges associated with this project or activity will be billed to **me** or **my business** as identified on this form.

I also certify that I have prepared this application and that the work to be performed will be done in accordance with all SAN JOAQUIN COUNTY Ordinance Codes, Standards, STATE and FEDERAL laws.

APPLICANT'S SIGNATURE: *Brian McNamara* DATE: *9/20/2019*
 PROPERTY / BUSINESS OWNER ☐ OPERATOR / MANAGER ☐ OTHER AUTHORIZED AGENT ☒ *Project Manager*
If APPLICANT is not the BILLING PARTY, proof of authorization to sign is required Title

AUTHORIZATION TO RELEASE INFORMATION: When applicable, I, the **owner** or **operator** of the **property** located at the above **site address**, hereby authorize the release of any and all results, geotechnical data and/or environmental/site assessment information to the SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT as soon as it is available and at any time it is provided to me or my representative.

TYPE OF SERVICE REQUESTED: Review Soil Suitability/Nitrate Loading Study			
COMMENTS:			
ACCEPTED BY: <u><i>SHH</i></u>		EMPLOYEE #:	DATE: <u><i>9/23/19</i></u>
ASSIGNED TO: <u><i>SHMED</i></u>		EMPLOYEE #:	DATE: <u><i>9/23/19</i></u>
Date Service Completed (if already completed):		SERVICE CODE: <u><i>SV3</i></u>	P/E: <u><i>2602</i></u>
Fee Amount: <u><i>\$608</i></u>	Amount Paid: <u><i>\$608.00</i></u>	Payment Date: <u><i>9/23/19</i></u>	
Payment Type: <u><i>CR</i></u>	Invoice #	Check # <u><i>343</i></u>	Received By: <u><i>[Signature]</i></u>

Re: PA-1800177 (UP)

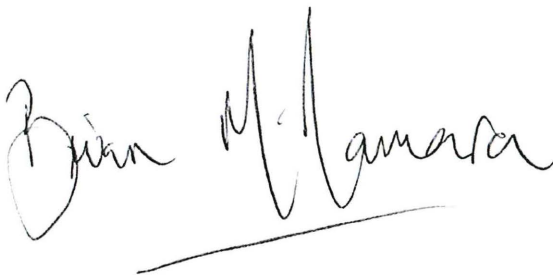
Kusalakari Neighborhood Religious Assembly.

9/19/2019

Hello Giuseppe,

Enclosed please find the Soils Suitability and Nitrate Loading Study performed by Live Oak GeoEnvironmental, to be routed to the EHD. Also enclosed are a check for \$608 for EHD fees, and the required Service Request.

Regards,

A handwritten signature in black ink, reading "Brian McNamara". The signature is written in a cursive style with a long horizontal line extending from the bottom of the name.

Brian McNamara

Project Manager



LIVE OAK GEO ENVIRONMENTAL, INC.

407 W. Oak St., Lodi, CA 95240 ♦ (209) 369-0375 ♦ logelodi.com

November 20, 2019

Project Number: 1938

Michael Kith, Lead REHS
San Joaquin County Environmental Health Department
1868 E. Hazelton Ave.
Stockton, CA 95205

**Regarding: Addendum to Nitrate Loading Study
Kusalakari Property
9698 S. Priest Rd., French Camp, CA
Original report dated September 4, 2019**

Mr. Kith:

Based on our phone conversation on November 15, we have prepared this addendum to the above Nitrate Loading Study.

During our call, you indicated that an average daily flow rate of 10 gal/person should be used for all day visitors to the religious facility. This is the rate typically requested by the Environmental Health Department for a church with a kitchen. We originally used a lower rate because the proposal before the County restricts the use of the kitchen to meditation retreats and certain other events, and daily visitors are not permitted to make use of it. Nevertheless, we have revised the calculation to include the rate of 10 gal/person as requested.

You also stated that the congregants at events should be listed as 225 rather than the 200 presented in our original report. When I spoke with the Project Management team concerning your comments regarding our report of September 4, I was informed that during a meeting with County staff on June 26 the number of congregants attending special events was amended to be 185 based on the amount of parking to be provided. Consequently, we have included the new value of 185 congregants per event in the revised calculation below.

Revised Nitrate Loading Calculation

As in the previous report prepared by our office, the method utilized for the nitrate loading analysis is based on a mass balance formula discussed in a published paper by Hantzsche and Finnemore (1992). The Hantzsche and Finnemore equation is a conservative approximation of ground-water nitrate-nitrogen concentration resulting from the combined effect of on-site sewage disposal systems and percolating recharge waters.

For this addendum, most of the variables remain unchanged from the original report. The quantity and quality of wastewater generated have been corrected as discussed above. The new average daily flow calculation is presented below:

Average Daily Flow Calculation

Use	Units	Rate	Subtotal	Adjustment	Average Daily Flow
Volunteers (daily)	2	13 gal/person/day	26 gpd	None	26 gpd
Residence	3 BR	140 gal/BR/day	420 gpd	None	420 gpd
Congregants, weekdays (no kitchen use)	10	10 gal/person	100 gpd	5/7, 300/365	58.7 gpd
Congregants, weekends (no kitchen use)	40	10 gal/person	400 gpd	2/7, 300/365	93.9 gpd
Congregants, events (4 per year, some kitchen use)	185	10 gal/person	1,850 gpd	4/365	20.3 gpd
Retreat guests (overnight on-site)	47	50 gal/person	2,350 gpd	65/365	418.5 gpd
Retreat day visitors	2	10 gal/person	20 gpd	65/365	3.6 gpd
Total					1,041 gpd

Adjustment factors convert calculated flow into average daily flow over a year. This needs to be taken into account since attendance varies by day of the week, and retreats take place only part of the year. The factors 2/7 and 5/7 refer to days per week. The factors 65/365 and 300/365 refer to days per year. No adjustment factor is used for a residence since it is continuously occupied.

The new weighted average nitrate concentration is calculated as follows:

Weighted Average Concentration Calculation

Use	Average Daily Flow	Estimated Waste Water Quality	Weighted Average Product
Volunteers, non-resident (14 hr. shift, daily)	26 gpd	85 mg/L-N	2,210 gpd-mg/L-N
Residence	420 gpd	35 mg/L-N	14,700 gpd-mg/L-N
Congregants, weekdays (no kitchen use)	58.7 gpd	85 mg/L-N	4,989.5 gpd-mg/L-N
Congregants, weekends (no kitchen use)	93.9 gpd	85 mg/L-N	7,981.5 gpd-mg/L-N
Congregants, events (4 per year, some kitchen use)	20.3 gpd	85 mg/L-N	1,725.5 gpd-mg/L-N
Retreat Guests (overnight on-site)	418.5 gpd	35 mg/L-N	14,647.5 gpd-mg/L-N
Retreat Day Visitors	3.6 gpd	85 mg/L-N	306 gpd-mg/L-N
Totals	1,041 gpd		46,560 gpd-mg/L-N
Weighted Average Concentration:	$46,560 \text{ gpd-mg/L-N} / 1041 \text{ gpd} = \mathbf{44.7 \text{ mg/L-N}}$		

The new nitrate loading calculation is attached to this letter. The assumptions of the calculation are as follows:

Assumptions for Nitrate Loading Calculation

Variable	Value	Units	Description
Q	1,041	gpd	Effluent flow rate
Nw	44.7	mg/L-N	Effluent stream concentration
A	5.0	acres	Site area
Nb	0.3	mg/L-N	Concentration of rain
d	0.25	constant	Denitrification factor
R	3.64	inches per year	Recharge rate of rainfall
W	2.8	inches per year	Uniform waste water loading (calculated)

The details of the nitrate loading calculation are included in the attached plate. The results of the calculation are presented in the following table:

Table 6. Result of Nitrate Loading Calculation

Variable	Value	Units	Description
Nc	14.7	mg/L-N	Long-term average concentration of percolating effluent


The US EPA recommended MCL for nitrate in drinking water is 10 mg/L-N. In a worst-case situation, the maximum buildup of nitrates in the aquifer from the use of septic systems on the Site is predicted to be 14.7 mg/L-N. The result of the nitrate loading estimate exceeds the maximum drinking water standard.

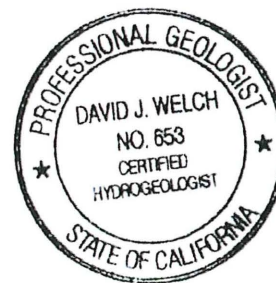
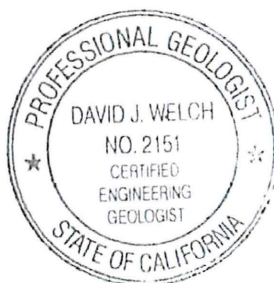
For greater protection of the ground water, it is recommended that only shallow septic systems utilizing leach lines or filter beds be installed rather than deeper sumps. We understand that recent San Joaquin County Environmental Health Department policy has been to evaluate each project on a case-by-case basis to determine whether additional measures to mitigate nitrate should be employed.

Please feel free to contact us with any questions about the revised calculation.

Sincerely,
Live Oak GeoEnvironmental, Inc.


Abigail Racco, REPA


David J. Welch, CEG, CHG, PGP



CC: Brian McNamara
58793 Road 225
North Fork, CA 93643

Kusalakari Corporation
9698 S. Priest Rd.
French Camp, CA 95231

Attachment:

Plate 1. Revised Nitrate Loading Calculation

Plate 1.
Kusalakari Property
Nitrate Mass Balance Calculation

Nitrate Loading Calculations:

<u>Variable</u>	<u>Value</u>	<u>Units</u>	<u>Description</u>
Q	1041.0	gallons per day	Effluent flow rate from report
Nw	44.7	mg/L-N	Effluent stream concentration from report
A	5.00	acres	Site area from report
Nb	0.3	mg/L-N	Concentration of rain water from report
d	0.25	constant	Denitrification factor from report
R	3.64	inches per year	Recharge rate of rainfall from report (evapotranspiration method)
W	2.8	inches per year	Uniform waste water loading for site calculation result
Nc	14.7	mg/L-N	RESULT: Long-term average concentration of percolating effluent

Find Variable (W):

$$(W) \frac{\text{in}}{\text{yr}} = (Q) \frac{\text{gal}}{\text{day}} \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} \times \frac{365 \text{ day(s)}}{1 \text{ year}} \times \frac{1 \text{ acre}}{43,560 \text{ ft}^2} \times \frac{12 \text{ in}}{1 \text{ ft}} \times \frac{1 \text{ site}}{(A) \text{ acre(s)}}$$

$$2.8 \text{ in/yr (site)} = 1,041 \text{ gal/day} \times (1 \text{ cu-ft} / 7.48 \text{ gals}) \times (365 \text{ days} / 1 \text{ year}) \times (1 \text{ acre} / 43,560 \text{ sq-ft}) \times (12 \text{ in} / 1 \text{ ft}) \times (1 \text{ site} / 5 \text{ acres})$$

Hantzsche-Fennemore Equation (Nc):

$$N_c = \frac{WN_w(1-d)+RN_b}{W+R}$$

$$14.74 \text{ mg/L-N} = ((2.8 \text{ in/yr} \times 44.7 \text{ mg/L-N} \times (1 - 0.25)) + (3.64 \text{ in/yr} \times 0.3 \text{ mg/L-N})) / (2.8 \text{ in/yr} + 3.64 \text{ in/yr})$$

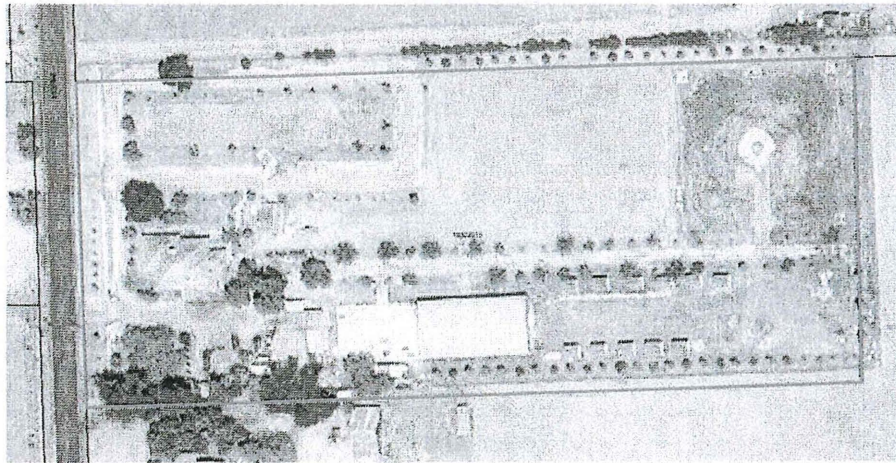
Assumptions:

1. Total nitrogen concentration of influent waste stream is 44.7 mg/L-N. If different influent concentrations exist, use weighted average
2. Fraction of nitrate-N loss due to denitrification in the soil is 25%.
3. Estimated deep percolation of rainfall is 3.64 in/yr.
4. Background nitrate-N concentration of rainfall is 0.3 mg/L-N.



LIVE OAK GEO ENVIRONMENTAL, INC.
407 W. Oak St., Lodi, CA 95240 ❖ (209) 369-0375 ❖ logelodi.com

**SOIL SUITABILITY/NITRATE LOADING STUDY
KUSALAKARI PROPERTY
9698 S. PRIEST RD.
FRENCH CAMP, CALIFORNIA**



Prepared for:

Brian McNamara
58793 Road 225
North Fork, CA 93643
&
Kusalakari Corporation
9698 S. Priest Rd.
French Camp, CA 95231

September 4, 2019
Project No. 1938

RECEIVED

SEP 23 2019

ENVIRONMENTAL HEALTH
PERMIT/SERVICES



LIVE OAK GEO ENVIRONMENTAL, INC.

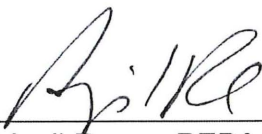
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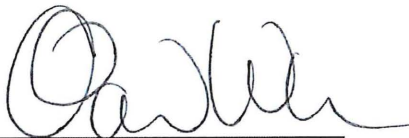
**SOIL SUITABILITY/NITRATE LOADING STUDY
KUSALAKARI PROPERTY
9698 S. PRIEST RD.
FRENCH CAMP, CALIFORNIA**

Prepared for:

Brian McNamara
58793 Road 225
North Fork, CA 93643
&
Kusalakari Corporation
9698 S. Priest Rd.
French Camp, CA 95231

Prepared by:


Abigail Racco, REPA


David Welch, CEG-2151, CHG-653, PGP-1049

September 4, 2019
Project No. 1938

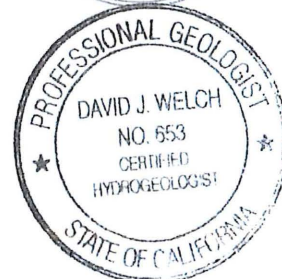
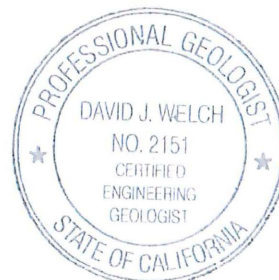


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SOIL SUITABILITY STUDY

Introduction

Live Oak GeoEnvironmental, Inc. (Live Oak) was contracted by Brian McNamara to conduct a Soil Suitability Study and Nitrate Loading Study for the property located at 9698 South Priest Road, French Camp, California (Plate 1).

The Soil Suitability Study and Nitrate Loading Study are combined under this report cover and presented as two sections of this report. The formatting of the report has been designed to follow the recommendations of the San Joaquin County Environmental Health Department as described in its Soil Suitability Study Requirements Checklist and Nitrate Loading Study Requirements Checklist.

The Soil Suitability Study and Nitrate Loading Study were conducted to determine whether the soils are suitable for use with a septic system, as well as to estimate if the use of septic systems will impact ground water quality. The study was performed according to the requirements of Section 9-1105.2(d) of the San Joaquin County Development code.

Proposed Development

According to the information on file at the San Joaquin County Community Development Department, the Kusalakari Corporation intends to develop "a Neighborhood Religious Assembly (maximum 200 persons) in the Buddhist Theravada tradition. The facility will consist of Monastic facilities and functions offering meditation retreats and religious instruction for laypersons."

Specifically, the project consists of "a Monastery/Meditation Retreat Center ... to be built in four phases over seven years. Phase One, to be completed in 18 months, includes the construction of a 600 square foot maintenance shed, the conversion of an existing 1,804 square foot barn into a reception area and office, the conversion of an existing 5,000 square foot barn into an ordination hall, and the construction of a 5,900 square foot assembly hall. Phase Two, to be completed in three years, includes the construction of a 3,600 square foot addition to the ordination hall for kitchen and dining facilities, a 1,650 square foot residential unit, and a 1,500 square foot residential unit. Phase Three, to be completed in five years, includes the construction of a 1,650 square foot residential unit and a 1,500 square foot residential unit. Phase Four, to be completed in seven years, includes the construction of a 1,650 square foot residential unit." A site plan is presented as Plate 2.

Site Description

The Site is defined as Assessor's Parcel Number (APN) 193-220-15, 5.0 acres in size. It is located at 9698 South Priest Road, French Camp.

The Site is currently developed with a house, barn, storage building, and 11 small sheds. A domestic well and septic system serve the Site; a second well is currently inoperable (Plate 3).

The elevation of the Site, according to a United States Geological Survey topographic map, is approximately 20 feet above mean sea level. The Site is relatively flat (Plate 4).

According to the San Joaquin County Community Development Department (www.co.san-joaquin.ca.us), the Site is zoned AU-20, Agriculture-Urban Reserve. This zoning designation "is intended to retain in agriculture those areas planned for future urban development in order to facilitate compact, orderly growth and to assure the proper timing and economical provision of services and utilities."

Existing and Proposed Septic Tank Usage

Existing Septic System

A septic system serves the existing house on the Site (Plates 2 and 3); this system will be destroyed prior to construction of the new parking area, according to the Site Plan (Plate 2).

Proposed Septic System

Kusalakari Corporation plans to build four new septic systems to serve the proposed new retreat residences and expanded facility.

On-Site Septic Permit History

The San Joaquin County Environmental Health Department septic permit files were searched for the Site address. Three septic permits were identified:

- December 1975 permit for new septic system at mobile home. The system utilized a 1,200-gallon tank and two 80-foot leach lines.
- May 1988 permit for destruction of septic system.
- January 1990 permit for new septic system at house. The system utilized a 1,600-gallon tank and three 80-foot leach lines.

These permits have been included in Appendix 4 of this report.

Existing Septic Tank Usage in the Vicinity

To estimate the septic system usage in the area, our office counted septic systems that exist within approximately one square mile surrounding the property. Air photo imagery from Google Earth was used. Each building cluster on the photo was assumed to have one septic system. Using this method, it is estimated that at least 130 septic systems per square mile are located in the immediate vicinity of the Site.

The Site is located within an area of rural residences and orchards; a few commercial/industrial properties are located one-third of a mile to the west.

Septic Permit History in the Vicinity

Based on a review of septic permits on file at the San Joaquin County Environmental Health Department for nearby properties, most septic systems in the area utilize leach lines; one utilized leach lines and sumps. The septic permits can be found in Appendix 4 of this report.

Expected On-Site Maximum Septic Tank Usage

Maximum expected septic tank usage on the Site would be from the current residents and future guests of the Site. Septic system design should be based on the San Joaquin County *On-Site Wastewater Treatment Systems Standards* (2017) or other engineering recommendations.

Ground Water Information

Depth and Gradient

Live Oak reviewed ground water elevation information available from the San Joaquin County Flood Control and Water Conservation District to determine the ground water levels near the Site. Data from spring and fall of 2016 were the most recent available from this source. According to an analysis of these maps (Plates 5 and 6), ground water elevation in the area is approximately five to 10 feet below mean sea level. The ground-water flow is to the north or north-northeast at a rate of approximately four feet per mile.

Given that the ground elevation of the Site is approximately 20 feet above mean sea level, the depth to water below the Site is estimated to be approximately 25 to 30 feet. The Well Completion Report for the new domestic well on the Site (Appendix 4) indicates that the static water level beneath the Site was 32 feet in October of 2015.

San Joaquin County experienced its highest recent ground-water levels in 1983 and 1999 (Plates 7 and 8). Based on review of maps of ground-water levels for spring of

those years, depth to water was approximately 14 feet in 1983 and 23 feet in 1999 (San Joaquin County Flood Control and Water Conservation District, 1983 and 1999).

Potential Ground Water Contamination Issues

The Soil Suitability Study is not intended to be an investigation into ground-water contamination sources, and no such investigation was conducted. Many sources can contribute to ground water contamination, including leaking underground storage tanks, agricultural activities, dairies, septic systems, and storm water infiltration. Agricultural activities and the use of septic systems in the area are known ground water contamination sources with the potential to impact the Site.

Two common ground-water contaminants in San Joaquin County are nitrate and dibromochloropropane (DBCP). Live Oak reviewed the San Joaquin County Environmental Health Department's maps of *Nitrate – Land Use Data* and *DBCP – Land Use Data* dated February 20, 2019. According to the nitrate map (Plate 9), two wells within a half-mile radius of the subject Site have been tested. Nitrate was detected in one well at a concentration between 0.1 and 5.0 mg/L-N, and in the other well at a concentration between 5.1 and 10 mg/L-N. One well within a half-mile radius of the Site was tested for DBCP; no DBCP was detected (Plate 10). The Maximum Contaminant Level (MCL) set by the US EPA for nitrate is 10 mg/L-N; the MCL for DBCP is 0.2 µg/L.

On-Site Wells

Two domestic wells are currently located on the Site. One well serves the house and monastery; the other is currently inoperable.

Two well permits were identified for the Site from among the files of the San Joaquin County Environmental Health Department:

- April 2012 permit for pump replacement at domestic well near house.
- June 2015 permit for new domestic well. The permit indicates that the well is 300 feet deep, with a grout seal at 200 feet. The Well Completion Report indicates that the soil strata encountered were primarily clay and sand.

These permits have been included in Appendix 4 of this report.

Water Sample

Because the new domestic well is currently inoperable, Live Oak collected a water sample from the older domestic well on the Site on August 2, 2019. The sample was analyzed for nitrate and dibromochloropropane (DBCP) per San Joaquin County Environmental Health Department policy.

As required by the laboratory, the sample was collected in a plastic container and two glass vials for nitrate and DBCP analysis, respectively. Trip blanks were also utilized. The sample was placed on ice and transported under chain of custody to FGL Environmental, Stockton.

Nitrate was detected in the sample at a concentration of 22.6 mg/L-N. DBCP was not detected. The laboratory analytical results are attached as Appendix 5 of this report.

Nitrate is commonly detected in shallow ground water aquifers of the Central Valley. Application of fertilizers, livestock waste, and untreated septic tank waste can all contribute to nitrate in ground water. Nitrate is mobile and tends to accumulate in shallow ground water zones. Based on work in the Sacramento Valley from the early 1900s, it is estimated that under "natural" conditions, ground water contains nitrate at concentrations no more than about 3 mg/L-N. Nitrate may be increasing in areas with concentrations of 5.5 mg/L-N or more (Hull, 1984). The US EPA has set the Maximum Contaminant Level (MCL) for nitrate at 10 mg/L-N.

The agricultural properties to the east of the Site are mainly orchards; elevated nitrate levels in the ground water may derive in part from fertilizer application on these properties.

Although nitrate is a naturally-occurring compound necessary for plant growth, it can cause health problems when present at high levels in drinking water. The most common health effect of nitrates in water is methemoglobinemia, or blue baby syndrome, which results in reduced oxygen supply to vital tissues. Pregnant women and certain others can also develop methemoglobinemia. Symptoms include a bluish color of the skin, as well as headache, dizziness, weakness, and difficulty breathing. Ingestion of high levels of nitrates over time can also lead to gastric problems.

DBCP is a nematocide and soil fumigant for vegetables and grapes. It is known to cause male reproductive effects and is classified as a probable human carcinogen. Most domestic use of DBCP was discontinued in 1977 through 1979. The US EPA set the MCL at 0.2 parts per billion (ppb, equivalent to $\mu\text{g/L}$) because it believes that given present technology and resources, this is the lowest level to which water systems can reasonably be required to remove this contaminant should it occur in drinking water. The Maximum Contaminant Level Goal (MCLG) for DBCP is zero.

Soil Profile and Geologic Information

The Site is depicted on the *Geologic maps of the Sacramento-San Joaquin Delta, California* (Atwater, B.F., 1982). The Site is depicted within a map unit of the Modesto formation, described as "loose sand and silt, chiefly fluvial" (Plate 11).

The surface and near surface soils located at the Site are reported by the USDA Web Soil Survey to be composed of Honcut sandy loam, Tinnin loamy coarse sand, and Veritas fine sandy loam (Plate 12) (USDA, 2019). The table below presents some selected properties of these soils:

Table 1. Selected Properties of On-Site Soils (USDA, 1992)

Soil Name and Map Symbol	Depth (in)	Unified Soil Classification	Salinity mmhos/cm	Soil Reaction pH	Permeability (in/hr)	Septic tank absorption fields
Honcut sandy loam, 0-2% slopes, 175	0-21:	Sandy loam; SM	<2	6.1-7.3	2.0-6.0	Slight
	21-60:	Coarse sandy loam sandy loam; SM	<2	6.1-7.8	2.0-6.0	
Tinnin loamy coarse sand, 0-2% slopes, 255	0-28:	Loamy coarse sand; SM	<2	6.1-7.8	6.0-20	Severe: poor filter
	28-53:	Loamy coarse sand, loamy sand; SM	<2	6.1-7.8	6.0-20	
	53-75:	Loamy coarse sand, loamy sand, sand; SM	<2	6.6-8.4	6.0-20	
Veritas fine sandy loam, 0-2% slopes, 266	0-15:	Fine sandy loam; SM, SC-SM	<4	7.4-8.4	2.0-6.0	Moderate: flooding, cemented pan
	15-54:	Sandy loam, fine sandy loam; SM, SC-SM	<4	7.4-8.4	2.0-6.0	
	54-70:	Cemented	--	--	--	

Note: The table descriptions do not necessarily reflect site-specific soil properties. See description of the map unit for composition and behavior characteristics of the map unit.

Soil Borings

On August 2, 2019, Live Oak excavated two shallow soil borings near the proposed septic disposal areas of the Site for the purpose of conducting percolation tests. The borings were four inches in diameter, 3.26 and 3.49 feet deep, and were excavated by hand auger (Table 2). The locations of the borings are indicated on Plate 13.

The soil in the borings was similar to that described by the Soil Survey. Sandy silt was encountered to the full depth of each hole. The soil log is presented on Plate 14.

Discussion of Soil Lithology

Based on the soil observed in the boring, there appears to be good potential for percolation in the shallow soil zone. Sandy soils generally have a much greater potential for percolation than fine-grained or cemented soils. However, a percolation test is the only accepted method for determining the suitability of the soils for a septic disposal area. Percolation test results are discussed in the following section.

Percolation Tests

Two shallow percolation tests were conducted near the proposed septic disposal areas of the Site. The soil borings discussed above were used for the percolation test holes. Percolation test procedures conformed to San Joaquin County Environmental Health Department policy.

Preparation and Presaturation of Percolation Test Holes

After the borings were advanced by hand auger and the soil logged, the test holes were completed for the percolation testing. Approximately two inches of pea gravel were placed in the bottom of each open soil boring, followed by a 2.0-inch diameter PVC pipe with perforations on the bottom. Pea gravel was then used to backfill a few inches of the annular space.

Live Oak presaturated the percolation test holes approximately 24 hours prior to the percolation testing. Each hole was filled with water to a height of 12 inches above the bottom of the boring for the presaturation. On the day of testing, the holes were found to be intact and dry.

Percolation Test Procedure

Live Oak conducted the percolation tests for the borings on August 7, 2019. Based on initial percolation rates observed, one-hour tests were selected. Water level measurements were taken every 10 minutes during this one-hour period. The last 10 minutes of the test were observed by Naseem Ahmed, Registered Environmental Health Specialist at the San Joaquin County Environmental Health Department.

An electronic well sounder with a depth accuracy of 1/100th foot was utilized for the water level measurements. The water level was measured against a fixed reference point on the well casing. Measurements were recorded on the data sheet in decimal feet. When necessary after measuring the water level, the hole was refilled with water to a level of six inches or more above the bottom of the hole.

Percolation Test Results

The completed percolation test form is included in Appendix 3 of this report. The form was signed by Mr. Ahmed and indicates a percolation rate for the hole based on the final water drop observed.

Per San Joaquin County Environmental Health Department's definition, a shallow percolation test hole has a depth between 36 and 42 inches; a satisfactory percolation rate for a shallow test is greater than or equal to 1 minute per inch (min/in) but less than or equal to 60 min/in drop. For the Site to utilize a standard septic system, one percolation test must demonstrate a satisfactory percolation rate within the proposed

septic system disposal field. Details and results of the percolation test are summarized in the following table.

Table 2. Percolation Test Summary

Test No., Date Tested	Percolation Test Depth (ft.)	Percolation Rate (minutes/inch)	Test Duration	Comments (see notes)
P1, 8/7/2019 Shallow Test	3.26	2.38	1 hr.	Satisfactory perc. rate ¹
P1, 8/7/2019 Shallow Test	3.49	2.19	1 hr.	Satisfactory perc. rate ¹

Note: A satisfactory percolation rate for a "shallow" test is greater than 1 but less than or equal to 60 minutes per inch.

1 Per San Joaquin County Environmental Health Department, a rate between 1.0 and 5.0 min/in requires a 20-foot separation between the bottom of dispersal system and ground water, or mitigation by system design or enhancement.

Discussion of Percolation Test Results

The soils within the proposed sewage disposal areas of the Site have demonstrated satisfactory percolation rates for the use of septic systems in accordance with the requirements of the San Joaquin County Environmental Health Department.

Because of the percolation rate between 1.0 and 5.0 min/in encountered in the test hole, the San Joaquin County Environmental Health Department will require a 20-foot separation from the bottom of the dispersal system to ground water, or mitigation by system design or enhancement (see Table 2). Ground water is anticipated to be encountered approximately 32 feet below ground surface at the Site, according to the Well Completion Report; as a result, no modification to standard shallow septic systems should be required.

Discussion of Septic System Sizing

Septic system construction utilizing leach lines or filter beds should follow the San Joaquin County *On-Site Wastewater Treatment Systems Standards* (2017) where applicable.

NITRATE LOADING STUDY

Because of concerns of nitrate leaching into ground water from septic systems, a nitrate loading analysis was required by the San Joaquin County Environmental Health Department for approval of the proposed project. The study estimates the potential concentration of percolating effluent produced by the project over the long term. Where percolating effluent leaches into the ground, ground water quality may be impacted to some degree should the effluent reach ground water.

The method utilized for the nitrate loading analysis is based on a simple and convenient mass balance formula, discussed in a published paper by Hantzsche and Finnemore (1992).

Hantzsche and Finnemore have found from investigations conducted in the Chico, California area, the water quality in the upper saturated ground-water zone closely approximates the quality of percolating effluent from septic systems. They have developed a simple method that could be used to estimate the quality of the percolating effluent from septic systems. The quality of the percolating effluent may represent the potential worst-case condition the upper aquifer would ever experience from the use of on-site septic systems. Mixing and dilution in the aquifer as well as adsorption and adhesion in the soil would tend to substantially reduce the concentration of percolating effluent.

The Hantzsche and Finnemore equation is a conservative approximation of ground-water nitrate-nitrogen concentration resulting from the combined effect of on-site sewage disposal systems and percolating recharge waters. The equation and method is for estimation of long-term effect ground-water quality, and is not intended for prediction of seasonal changes (Hantzsche and Finnemore, 1992).

For the purpose of the Hantzsche and Finnemore equation, only septic effluent is included in the nitrate loading calculation; no other potential sources of nitrate are considered.

The method takes into account the development area, soil denitrification factor, rate of recharge from percolating waters, waste effluent quantity, and waste effluent nitrate concentration from on-site septic systems, and predicts the nitrate concentration of percolating effluent.

Mass Transport Soil Properties

The percolation test has revealed that the surface soils are permeable and will allow infiltration of water. The longer the effluent remains near the surface, the more biologic treatment may occur. If permeable soils exist to the depth of the ground-water aquifer, it

is possible that any remaining surface contaminants may be transported to the first saturated zone of the aquifer.

Sources of Nitrate

Dairies, orchards that require fertilization in sandy soils, and septic systems have been found to be the most significant sources of nitrate in ground water.

Percolating Recharge Waters

One of the most determinant factors in the Hantzsche and Finnemore equation is the rate of recharge from percolating waters, which mix with the downward-percolating effluent generated by on-site septic systems. In the original Hantzsche and Finnemore paper, only "average recharge rate of rainfall" was considered.

Based on San Joaquin County Environmental Health Department policy (personal communication, March 18, 2019), the recharge input for the Hantzsche and Finnemore equation should be derived from average monthly precipitation of rainfall and evapotranspiration rates for the area; the data should be obtained from the California Irrigation Management Information System (CIMIS), preferably from stations located within San Joaquin County. Recharge is calculated by first determining whether the average monthly precipitation exceeds average monthly potential evapotranspiration. If so, then the difference is the percolating recharge water into the aquifer. Runoff and stream infiltration drainage are not factored into the calculation. This approach likely under-estimates recharge to the aquifer and, consequently, over-estimates nitrate loading.

For the project Site, the local precipitation and evapotranspiration rates are presented in Plate 15. The Site is located closest to the CIMIS Manteca station (70). Data for the Manteca station were available for 2014 through 2018; based on the calculation shown, the estimated rate of recharge from percolating waters for the Manteca station is determined to be 3.64 inches. A statistical error of 48 percent is associated with this value.

Quality of Rainwater

Hantzsche and Finnemore listed 1 mg/L-N as the nitrate concentration of rainwater for their original calculation; in the past, Live Oak has also utilized this value for the nitrate loading calculation.

In May 2019, Live Oak collected rainwater during two storm events in Lodi; the samples were analyzed for nitrate by FGL Environmental of Stockton. Each sample was collected in a clean, dry, stainless steel bowl, then decanted into a plastic container and placed on ice for transport.

Nitrate was detected in the May 17 sample at a concentration of 0.4 mg/L-N and in the May 19 sample at a concentration of 0.2 mg/L-N. Live Oak then averaged the concentrations of the two samples, for a value of 0.3 mg/L-N to represent the nitrate concentration of rain.

Because the San Joaquin County Environmental Health Department has requested that local and recent data be utilized wherever possible, the concentration of the Lodi rainwater been selected for use in the nitrate loading calculation.

Quantity and Quality of Domestic Wastewater

According to information on file at the San Joaquin County Community Development Department, the Kusalakari Corporation plans to convert an existing 1,804 square foot barn into a reception area and office, convert an existing 5,000 square foot barn into an ordination hall, and construct a 5,900 square foot assembly hall. In three years, a 3,600 square foot addition to the ordination hall for kitchen and dining facilities will be constructed, as well as a 1,650 square foot residential unit and a 1,500 square foot residential unit. In five years, a 1,650 square foot residential unit and a 1,500 square foot residential unit will be constructed. In seven years, a 1,650 square foot residential unit will be constructed.

The Use Permit application indicates that one to two volunteers will be present on the Site daily. Meditation retreats will take place periodically; additional information provided as part of the application states that, at full build-out, the retreats will be attended by up to 47 people. Each retreat will last between three and ten days. According to the Use Permit application, events will also be held four times per year, with a maximum attendance of 200 guests.

Brian McNamara and Jim Kahn were interviewed by phone on August 13, 2019, regarding the proposed facilities. They clarified that meditation retreats will be held approximately six to ten times per year. Half of these retreats will be expected to last ten days, while the other half will last only three days. For the purpose of this study, a maximum of 65 days of retreats are assumed. During a retreat, approximately two daily visitors (staying for only a few hours) would be anticipated. No other non-resident congregants would be present at the Site while a retreat is taking place. Mr. Kahn added that the facility's kitchen will only be used during retreats and events, and will not include a garbage disposal. The retreat residences will include toilets, showers, and sinks, but will not include kitchen or laundry facilities.

The Site will be used for religious purposes on non-retreat days; the information provided by the San Joaquin County Community Development Department states that "attendees would use the facilities on their own individual schedules. The applicant anticipates Saturday and Sunday being the busiest days with approximately 40

attendees per day.” Mr. McNamara indicated that 10 or less congregants per day are anticipated on weekdays.

The estimated sewage flow rates for various uses are available from a number of references. The uses presented below were guided by the San Joaquin County *On-Site Wastewater Treatment Systems Standards* (2017), Crites and Tchobanoglous (1998), and US EPA (1980).

Crites and Tchobanoglous (1998) list a typical flow rate of 50 to 70 gallons per person per day for an individual residence. The San Joaquin County Environmental Health Department has indicated that maximum flow and double occupancy within each bedroom should be considered for the nitrate loading assessment (personal communication, January 6, 2017); as a result, a value of 140 gallons per bedroom per day has been selected for the three-bedroom residence on the Site.

Crites and Tchobanoglous list a value of 50 gallons per day for a guest at a hotel. Because the guests at the retreat on the Site will be staying for a maximum of 10 days, during which time they will not wash laundry or do other water-intensive activities, the hotel use value is appropriate and is selected for the guests.

Crites and Tchobanoglous indicate that 13 gallons per day for each employee is typical for an office worker; this rate was used for the volunteers of the religious facility.

The *On-Site Wastewater Treatment Systems Standards* indicate 10 gallons per seat is the typical flow for a church with a kitchen; however, this value is intended for use in sizing septic systems and may overestimate use. Crites and Tchobanoglous indicate 3 gallons per seat is the typical use for an assembly hall, 9 gallons per customer is the typical use for a restaurant, and 7 gallons per meal is the typical use for a dining hall. For the purpose of this study, 7 gallons per person has been selected to represent the guests at an event, during which time a meal may be served.

A value of 5 gallons per person is typically assigned to attendees at a religious facility without a kitchen; this value has been selected to represent daily (non-retreat, non-event) congregants because the kitchen will not be used on a daily basis.

Crites and Tchobanoglous list 5 gallons per person for an attendee at a visitor center; this value has been used for day visitors to the Site.

A typical residential concentration of 35 mg/L of nitrate as N was selected for the existing residence and proposed retreat housing (Crites and Tchobanoglous, 1998).

Total nitrogen levels from commercial wastewater uses are known to be higher in concentration compared to residential levels due to less dilution from non-toilet sources. The typical residential wastewater range is reported to be 20 to 85 mg/L-N (Crites and Tchobanoglous, 1998). Since reference material for commercial restroom uses is

limited, we assume total nitrogen is similar to higher residential values; therefore, 85 mg/L-N is selected for visiting guests and volunteers of the religious facility.

The estimated flow values discussed here should not be used for the design and sizing of the septic system. The design and sizing of the septic system should utilize the San Joaquin County Environmental Health Department *On-Site Wastewater Treatment Systems Standards* which incorporate peak and surge flow factors. The estimates used in the *On-Site Wastewater Treatment Systems Standards* may be greater than those discussed here.

The maximum average daily flow for the Site was estimated to be 958 gallons per day (gpd). Through the use of a weighted average, the average concentration of all the different effluent flows and concentrations was determined to be 41.2 mg/L-N at 958 gallons per day. Please see the following tables:

Table 3. Average Daily Flow Calculation

Use	Units	Rate	Subtotal	Adjustment	Average Daily Flow
Volunteers (daily)	2	13 gal/person/day	26 gpd	None	26 gpd
Residence	3 BR	140 gal/BR/day	420 gpd	None	420 gpd
Congregants, weekdays (no kitchen use)	10	5 gal/person	50 gpd	5/7, 300/365	29.4 gpd
Congregants, weekends (no kitchen use)	40	5 gal/person	200 gpd	2/7, 300/365	47.0 gpd
Congregants, events (4 per year, some kitchen use)	200	7 gal/person	1,400 gpd	4/365	15.3 gpd
Retreat guests (overnight on-site)	47	50 gal/person	2,350 gpd	65/365	418.5 gpd
Retreat day visitors	2	5 gal/person	10 gpd	65/365	1.8 gpd
Total					958 gpd

Adjustment factors convert calculated flow into average daily flow over a year. This needs to be taken into account since attendance varies by day of the week, and retreats take place only part of the year. The factors 2/7 and 5/7 refer to days per week. The factors 65/365 and 300/365 refer to days per year. No adjustment factor is used for a residence since it is continuously occupied.

Table 4. Weighted Average Concentration Calculation

Use	Average Daily Flow	Estimated Waste Water Quality	Weighted Average Product
Volunteers, non-resident (14 hr. shift, daily)	26 gpd	85 mg/L-N	2,210 gpd-mg/L-N
Residence	420 gpd	35 mg/L-N	14,700 gpd-mg/L-N
Congregants, weekdays (no kitchen use)	29.4 gpd	85 mg/L-N	2,499 gpd-mg/L-N
Congregants, weekends (no kitchen use)	47.0 gpd	85 mg/L-N	3,995 gpd-mg/L-N
Congregants, events (4 per year, some kitchen use)	15.3 gpd	85 mg/L-N	1300.5 gpd-mg/L-N
Retreat Guests (overnight on-site)	418.5 gpd	35 mg/L-N	14,647.5 gpd-mg/L-N
Retreat Day Visitors	1.8 gpd	85 mg/L-N	153 gpd-mg/L-N
Totals	958 gpd		39,505 gpd-mg/L-N
Weighted Average Concentration:	$39,505 \text{ gpd-mg/L-N} / 958 \text{ gpd} = 41.2 \text{ mg/L-N}$		

Denitrification Reductions

Denitrification is a process that occurs in the septic system drain field whereby certain bacteria oxidize the nitrate (NO₃) in the wastewater and release nitrogen gas (N₂) to the atmosphere. Due to the biologic processes in the shallow soils, nitrogen in the drain field may undergo a reduction between 10 percent to 35 percent. Soils with higher clay content, moist soil conditions, high pH, and organic material denitrify by about 35 percent, and soils with high sand content tend to denitrify at a lower rate of about 10 percent.

A standard denitrification factor of 25 percent (Hantzsche and Finnemore) was selected for the Site because of the silt content of the soil present at the percolation test locations.

Nitrate Loading Estimate

A nitrate loading scenario was employed to determine the impact from the proposed project to ground water. The scenario utilizes the variables discussed previously, which represent the estimated conditions and uses associated with this project. The following table presents a summary of the assumptions for the nitrate loading calculation for the Site, as presented in Plate 16.

Table 5. Assumptions for Nitrate Loading Calculation

Variable	Value	Units	Description
Q	958	gpd	Effluent flow rate
Nw	41.2	mg/L-N	Effluent stream concentration
A	5.0	acres	Site area
Nb	0.3	mg/L-N	Concentration of rain
d	0.25	constant	Denitrification factor
R	3.64	inches per year	Recharge rate of rainfall
W	2.6	inches per year	Uniform waste water loading (calculated)

The details of the nitrate loading calculation are included in Plate 16. The results of the calculation are presented in the following table.

Table 6. Result of Nitrate Loading Calculation

Variable	Value	Units	Description
Nc	13.0	mg/L-N	Long-term average concentration of percolating effluent

The US EPA recommended MCL for nitrate in drinking water is 10 mg/L-N. In a worst-case situation, the maximum buildup of nitrates in the aquifer from the use of septic systems on the Site is predicted to be 13.0 mg/L-N. The result of the nitrate loading estimate exceeds the maximum drinking water standard.

Discussion of Nitrate Loading Results

Total Nitrate Impact

Based on the method and assumptions described, the result of the nitrate loading estimate indicates that the existing and proposed development on the Site has the potential to cause a buildup of nitrates in the aquifer above 10 mg/L-N.

For greater protection of the ground water, it is recommended that only shallow septic systems utilizing leach lines or filter beds be installed rather than deeper sumps. Recent San Joaquin County Environmental Health Department policy has been to evaluate each project on a case-by-case basis to determine whether additional measures to mitigate nitrate should be employed.

CONCLUSIONS AND RECOMMENDATIONS

In summary, this investigation has found the Site suitable for the use of on-site septic systems; the soil conditions examined near the proposed septic system drain fields were found to be suitable. Satisfactory soil percolation rates of 2.38 and 2.19 min/in were observed in the shallow soil zone at the test locations.

The depth of ground water based on recent aquifer levels is estimated to be 25 to 30 feet below ground surface; the well completion report for the new domestic well indicates a depth to water of 32 feet. The ground-water flow beneath the Site is to the north or north-northeast at a rate of approximately four feet per mile.

Because the percolation rate encountered falls between 1.0 and 5.0 min/in, the San Joaquin County Environmental Health Department will require a 20-foot separation from the bottom of the dispersal system to ground water, or mitigation by system design or enhancement. Based on the predicted current depth to water, no modification to standard, shallow systems should be required.

A water sample was collected from the old domestic well on the Site as part of this investigation; the new well is not currently operational. Nitrate was detected in the sample at a concentration of 22.6 mg/L-N, above the MCL of 10 mg/L-N. DBCP was not detected in the sample; the MCL for DBCP is 0.2 µg/L. It is recommended for health reasons that bottled water be consumed until the concentration of nitrate can be reduced to below the MCL. Nitrate can be removed by filtration, and several whole-house filters are available. When the new well is made operational, it should be tested for nitrate prior to domestic use. Nitrate levels in the area may derive in part from fertilization of nearby orchards.

Based on a review of the San Joaquin County Environmental Health Department's map of nitrate detections in nearby wells, two wells within a half-mile radius of the subject Site have been tested. Nitrate was detected in one well at a concentration between 0.1 and 5.0 mg/L-N, and in the other at a concentration between 5.1 and 10 mg/L-N. One well within a half-mile radius of the Site was tested for DBCP; no DBCP was detected.

Based on the current project, the use of on-site septic tanks and drain field systems on the Site has the potential to cause a buildup of nitrate in the aquifer up to 13.0 mg/L-N. This level exceeds the US EPA drinking water recommendation of 10 mg/L-N.

For greater protection of the ground water, it is recommended that only shallow septic systems utilizing leach lines or filter beds be installed rather than deeper sumps. Recent San Joaquin County Environmental Health Department policy has been to evaluate each project on a case-by-case basis to determine whether additional measures to mitigate nitrate should be employed.

LIMITATIONS

This report has been prepared for the exclusive purpose of processing of a land use application or building permit at San Joaquin County. It is authorized for use only by the client, the property owner, and the County agencies involved. The standard of care employed is typical for this type of work in this area.

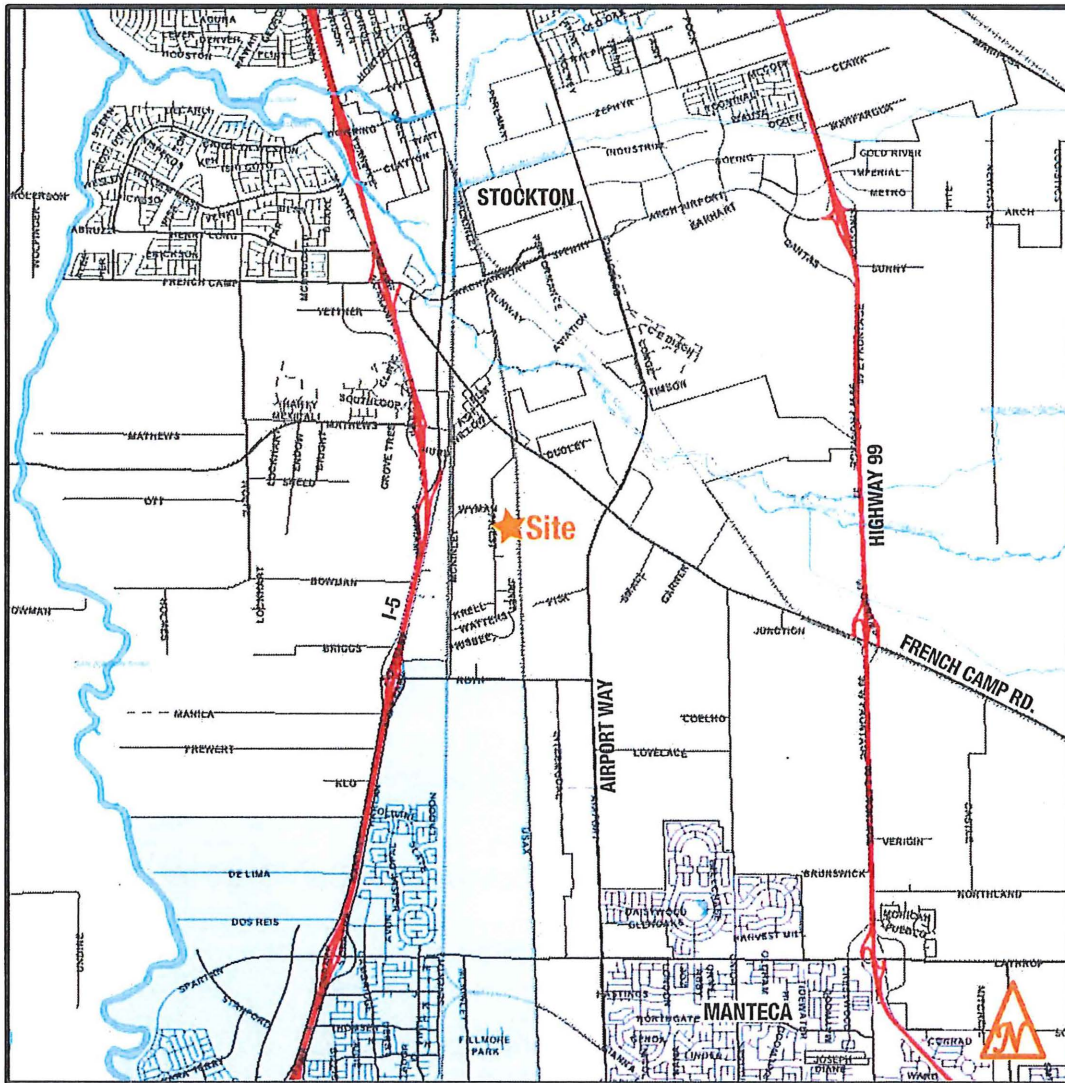
Test findings and statements of opinion are not a guarantee or warranty. Site conditions, agency policies, and regulations are subject to change and may invalidate portions of this report. Information in this report is derived from many sources; Live Oak cannot warrant the accuracy or completeness of information provided by those sources. The nitrate loading calculation discussed in this report is based on a combination of scientific studies prepared by others and policies dictated by the San Joaquin County Environmental Health Department. As such, Live Oak cannot guarantee or warranty the findings of this investigation or the prevention of environmental impacts as a result of the proposed development.

This report is not an environmental assessment and makes no claim to identify "recognized environmental conditions" or health and safety concerns for the Site. The San Joaquin County Environmental Health Department should be contacted regarding actions to be taken to ensure an acceptable drinking water supply.

The estimated flow values discussed in the Nitrate Loading Study should not be used for the design and sizing of the septic system. The design and sizing of the septic system should utilize the San Joaquin County Environmental Health Department *On-Site Wastewater Treatment Systems Standards* which incorporates peak and surge flow factors.

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- San Joaquin County Flood Control and Water Conservation District, 2016, Groundwater Report Spring 2016.
- ___, 2017, Groundwater Report Fall 2016.
- ___, 1983, Lines of Equal Depth to Water in Wells, Spring 1983.
- ___, 1999, Lines of Equal Depth to Groundwater, Spring 1999.
- U.S. Department of Agriculture, Natural Resources Conservation Service, 2019, Web Soil Survey.
- U.S. Department of Agriculture, Soil Conservation Service, 1992, Soil Survey of San Joaquin County, California.
- U.S. Environmental Protection Agency (EPA), 1980, Design Manual: Onsite Wastewater Treatment and Disposal Systems.



Modified after San Joaquin County District Viewer, sjmap.org.

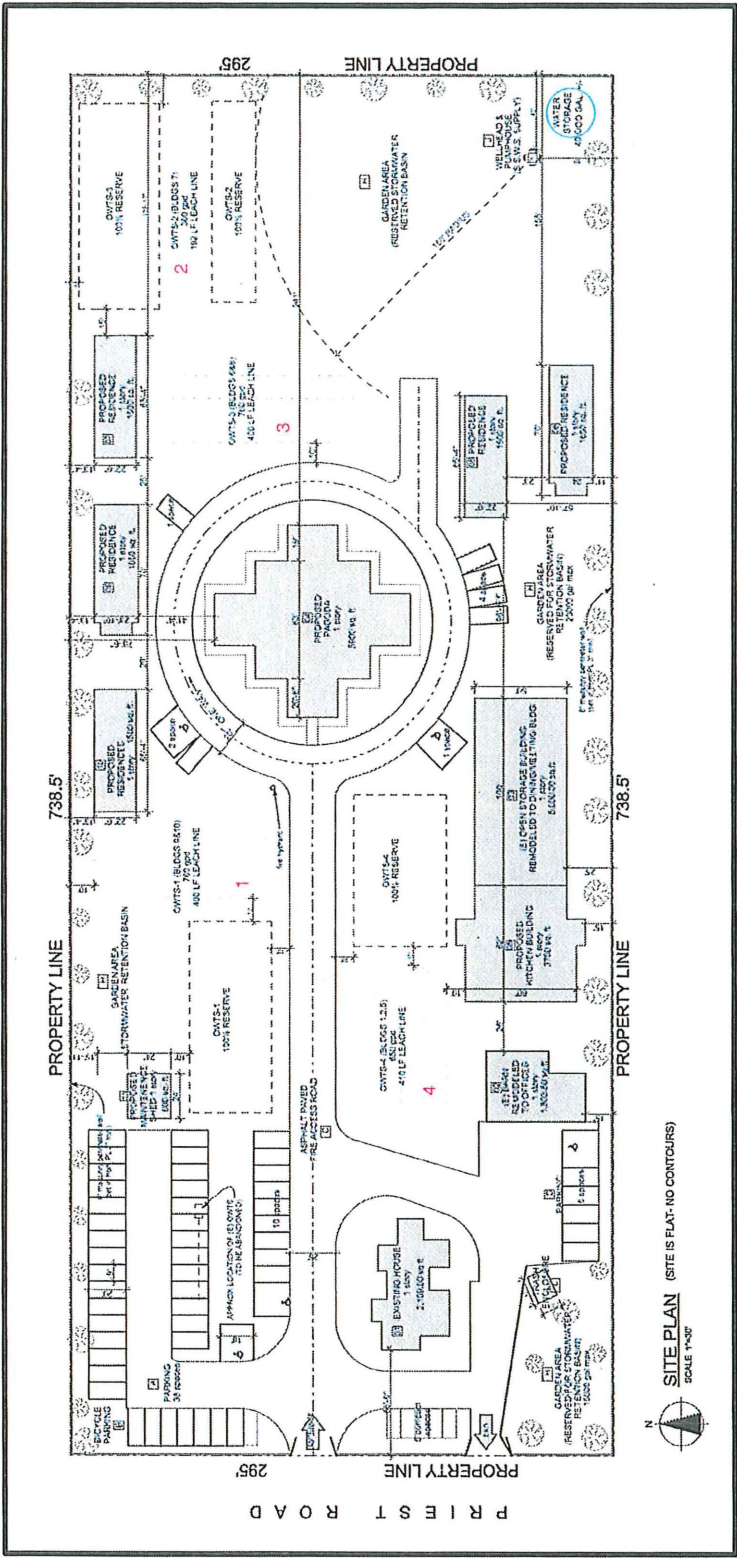
 <p>LIVE OAK GEO ENVIRONMENTAL INC.</p>	<p>Site Location</p> <p>Kusalakari Property 9698 S. Priest Rd. French Camp, CA</p>	Plate No.: 1
		Project No: 1938
		Date: September 4, 2019
		Not to Scale



Proposed Development

Kusalakari Property
 9698 S. Priest Rd.
 French Camp, CA

Plate No.: 2
Project No: 1938
Date: September 4, 2019
Not to Scale




Site Plan by Steven Cho, Architect, 2019.

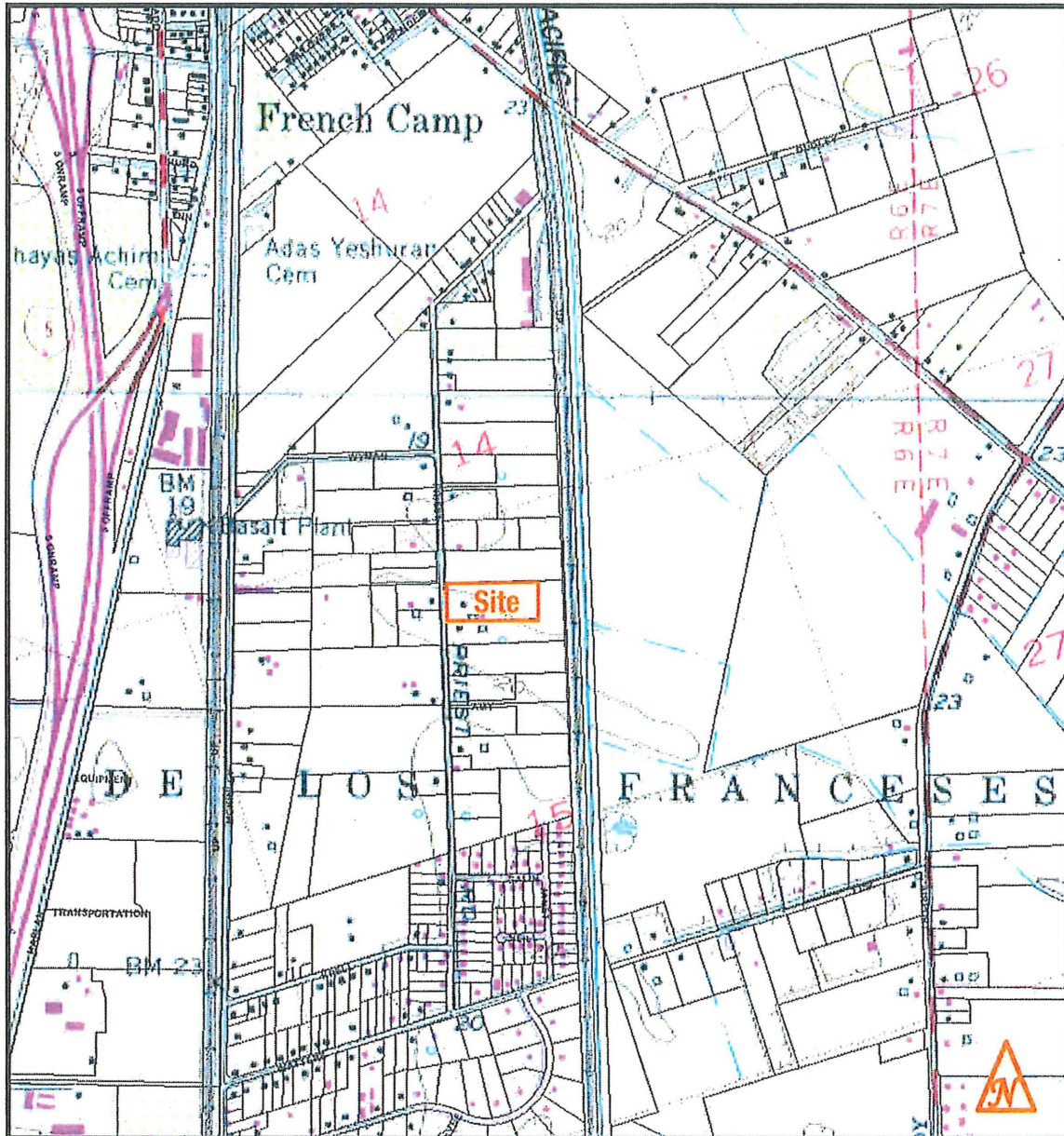


Modified after May 2018 photo from San Joaquin County District Viewer, sjmap.org.


Key

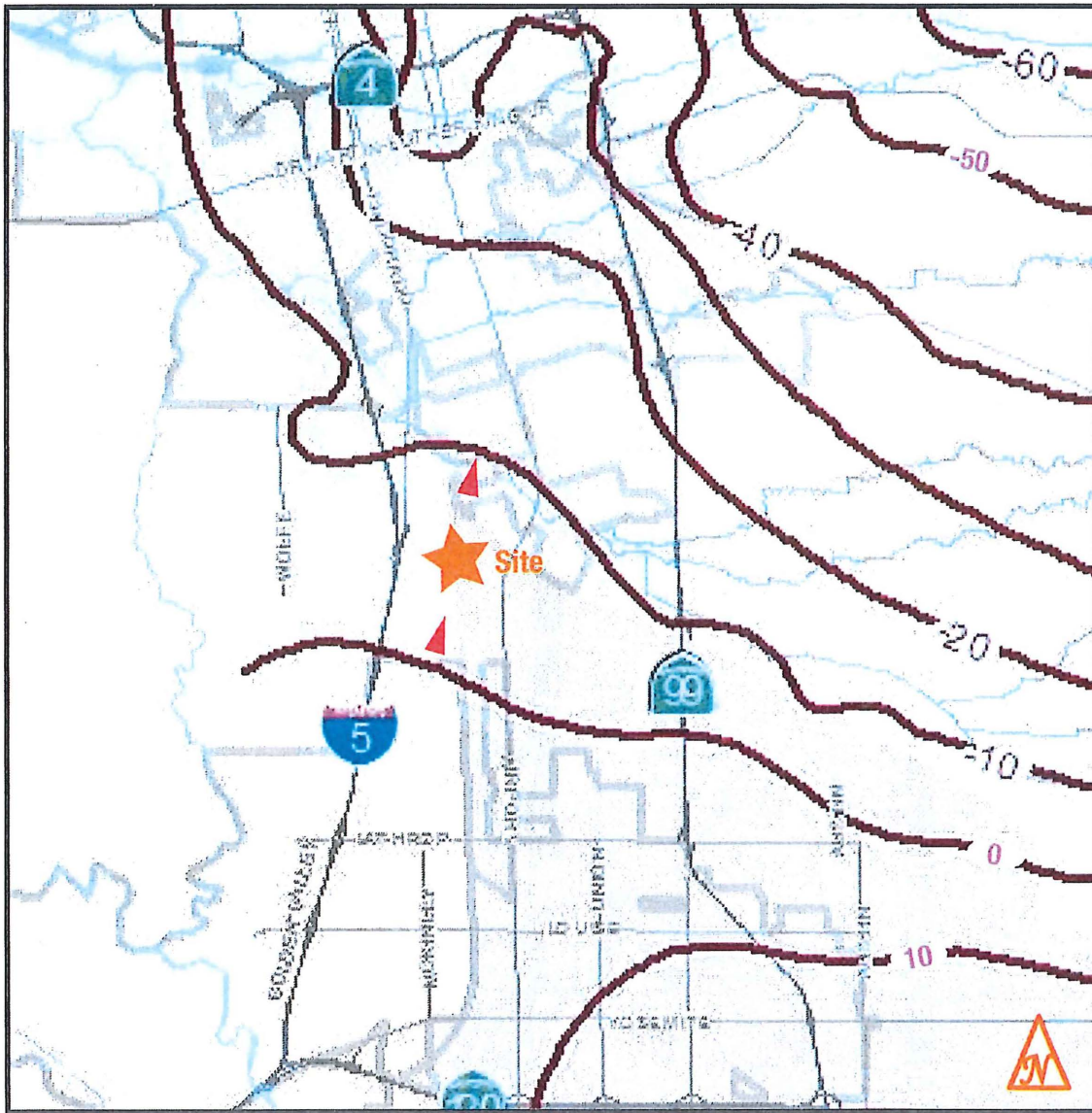
- Property line
- Domestic well
- Septic system

 <p>LIVE OAK GEO ENVIRONMENTAL INC.</p>	<p>Site Map/Aerial Photo</p> <p>Kusalakari Property 9698 S. Priest Rd. French Camp, CA</p>	Plate No.: 3
		Project No: 1938
		Date: September 4, 2019
		Not to Scale



Modified after USGS 7.5' Topographic Map, San Joaquin County District Viewer.


	<p>Topographic Map</p> <p>Kusalakari Property 9698 S. Priest Rd. French Camp, CA</p>	<p>Plate No.: 4</p>
		<p>Project No: 1938</p>
		<p>Date: September 4, 2019</p>
		<p>Scale: 1 in. = 0.25 mi.</p>

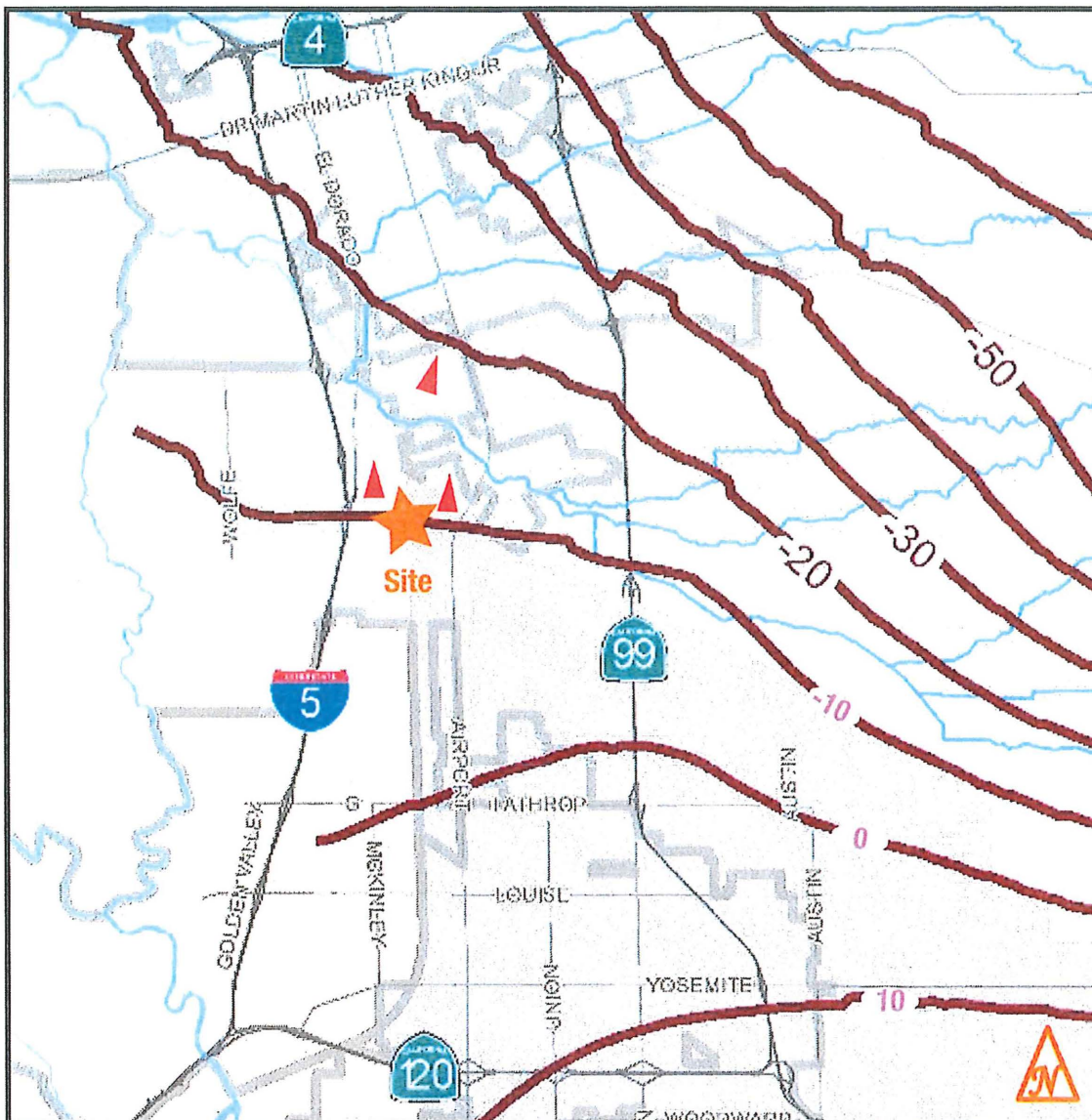


Modified after San Joaquin County Flood Control and Water Conservation District, Groundwater Report Spring 2016.

Key:

-  Lines of equal elevation of ground water (feet above mean sea level)
-  Groundwater flow direction


	Spring 2016 Groundwater Elevation		Plate No.: 5
	Kusalakari Property		Project No: 1938
	9698 S. Priest Rd.		Date: September 4, 2019
	French Camp, CA		Scale: 1 in. = 2 mi.

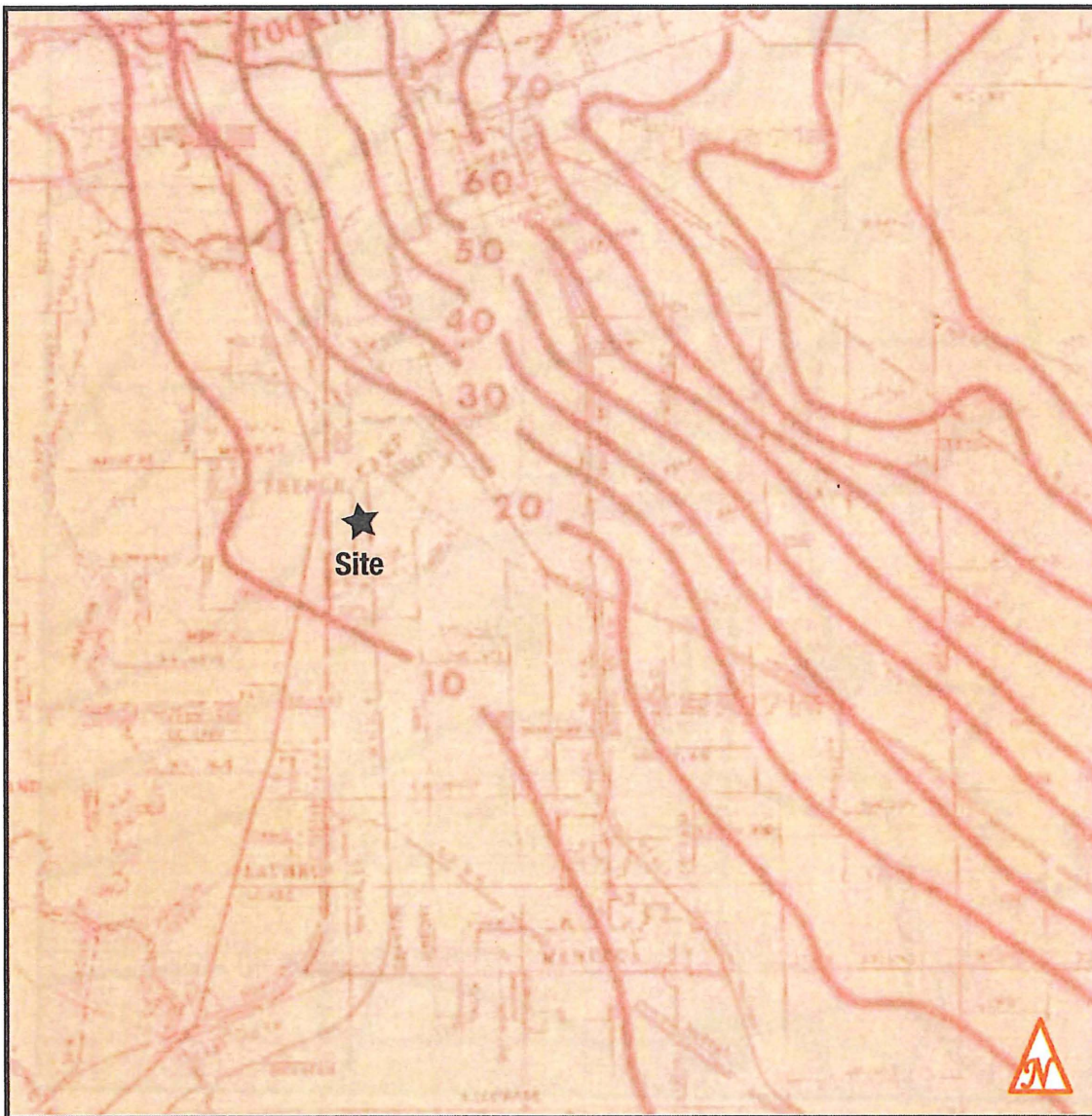


Modified after San Joaquin County Flood Control and Water Conservation District, Groundwater Report Fall 2016.

Key:

- 50- Lines of equal elevation of ground water (feet above mean sea level)
- ▲ Groundwater flow direction


	<p>Fall 2016 Groundwater Elevation</p> <p>Kusalakari Property 9698 S. Priest Rd. French Camp, CA</p>	Plate No.: 6
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 2 mi.

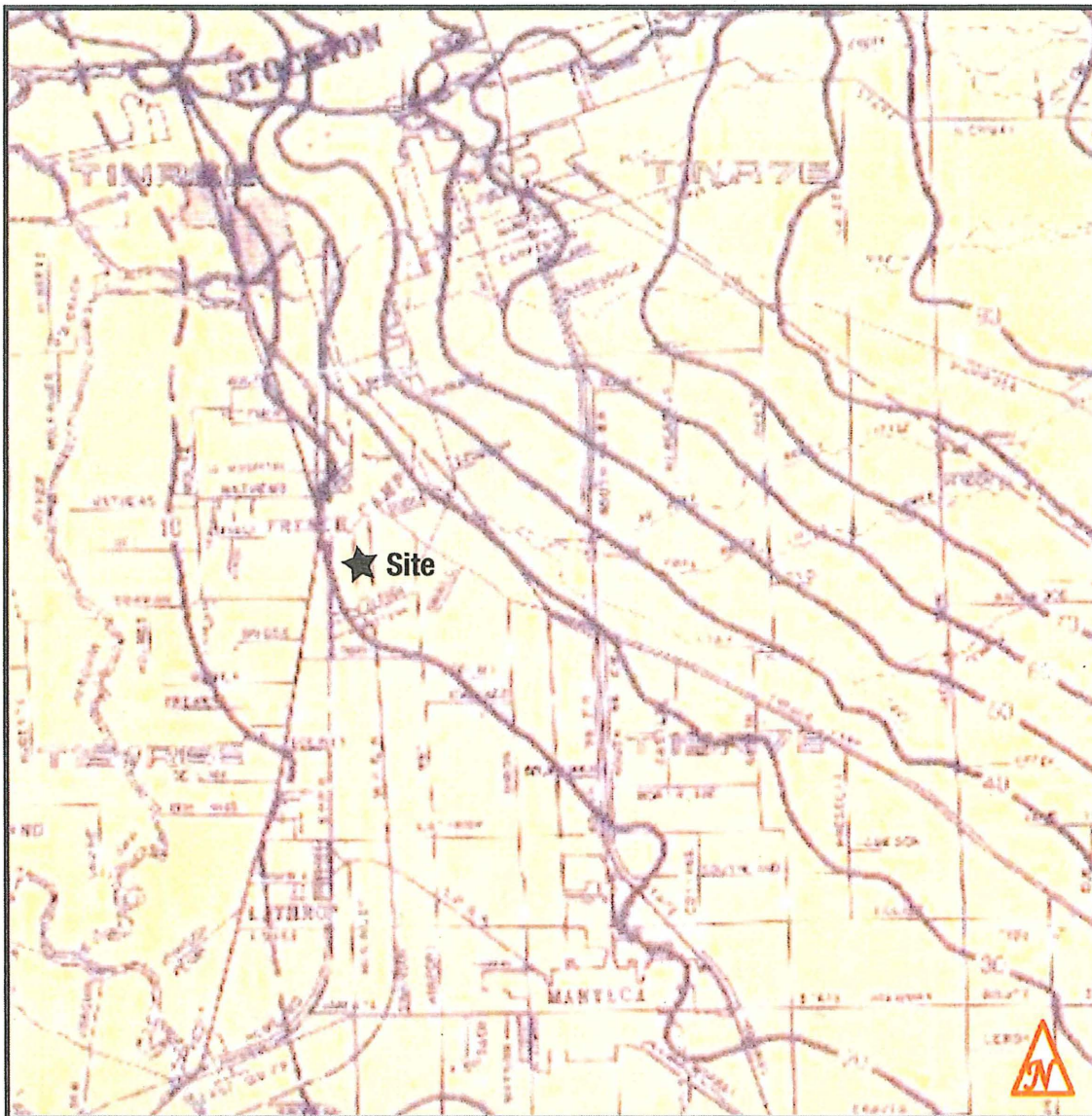


Modified after San Joaquin County Flood Control and Water Conservation District, Lines of Equal Depth to Water in Wells, Spring 1983.

Key:

 Lines of equal depth to ground water


 LIVE OAK GEO ENVIRONMENTAL INC.	Spring 1983 Depth to Ground Water Kusalakari Property 9698 S. Priest Rd. French Camp, CA	Plate No.: 7
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 2 mi.

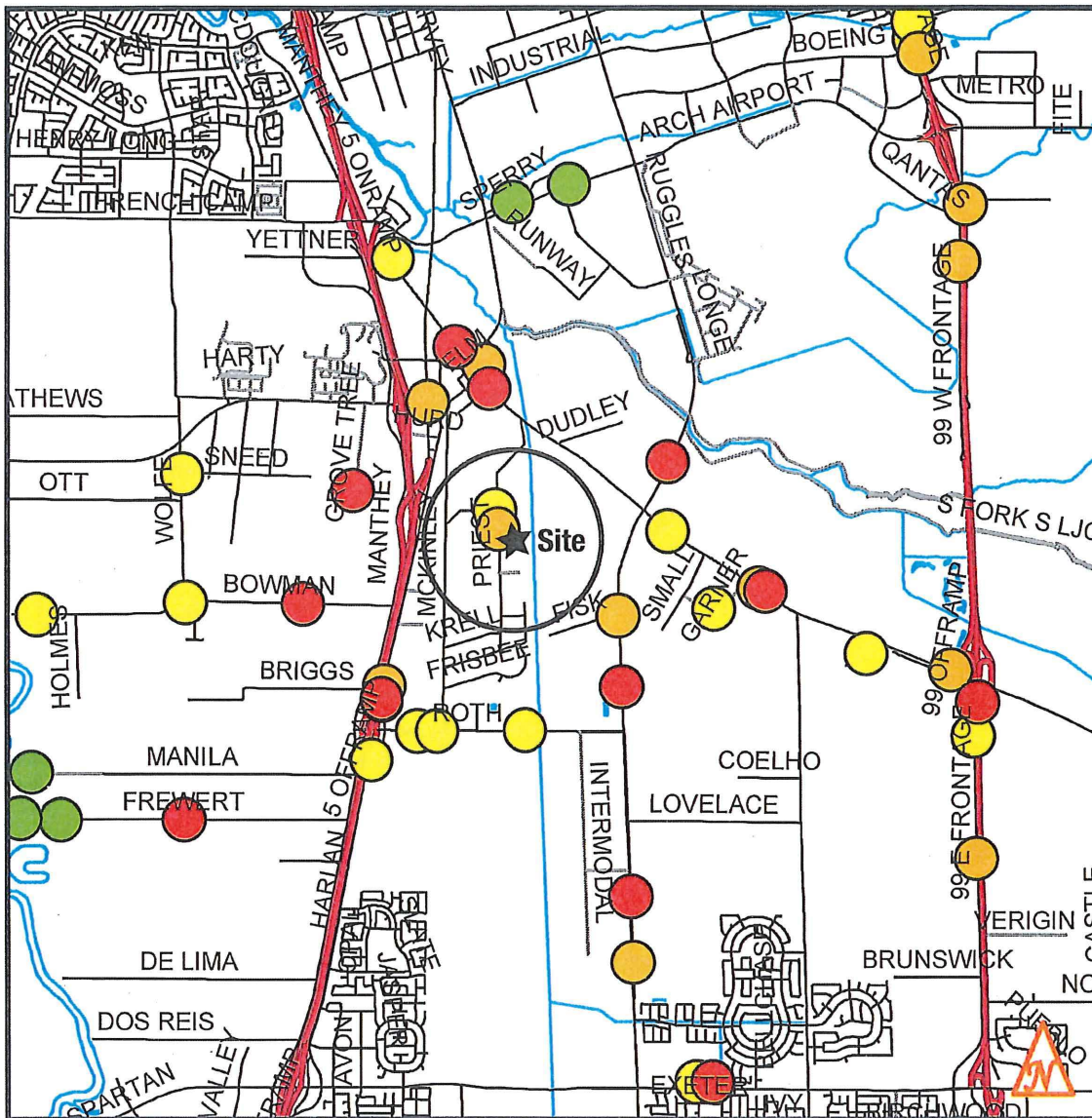


Modified after San Joaquin County Flood Control and Water Conservation District, Lines of Equal Depth to Groundwater, Spring 1999.

Key:

 Lines of equal depth to ground water


 LIVE OAK GEO ENVIRONMENTAL INC.	Spring 1999 Depth to Ground Water Kusalakari Property 9698 S. Priest Rd. French Camp, CA	Plate No.: 8
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 2 mi.

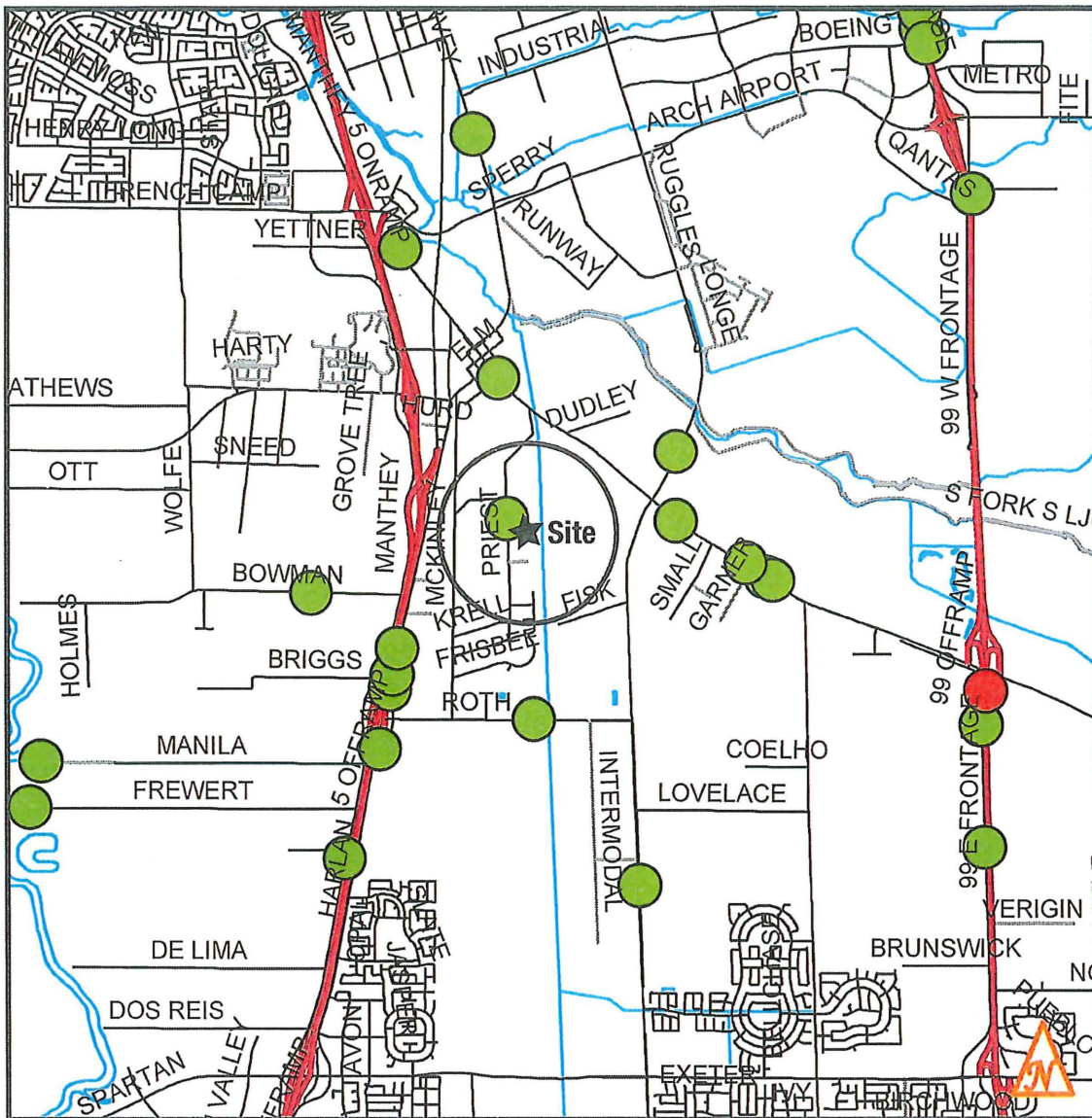


Modified after San Joaquin County Environmental Health Department, 2019, Nitrate - Land Use Data.

Key

- Not Detected
- Nitrate 0.1 - 5.0 mg/L-N
- Nitrate 5.1 - 10.0 mg/L-N
- Nitrate > 10.0 mg/L-N


	Nitrate Levels in Nearby Wells Kusalakari Property 9698 S. Priest Rd. French Camp, CA	Plate No.: 9
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 1 mi.

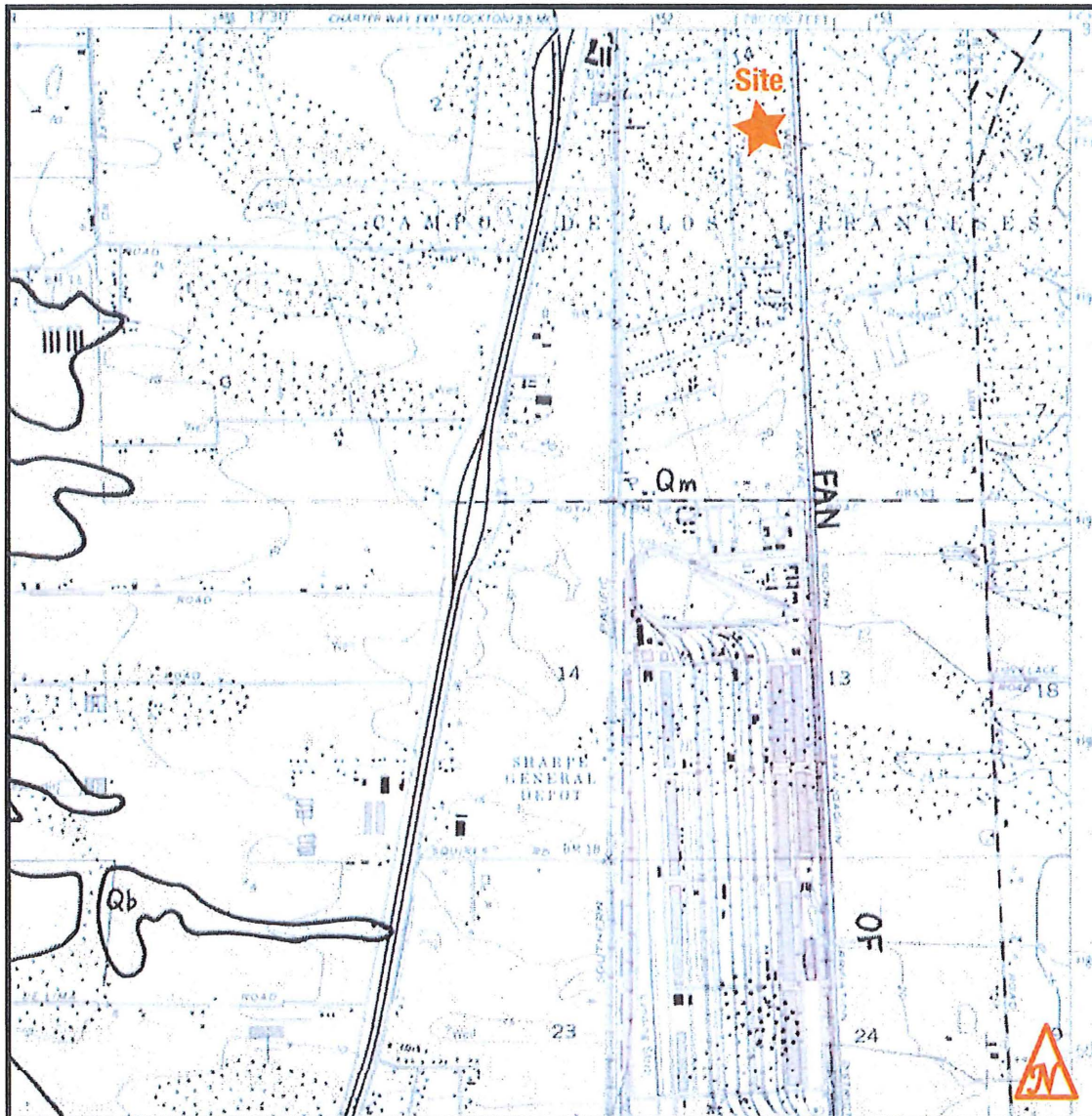


Modified after San Joaquin County Environmental Health Department, 2019, DBCP - Land Use Data.

Key

- DBCP Not Detected
- DBCP 0.01 - 0.2 ug/L
- DBCP > 0.2 ug/L


	<p>DBCP Levels in Nearby Wells</p> <p>Kusalakari Property 9698 S. Priest Rd. French Camp, CA</p>	Plate No.: 10
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 1 mi.



Modified after Atwater, B.F., 1982, Geologic maps of the Sacramento-San Joaquin Delta, California. USGS MF-1401.

Key:

- Qm** Modesto formation, loose sand and silt, chiefly fluvial
Qb Flood-basin deposits


 LIVE OAK GEO ENVIRONMENTAL INC.	Geologic Map Kusalakari Property 9698 S. Priest Rd. French Camp, CA	Plate No.:11
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 0.5 mi.

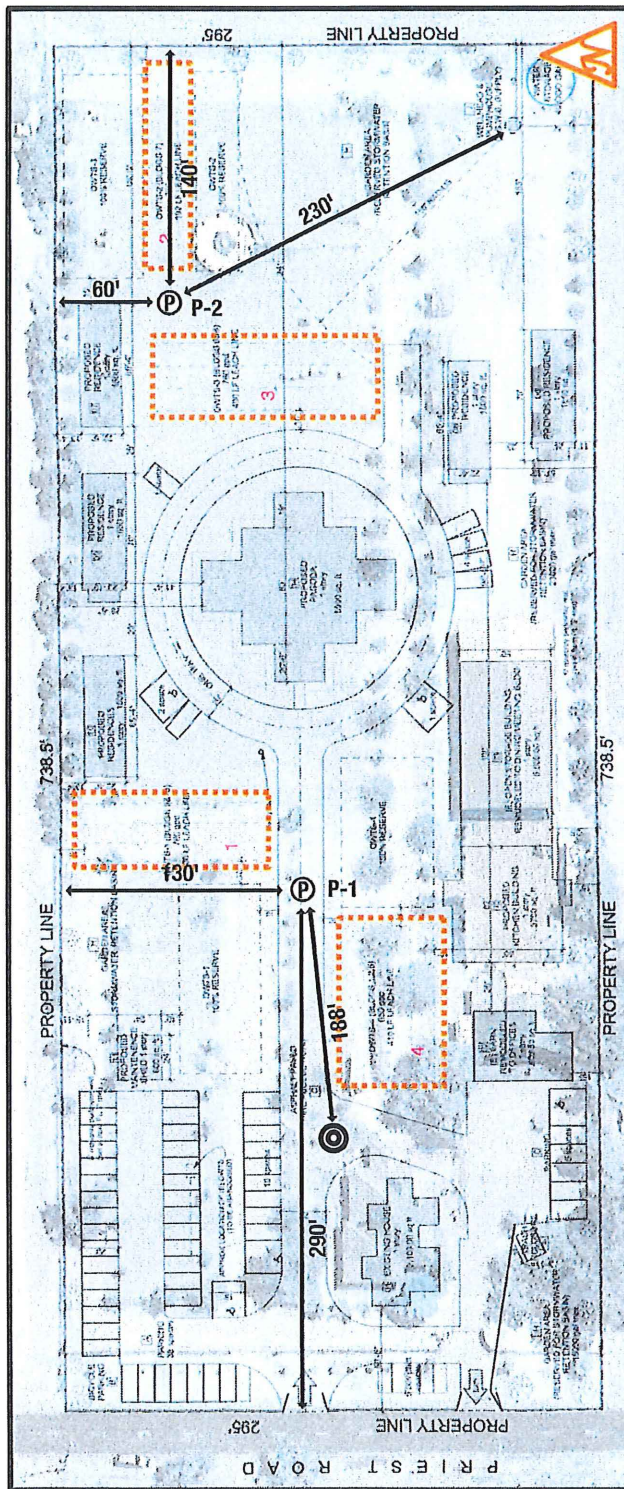


Modified after US Department of Agriculture, Natural Resources Conservation Service, 2019, Web Soil Survey.

Key:




- 142 Delhi loamy sand, 0-2% slopes
- 175 Honcut sandy loam, 0-2% slopes
- 255 Tinnin loamy coarse sand, 0-2% slopes
- 266 Veritas fine sandy loam, 0-2% slopes

 LIVE OAK GEO ENVIRONMENTAL INC.	Soil Map Kusalakari Property 9698 S. Priest Rd. French Camp, CA	Plate No.: 12
		Project No: 1938
		Date: September 4, 2019
		Scale: 1 in. = 0.125 mi.



Modified after 2018 aerial photo from Google Earth and Site Plan by Steven Cho, Architect, 2019.

Key:

-  Percolation test location (shallow)
-  Water sample location (domestic well)
-  Proposed septic leach field area



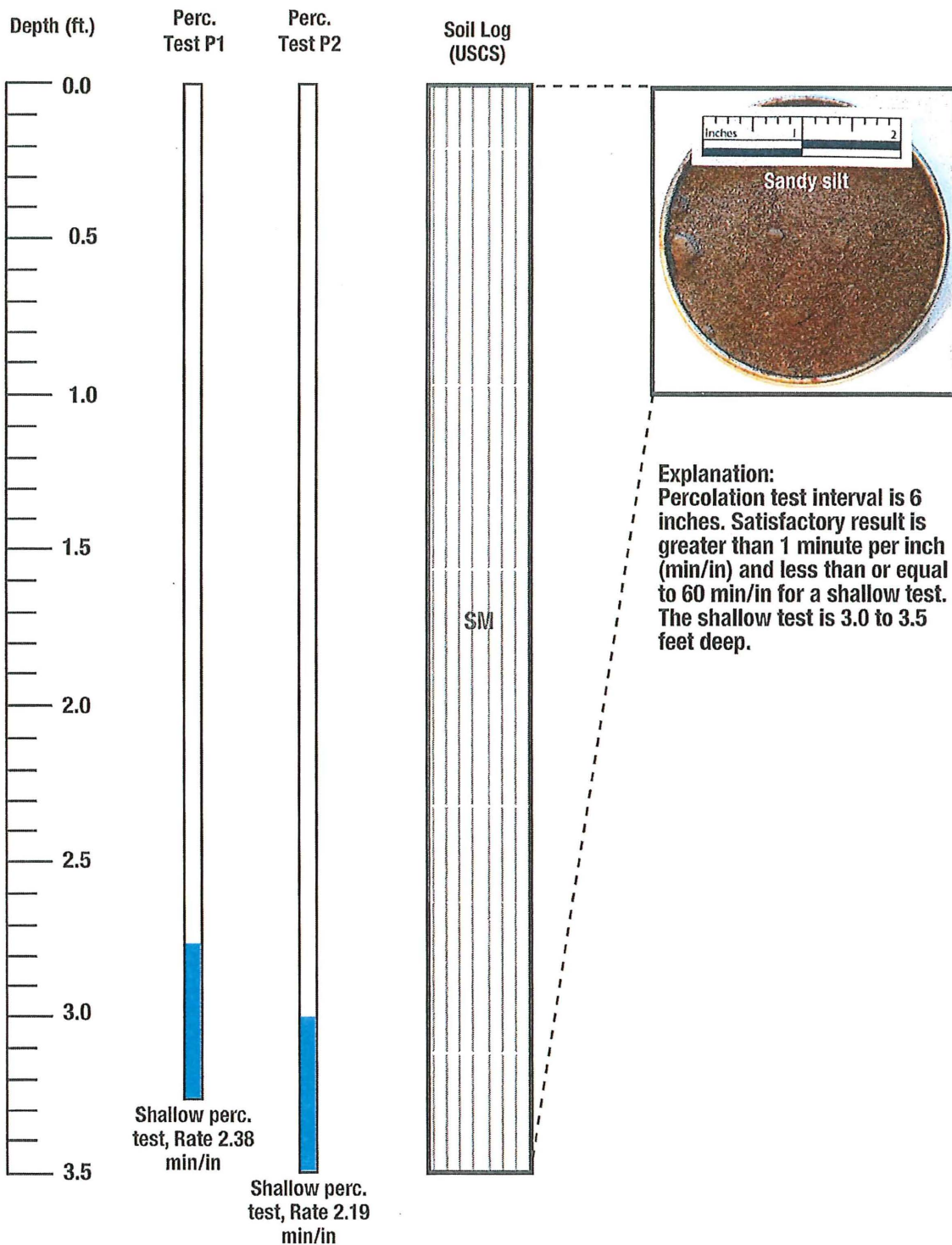
**Percolation Test and Water
Sample Locations**
Kusalakari Property
9698 S. Priest Rd.
French Camp, CA


Plate No.: 13

Project No: 1938

Date: September 4, 2019

Scale: 1 in. = 100 ft.



	Soil Log and Percolation Test Results Kusalakari Property 9698 S. Priest Rd. French Camp, CA		Plate No.: 14
			Project No: 1938
			Drilled August 2, 2019
			Drilling method: hand auger

Manteca (Station 70)*

Deep Percolation = Precipitation - Evapotranspiration

2014

Month	Precipitation (in)	Evapotranspiration (in)	Deep Percolation (in)
Jan	0.43	1.90	
Feb	2.67	1.91	0.76
Mar	1.89	3.49	
Apr	0.72	5.10	
May	0.00	7.46	
Jun	0.03	8.03	
Jul	0.00	7.82	
Aug	0.00	6.84	
Sep	0.50	5.21	
Oct	0.43	3.65	
Nov	1.16	1.64	
Dec	5.83	0.96	4.87
Total	13.20	52.11	5.63

2017

Month	Precipitation (in)	Evapotranspiration (in)	Deep Percolation (in)
Jan	5.50	1.09	4.41
Feb	0.07	1.63	
Mar	1.41	3.69	
Apr	1.63	4.55	
May	0.09	7.13	
Jun	0.02	7.78	
Jul	0.00	8.35	
Aug	0.03	6.91	
Sep	0.00	4.90	
Oct	0.11	3.82	
Nov	0.74	1.60	
Dec	0.08	1.62	
Total	9.70	53.07	4.41

2015

Month	Precipitation (in)	Evapotranspiration (in)	Deep Percolation (in)
Jan	0.10	1.11	
Feb	0.89	1.97	
Mar	0.21	4.32	
Apr	1.14	5.69	
May	0.01	6.70	
Jun	0.06	7.73	
Jul	0.00	7.96	
Aug	0.01	7.09	
Sep	0.02	4.82	
Oct	0.18	3.75	
Nov	1.95	1.89	0.06
Dec	2.14	1.24	0.90
Total	6.70	54.27	0.96

2018

Month	Precipitation (in)	Evapotranspiration (in)	Deep Percolation (in)
Jan	2.85	1.02	1.83
Feb	0.61	2.58	
Mar	1.94	3.08	
Apr	1.75	5.22	
May	0.09	6.94	
Jun	0.00	7.89	
Jul	0.00	8.34	
Aug	0.00	7.07	
Sep	0.02	5.54	
Oct	0.33	3.83	
Nov	2.15	1.92	0.23
Dec	2.26	1.26	1.00
Total	12.00	54.69	3.06

2016

Month	Precipitation (in)	Evapotranspiration (in)	Deep Percolation (in)
Jan	4.38	1.11	3.27
Feb	0.50	2.59	
Mar	3.01	3.45	
Apr	2.22	5.23	
May	0.37	6.59	
Jun	0.00	7.98	
Jul	0.00	8.20	
Aug	0.00	6.88	
Sep	0.00	5.35	
Oct	2.17	2.84	
Nov	1.45	1.80	
Dec	2.07	1.22	0.85
Total	16.20	53.24	4.12

*Data from California Irrigation Management Information System (CIMIS)

Average Recharge (in) = 3.64

Standard Deviation (in) = 1.8

$$s = \sqrt{\frac{\sum_{i=1}^N (x_i - \bar{x})^2}{N - 1}}$$

(Wikipedia, 2019)

where {x1, x2, ..., Xn} are the observed values of the sample items, x bar is the mean value of these observations, and N is the number of observations in the sample.

Percent Error = Standard Deviation / mean * 100%

Percent Error = 48 %



Recharge Calculation
(Manteca Station)
Kusalakari Property
9698 S. Priest Rd.
French Camp, CA

Plate No.: 15

Project No: 1938

Date: September 4, 2019

Nitrate Loading Calculations:

<u>Variable</u>	<u>Value</u>	<u>Units</u>	<u>Description</u>
Q	958.0	gallons per day	Effluent flow rate from report
Nw	41.2	mg/L-N	Effluent stream concentration from report
A	5.00	acres	Site area from report
Nb	0.3	mg/L-N	Concentration of rain water from report
d	0.25	constant	Denitrification factor from report
R	3.64	inches per year	Recharge rate of rainfall from report (evapotranspiration method)
W	2.6	inches per year	Uniform waste water loading for site calculation result
Nc	13.0	mg/L-N	RESULT: Long-term average concentration of percolating effluent

Find Variable (W):

$$(W) \frac{\text{in}}{\text{yr}} = (Q) \frac{\text{gal}}{\text{day}} \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} \times \frac{365 \text{ day(s)}}{1 \text{ year}} \times \frac{1 \text{ acre}}{43,560 \text{ ft}^2} \times \frac{12 \text{ in}}{1 \text{ ft}} \times \frac{1 \text{ site}}{(A) \text{ acre(s)}}$$

$$2.58 \text{ in/yr (site)} = 958 \text{ gal/day} \times (1 \text{ cu-ft} / 7.48 \text{ gals}) \times (365 \text{ days} / 1 \text{ year}) \times (1 \text{ acre} / 43,560 \text{ sq-ft}) \times (12 \text{ in} / 1 \text{ ft}) \times (1 \text{ site} / 5 \text{ acres})$$

Hantzsche-Fennemore Equation (Nc):

$$N_c = \frac{WN_w(1-d)+RN_b}{W+R}$$

$$12.98 \text{ mg/L-N} = ((2.58 \text{ in/yr} \times 41.2 \text{ mg/L-N} \times (1 - 0.25)) + (3.64 \text{ in/yr} \times 0.3 \text{ mg/L-N})) / (2.58 \text{ in/yr} + 3.64 \text{ in/yr})$$

Assumptions:

1. Total nitrogen concentration of influent waste stream is 41.2 mg/L-N. If different influent concentrations exist, use weighted average
2. Fraction of nitrate-N loss due to denitrification in the soil is 25%.
3. Estimated deep percolation of rainfall is 3.64 in/yr.
4. Background nitrate-N concentration of rainfall is 0.3 mg/L-N.



Nitrate Loading Calculation

**Kusalakari Property
9698 S. Priest Rd.
French Camp, CA**

Plate No.: 16

Project No: 1938

Date: September 4, 2019

ONSITE WASTEWATER TREATMENT SYSTEM PERMIT

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

600 E MAIN STREET - STOCKTON CA 95202 - (209) 468-3420

NON-REFUNDABLE PERMIT

CALL (209) 953-7697 FOR INSPECTIONS

EXPIRES 1 YEAR FROM DATE ISSUED

JOB ADDRESS 9698 S. PRIEST RD. CITY/ZIP FRENCH CAMP 95231
 CROSS STREET WYMAN RD. APN 193-220-15 PARCEL SIZE 5 AC.
 OWNER NAME KUSALAKARI CORP. PHONE (415) 293-9192
 OWNER ADDRESS SAME CITY/STATE/ZIP _____
 CONTRACTOR LIVE OAK GEENVIRONMENTAL PHONE 369-0375
 CONTRACTOR ADDRESS 407 W. OAK ST. CITY/STATE/ZIP LODI CA 95240
 LICENSE ☐ C-42 ☐ C-36 OTHER _____ NUMBER _____ EXPIRATION DATE _____

WATER TABLE DEPTH: _____ ft GEOGRAPHICAL INFORMATION: Coordinates X _____ Y _____
☒ PERC TEST # 2 BUILDING PERMIT # _____ LAND USE APPLICATION # PA-1800177

TYPE OF WORK: ☐ NEW INSTALLATION ☐ REPAIR/ADDITION ☐ ENGINEER DESIGNED /ALTERNATIVE
☐ REPLACEMENT ☐ DESTRUCTION

INSTALLATION WILL SERVE: ☐ RESIDENCE ☐ COMMERCIAL ☐ OTHER _____
 NUMBER OF LIVING UNITS: _____ NUMBER OF BEDROOMS: _____ NUMBER OF EMPLOYEES: _____

☐ SEPTIC TANK TYPE/MFG _____ CAPACITY _____ gal # OF COMPARTMENTS _____
☐ GREASE TRAP TYPE/MFG _____ CAPACITY _____ gal # OF COMPARTMENTS _____

DISTANCE TO NEAREST: WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ LIFT STATION SIZE _____ TYPE OF PUMP _____ ☐ PKG TX PLANT ☐ SAND OIL SEPARATOR (ENCLOSED SYSTEM)

☐ LEACH LINES ☐ LEACHING CHAMBERS _____ # OF LINES _____ LENGTH OF LINES _____

DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

☐ FILTER BED WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft

DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

☐ MOUNDED WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft

DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

☐ SUMPS WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft

DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

☐ DISPOSAL PONDS WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft

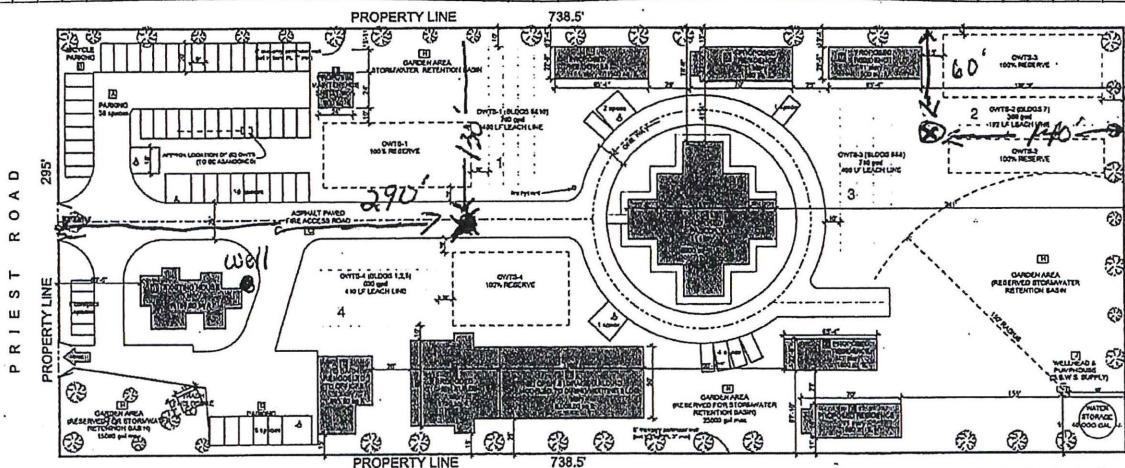
DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

☐ SEEPAGE PITS NUMBER _____ WIDTH _____ ft DEPTH _____ ft

DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES, STATE LAWS AND RULES AND REGULATIONS OF SAN JOAQUIN COUNTY.

SIGNED [Signature] MINIMUM 24 HOUR ADVANCE NOTICE REQUIRED FOR INSPECTIONS - PLEASE CALL (209) 953-7697
 TITLE CONSULTANT DATE 7-30-19



Application Accepted By [Signature] DEPARTMENT USE ONLY Date 8/2/19 Area 1/99 Employee ID# DA
 Final Inspection By _____ Date _____ ☐ SPECIAL PERMIT - Approved by _____
 Character of Soil to Depth of 3 Ft: _____ Pit/Sump Soil Character: _____
 COMMENTS _____

PE Code	SC INFO	Received By	Check#	Amount Remitted	Date	Permit/Service Request #	Invoice #	Permit ID#
4222	C23	WRO	1755	\$ 304	8/2/19	SR0080918		

SITE ADDRESS:

PAYMENT RECEIVED
 AUG 02 2019

SAN JOAQUIN COUNTY
 ENVIRONMENTAL
 HEALTH DEPARTMENT

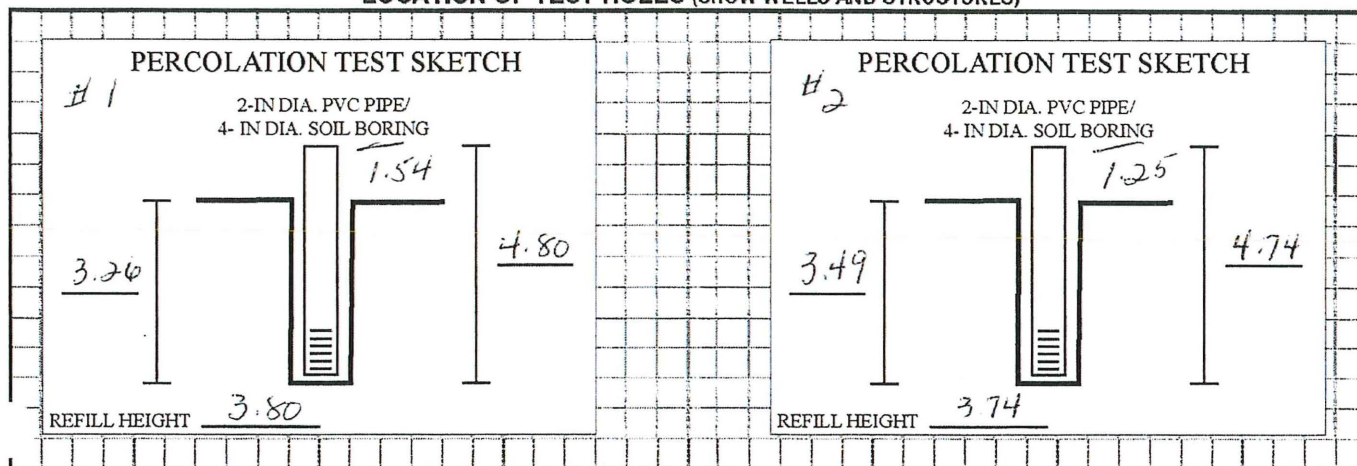


SAN JOAQUIN COUNTY
ENVIRONMENTAL HEALTH DEPARTMENT
600 East Main Street, Stockton, CA 95202-3029
Telephone: (209) 468-3420 Fax: (209) 464-0138 Web: www.sjgov.org/ehd

PERCOLATION TEST RATE

ADDRESS OR LOCATION: 9698 S. PRIEST RD. CITY: FRENCH CAMP
OWNER NAME: KUSALAKARI CORP. DATE: 8-7-19
APN: 193-220-15 APPLICATION #: PA-1800177 DEPTH TO FIRST WATER: _____ Ft
SOIL TYPE: _____
REMARKS: _____

LOCATION OF TEST HOLES (SHOW WELLS AND STRUCTURES)



SOIL PROFILE (IF REQUIRED)

Depth	Soil Type	Depth	Soil Type	Depth	Soil Type	Depth	Soil Type	Depth	Soil Type

Test Hole # 1

Parcel: 1 Diameter: 4 in Depth: 3.26

TIME	READING	WATER DROP	REFILLED
8:00	DRY	-	3.34
8:30	DRY		
11:00	DRY		4.10
11:16	4.53	.43	3.93
11:20	4.24	.31	3.92
11:30	4.19	.27	3.95
11:40	4.41	.46	3.99
11:50	4.46	.47	4.15
12:00	4.50	.35	

PERCOLATION RATE: 2.38 min/in

COMMENDED SEPTIC AREA:

TEST PERFORMED BY: TONY RACCO
TEST CERTIFIED BY: [Signature]
OBSERVED BY (REHS): Nasreen Alim

Test Hole # 2

Parcel: 1 Diameter: 4 in Depth: 3.49

TIME	READING	WATER DROP	REFILLED
8:05	DRY		3.39
8:35	DRY		
11:04	DRY		3.87
11:14	4.38	.51	4.02
11:24	4.43	.41	3.86
11:34	4.35	.49	3.62
11:44	4.22	.60	3.80
11:54	4.26	.46	3.96
12:04	4.34	.38	

PERCOLATION RATE: 2.19 min/in

RECOMMENDED SEPTIC AREA:

Phone: 209-608-2180 Date 8-7-19
Phone: 209-329-0198 Date 8-7-19
Phone: 209-604-7651 Date 8-7-19

FOR OFFICE USE:

APPLICATION FOR SANITATION PERMIT

(Complete in Triplicate)

Permit No. 75-993

Date Issued 12-17-75

This Permit Expires 1 Year From Date Issued

Application is hereby made to the San Joaquin Local Health District for a permit to construct and install the work herein described. This application is made in compliance with County Ordinance No. 549 and existing Rules and Regulations:

JOB ADDRESS/LOCATION 9698 Priest Lane French Camp CENSUS TRACT

Owner's Name LEE STAHOSKI Phone

Address P.O. Box 12 Banta City Banta Calif

Contractor's Name Certified Sewer Inc License # 254173 Phone 466-0398

Installation will serve: Residence ☐ Apartment House ☐ Commercial ☐ Trailer Court ☐Motel ☐ Other Trailer

Number of living units: 1 Number of bedrooms 2 Garbage Grinder Lot Size 5 acres

Water Supply: Public System and name Private ☒Character of soil to a depth of 3 feet: Sand ☒ Silt ☐ Clay ☐ Peat ☐ Sandy Loam ☐ Clay Loam ☐Hardpan ☐ Adobe ☐ Fill Material If yes, type

(Plot plan, showing size of lot, location of system in relation to wells, buildings, etc. must be placed on reverse side.)

NEW INSTALLATION: (No septic tank or seepage pit permitted if public sewer is available within 200 feet.)

PACKAGE TREATMENT ☐ SEPTIC TANK ☐ Size 6 x 5 x 9 Liquid Depth 60"

Capacity 1200 Type Prefab Material Concrete No. Compartments 2

Distance to nearest: Well 90' Foundation 10' Prop. Line 5'

LEACHING LINE ☐ No. of Lines 2 Length of each line 80 Total Length 160

'D' Box 60 Type Filter Material 1 1/2 x 3/4 Depth Filter Material 18"

Distance to nearest: Well 100' Foundation 10' Property Line 5'

SEEPAGE PIT ☐ Depth Diameter Number Rock Filled Yes ☐ No ☐

Water Table Depth Rock Size

Distance to nearest: Well Foundation Prop. Line

REPAIR/ADDITION (Prev. Sanitation Permit # Date)

Septic Tank (Specify Requirements)

Disposal Field (Specify Requirements)

(Draw existing and required addition on reverse side)

I hereby certify that I have prepared this application and that the work will be done in accordance with San Joaquin County Ordinances, State Laws, and Rules and Regulations of the San Joaquin Local Health District. Home owner or licensed agents signature certifies the following:

"I certify that in the performance of the work for which this permit is issued, I shall not employ any person in such manner as to become subject to Workman's Compensation laws of California."

Signed Certified Sewer Inc. Owner

By Lee Cring Title Estimator

(If other than owner)

FOR DEPARTMENT USE ONLY

APPLICATION ACCEPTED BY C. Beeg DATE 12-17-75

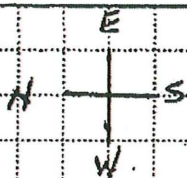
BUILDING PERMIT ISSUED DATE

ADDITIONAL COMMENTS

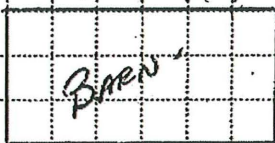
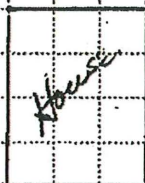
Final Inspection by: C. Beeg Date 12/17/75

EH 13 24 1-68 Rev. 5M SAN JOAQUIN LOCAL HEALTH DISTRICT

B/74 3M



Wall



80'

80'

DRIVEWAY

96.98 PRIEST LN

P/L



APPLICATION FOR PERMIT
SAN JOAQUIN LOCAL HEALTH DISTRICT
1601 E. HAZELTON AVE., STOCKTON, CA
Telephone (209) 466-6781

PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

(Complete in Triplicate)

Application is hereby made to the San Joaquin Local Health District for a permit to construct and/or install the work herein described. This application is made in compliance with San Joaquin County Ordinance No. 549 for sewage or No. 1862 for well/pump and the Rules and Regulations of the San Joaquin Local Health District.

Job Address 9698 Priest Rd City FRENCH CAMP Lot Size 5 ac PM _____
Owner's Name Robertson / Samisch Address 9698 Priest Rd Phone 982-0736

Contractor SELF Address _____ License No. _____ Phone _____

TYPE OF WELL/PUMP: NEW WELL ☐ WELL REPLACEMENT ☐ DESTRUCTION ☐
PUMP INSTALLATION ☐ SYSTEM REPAIR ☐ OTHER ☐
DISTANCE TO NEAREST: SEPTIC TANK _____ SEWER LINES _____ DISPOSAL FLD. _____ PROP. LINE _____
FOUNDATION _____ AGRICULTURE WELL _____ OTHER WELL _____ PITS/SUMPS _____

INTENDED USE TYPE OF WELL PROBLEM AREA CONSTRUCTION SPECIFICATIONS
☐ Industrial ☐ Open Bottom ☐ Manteca Dia. of Well Excavation _____ Dia. of Well Casing _____
☐ Domestic/Private ☐ Gravel Pack ☐ Tracy Type of Casing _____ Specifications _____
☐ Public ☐ Other ☐ Delta Depth of Grout Seal _____ Type of Grout _____
☒ Irrigation _____ Approx. Depth _____ Eastern Surface Seal Installed by _____
Repair Work Done ☐ Type of Pump _____ H.P. _____ State Work Done _____
Well Destruction ☐ Well Diameter _____ Sealing Material (top 50') _____
Depth _____ Filter Material (Below 50') _____

TYPE OF SEPTIC WORK: NEW INSTALLATION ☐ REPAIR/ADDITION ☐ DESTRUCTION ☒ (No septic system permitted if public sewer is available within 200 feet.)

Installation will serve: Residence _____ Commercial _____ Other _____

Number of living units: _____ Number of bedrooms _____

Character of soil to a depth of 3 feet: _____ Water table depth _____

SEPTIC TANK ☐ Type/Mfg _____ Capacity _____ No. Compartments _____
PKG. TREATMENT PLT. ☐ Method of Disposal _____

Distance to nearest: Well _____ Foundation _____ Property Line _____

LEACHING LINE ☐ No. & Length of lines _____ Total length/size _____

FILTER BED ☐ Distance to nearest: Well _____ Foundation _____ Property Line _____

SEEPAGE PITS ☐ Depth _____ Size _____ Number _____

SUMPS ☐ Distance to nearest: Well _____ Foundation _____ Property Line _____

DISPOSAL PONDS ☐

I hereby certify that I have prepared this application and that the work will be done in accordance with San Joaquin county ordinances, state laws, and rules and regulations of the San Joaquin Local Health District.

Home owner or licensed agent's signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall not employ any person in such manner as to become subject to workman's compensation laws of California." Contractor's hiring or sub-contracting signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall employ persons subject to workman's compensation laws of California."

The applicant must call for all required inspections. Complete drawing on reverse side.

Signed X Robertson / Samisch Title: OWNER Date: 5-5-88

FOR DEPARTMENT USE ONLY

Application Accepted by [Signature] Date 5-5-88 Area 13

Pit or Grout Inspection by _____ Date _____ Final Inspection by _____ Date _____

Additional Comments: put diagram on back when location determined

☐ Stk 466-6781 ☐ Lodi 369-3621 ☐ Manteca 823-7104 ☐ Tracy 835-6385

Applicant - Return all copies to: Environmental Health Permit/Services 1601 E. Hazelton Ave., P.O. Box 2009, Stk., CA 95201

FEE INFO	AMOUNT DUE	AMOUNT REMITTED	CK # CASH	RECEIVED BY	DATE	PERMIT NO.
	35	35.00	CASH	LD	5-5-88	88-1115

**2ND PAGE
OF PERMIT
IS BLANK -
NO MAP
FOR
THIS PERMIT**

APPLICATION FOR PERMIT
SAN JOAQUIN LOCAL HEALTH DISTRICT
 1601 E. HAZELTON AVE., STOCKTON, CA
 Telephone (209) 466-6781
PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

(Complete in Triplicate)

Application is hereby made to the San Joaquin Local Health District for a permit to construct and/or install the work herein described. This application is made in compliance with San Joaquin County Ordinance No. 549 for sewage or No. 1862 for well/pump and the Rules and Regulations of the San Joaquin Local Health District.

Job Address 9698 Priest Road City FRENCH CAMP Lot Size _____ PM _____
 Owner's Name ROBERT J. SEMISCH AND LORRI LEE ROBERTSON Address SAME Phone (209) 982-0736

Contractor N/A Address _____ License No. _____ Phone _____

TYPE OF WELL/PUMP: NEW WELL ☐ WELL REPLACEMENT ☐ DESTRUCTION ☐
 PUMP INSTALLATION ☐ SYSTEM REPAIR ☐ OTHER ☐
 DISTANCE TO NEAREST: SEPTIC TANK _____ SEWER LINES _____ DISPOSAL FLD. _____ PROP. LINE _____
 FOUNDATION _____ AGRICULTURE WELL _____ OTHER WELL _____ PITS/SUMPS _____

INTENDED USE TYPE OF WELL PROBLEM AREA CONSTRUCTION SPECIFICATIONS
☐ Industrial ☐ Open Bottom ☐ Manteca Dia. of Well Excavation _____ Dia. of Well Casing _____
☐ Domestic/Private ☐ Gravel Pack ☐ Tracy Type of Casing _____ Specifications _____
☐ Public ☐ Other ☐ Delta Depth of Grout Seal _____ Type of Grout _____
☐ Irrigation _____ Approx. Depth _____ Eastern Surface Seal Installed by _____
 Repair Work Done ☐ Type of Pump _____ H.P. _____ State Work Done _____
 Well Destruction ☐ Well Diameter _____ Sealing Material (top 50') _____
 Depth _____ Filler Material (Below 50') _____

TYPE OF SEPTIC WORK: NEW INSTALLATION ☒ REPAIR/ADDITION ☐ DESTRUCTION ☐ (No septic system permitted if public sewer is available within 200 feet.)

Installation will serve: Residence ☒ Commercial _____ Other _____

Number of living units: 1 Number of bedrooms 3

Character of soil to a depth of 3 feet: Sandy Water table depth 20'

SEPTIC TANK ☐ Type/Mfg _____ Capacity 1160 No. Compartments 2

PKG. TREATMENT PLT. ☐ Method of Disposal _____

Distance to nearest: Well 100' Foundation 90' Property Line 85'

LEACHING LINE ☒ No. & Length of lines 3 Total length/size 240' (3x80')

FILTER BED ☐ Distance to nearest: Well 7100' Foundation 80' Property Line 70'

SEEPAGE PITS ☐ Depth _____ Size _____ Number _____

SUMPS ☐ Distance to nearest: Well _____ Foundation _____ Property Line _____

DISPOSAL PONDS ☐

I hereby certify that I have prepared this application and that the work will be done in accordance with San Joaquin county ordinances, state laws, and rules and regulations of the San Joaquin Local Health District.
 Home owner or licensed agent's signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall not employ any person in such manner as to become subject to workman's compensation laws of California." Contractor's hiring or sub-contracting signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall employ persons subject to workman's compensation laws of California."

The applicant must call for all required inspections. Complete drawing on reverse side.

Signed X Lorri Lee - Robertson Title: OWNER Date: 1-18/90

Application Accepted by H. K. Muel FOR DEPARTMENT USE ONLY

Date 1/18/90 Area 2.15

Pit or Grout Inspection by _____ Date _____ Final Inspection by Robertson Date 1/18/90

Additional Comments:

☐ Stk 466-6781 ☐ Lodi 369-3621 ☐ Manteca 823-7104 ☐ Tracy 835-6385

Applicant - Return all copies to: Environmental Health Permit/Services 1601 E. Hazelton Ave., P.O. Box 2009, Stk., CA 95201

FEE INFO	AMOUNT DUE	AMOUNT REMITTED	CK # CASH	RECEIVED BY	DATE	PERMIT NO.
	70.00	70.00	146	VS	1-18-90	90-104

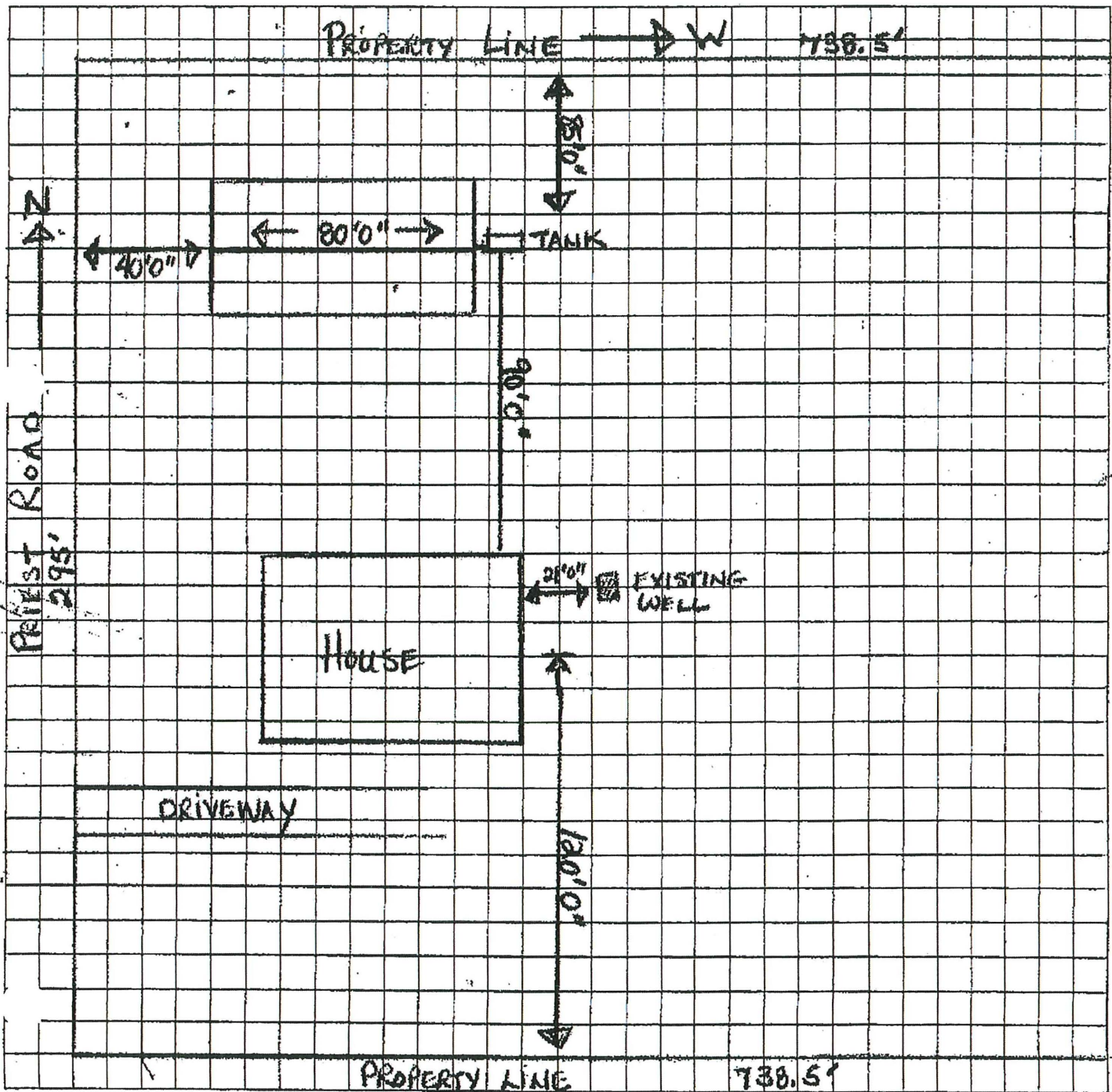
9698 Priest Rd



PLOT PLAN
(Draw To Scale)

SCALE $\frac{1}{4}$ " TO 10'0"

1. Names of streets or roads nearest to or bounding the property.
2. Outline of the property, giving dimensions and North direction.
3. Dimensioned outlines and locations of all existing and proposed structures, including covered areas such as patios, driveways and walks.
4. Location of house sewer outlet, public sewer, sewage disposal system or proposed sewage disposal system, proposed expansion of sewage disposal system, or any other possible source of contamination.
5. Location of other wells within radius of 150 feet on the property or adjoining property.
6. Location of sewage disposal system on adjoining property or within a radius of 150 feet.



WELL/PUMP PERMIT

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

600 EAST MAIN STREET - STOCKTON CA 95202 - (209) 488-3420

NON-REFUNDABLE PERMIT

CALL (209) 953-7697 FOR INSPECTIONS

EXPIRES 1 YEAR FROM DATE ISSUED

JOB ADDRESS 9698 S. Priest rd CITY/ZIP French Camp, CA 95231
 CROSS STREET Waters APN 193-220-15 PARCEL SIZE 5 LAND USE APPLICATION #
 OWNER NAME Tin Tin Lin PHONE 510-249-0362
 OWNER ADDRESS 42836 Gatewood St CITY/STATE/ZIP Fremont CA, 94538
 CONTRACTOR Larsen Pump PHONE 209-529-2020
 CONTRACTOR ADDRESS 309 Tully rd CITY/STATE/ZIP Modesto CA, 95351
 SUBCONTRACTOR _____ PHONE _____
 SUBCONTRACTOR ADDRESS _____ CITY/STATE/ZIP _____
 LICENSE C-57 C-61 D-09 Other _____ NUMBER 276660 EXPIRATION DATE 12/31/12

GEOGRAPHICAL INFORMATION: Coordinates X _____ Y _____ Township _____ Range _____ Section _____
 INTENDED USE Domestic Private Irrigation/Agricultural Industrial Water Quality Monitoring Soil Sampling/Characterization
 Public Water System _____ Water System Name _____ Contact Name or Phone Number _____

TYPE OF WORK New Well Replacement Well Well Alteration/Modification Other _____
 Monitoring Well(s) # of wells _____ Soil Boring(s) # of borings _____ Geotechnical # of borings _____
 Out-Of-Service Well _____ Out-Of-Service Well Renewal _____ Cross-Connection Repair _____
New Pump Pump Replacement Pump Repair Raise Well Casing

WELL CONSTRUCTION
 Drilling Method Mud Rotary Air Rotary Auger Cable Tool Push Point Other _____
 Proposed Well Depth _____ ft Excavation _____ in diameter Open Bottom _____ Gravel Pack/Gravel Size _____ in diameter
 Conductor Casing _____ in diameter / Conductor Casing Depth _____ ft
 Well Casing Diameter _____ in Thickness/Gauge/ASTM Sched _____ Steel Plastic Stainless Steel Other _____
 Grout Seal Depth _____ ft Neat Cement (94 lb bag/5-10 gal water) Sand Cement _____ sack mix/7 gal water
 Bentonite (20% solids) Other _____
 Grout Placement Method Pumped Free Fall Other _____ Retardant / Accelerator (name) _____

PEDESTAL Installed By Driller Pump Contractor Other _____
 Concrete Pedestal Dimensions: Width _____ ft Length _____ ft Thick _____ in Christy Box Stove Pipe

PUMP Submersible Turbine Other _____ HP 1 1/2 Pump Set 60 ft Standing Water Level 18 ft

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THAT THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES, STATE LAWS, AND RULES AND REGULATIONS. I ALSO CERTIFY THAT MY REQUIRED LICENSE IS CURRENT AND ACTIVE WITH THE CALIFORNIA CONTRACTORS STATE LICENSE BOARD AND THAT I AM IN COMPLIANCE WITH ALL WORKERS COMPENSATION LAWS.

MINIMUM 24 HOUR ADVANCE NOTICE REQUIRED FOR INSPECTIONS

Signed [Signature] TITLE Manager DATE 4-4-12

Diagram showing well location relative to house and street (9698 S. Priest Rd). The well is located near the house. A north arrow is present. The street is labeled 'Waters'.

PAYMENT RECEIVED

APR 26 2012

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

DEPARTMENT USE ONLY
 Application Accepted By [Signature] Date 4/26/12 Area _____ Employee ID# 4045/99
 Grout Inspection By _____ Date 4/30/12 SPECIAL Well Permit
 Pump Inspection By [Signature] Date 4/30/12 WAIVER Received
 Soil Boring Inspection By _____ Date _____ Constructed Well Depth _____ ft

COMMENTS Flow OK

PE Codes	SC Info	Received By	Check#/Cash	Amount Remitted	Date	Permit/Service Request #	Invoice #	Well ID#
4381	OSD	YHL	18593	\$53.00	4/26/12	SR00 648220		

WELL/PUMP PERMIT

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

1888 EAST HAZELTON AVENUE - STOCKTON CA 95205 - (209) 468-3420

NON-REFUNDABLE PERMIT

CALL (209) 953-7697 FOR INSPECTIONS

EXPIRES 1 YEAR FROM DATE ISSUED

JOB ADDRESS 9698 South Priest Rd. CITY/ZIP French Camp, CA 95231
 CROSS STREET French Camp Rd. APN 193-220-15 PARCEL SIZE 5.0 LAND USE APPLICATION #
 OWNER NAME Kusalakari Corporation PHONE 510-417-0701
 OWNER ADDRESS 40174 Spady Ct. CITY/STATE/ZIP Freemont, CA 94538
 CONTRACTOR Martell Water Systems, Inc. PHONE 925-432-4282
 CONTRACTOR ADDRESS 1818 Loveridge Rd. CITY/STATE/ZIP Pittsburg, CA 94565
 SUBCONTRACTOR _____ PHONE _____
 SUBCONTRACTOR ADDRESS _____ CITY/STATE/ZIP _____
 LICENSE ☒ C-57 ☐ C-51 ☐ D-09 ☐ Other _____ NUMBER 510952 EXPIRATION DATE 5/31/2017

GEOGRAPHICAL INFORMATION: Coordinates X _____ Y _____ Township _____ Range _____ Section _____
 INTENDED USE ☒ Domestic/Private ☐ Irrigation/Agricultural ☐ Industrial ☐ Water Quality Monitoring ☐ Soil Sampling/Characterization
 Public Water System ☐ If different from Owner: _____ Water System Name _____ Contact Name or Phone Number _____

TYPE OF WORK ☒ New Well ☐ Replacement Well ☐ Well Alteration/Modification ☐ Other _____
 Monitoring Well(s) _____ # of wells _____ L Soil Boring(s) _____ # of borings _____ L Geotechnical _____
 Out-Of-Service Well _____ L Out-Of-Service Well Renewal _____ L Cross-Connection Repair _____
 New Pump _____ Pump Replacement _____ Pump Repair _____ Raise Well Casing _____

WELL CONSTRUCTION
 Drilling Method ☒ Mud Rotary ☐ Air Rotary ☐ Auger ☐ Cable Tool ☐ Push Point ☐ Other _____
 Proposed Well Depth 300 ft Excavation 10" in diameter ☐ Open Bottom ☐ Gravel Pack/Gravel Size _____ in diameter
☒ Conductor Casing 10" in diameter / Conductor Casing Depth _____ ft
 Well Casing Diameter 5 in Thickness/Gauge/ASTM Sched 250 ☐ Steel ☒ Plastic ☐ Stainless Steel ☐ Other _____
 Grout Seal Depth 200 ft ☐ Neat Cement (94 lb bag/5-10 gal water) ☒ Sand Cement 10.3 sack mix/7 gal water
☐ Bentonite (20% solids) ☐ Other _____
 Grout Placement Method ☒ Pumped ☐ Free Fall ☐ Other _____ ☐ Retardant / Accelerator (name) _____

PEDESTAL Installed By ☒ Driller ☐ Pump Contractor ☐ Other _____
 Concrete Pedestal Dimensions: Width 5 ft Length 6 ft Thick 6 in Christy Box ☐ Stove Pipe _____

PUMP ☒ Submersible ☐ Turbine ☐ Other _____ HP 5 Pump Set 200 ft Standing Water Level 1100 ft

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THAT THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES, STATE LAWS, AND RULES AND REGULATIONS. I ALSO CERTIFY THAT MY REQUIRED LICENSE IS CURRENT AND ACTIVE WITH THE CALIFORNIA CONTRACTORS STATE LICENSE BOARD AND THAT I AM IN COMPLIANCE WITH ALL WORKERS COMPENSATION LAWS.

MINIMUM 24 HOUR ADVANCE NOTICE REQUIRED FOR INSPECTIONS - PLEASE CALL (209) 953-7697

SIGNED Marcelus Finkbe TITLE Estimator DATE 05/28/2015

Grid area for site plan or map. Includes handwritten note: "See Attached map".

SITE ADDRESS:

324 3-10-16

PAYMENT RECEIVED

JUN 24 2015
 SAN JOAQUIN COUNTY
 ENVIRONMENTAL
 HEALTH DEPARTMENT

RECEIVED

JUN 11 2015

ENVIRONMENTAL HEALTH DEPARTMENT

DEPARTMENT USE ONLY

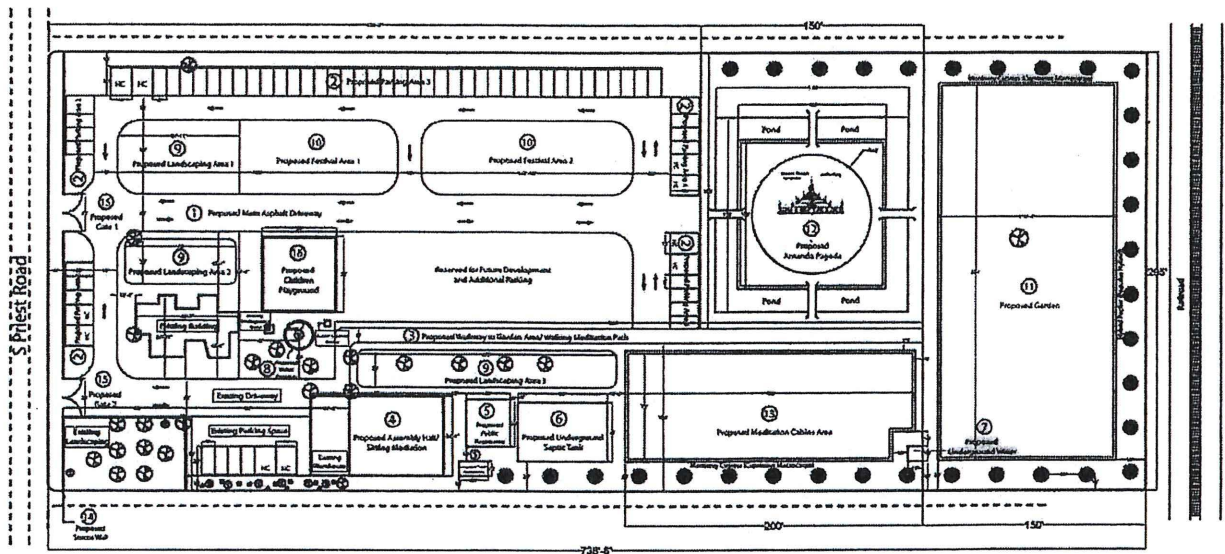
Application Accepted By A. J. [Signature] Date 6/24/15 Area 01/99 Employee ID# Tasapodis
 Grout Inspection By [Signature] Date 10/2/15 ☐ SPECIAL Well Permit
 Pump Inspection By [Signature] Date 5/9/16 ☐ WAIVER Received
 Soil Boring Inspection By _____ Date _____ Constructed Well Depth _____ ft
 COMMENTS 221 of 2 records; not in historical flood area
Grout Seal 10/2/15 date; no issue 2/9/16 Pump OK

PE Codes	SC Info	Received By	Check#/Cash	Amount Remitted	Date	Permit/Service Request #	Invoice #	Well ID#
4366	180	[Signature]	28856	341	6/24/15	SR0072524		
4380	050	[Signature]	28856	53	6/24/15	SR0072525		



Kusalakari Corporation

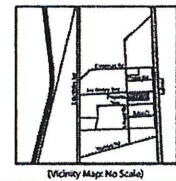
KUSALAKARI MEDITATION CENTER



- | | |
|---|----------------------------|
| Phase 1 | Phase 2 |
| 1 - Main Asphalt Driveway | 8 - Water Fountain |
| 2 - Parking Areas | 9 - Landscaping Areas |
| 3 - Meditation Walkway | 10 - Festival Areas |
| 4 - Meditation Assembly Hall | 11 - Garden |
| 5 - Public Restrooms and Trash Receptacle | 12 - Arnanda Pagoda |
| 6 - Underground Septic Tank | 13 - Meditation Cabins |
| 7 - Underground Water | 14 - Stucco Wall and Sign |
| | 15 - Gates |
| | 16 - Children's Playground |

Existing	Proposed	Proposed
Area	Area	Area
Existing Parking	1	1
Proposed Parking Area 1	1	1
Proposed Parking Area 2	1	1
Proposed Parking Area 3	1	1
Proposed Parking Area 4	1	1
Proposed Parking Area 5	1	1
Proposed Parking Area 6	1	1
Proposed Parking Area 7	1	1
Proposed Parking Area 8	1	1
Proposed Parking Area 9	1	1
Proposed Parking Area 10	1	1
Proposed Parking Area 11	1	1
Proposed Parking Area 12	1	1
Proposed Parking Area 13	1	1
Proposed Parking Area 14	1	1
Proposed Parking Area 15	1	1
Proposed Parking Area 16	1	1
Proposed Parking Area 17	1	1
Proposed Parking Area 18	1	1
Proposed Parking Area 19	1	1
Proposed Parking Area 20	1	1
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Proposed Parking Area 91	1	1
Proposed Parking Area 92	1	1
Proposed Parking Area 93	1	1
Proposed Parking Area 94	1	1
Proposed Parking Area 95	1	1
Proposed Parking Area 96	1	1
Proposed Parking Area 97	1	1
Proposed Parking Area 98	1	1
Proposed Parking Area 99	1	1
Proposed Parking Area 100	1	1

Name: Kusalakari Meditation Center Site Plan
 Address: 5608 S Priest Rd, French Camp, CA 95231
 Scale: 1" = 20' 0"
 Date: 06/07/2012
 Managing by: Sayadaw U Kosalla
 Kun Pe, Myat Htoo, Zew Lin Myat
 Drawing by: Phyu Phyu Aung



SAN JOAQUIN COUNTY
ENVIRONMENTAL HEALTH DEPARTMENT
 1868 East Hazelton Avenue, Stockton, CA 95205-6232
 Telephone: (209) 468-3420 Fax: (209) 468-3433 Web: www.sjgov.org/ehd

PUMP INSPECTION CHECK LIST

Address: <u>9698 Priest Rd.</u>		Permit#: <u>72525</u>	Inspection Date: <u>8/19/16</u>	
Parameter/Standard	Meets SJC Standards?			Comments/Measurements/Recommendations
CEMENT PEDESTAL:				
Dimensions of surface seal (2'x2'x4" minimum)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Casing extends at least 12" above grade	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Casing extends at least 1" above pedestal	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Free of cracks/contiguous with annular seal	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Graded to allow drainage away from casing	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
SANITARY SEAL:				
Well is sealed between pump and casing	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Seal between all pipe columns and casing	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Sounding tube/air vents sealed properly	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Chlorination port available and sealed properly	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
SAMPLE TAP AND BACKFLOW PREVENTION:				
Non-threaded sample tap between well head and check valve or within 3' of well head	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Adequately installed check valve or BFP device	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
No cross connections (ex: chemical feeders hooked to distribution system/ag flood irrigation from domestic supply)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Air gap of at least 6" (same as pipe diameter)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
MAINTENANCE:				
Well/Pump visible and protected from damage	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
Well/Pump free from excessive vegetation	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
MISCELLANEOUS:				
Permit drawing represents actual location of well	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	If 'no' is selected, attach an accurate map to permit	
Permit drawing sufficient to locate well in future	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Photograph taken and attached to record	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
OTHER:				
Comments: <u>NONE</u>				
Inspected By: <u>Tro T...</u>			Title: <u>SR REP</u>	
Received By:			Date:	

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. **a0285958**

Page **1** of **1**

Owner's Well Number **2015-1**

Date Work Began **09/28/2015**

Date Work Ended **10/21/2015**

Local Permit Agency **San Joaquin Environmental Health Department**

Permit Number **SR0072524**

Permit Date **6/24/15**

DWR Use Only - Do Not Fill In

State Well Number/Site Number	
Latitude	Longitude
APN/TRS/Other	

Geologic Log		
Orientation	Drilling Method	Drilling Fluid
<input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Depth from Surface	Feet to Feet	Description
		Describe material, grain size, color, etc
0	15	Fine & medium light brown sand.
15	20	Fine & medium sand with some claystone
20	37	Fine & medium sand w/ some claystone, Multi-color & pyrite.
37	50	Light brwn clay w/ med. & coarse sands multi-color
50	68	Creamy white clay w/ sands
68	80	Super fine sand w/ light brwn clay & coarse sand
80	96	Med. & fine sand multi-colors
96	185	Clay w/ multi-colored sands
185	200	Clay & fine sand
200	230	Medium sand multi-colors
230	245	Medium sand multi-colors w/ small gravel
245	267	Blue shale w/ small gravels
267	270	Sandy blue shale clay w/ medium sands
270	285	Fine shale sand w/ med. multi-colored sands
285	300	Blue Shale like clay
<div style="text-align: center;"> RECEIVED OCT 22 2015 ENVIRONMENTAL HEALTH PERMIT SERVICES </div>		
Total Depth of Boring 300 Feet Total Depth of Completed Well 300 Feet		

Well Owner	
Name Kusalakari Corporation	
Mailing Address 40174 Spady Ct.	
City Freemont State CA Zip 94538	
Well Location	
Address 9698 S. Priest Rd.	
City French Camp County San Joaquin	
Latitude _____ N Longitude _____ W	
Datum _____ Dec. Lat. 37.870436 Dec. Long. -121.266374	
APN Book 193 Page 220 Parcel 15	
Township _____ Range _____ Section _____	
Location Sketch	
(Sketch must be drawn by hand after form is printed.)	
North	
<div style="display: flex; justify-content: space-between;"> West East </div>	
Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.	
Activity	
<input checked="" type="radio"/> New Well <input type="radio"/> Modification/Repair <input type="radio"/> Deepen <input type="radio"/> Other _____ <input type="radio"/> Destroy Describe procedures and materials under "GEOLOGIC LOG"	
Planned Uses	
<input checked="" type="radio"/> Water Supply <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="radio"/> Cathodic Protection <input type="radio"/> Dewatering <input type="radio"/> Heat Exchange <input type="radio"/> Injection <input type="radio"/> Monitoring <input type="radio"/> Remediation <input type="radio"/> Sparging <input type="radio"/> Test Well <input type="radio"/> Vapor Extraction <input type="radio"/> Other _____	
Water Level and Yield of Completed Well	
Depth to first water _____ (Feet below surface)	
Depth to Static _____	
Water Level 32 (Feet)	Date Measured 10/02/2015
Estimated Yield * 40 (GPM)	Test Type Air Lift
Test Length 1.0 (Hours)	Total Drawdown 60 (Feet)
*May not be representative of a well's long term yield.	

Casings								Annular Material			
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size	Depth from Surface	Fill	Description	
Feet to Feet	(Inches)			(Inches)	(Inches)		If Any (Inches)	Feet to Feet			
0	230	11	SDR-17 PVC	.327	5.563	Blank		0	212	Grout	Sand/Slurry
230	250	11	SDR-17 PVC	.327	5.563	Screen	0.032	212	300	Sand	#8
250	270	11	SDR-17 PVC	.327	5.563	Blank					
270	290	11	SDR-17 PVC	.327	5.563	Screen	0.032				
290	300	11	SDR-17 PVC	.327	5.563	Blank					

Attachments	Certification Statement
<input type="checkbox"/> Geologic Log <input type="checkbox"/> Well Construction Diagram <input type="checkbox"/> Geophysical Log(s) <input type="checkbox"/> Soil/Water Chemical Analyses <input type="checkbox"/> Other _____	I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief Name Martell Water Systems, Inc. Person, Firm or Corporation 1818 Loveridge Rd. Pittsburg CA 94565 Address City State Zip Signed [Signature] Date Signed 10-8-15 C-57 Licensed Water Well Contractor 510952 C-57 License Number

Attach additional information, if it exists

001145

Complete in Technical

JOE ADDRESSOR APN# 7850 West RD. CITY French Camp LOT SIZE 5 acres
OWNER'S NAME Shirere Sprouse ADDRESS 581 Amy Ct. PHONE 982-0201
CONTRACTOR Same ADDRESS _____ LIC# _____ PHONE _____
SUB CONTRACTOR Northern S&D Inc. ADDRESS 21 E. Churchill St. #4 LIC# 444225 PHONE 463-5343

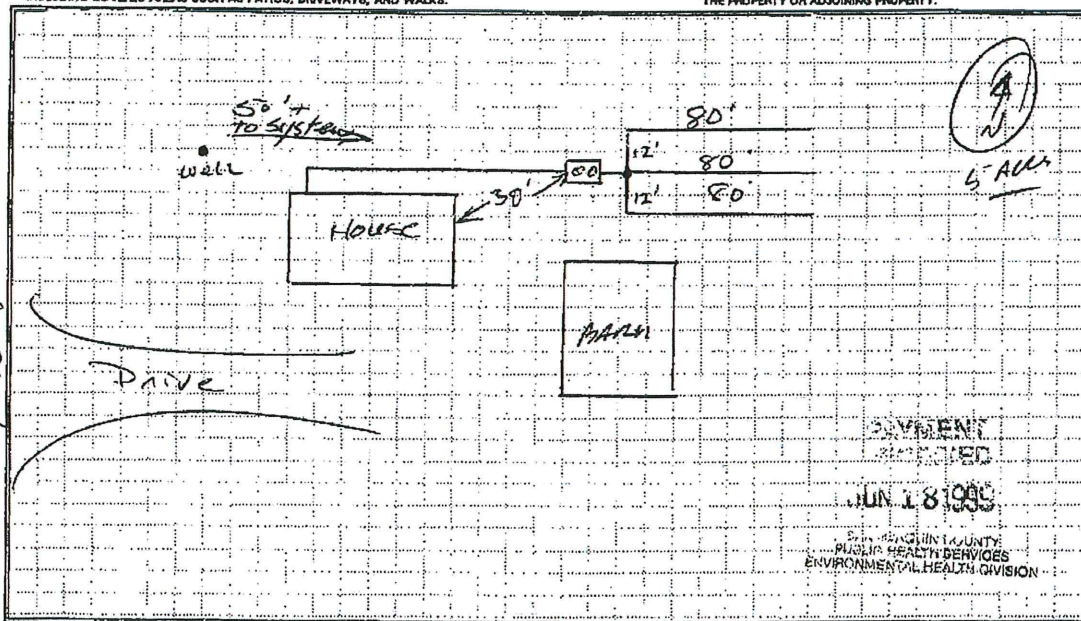
PERC TEST(a) [] HOW MANY
Application #

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THAT THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES AND STATE LAWS, AND RULES AND REGULATIONS OF THE SAN JOAQUIN COUNTY. HOME OWNER OR LICENSED AGENT'S SIGNATURE CERTIFIES THE FOLLOWING: "I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN SUCH A MANNER AS TO BECOME SUBJECT TO WORKMAN'S COMPENSATION LAWS OF CALIFORNIA." CONTRACTOR'S HIRING OR SUB-CONTRACTING SIGNATURE CERTIFIES THE FOLLOWING: "I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL EMPLOY PERSONS SUBJECT TO WORKMAN'S COMPENSATION LAWS OF CALIFORNIA." THE APPLICANT MUST CALL 24 HOURS IN ADVANCE FOR ALL REQUIRED INSPECTIONS, COMPLETE DRAWING BELOW.

BOOKED X

PLOT PLAN (DRAW TO SCALE) SCALE

1. NAMED OR STREETS OR ROADS NEAREST TO THE BOUNDING PROPERTY.
2. OUTLINE OF THE PROPERTY, WITH DIMENSIONS AND NORTH DIRECTION.
3. DIMENSIONED OUTLINE AND LOCATION OF ALL EXISTING AND PROPOSED STRUCTURES, INCLUDING COVERED AREAS SUCH AS PATIOS, DRIVEWAYS, AND WALKS.
4. LOCATION OF HOUSE SEWAGE DISPOSAL SYSTEM OR PROPOSED EXPANSION OF SEWAGE DISPOSAL SYSTEMS.
5. LOCATION OF WELL WITHIN RANGE OF ONE HUNDRED FIFTY FT. OR THE PROPERTY OR ADJACENT PROPERTY.



APPLICATION ACCEPTED BY

FOR DEPARTMENT USE ONLY

DATE: _____

TANK, PIT OR SUMP INSPECTION BY _____

DAT

FIN

i

ADDITIONAL COMMENTS:

ACCOUNTING ONLY:		AIDP		FAC#		5R0019591	
PE CODE	FEE INFO	AMOUNT PERMITTED	CHECK/CASH	RECEIVED BY	DATE	GR / PERMIT NUMBER	INVOICE #
4211	115	180	1505	LB	6/18/99	0195 91	

APPLICATION

SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICES
 ENVIRONMENTAL HEALTH DIVISION
 445 N SAN JOAQUIN, PHONE (209)468-3420
 P O BOX 2009, STOCKTON, CA 95201

PERMIT EXPIRES 1 YEAR FROM DATE ISSUED
 (Complete in Triplicate)

Application is hereby made to San Joaquin County for a permit to construct and/or install the work herein described. This application is made in compliance with San Joaquin County Ordinance No. 549 and 1862 and the Rules and Regulations of San Joaquin County Public Health Services.

Job Address 9659 PRIEST RD City FRENCH Lot Size/Acreage CAMP

Owner's Name JERRY MAY S Address _____ Phone _____

Contractor AL FULLER Address PO 149 MTEN License No. 225582 Phone 8584251

TYPE OF WELL/PUMP: NEW WELL ☐ WELL REPLACEMENT ☐ DESTRUCTION ☐ Out of Service Well ☐
 PUMP INSTALLATION ☐ SYSTEM REPAIR ☐ OTHER ☐ Monitoring Well ☐

DISTANCE TO NEAREST: SEPTIC TANK _____ SEWER LINES _____ DISPOSAL FLD. _____ PROP. LINE _____
 FOUNDATION _____ AGRICULTURE WELL _____ OTHER WELL _____ PITS/SUMPS _____

INTENDED USE TYPE OF WELL PROBLEM AREA CONSTRUCTION SPECIFICATIONS
☐ Industrial ☐ Open Bottom ☐ Manteca Dia. of Well Excavation _____ Dia. of Well Casing _____
☐ Domestic/Private ☐ Gravel Pack ☐ Tracy Type of Casing _____ Specifications _____
☐ Public ☐ Other ☐ Delta Depth of Grout Seal _____ Type of Grout _____
☐ Irrigation _____ Approx. Depth _____ Eastern Surface Seal Installed by _____
 Repair Work Done ☐ Type of Pump _____ H.P. _____ State Work Done _____
 Well Destruction ☐ Well Diameter _____ Sealing Material & Depth _____
 Depth _____ Filler Material & Depth _____

TYPE OF SEPTIC WORK: NEW INSTALLATION ☐ REPAIR/ADDITION ☒ DESTRUCTION ☐ (No septic system permitted if public sewer is available within 200 feet.)

Installation will serve: Residence ☒ Commercial _____ Other _____

Number of living units: 1 Number of bedrooms 3

Character of soil to a depth of 3 feet: Sandy loam

Water table depth _____

SEPTIC TANK ☐ Type/Mfg PPL Capacity 1200 No. Compartments 2

PKG. TREATMENT PLT. ☐ Method of Disposal _____

Distance to nearest: Well 100' Foundation 125' Property Line 65'

LEACHING LINE ☒ No. & Length of lines 50 FT Total length/size 100 FT

FILTER BED ☐ Distance to nearest: Well 100' Foundation 25' Property Line 15'

SEEPAGE PITS ☐ Depth 8 FT Size 2'x12'x8' Number 2

SUMPS ☒ Distance to nearest: Well _____ Foundation _____ Property Line _____

DISPOSAL PONDS ☐

I hereby certify that I have prepared this application and that the work will be done in accordance with San Joaquin county ordinances, state laws, and rules and regulations of the San Joaquin County Home owner or licensed agent's signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall not employ any person in such manner as to become subject to workman's compensation laws of California." Contractor's hiring or sub-contracting signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall employ persons subject to workman's compensation laws of California."

The applicant must call for all required inspections. Complete drawing on reverse side.

Signed X AL Fuller Title: Contractor Date: 7-25-90

FOR DEPARTMENT USE ONLY

Application Accepted by [Signature] Date 7-25-91 Area 215

Pit or Grout Inspection by [Signature] Date 7/26/91 Final Inspection by [Signature] Date 7/26/91

Additional Comments: Sumps 4'x6'x8'

Applicant - Return all copies to: San Joaquin County Public Health Services
 Environmental Health Permit/Services
 445 N San Joaquin, P O Box 2009, Stkn, CA 95201

FEE INFO	AMOUNT DUE	AMOUNT REMITTED	CK # CASH	RECEIVED BY	DATE	PERMIT NO.
SR	114.00	—	000045	[Signature]	7-25-91	91-1837

9659 PRIEST ROAD - FRENCH CAMP

SCALE _____" TO _____

-
- A hand-drawn site plan on graph paper. The plan shows a rectangular building labeled 'GARAGE' on the left and a larger rectangular building labeled 'HOUSE' on the right. A 'DRIVEWAY' is shown between them. A 'WELL' is located to the right of the house, connected by a line labeled '60 FT'. A 'NEW GAL PUMP' is indicated near the house. Dimensions are given for various sections: '50 FT' for the driveway, '120 FT' for the house, and '50 FT' for the well area. A north arrow is at the top. The plan is titled 'PRIEST' at the bottom.

PRICST

~~COPY~~

APPLICATION FOR LIQUID WASTE PERMIT
SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
P.O. BOX 388, 445 N. SAN JOAQUIN ST., STOCKTON, CA 95201-0388
(209) 488-3420

~~COPY~~

NON-REFUNDABLE PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

(Complete in Triplicate)

APPLICATION IS HEREBY MADE TO THE SAN JOAQUIN COUNTY FOR A PERMIT TO CONSTRUCT AND/OR INSTALL THE WORK DESCRIBED. THIS APPLICATION IS MADE IN COMPLIANCE WITH SAN JOAQUIN COUNTY DEVELOPMENT TITLE, CHAPTER 9-1110.3 AND THE STANDARDS OF SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICES, ENVIRONMENTAL HEALTH DIVISION.

JOB ADDRESS/OR APTS: 9733 So Priest RD CITY: FRENCH CAMP LOT SIZE: _____
OWNER'S NAME: R. Williams ADDRESS: SAME PHONE: _____
CONTRACTOR: Walthall ADDRESS: 3883 So EL Dorado LIC# 430829 PHONE: 9825624
SUB CONTRACTOR: _____ ADDRESS: _____ LIC# _____ PHONE: _____

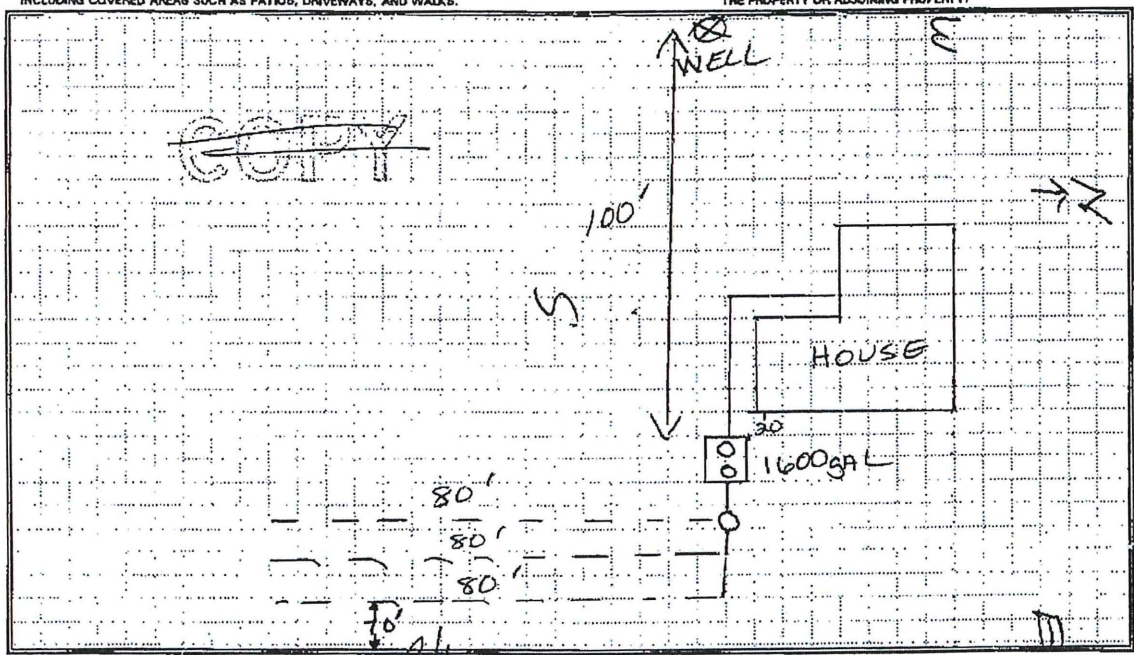
TYPE OF SEPTIC WORK: NEW INSTALLATION ☒ REPAIR/ADDITION ☐ DESTRUCTION ☐
(NO SEPTIC SYSTEM PERMITTED IF PUBLIC SEWER IS AVAILABLE WITHIN 200 FEET OF BUILDING.)
PERC TEST(s) [] HOW MANY _____
Application # _____

INSTALLATION WILL SERVE: RESIDENCE ☒ COMMERCIAL ☐ OTHER ☐
NUMBER OF LIVING UNITS: 1 NUMBER OF BEDROOMS: 3 NUMBER OF EMPLOYEES: _____
CHARACTER OF SOIL TO A DEPTH OF 3 FEET: SAND PIT/SUMP SOIL CHARACTER: _____ WATER TABLE DEPTH: _____
SEPTIC TANK/GREASE TRAP ☐ TYPE/MFG: Concrete CAPACITY: 1600 NO. COMPARTMENTS: 2
PKG TREATMENT PLANT ☐ DISTANCE TO NEAREST: WELL 100' FOUNDATION 20' PROPERTY LINE 95'
LEACHING LINE ☐ SIZE: _____ TYPE OF PUMP: _____ SAND OIL SEPARATOR (ENCLOSED SYSTEM) _____
NO. & LENGTH OF LINES: 380' DISTANCE TO NEAREST: WELL 120' FOUNDATION 50' PROPERTY LINE 15'
FILTER BED ☐ WIDTH: _____ LENGTH: _____ DEPTH: _____ DISTANCE TO NEAREST: WELL _____ FOUNDATION _____ PROPERTY LINE _____
MOUNDING ☐ WIDTH: _____ LENGTH: _____ DEPTH: _____ DISTANCE TO NEAREST: WELL _____ FOUNDATION _____ PROPERTY LINE _____
SEEPAGE PITS ☐ DEPTH: _____ SIZE: _____ NUMBER: _____ DISTANCE TO NEAREST: WELL _____ FOUNDATION _____ PROPERTY LINE _____
GUMPS ☐ WIDTH: _____ LENGTH: _____ DEPTH: _____ DISTANCE TO NEAREST: WELL _____ FOUNDATION _____ PROPERTY LINE _____
DISPOSAL POND ☐ WIDTH: _____ LENGTH: _____ DEPTH: _____ DISTANCE TO NEAREST: WELL _____ FOUNDATION _____ PROPERTY LINE _____

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THAT THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES AND STATE LAWS, AND RULES AND REGULATIONS OF THE SAN JOAQUIN COUNTY. HOME OWNER OR LICENSED AGENT'S SIGNATURE CERTIFIES THE FOLLOWING: "I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN SUCH A MANNER AS TO BECOME SUBJECT TO WORKMAN'S COMPENSATION LAWS OF CALIFORNIA." CONTRACTOR'S HIRING OR SUB-CONTRACTING SIGNATURE CERTIFIES THE FOLLOWING: "I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL EMPLOY PERSONS SUBJECT TO WORKMAN'S COMPENSATION LAWS OF CALIFORNIA." THE APPLICANT MUST CALL 24 HOURS IN ADVANCE FOR ALL REQUIRED INSPECTIONS. COMPLETE DRAWING BELOW.

SIGNED: [Signature] TITLE: Contractor DATE: 11-14-94

- PLOT PLAN (DRAW TO SCALE) SCALE _____ TO _____
1. NAMES OF STREETS OR ROADS NEAREST TO OR BOUNDING THE PROPERTY.
 2. OUTLINE OF THE PROPERTY, WITH DIMENSIONS AND NORTH DIRECTION.
 3. DIMENSIONED OUTLINES AND LOCATION OF ALL EXISTING AND PROPOSED STRUCTURES, INCLUDING COVERED AREAS SUCH AS PATIOS, DRIVEWAYS, AND WALKS.
 4. LOCATION OF HOUSE SEWAGE DISPOSAL SYSTEM OR PROPOSED EXPANSION OF SEWAGE DISPOSAL SYSTEMS.
 5. LOCATION OF WELLS WITHIN RADIUS OF ONE HUNDRED FIFTY FT. ON THE PROPERTY OR ADJOINING PROPERTY.



APPLICATION ACCEPTED BY: C. Baughman DATE: 11/15/94 AREA: 218
TANK, PIT OR SUMP INSPECTION BY: Ted M. [unclear] DATE: 11/14/94 FINAL INSPECTION BY: Ted M. [unclear] DATE: 11/14/94
ADDITIONAL COMMENTS: _____

ACCOUNTING ONLY:		AID#	FAC#		5R0004679		
PE CODE	FEE INFO	AMOUNT REMITTED	CHECK/CASH	RECEIVED BY	DATE	BR / PERMIT NUMBER	INVOICE #
4211	114	9/114		SA	11-14-94	4679	015390

APPLICATION FOR PERMIT
SAN JOAQUIN LOCAL HEALTH DISTRICT
1601 E. HAZELTON AVE., STOCKTON, CA
Telephone (209) 466-6781

PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

(Complete in Triplicate)

Application is hereby made to the San Joaquin Local Health District for a permit to construct and/or install the work herein described. This application is made in compliance with San Joaquin County Ordinance No. 549 for sewage or No. 1862 for well/pump and the Rules and Regulations of the San Joaquin Local Health District.

Job Address 9553 4549 S. PRIEST RD City FC Lot Size 109X504 PM 83-78 Parcel A

Owner's Name W. P. CALIF Address SAME Phone 982-4820

Contractor's Name FLOYD E. WOOD License No. 425276 Phone 465-3971

TYPE OF WELL/PUMP: ☐ NEW WELL ☐ WELL REPLACEMENT ☐ DESTRUCTION ☐
☐ PUMP INSTALLATION ☐ SYSTEM REPAIR ☐ OTHER ☐
DISTANCE TO NEAREST: SEPTIC TANK _____ SEWER LINES _____ DISPOSAL FLD. _____ PROP. LINE _____
FOUNDATION _____ AGRICULTURE WELL _____ OTHER WELL _____ PITS/SUMPS _____

INTENDED USE	TYPE OF WELL	PROBLEM AREA	CONSTRUCTION SPECIFICATIONS	
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Bottom	<input type="checkbox"/> Manteca	Dia. of Well Excavation _____	Dia. of Well Casing _____
<input type="checkbox"/> Domestic/Private	<input type="checkbox"/> Gravel Pack	<input type="checkbox"/> Tracy	Type of Casing _____	Specifications _____
<input type="checkbox"/> Public	<input type="checkbox"/> Other	<input type="checkbox"/> Delta	Depth of Grout Seal _____	Type of Grout _____
<input type="checkbox"/> Irrigation	Approx. Depth _____	<input type="checkbox"/> Eastern	Surface Seal Installed by _____	
Repair Work Done <input type="checkbox"/>	Type of Pump _____	H.P. _____	State Work Done _____	
Well Destruction <input type="checkbox"/>	Well Diameter _____	Sealing Material (top 50') _____		
	Depth _____	Filler Material (Below 50') _____		

TYPE OF SEPTIC WORK: NEW INSTALLATION ☒ REPAIR/ADDITION ☐ DESTRUCTION ☐ (No septic system permitted if public sewer is available within 200 feet.)

Installation will serve: Residence ☒ Commercial _____ Other _____

Number of living units: 1 Number of bedrooms: 3

Character of soil to a depth of 3 feet: SANDY LOAM

SEPTIC TANK ☒ Type/Mfg. CC P&L Capacity 1600 Water table depth _____
No. Compartments 2

PKG. TREATMENT PLT. ☐ Method of Disposal _____
Distance to nearest: Well 70' Foundation 15' Property Line 20'

LEACHING LINE ☒ No. & Length of lines 3-80' Total length/size 240' X 2'
FILTER BED ☐ Distance to nearest: Well 100' Foundation 140' Property Line 20'

SEEPAGE PITS ☐ Depth _____ Size _____ Number _____

SUMPS ☐ Distance to nearest: Well _____ Foundation _____ Property Line _____

DISPOSAL PONDS ☐

I hereby certify that I have prepared this application and that the work will be done in accordance with San Joaquin county ordinances, state laws, and rules and regulations of the San Joaquin Local Health District.

Home owner or licensed agent's signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall not employ any person in such manner as to become subject to workman's compensation laws of California." Contractor's hiring or sub-contracting signature certifies the following: "I certify that in the performance of the work for which this permit is issued, I shall employ persons subject to workman's compensation laws of California."

The applicant must call for all required inspections. Complete drawing on reverse side.

Signed X Floyd Wood Title: Cont Date: 2-11-85

Application Accepted by W.R. Snively Date 2/11/85 Area 08

Pit or Grout Inspection by _____ Date _____ Final Inspection by [Signature] Date 2-14-85

Additional Comments:

☐ Stk 466-6781 ☐ Lodi 369-3621 ☐ Manteca 823-7104 ☐ Tracy 835-6385

Applicant - Return all copies to: Environmental Health Permit/Services 1601 E. Hazelton Ave., P.O. Box 2009, Stk., CA 95201

FEE INFO	AMOUNT DUE	AMOUNT REMITTED	CK # CASH	RECEIVED BY	DATE	PERMIT NO.
	45	Chg		ND	2-11-85	85-104

SCALE _____" TO _____'

- [illegible]

APPLICATION FOR LIQUID WASTE PERMIT
SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
P.O. BOX 388, 446 N. SAN JOAQUIN ST., STOCKTON, CA 95201-0388
(209) 468-3420

19322005

NON-REFUNDABLE PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

(Complete in Triplicate)

APPLICATION IS HEREBY MADE TO THE SAN JOAQUIN COUNTY FOR A PERMIT TO CONSTRUCT AND/OR INSTALL THE WORK DESCRIBED. THIS APPLICATION IS MADE IN COMPLIANCE WITH SAN JOAQUIN COUNTY DEVELOPMENT TITLE, CHAPTER 9-1110.3 AND THE STANDARDS OF SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICES, ENVIRONMENTAL HEALTH DIVISION.

JOB ADDRESSOR APN# 9553 S. Priest Rd CITY French Camp LOT SIZE 109x504
OWNER'S NAME W.P. Calif ADDRESS 9553 S. Priest Rd PHONE 982-4820
CONTRACTOR Dennis Ogilvie ADDRESS 104 E Yorkshire Dr LIC# 792392 PHONE 478-8410
SUB CONTRACTOR ADDRESS Stockton 95207 LIC# PHONE

TYPE OF SEPTIC WORK: NEW INSTALLATION ☐ REPAIR/ADDITION ☒ DESTRUCTION ☐
(No septic system permitted if public sewer is available within 200 feet of buildings.)

PERC TEST(s) () HOW MANY
Application #

INSTALLATION WILL SERVE: RESIDENCE ☒ COMMERCIAL ☐ OTHER ☐

NUMBER OF LIVING UNITS: 1 NUMBER OF BEDROOMS: 3 NUMBER OF EMPLOYEES:

CHARACTER OF SOIL TO A DEPTH OF 3 FEET: Sandy PIT/SUMP SOIL CHARACTER: WATER TABLE DEPTH

SEPTIC TANK/CREASE TRAP ☐ TYPE/MFG Concrete CAPACITY 1600 NO. COMPARTMENTS 2 Existing

PKG TREATMENT PLANT ☐ DISTANCE TO NEAREST: WELL 70' FOUNDATION 15' PROPERTY LINE 20'

LIFT STATION ☐ SIZE TYPE OF PUMP SAND OIL SEPARATOR (ENCLOSED SYSTEM)

LEACHING LINE ☒ NO. & LENGTH OF LINES 80' DISTANCE TO NEAREST: WELL 100' FOUNDATION 140' PROPERTY LINE 20'

FILTER BED ☐ WIDTH LENGTH DEPTH DISTANCE TO NEAREST: WELL FOUNDATION PROPERTY LINE

MOUND ☐ WIDTH LENGTH DEPTH DISTANCE TO NEAREST: WELL FOUNDATION PROPERTY LINE

SEEPAGE PITS ☐ DEPTH SIZE NUMBER DISTANCE TO NEAREST: WELL FOUNDATION PROPERTY LINE

SUMPS ☐ WIDTH LENGTH DEPTH DISTANCE TO NEAREST: WELL FOUNDATION PROPERTY LINE

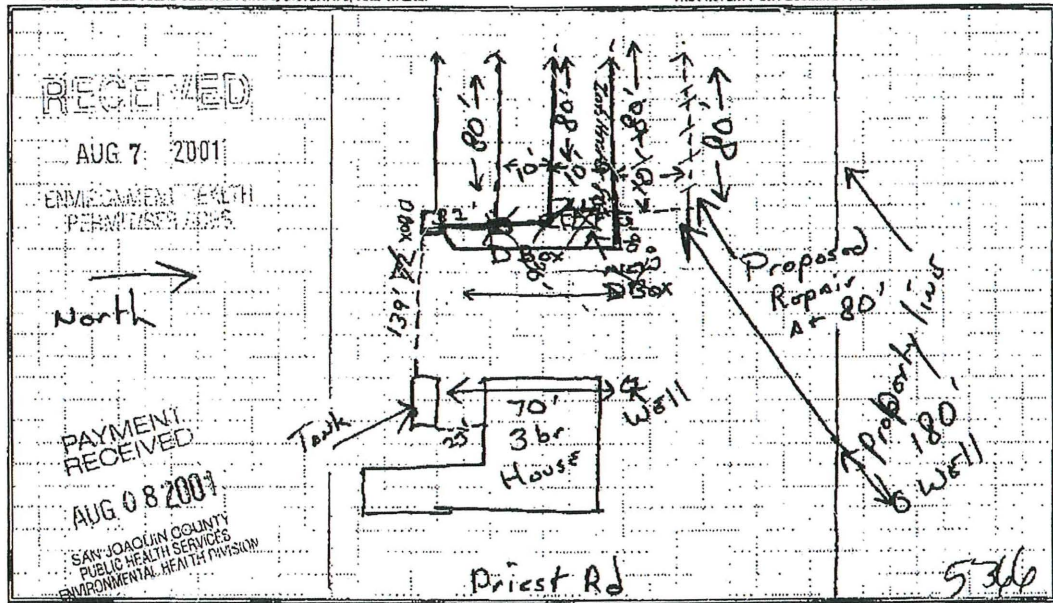
DISPOSAL PONDS ☐ WIDTH LENGTH DEPTH DISTANCE TO NEAREST: WELL FOUNDATION PROPERTY LINE

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THAT THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES AND STATE LAWS, AND RULES AND REGULATIONS OF THE SAN JOAQUIN COUNTY. HOME OWNER OR LICENSED AGENT'S SIGNATURE CERTIFIES THE FOLLOWING: "I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN SUCH A MANNER AS TO BECOME SUBJECT TO WORKMAN'S COMPENSATION LAWS OF CALIFORNIA." CONTRACTOR'S HIRING OR SUB-CONTRACTING SIGNATURE CERTIFIES THE FOLLOWING: "I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL EMPLOY PERSONS SUBJECT TO WORKMAN'S COMPENSATION LAWS OF CALIFORNIA." THE APPLICANT MUST CALL 24 HOURS IN ADVANCE FOR ALL REQUIRED INSPECTIONS. COMPLETE DRAWING BELOW.

SIGNED X Dennis Ogilvie TITLE: DATE: 8/7/01

PLOT PLAN (DRAW TO SCALE) SCALE "to

- NAMES OF STREETS OR ROADS NEAREST TO OR BOUNDING THE PROPERTY.
- OUTLINE OF THE PROPERTY, WITH DIMENSIONS AND NORTH DIRECTION.
- DIMENSIONED OUTLINES AND LOCATION OF ALL EXISTING AND PROPOSED STRUCTURES, INCLUDING COVERED AREAS SUCH AS PATIOS, DRIVEWAYS, AND WALKS.
- LOCATION OF HOUSE SEWAGE DISPOSAL SYSTEM OR PROPOSED EXPANSION OF SEWAGE DISPOSAL SYSTEMS.
- LOCATION OF WELLS WITHIN RADIUS OF ONE HUNDRED FIFTY FT. ON THE PROPERTY OR ADJOINING PROPERTY.



9553 S Priest Rd

APPLICATION ACCEPTED BY Russell A. Turnbull DATE: 8/7/01 AREA: 219
TANK, PIT OR SUMP INSPECTION BY Jim Mason DATE: 8/9/01 FINAL INSPECTION BY Jim Mason DATE: 8/9/01
ADDITIONAL COMMENTS: Added to existing system without changing to new line

ACCOUNTING ONLY:		AID#	FAC#
PE CODE	FEE INFO	AMOUNT REMITTED	CHECK/CASH
4210	115	190.00	5095
RECEIVED BY	DATE	BR / PERMIT NUMBER	INVOICE #
LT	8/7/01	SR0027021	

130

ONSITE WASTEWATER TREATMENT SYSTEM PERMIT

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

600 E MAIN STREET - STOCKTON CA 95202 - (209) 468-3420

NON-REFUNDABLE PERMIT

CALL (209) 953-7697 FOR INSPECTIONS

EXPIRES 1 YEAR FROM DATE ISSUED

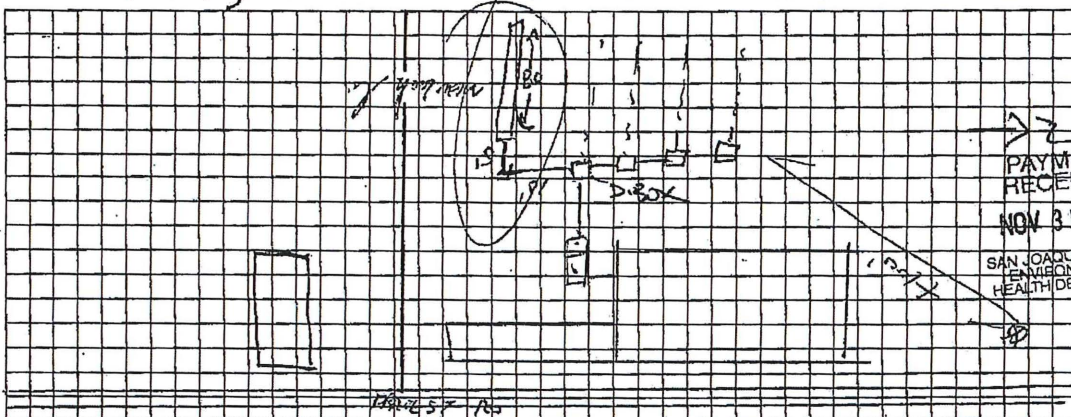
JOB ADDRESS 9553 S PRIEST RD CITY/ZIP FRENCH CAMP 95231
 CROSS STREET WATTERS APN 193-220-50 PARCEL SIZE 1.26
 OWNER NAME BALVINDER KAIR PHONE 479-4376
 OWNER ADDRESS SAME CITY/STATE/ZIP _____
 CONTRACTOR CHIER PLUMBING PHONE 209-581-9458
 CONTRACTOR ADDRESS P.O. Box 1787 CITY/STATE/ZIP CERES, CA 95307
 LICENSE ☐ C-42 ☒ C-36 OTHER _____ NUMBER _____ EXPIRATION DATE _____

WATER TABLE DEPTH: _____ ft GEOGRAPHICAL INFORMATION: Coordinates X _____ Y _____
☐ PERC-TEST # _____ BUILDING PERMIT # _____ LAND USE APPLICATION # _____
 TYPE OF WORK: ☐ NEW INSTALLATION ☒ REPAIR/ADDITION ☐ ENGINEER DESIGNED /ALTERNATIVE
☐ REPLACEMENT ☐ OUT-OF-SERVICE SEPTIC SYSTEM ☐ DESTRUCTION
 INSTALLATION WILL SERVE: ☒ RESIDENCE ☐ COMMERCIAL ☐ OTHER _____
 NUMBER OF LIVING UNITS: _____ NUMBER OF BEDROOMS: _____ NUMBER OF EMPLOYEES: _____
☐ SEPTIC TANK TYPE/MFG _____ CAPACITY _____ gal # OF COMPARTMENTS _____
☐ GREASE TRAP TYPE/MFG _____ CAPACITY _____ gal # OF COMPARTMENTS _____
 DISTANCE TO NEAREST: WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ LIFT STATION SIZE _____ TYPE OF PUMP _____ ☐ PKG TX PLANT ☐ SAND OIL SEPARATOR (ENCLOSED SYSTEM)
☒ LEACH LINES ☐ LEACHING CHAMBERS # OF LINES 1 LENGTH OF LINES 80' ft
 DISTANCE TO NEAREST WELL 100 ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ FILTER BED WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft
 DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ MOUNDED WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft
 DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ SUMPS WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft
 DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ DISPOSAL PONDS WIDTH _____ ft LENGTH _____ ft DEPTH _____ ft
 DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft
☐ SEEPAGE PITS NUMBER _____ WIDTH _____ ft DEPTH _____ ft
 DISTANCE TO NEAREST WELL _____ ft FOUNDATION _____ ft PROPERTY LINE _____ ft

I HEREBY CERTIFY THAT I HAVE PREPARED THIS APPLICATION AND THE WORK WILL BE DONE IN ACCORDANCE WITH SAN JOAQUIN COUNTY ORDINANCES, STATE LAWS AND RULES AND REGULATIONS OF SAN JOAQUIN COUNTY.

MINIMUM 24 HOUR ADVANCE NOTICE REQUIRED FOR INSPECTIONS - PLEASE CALL (209) 953-7697

SIGNED [Signature] TITLE OWNER DATE _____



PAYMENT
RECEIVED

NOV 30 2009

SAN JOAQUIN COUNTY
ENVIRONMENTAL
HEALTH DEPARTMENT

Application Accepted By [Signature] DEPARTMENT USE ONLY Date 11/30/09 Area _____ Employee ID# 46045/99
 Final Inspection By [Signature] Date 12/3/09 ☐ SPECIAL PERMIT - Approved by _____
 Character of Soil to Depth of 3 Ft: _____ Pit/Sump Soil Character: _____

COMMENTS NEW LOT OF RECORD
Repair finished, no issues [Signature]

PE Code	SC INFO	Received By	Check# Cash	Amount Remitted	Date	Permit/ Service Request #	Invoice #	Permit ID#
4210	115	<u>26</u>	1115	\$230.00	11/30/09	SL0058852		

SITE ADDRESS:

9553 S. PRIEST RD.

August 14, 2019

Live Oak Geo Environmental
 407 W. Oak Street
 Lodi, CA 95240

Lab ID : STK1951306
 Customer : 3-16608

Laboratory Report

Introduction: This report package contains total of 7 pages divided into 3 sections:

Case Narrative	(2 pages) : An overview of the work performed at FGL.
Sample Results	(3 pages) : Results for each sample submitted.
Quality Control	(2 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
Travel Blank	08/02/2019	08/02/2019	STK1951306-000	LBW
Domestic Well	08/02/2019	08/02/2019	STK1951306-001	DW

Sampling and Receipt Information: All samples were received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. All samples arrived on ice. All samples were prepared and analyzed within the method specified hold time. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Organic QC

504	08/10/2019:209081 All preparation quality controls are within established criteria
504.1	08/11/2019:212253 All analysis quality controls are within established criteria

Inorganic - Wet Chemistry QC

4500NO3F	08/06/2019:211992 All analysis quality controls are within established criteria
	08/06/2019:208904 All preparation quality controls are within established criteria

August 14, 2019
Live Oak Geo Environmental

Lab ID : STK1951306
Customer : 3-16608

Certification:: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:DMB

Approved By **Kelly A. Dunnahoo, B.S.**



Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2019-08-14



ENVIRONMENTAL AGRICULTURAL

Analytical Chemists

August 14, 2019

Lab ID : STK1951306-000

Customer ID : 3-16608

Live Oak Geo Environmental

407 W. Oak Street

Lodi, CA 95240

Sampled On : August 2, 2019-11:15

Sampled By : Tony Racco

Received On : August 2, 2019-13:35

Matrix : Lab. Blank Water

Description : Travel Blank

Project : Kusalakari, 9698 S. Priest Rd. French Camp, CA

Sample Result - Organic

Constituent	Result	PQL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
EPA 504.1								
1,3-Dibromopropane [‡]	112	70-130	%		504	08/10/19:209081	504.1	08/11/19:212253
DBCP	ND	0.01	ug/L		504	08/10/19:209081	504.1	08/11/19:212253
EDB	ND	0.02	ug/L		504	08/10/19:209081	504.1	08/11/19:212253

ND=Non-Detected. PQL=Practical Quantitation Limit. [‡]Surrogate. * PQL adjusted for dilution.



ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

August 14, 2019

Lab ID : STK1951306-001

Customer ID : 3-16608

Live Oak Geo Environmental

407 W. Oak Street

Lodi, CA 95240

Sampled On : August 2, 2019-11:15

Sampled By : Tony Racco

Received On : August 2, 2019-13:35

Matrix : Drinking Water

Description : Domestic Well

Project : Kusalakari, 9698 S. Priest Rd. French Camp, CA

Sample Result - Inorganic

Constituent	Result	PQL	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Wet Chemistry								
Nitrate Nitrogen	22.6	0.2	mg/L	10	4500NO3F	08/06/19:208904	4500NO3F	08/06/19:211992

ND=Non-Detected. PQL=Practical Quantitation Limit. * PQL adjusted for dilution.

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

August 14, 2019

Lab ID : STK1951306-001
Customer ID : 3-16608

Live Oak Geo Environmental
407 W. Oak Street
Lodi, CA 95240

Sampled On : August 2, 2019-11:15
Sampled By : Tony Racco
Received On : August 2, 2019-13:35
Matrix : Drinking Water

Description : Domestic Well
Project : Kusalakari, 9698 S. Priest Rd. French Camp, CA

Sample Result - Organic

Constituent	Result	PQL	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
EPA 504.1								
1,3-Dibromopropane [‡]	101	70-130	%		504	08/10/19:209081	504.1	08/11/19:212253
DBCP	ND	0.01	ug/L	0.2	504	08/10/19:209081	504.1	08/11/19:212253
EDB	ND	0.02	ug/L	0.05	504	08/10/19:209081	504.1	08/11/19:212253

ND=Non-Detected. PQL=Practical Quantitation Limit. [‡]Surrogate. * PQL adjusted for dilution.

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

August 14, 2019
Live Oak Geo Environmental

Lab ID : STK1951306
Customer : 3-16608

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic 1,2-Dibromoethane(EDB)	504	08/10/19:209081SBL (STK1951165-001)	Blank	ug/L		ND	<0.02	
			LCS	ug/L	0.2448	69.9 %	70-130	
			LCS	ug/L	0.2450	88.6 %	70-130	
			MS	ug/L	0.2453	94.0 %	70-130	
			MSD	ug/L	0.2485	87.8 %	70-130	
			MSRPD	ug/L	0.5832	5.5%	≤30	
			QMDL	ug/L	0.01953	120 %	60-140	
1,3-Dibromopropane	504	08/10/19:209081SBL (STK1951165-001)	Blank	ug/L	0.5899	108 %	70-130	
			LCS	ug/L	0.5744	99.2 %	70-130	
			LCS	ug/L	0.5749	94.5 %	70-130	
			MS	ug/L	0.5756	98.6 %	70-130	
			MSD	ug/L	0.5832	92.2 %	70-130	
			MSRPD	ug/L	0.5832	5.4%	≤30	
			QMDL	ug/L	0.5773	108 %	70-130	
DBCP	504	08/10/19:209081SBL (STK1951165-001)	Blank	ug/L		ND	<0.01	
			LCS	ug/L	0.2448	70.4 %	70-130	
			LCS	ug/L	0.2450	93.6 %	70-130	
			MS	ug/L	0.2453	98.1 %	70-130	
			MSD	ug/L	0.2485	95.2 %	70-130	
			MSRPD	ug/L	0.5832	1.7%	≤30	
			QMDL	ug/L	0.01953	93.4 %	60-140	
1,3-DBP	504.1	08/11/19:212253SBL	CCV	ug/L	7.481	94.4 %	70-130	
			CCV	ug/L	9.975	105 %	70-130	
DBCP	504.1	08/11/19:212253SBL	CCV	ug/L	2.000	102 %	70-130	
			CCV	ug/L	5.000	109 %	70-130	
EDB	504.1	08/11/19:212253SBL	CCV	ug/L	2.000	96.5 %	70-130	
			CCV	ug/L	5.000	92.6 %	70-130	
Definition CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria. Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples. LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery. MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery. MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery. MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis. ND : Non-detect - Result was below the DQO listed for the analyte. DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.								

August 14, 2019
Live Oak Geo Environmental

Lab ID : STK1951306
Customer : 3-16608

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Nitrate + Nitrite as N	4500NO3F	(SP 1910181-001)	MS	mg/L	28.04	36.6 %	5-285	
			MSD	mg/L	28.04	37.7 %	5-285	
			MSRPD	mg/L	28.04	1.5%	≤30.4	
	4500NO3F	08/06/19:211992JDD	CCB	mg/L		0.092	0.2	
			CCV	mg/L	11.22	93.3 %	90-110	
			CCB	mg/L		0.194	0.2	
			CCV	mg/L	11.22	94.1 %	90-110	
Definition CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria. CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria. MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery. MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery. MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis. DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.								



ENVIRONMENTAL

CHAIN OF CUSTODY
AND ANALYSIS REQUEST DOCUMENT

Client: Live Oak GeoEnvironmental Customer Number: 3016608 Address: 407 W. Oak St. Lodi, CA 96240 Phone: (209) 369-0375 Fax: Email Address: abby@logelodi.com Contact Person: Abby Racco Project Name: Kusalakari, 9698 S. Priest Rd. Purchase Order Number: French Camp, CA Quote Number: Sampler(s): TONY RACCO Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: _____ Time: _____				Lab Number: 1951306		TEST DESCRIPTION AND ANALYSES REQUESTED									
				<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> Method of Sampling: Composite (C) Grab (G) Number of Containers Type of Containers: Glass (G) Plastic (P) VOA (V) Metal Tube (MT) Potable (P) Non-Potable (NP) Ag Water (AgW) Surface Water (SW) Monitoring Well (MW) Ground Water (GW) Travel Blank (TB) Waste Water (WW) Drinking Water (DW) Soil (S) Sludge (SLG) Solid (SLD) Oil (O) Bact: System (Sys) Source (SRC) Waste (W) Bact: Routine (ROUT) Repeat (RPT) Other (OTH) Replace (RPL) Special (SPL) Leaf Tissue (LT) Petiole Tissue (PET) Produce (PRD) Preservative: (1) NaOH + ZnAc, (2) NaOH, (3) HCl (4) H2SO4, (5) HNO3, (6) Na2S2O3, (7) Other </div> <div style="width: 60%;"> <p style="font-size: 2em; opacity: 0.5; transform: rotate(-45deg); position: absolute; top: 100px; right: 100px;">RUSH</p> <p style="font-size: 2em; opacity: 0.5; transform: rotate(-45deg); position: absolute; top: 300px; right: 100px;">RUSH</p> <p style="position: absolute; top: 250px; left: 100px; transform: rotate(-90deg);"> DBCP Nitrate - 1603P, 8 mg H2SO4 </p> </div> </div>											
Samp Num	Location Description	Date Sampled	Time Sampled												
0	Travel Blank	8-2-19	11:15	G	2	G							X		
1	Domestic Well	8-2-19	11:15	G	3	P/G	P	DW	SRC	O			X	X	
Remarks: 7 Day RUSH				Relinquished	Date:	Time:	Relinquished	Date:	Time:	Relinquished	Date:	Time:			
				Received By:	Date:	Time:	Received By:	Date:	Time:	Received By:	Date:	Time:			
				Tony Racco	8/2/19	1335	DR	8/2/19	1700	GSO					
				DR	8/2/19	1335	GSO	8/2/19	1700						
											8/3/19	11050			

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FAX: 530/343-3807
CA ELAP Certification No. 2670

Field Office
Visalia, California
TEL: 559/734-9473
Mobile: 559/737-2399
FAX: 559/734-8435

Inter-Laboratory Condition Upon Receipt (Attach to COC) 1951306

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # _____

2. Were samples received in a chilled condition? Temps: 9.8 / _____ / _____ / _____ / _____
Surface water SWTR bact samples: A sample that has a temperature upon receipt of $>10^{\circ}\text{C}$, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

- | | | | |
|---|------------|----|-----|
| 3. Do the number of bottles received agree with the COC? | <u>Yes</u> | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <u>Yes</u> | No | |
| 5. VOAs checked for Headspace? | <u>Yes</u> | No | N/A |
| 6. Were sample custody seals intact? | <u>Yes</u> | No | N/A |
| 7. If required, was sample split for pH analysis? | <u>Yes</u> | No | N/A |
| 8. Were all analyses within holding times at time of receipt? | <u>Yes</u> | No | |
| 9. Verify sample date, time and sampler name | <u>Yes</u> | No | |

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): an

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 2 / 1 / _____ / _____ / _____

Acceptable is above freezing to 6°C . If many packages are received at one time check for tests/H.T.'s/rushes/

2. Shipping tracking numbers: 545715725/4962

- | | | | |
|---|------------|----|-----|
| 3. Do the number of bottles received agree with the COC? | <u>Yes</u> | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <u>Yes</u> | No | |
| 5. Were sample custody seals intact? | <u>Yes</u> | No | N/A |

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

- | | | | |
|--|------------|----|---------|
| 1. Were all requested analyses understood and acceptable? | <u>Yes</u> | No | |
| 2. Did bottle labels correspond with the client's ID's? | <u>Yes</u> | No | |
| 3. Were all bottles requiring sample preservation properly preserved?
[Exception: Oil & Grease, VOA and CrVI verified in lab] | <u>Yes</u> | No | N/A FGL |
| 4. VOAs checked for Headspace? | <u>Yes</u> | No | N/A |
| 5. Have rush or project due dates been checked and accepted? | <u>Yes</u> | No | N/A |
| 6. Were all analyses within holding times at time of receipt? | <u>Yes</u> | No | |

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): CT

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem: _____
Resolution: _____

2. Person Contacted: _____
Initiated By: _____
Problem: _____
Resolution: _____

(3-16608)
Live Oak Geo Environmental
STK1951306

