

MONTEREY COUNTY PLANNING COMMISSION

Meeting: October 30, 2013 Time: 9:30 a.m.	Agenda Item No.: 4
Project Description: Consider denial of the Minor Subdivision Vesting Tentative Map to allow the division of an approximately 9.26 acre parcel into two parcels of 3.086 and 3.086 acres and one remainder parcel of 3.086 acres. The property is located at 34735 Metz Road, Soledad (Assessor's Parcel Number 257-121-019-000), Central Salinas Valley Area Plan.	
Project Location: 34735 Metz Road	APN: 257-121-019-000
Planning File Number: PLN040529	Owner: Fermin Vasquez Agent: Joel Panzer
Planning Area: Central Salinas Valley Area Plan	Flagged and staked: N/A
Zoning Designation: : LDR/2.5 [Low Density Residential, 2.5 acres per unit]	
CEQA Action: Statutorily Exempt from CEQA (Public Resources Code Section 21080(b) (5); CEQA Guidelines Section 15061(b) (4)).	
Department: RMA - Planning Department	

RECOMMENDATION:

Staff recommends that the Planning Commission adopt a resolution (**Exhibit A**) to:

- 1) Find the Statutorily Exempt from CEQA (Public Resources Code Section 21080(b) (5); CEQA Guidelines Section 15061(b) (4)); and
- 2) Deny, without prejudice, PLN040529, based on findings and evidence.

PROJECT OVERVIEW:

On February 9, 2011, at a duly noticed Planning Commission hearing, staff recommended that the Planning Commission deny a three lot subdivision on a 9.24-acre parcel due to the lack of adequate water supply. The Planning Commission tabled the item to allow the applicant a period of time to provide proof of adequate water quality and quantity. Two years later, the applicant submitted a revised tentative map (**Exhibit C**) and a hydrogeologic report (**Exhibit D**). Based on review of the submitted materials, staff recommends that the Planning Commission deny the proposal of a two lot subdivision with one remainder parcel due to the lack of adequate water supply.

The 9.24 acre parcel, located just outside of the Soledad City limits, is designated LDR/2.5 (Low Density Residential, 2.5 acres per unit). When the application was initially filed to subdivide the property, the site included one single family dwelling home plus one mobile home approved as a caretaker unit (ZA4014, April 1980). In 2004, the owner, Fermin Vasquez, filed an application to subdivide the parcel into three parcels (PLN040529). Since that time the owner has received approval for two additional units: Administrative Permit for a second residential unit (PLN040503, August 2005), and Use Permit for a third unit (PLN04027, September 2005). The units are occupied and established for use by the owner's family members. A water system permit is not required for multiple residential units on a single parcel as long as all occupants of all units are related to each other (Section 15.04.020 (g) of the Monterey County Code).

A revised tentative map was submitted on February 14, 2012 proposing a two lot subdivision with one remainder parcel (**Exhibit C**). A remainder parcel, according to the Section 66424.6 of the Subdivision Map Act is not a parcel for purpose of sale, lease or financing and is not required to be conditioned as a subdivided parcel. Also, the revised tentative map proposes to split each parcel so each will have a well, therefore attempting to avoid water review for a four connection water system.

Since September 4, 2004 the project has been deemed incomplete. The revised map submitted February 14, 2012 was deemed incomplete March 13, 2012. Projects not deemed complete before

October 16, 2007 are subject to the 2010 Monterey County General Plan. The project is located in the Salinas Valley groundwater basin (Zone 2C) which is considered a long-term sustainable water supply (PS-3.1). Projects within the area are not required to provide a hydrogeological report for proof of long-term sustainable water (PS-3.2). However, policy PS-3.9 states: "A tentative subdivision map and/or vesting tentative subdivision map application for either a standard or minor subdivision shall not be approved until the applicant provides evidence of a long-term sustainable water supply in terms of yield and quality for all lots that are to be created through subdivision." Even though the property is located within Zone 2C, subdivisions must prove that water can be yielded from the water source and the quality is adequate. The existing wells are drilled into hard rock (fractured rock) and the owner or hired consultant has not demonstrated proof of access to the Zone 2C water source. According to the Environmental Health Bureau water production from fractured rock tends to decline over time, making said source unreliable as a sustainable source of water.

Additionally, the Subdivision Ordinance (Title 19) states a map shall be denied if the proposed subdivision is inconsistent with the current General Plan and likely to cause serious health problems (19.05.055.B(1)(6) and (8)). Subdivisions are required to provide proof of an adequate water supply in order to proceed (19.07.020.K, 19.10.070, and 19.03.015(L); Title 19). According to review by the Environmental Health Bureau of a groundwater quality and quantity assessment prepared by Bierman Hydrogeologic on September 18, 2012 (**Exhibit D**), the three existing wells do not meet water standards:

Well #1 (existing): Capacity unknown; exceeds drinking water MCL for arsenic and nitrate.

Well #2 (drilled April 2005): Capacity to be 5.1 gpm; exceeds drinking water MCL for fluoride.

Well #3 (drilled January 2008): Capacity unknown; exceeds drinking water MCL for fluoride.

The hydrogeologic report concludes that source testing and water treatment should be deferred as conditions of project approval. The 2010 General Plan and Subdivision Ordinance do not allow proof of water quality and quantity to be conducted after approval of a subdivision.

On August 28, 2013, correspondence was received from the project representative, Joel Panzer, addressing water contamination issues through a reverse osmosis water treatment system, and requested that the Environmental Health Bureau provide the Monterey County Code citation which prohibits water treatment as a means to address water issues for a new subdivision (**Exhibit E**). On September 19, 2013, the Environmental Health Bureau responded to the applicant's correspondence (**Exhibit F**). Monterey County Code Chapter 19.03.015L requires that water quality and quantity for wells must be demonstrated. Based on information provided by the applicant thus far, the Environmental Health Bureau has determined that water source(s) for a subdivision that needs treatment for primary contaminants and is proposed to serve 1-14 connections does not have the technical, managerial, and financial capability to provide consistent and reliable treatment resulting in a reliable source of potable water. Therefore, Environmental Health cannot make the health and safety finding that the project water sources are an adequate water supply as required in the approval of a subdivision. On September 19, 2013, the Environmental Health Bureau deemed the project complete stating that no additional information is required, and that the Bureau recommends denial of the proposed subdivision.

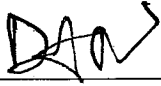
Based on the information available, staff cannot make the required health and safety findings, and therefore, staff recommends denial of the subject proposal.

OTHER AGENCY INVOLVEMENT: The following agencies and departments reviewed this project:

- √ RMA - Public Works Department
- √ Environmental Health Bureau

- √ Water Resources Agency
- √ Mission Soledad Rural Fire Department
- √ Parks Department

Note: The decision on this project is appealable to the Board of Supervisors.



Dan Lister, Assistant Planner
(831) 759-6617, listerdm@co.monterey.ca.us
October 22, 2013

cc: Front Counter Copy; Planning Commission; Mission Soledad Rural Fire Department; RMA-Public Works Department; Parks Department; Environmental Health Bureau; Water Resources Agency; City of Soledad; Wanda Hickman, Planning Services Manager; John Ford, Senior Planner; Dan Lister, Project Planner; Fermin Vasquez, Owner; Joel Panzer, Agent; The Open Monterey Project; LandWatch; Planning File PLN040529

Attachments: Exhibit A Draft Resolution
Exhibit B Vicinity Map
Exhibit C Revised Tentative Map
Exhibit D Hydro-geotechnical Report prepared by Bierman Hydrogeologic dated September 18, 2012
Exhibit E Correspondence from Joel Panzer dated August 28, 2013 with reverse osmosis water treatment system information
Exhibit F Response letter from the Environmental Health Bureau dated September 19, 2013, which includes

- Correspondence from Environmental Health Bureau, dated August 14, 2012, and
- Correspondence from Environmental Health Bureau, dated March 25, 2013.

This report was reviewed by Wanda Hickman, Planning Services Manager. *wah*

**EXHIBIT A
DRAFT RESOLUTION**

**Before the Planning Commission in and for the
County of Monterey, State of California**

In the matter of the application of:

VASQUEZ (PLN040529)

RESOLUTION NO. _____

Resolution by the Monterey County Planning
Commission:

- 1) Finding that the project is Statutorily Exempt from CEQA (Public Resources Code Section 21080(b) (5); CEQA Guidelines Section 15061(b) (4)); and
- 2) Denying a Minor Subdivision Vesting Tentative Map to allow the division of an approximately 9.26 acre parcel into two parcels of 3.086 and 3.086 acres and one remainder parcel of 3.086 acres.

(PLN040529, Vasquez, 34735 Metz Road, Soledad, Central Salinas Valley Are Plan (APN: 257-121-019-000))

The Vasquez application (PLN040529) came on for public hearing before the Monterey County Planning Commission on October 30, 2013. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Planning Commission finds and decides as follows:

FINDINGS

1. **FINDING:** **CEQA (Exempt):** - The project is statutorily exempt from environmental review because the County is denying the application.
EVIDENCE: A project that will be disapproved by the lead agency is statutorily exempt from CEQA. (Public Resources Code Section 21080(b) (5); CEQA Guidelines Section 15061(b) (4)). The project is exempt from CEQA because the County is disapproving the project.

2. **FINDING:** **SUBDIVISION** – Section 66474 of the California Government Code (Subdivision Map Act) and Title 19 (Subdivision Ordinance) of the Monterey County Code (MCC) requires that a request for subdivision be denied if any of the following findings are made:
 1. That the proposed map is not consistent with the applicable general plan and specific plans.
 2. That the design or improvement of the proposed subdivision is not consistent with the applicable general plan and specific plans.
 3. That the site is not physically suitable for the type of development.
 4. That the site is not physically suitable for the proposed density of development.
 5. That the design of the subdivision or the proposed improvements is likely to cause substantial environmental damage or substantially and

avoidably injure fish or wildlife or their habitat.

6. That the design of the subdivision or type of improvements is likely to cause serious public health problems.
7. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision.

3. **EVIDENCE:**
- a) Consistency. The subject application was initially filed August 24, 2004 and deemed incomplete September 22, 2004, and has remained incomplete. A revised application was filed February 14, 2012 and deemed incomplete March 13, 2012. Subdivision maps deemed complete prior to October 16, 2007 are subject to the 1982 General Plan; all others are subject to the 2010 Monterey County General Plan. The project as designed must be consistent with the 2010 Monterey County General Plan including the Central Salinas Valley Area Plan. The application as revised has not provided sufficient information to prove that there is an adequate water supply. New development shall be prohibited without proof based on specific evidence that there is a long-term sustainable water supply, both in water quality and quantity to serve the development (2010 General Plan Policy PS-3.1). General Plan Policy PS-3.2 establishes specific criteria for new development, including residential subdivision, upon advice from the Director of the Environmental Health Bureau (*see evidence below*). General Plan Policy PS-3.3 includes criteria to determine the adequacy of new domestic wells including water quality, production capability, and capability for maintaining the system (*see evidence below*).
 - b) Site Suitability. This 9.24-acre parcel, located just outside the Soledad City limits, is designated LDR/2.5 [Low Density Residential, 2.5 acres per unit] and currently has three residential units plus one mobile home as a caretaker unit. The site is not physically suitable for the proposed subdivision because there is not a proven long-term sustainable water source to serve a 2-lot subdivision with a remainder parcel (*see evidence below*).
 - c) Health and Safety. The proposed project would be detrimental to the health, safety, peace, morals, comfort and general welfare of persons residing or working in the neighborhood or to the general welfare of the County. Water data for the subject site indicates multiple water quality standards that are not met (Section 64431 of the California Code of Regulations); and therefore, would require treatment. Smaller water systems are severely challenged to maintain the necessary Technical, Managerial, and Financial (TMF) capabilities to operate and maintain a water system. Without TMF capabilities, the health and safety of any person purchasing the newly created lots could be at risk.
 - d) Water Supply. Section 19.10.070 MCC requires that provisions shall be made for such domestic water supply as may be necessary to protect public health, safety, or welfare, that the source of supply is adequate and potable, and that there is proof of a long term water supply with the proposed project. Three wells have been drilled that do not meet water standards:
Well #1 (existing well): Capacity unknown. Water exceeds primary inorganic standards for arsenic and nitrates. Water also exceeds

secondary general mineral/physical standards for iron, manganese, chloride, color, TDS and conductivity.

Well #2 (drilled April 2005): Capacity (5 .1 gpm). Water exceeds primary inorganic standards for fluoride. Water also exceeds secondary general mineral/physical standards for iron, manganese, chloride, color, TDS and conductivity.

Well #3 (drilled January 2008): Capacity unknown. Water exceeds primary inorganic standards for fluoride. Water also exceeds secondary general mineral/physical standards for iron, chloride, color, TDS and conductivity.

Based on this evidence, upon recommendation of the Monterey County Environmental Health Bureau, there is not a long-term sustainable water supply for the proposed subdivision.

- e) The application, tentative map and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project File PLN040529.

- 1. **FINDING:** **APPEALABILITY** - The decision on this project may be appealed to the Planning Commission/Board of Supervisors.
- EVIDENCE:** a) Section 19.16 and 21.80, Monterey County Zoning Ordinance (Board of Supervisors).

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Planning Commission does hereby:

- 1. Find that the project is Statutorily Exempt from CEQA (Public Resources Code Section 21080(b) (5); CEQA Guidelines Section 15061(b) (4)); and
- 2. Deny a Minor Subdivision Vesting Tentative Map to allow the division of an approximately 9.26 acre parcel into two parcels of 3.086 and 3.086 acres and one remainder parcel of 3.086 acres.

PASSED AND ADOPTED this 30th day of October, 2013 upon motion of _____, seconded by _____, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

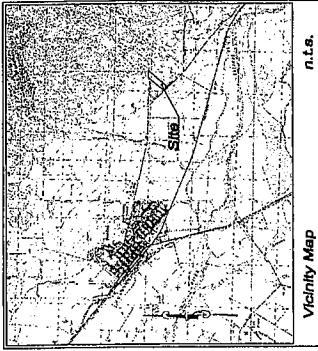
Mike Novo, Secretary

COPY OF THIS DECISION MAILED TO APPLICANT ON _____.

THIS APPLICATION IS APPEALABLE TO THE BOARD OF SUPERVISORS.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE CLERK TO THE BOARD ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE _____.

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.



- NOTES:**
1. DISTANCES AND DIMENSIONS SHOWN ARE EXPRESSED IN FEET AND DECIMALS THEREOF.
 2. DATA WITHIN PARENTHESES (IN BRACKETS) REFERS TO RECORD FROM FILE RECORDED IN VOLUME 2 OF PARCEL MAPS IN PAGE 70, MONTEREY COUNTY RECORDS.
 3. CONTOUR INTERVAL IS FIVE FEET.
 4. DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929, SOURCED FROM THE USGS 7.5 QUADRANGLE SHEET 5060M.
 5. THIS PROPERTY MAY BE SUBJECT TO EASEMENTS OF RECORD OR UNRECORDED. THE GRANTEE OF THIS REPORT TO DISCLOSE SUCH EASEMENTS WHICH MAY OR MAY NOT BE AFFECTED BY THIS SURVEY. THE GRANTEE, INC. SHALL BEAR AND ACKNOWLEDGE RESPONSIBILITY FOR NON-DISCLOSURE OF SAID EASEMENTS, THEIR EXTENT OR LOCATION.
 6. BOUNDARY LOCATION IS BASED UPON RECORD DATA AND BOUNDARY SURVEY HAS BEEN COMPLETED UNDER THE CONTRACTED SUPER. OF WORK.



PLN 040529

MCS INC
MONTEREY COUNTY SURVEYORS, INC.
 235 Salinas St., Salinas, CA 93901-3041 (831) 824-1889
 2011-1-02511, www.montereycountysurveyors.com

Veetling Tentative Parcel Map

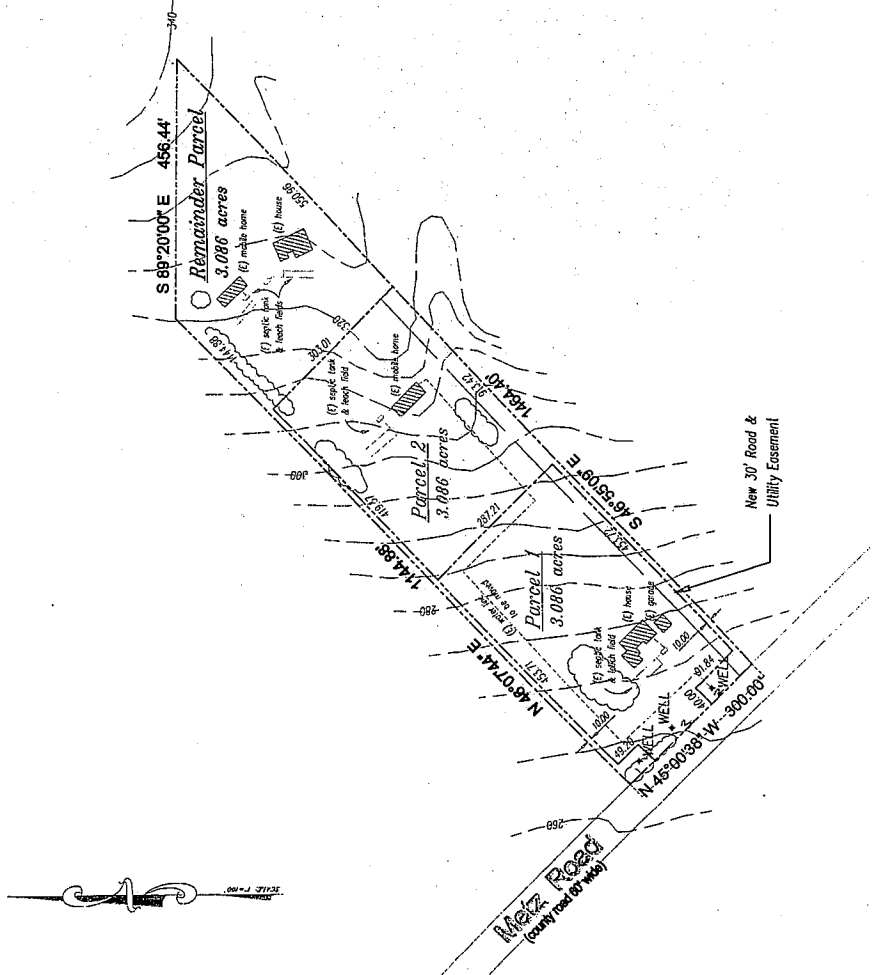
A portion of Lot 121-121-301, known as Parcel A, as shown on map A-1 of Parcel Map of 1994, is in the County of Monterey, Monterey County, CA.

MADE FOR: **Vesquizar, et al**

SCALE: 1" = 100' JOB NO. 2011.057 DATE: JANUARY 2012
 ACTN 257-121-319 SHEET 1 OF 1

Parcel Boundary Courses:

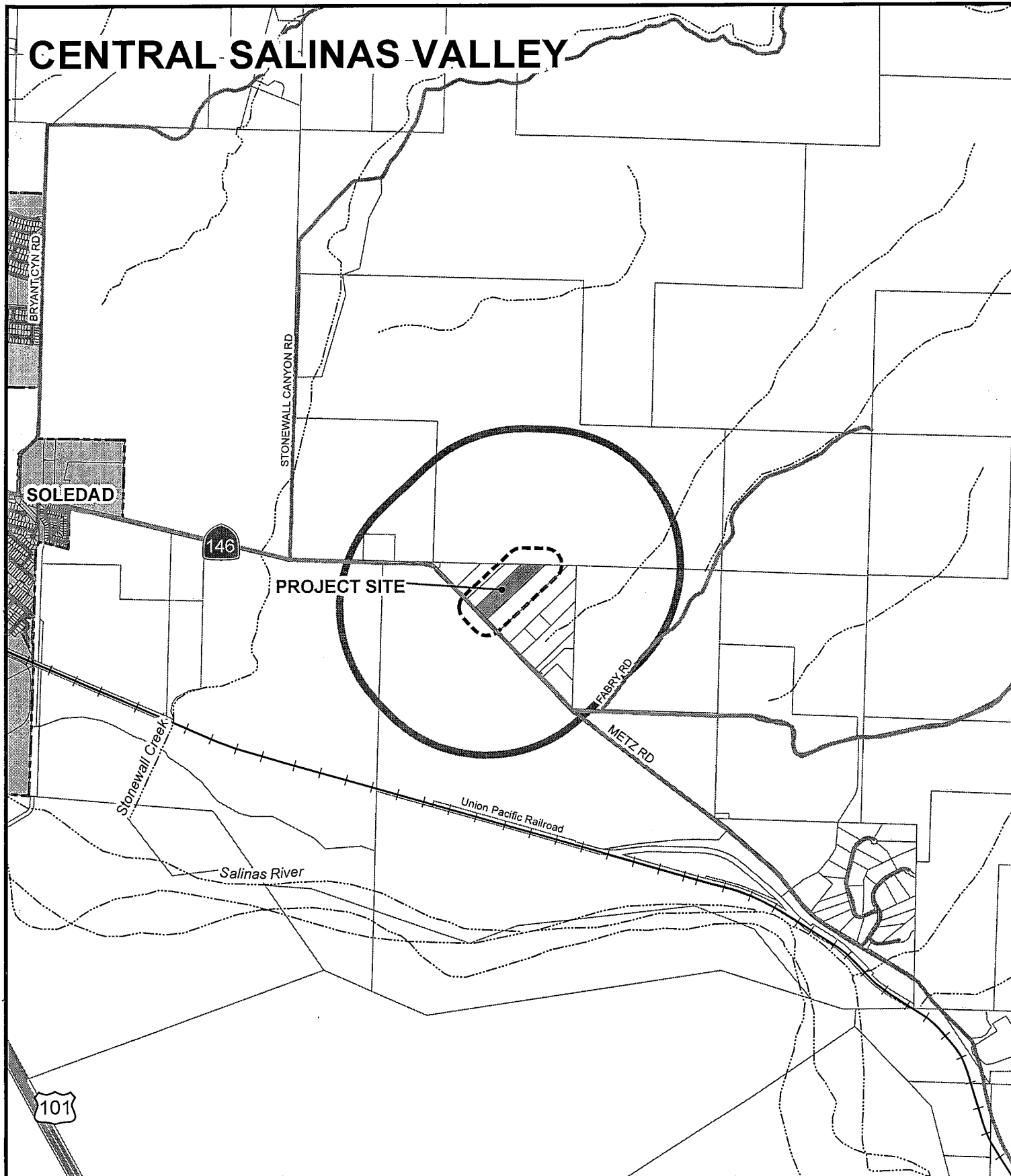
- PARCEL 1**
- 1.1 North 44°39'27" East 40.00'
 - 1.2 North 45°00'36" West 49.20'
 - 1.3 North 46°07'44" East 45.71'
 - 1.4 South 45°00'36" West 49.20'
 - 1.5 South 45°50'09" West 43.72'
 - 1.6 North 45°00'36" West 49.20'
 - 1.7 South 44°39'27" West 40.00'
 - 1.8 North 45°00'36" West 49.20'
- Containing 3.086 acres, more or less.
- PARCEL 2**
- 2.1 North 44°59'27" East 40.00'
 - 2.2 South 45°00'36" West 49.20'
 - 2.3 North 45°50'09" East 43.72'
 - 2.4 North 44°50'44" West 287.21'
 - 2.5 North 45°00'36" East 49.20'
 - 2.6 North 45°00'36" East 49.20'
 - 2.7 South 45°50'09" West 43.72'
 - 2.8 North 45°00'36" West 49.20'
- Containing 3.086 acres, more or less.
- REMANUENT PARCEL**
- 6.1 North 44°59'27" East 40.00'
 - 6.2 North 45°00'36" West 49.20'
 - 6.3 North 45°00'36" East 49.20'
 - 6.4 North 45°00'36" East 49.20'
 - 6.5 North 45°50'09" East 50.96'
 - 6.6 North 49°17'45" West 456.73'
 - 6.7 South 49°07'45" West 174.68'
 - 6.8 South 71°20'42" East 67.61'
- Containing 3.086 acres, more or less.



Owner & Applicant:
 34735 Mez Road
 Salinas, CA 93990
 County File No. PLN040529

Exhibit _____

CENTRAL SALINAS VALLEY



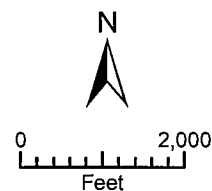
APPLICANT: VASQUEZ

APN: 257-121-019-000

FILE # PLN040529

Water 2500' Limit 300' Limit City Limits

Exhibit



PLANNER: AMADOR

BIERMAN



A Professional Company

Hydrogeologic Consulting & Water Resources Management
Office: (531) 888 8888 Cell: (531) 334 2237 E-Mail: bierman@comcast.net
3153 Redwood Drive, Aptos, CA. 95008

HEALTH DEPARTMENT
SEP 20 2012
ENVIRONMENTAL HEALTH

September 18, 2012

Monterey County Environmental Health Bureau
c/o: Patrick Treffry - REHS
1270 Natividad Road
Salinas, CA 93906

Subject: *Vasquez Property; PLN 040529 - Groundwater Quality and Quantity*

EXECUTIVE SUMMARY

Bierman Hydro-Geo-Logic (BHgl) has been contracted by the Vasquez's to; 1) review previous groundwater quality data and correspondence between MCEHB, 2) complete an up-dated round of groundwater sampling and laboratory analysis and, 3) prepare this letter with recommended Conditions Of Approval for MCEHB to consider for the Vasquez Property, PLN 040529, APN: 257-121-019. This report is not a Hydrogeological Investigation.

This letter provides additional information regarding; The wells construction, recent groundwater quality in relation to California Drinking Water Standards (DWS)¹, a summary of well##1, #2, #3 estimated source capacity, and summarized Point-of-Entry (POE) groundwater treatment system components in order to meet aforementioned State DWS.

SITE DESCRIPTION

The project, as shown on Figure 1 (attached) is located at 34735 Metz Road, outside the city of Soledad, California. The well field is located at an approximate elevation of 265-ft mean sea level (msl) just off the base of the valley floor and Salinas River. The site is located at the base of larger rolling hills backing up against Pinnacles National Monument. A Site Map is attached as Figure 2 and shows the well field, existing structures, existing septic tanks and leach-fields, proposed well easements to each parcel and proposed parcel lay-out each totaling 3.086 acres.

PROPOSED PROJECT

The Vasquez are proposing that MCEHB allow one parcel be split to form two parcels with a remainder parcel, such that, each parcel will be served by their own well based on the following primary Condition of Approvals (COAs):

1. Each parcel to have a minimum of 5,000 gallon raw water storage,
2. Each well to have Point-of-Entry (POE) groundwater treatment system,
3. Each parcel to have appropriate deed notifications notarized and submitted. Deed notifications to include (Well Easement, Fractured Hardrock Well, Groundwater Quality, POE Treatment System, reporting and maintenance),
4. Each parcel to provide quarterly reporting of pre-&-post groundwater treatment samples,
5. Each well to undergo updated source capacity testing per MCEHB guidelines and,

¹ California Administrative Code, Title 22, Chapter 15, Article 4. Primary Standards - Inorganic Chemicals, Section 64431, Maximum Contaminant Levels - Inorganic Chemicals, May, 2009.

Exhibit _____

6. Each well “well-head” and surface seal upgraded to appropriate well head standards.

As BHgl understands, no water system is being proposed. Additional supplemental COAs, as needed, are mentioned below.

DATA REVIEW AND FIELD WORK

Based on site data and previous regulatory communications provided by Maureen Wruck Planning Consultants, LLC, field work completed on August 16, 2012 BHgl (which included well purging & groundwater sampling of wells #2, #3), and review of laboratory groundwater analytical results (attached) the following information regarding the wells is summarized below.

Well #1:

Well Construction - This well is sufficiently old such that a copy of the DWR Well Completion Report could not be found and/or was not provided to BHgl. As a supplemental COA, BHgl recommends video logging Well #1 to determine its construction and integrity to serve one single family dwelling. Depending on the video logging, it may be necessary to drill a new well with a deeper sanitary seal to reduce the nitrate contamination in the well. This could be implemented as an another supplemental COA.

Groundwater Quantity and Long-Term Source Capacity - Although the source capacity of this well is unknown, based on review of the other two wells “historic” pumping tests, this well (well #1) can also likely meet post-recovery pumping rate of 3gpm/connection. As stated above, a primary COA would be to complete updated source capacity testing as per MCEHB guidelines.

Groundwater Quality - As BHgl understands, the well is out-of service due to primary constituents² (arsenic and nitrate) concentrations that exceed State Maximum Contaminant Level (MCL) for drinking water, among other elevated secondary constituents³ (chloride, color, electrical conductance, iron, manganese, total dissolved solids). As a second supplemental COA, BHgl recommends an updated groundwater sample from this well to determine design parameters for a Point-of-Entry (POE) single-connection groundwater treatment system.

Well #2:

Well Construction - Based DWR Well Completion Report (attached) Well #2 was drilled in April, 2005 and is constructed with 5-inch diameter steel casing and is perforated in a granitic hardrock aquifer. The well is noted as being completed to a depth of 620 feet below ground surface and perforated from 440-620’ below ground surface (bgs) with a sanitary seal to a depth of 400-ft bgs.

Groundwater Quantity and Long-Term Source Capacity - The source capacity of this well was determined to be 5.1 gallons per minute (2005 72-hour pumping test by Salinas Pump Co.) and therefore exceeds the post-recovery pumping rate of 3gpm/connection. As an aside, during the

² Primary constituents are contaminants that can cause significant adverse health effects for which local agencies can regulate and enforce.

³ Secondary constituents which are contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. Secondary constituents are non-enforceable; however, Environmental Protection Agency (EPA) recommends secondary standards to water systems but does not require systems to comply. Individual States and/or local counties may choose to adopt them as enforceable standards. Although MCHD does not enforce these standards, we recommend treating the secondary constituents to the recommended standards.

recent well purging and groundwater sampling of wells #2, #3, the wells (for how close in proximity they were and similar perforated interval) the wells did not appear to be hydrogeologically connected, although future source-capacity testing would verify this. As stated above, a primary COA would be to complete updated source capacity testing as per MCEHB guidelines.

Groundwater Quality - As BHgl understands the well is currently off-line due to fluctuating primary constituents (arsenic and fluoride) among other secondary constituents (chloride, color, electrical conductance, iron, manganese, total dissolved solids).

Based on recent groundwater analytical results⁴, nitrate and nitrite were not detected. Although arsenic was present at 6 parts per billion (ppb), historic and current fluctuating concentrations (2-6 ppb) remain below the States MCL of 10 ppb. On the contrary, fluoride concentrations were detected at 3.34 parts per million (ppm) exceeding the States MCL of 2 ppm. No historic concentrations for fluoride were provided. As stated above, a primary COA would be to have a satisfactory POE single-connection groundwater treatment system.

Well #3:

Well Construction - Based DWR Well Completion Report (attached) Well #3 was drilled in January, 2008 and is constructed with 5-inch diameter steel casing and is perforated in a granitic hardrock aquifer. The well is noted as being completed to a depth of 800 feet below ground surface and perforated from 360-460', 480-580' and 600-740' bgs with a sanitary seal to a depth of 340-ft bgs. As BHgl understands, the well is currently serving the structures at the site.

Groundwater Quantity and Long-Term Source Capacity - The source capacity of this well was never determined (pump test canceled because of water quality issues) although, as BHgl understands, the well is adequate to support a pumping rate of 3gpm/connection. As an aside, during the recent purging and monitoring, well #3 was being pumped at 6.5 gpm and had only 2.7 feet of drawdown after 2-hours of pumping, and although preliminary, suggests the well can support 3gpm/connection. As stated above, a primary COA would be to complete updated source capacity testing as per MCEHB guidelines.

Groundwater Quality - As BHgl understands the well is currently on-line as it appears to be the best producing well, although does have fluctuating primary constituents (arsenic and fluoride) among other secondary constituents (chloride, color, electrical conductance, iron, manganese, total dissolved solids).

Based on recent groundwater analytical results⁵, nitrate and nitrite were not detected. Although arsenic was present at 5 parts per billion (ppb), historic and current fluctuating concentrations (2-6 ppb) remain below the States MCL of 10 ppb. On the contrary, as with well #2, fluoride concentrations were detected at 3.19 parts per million (ppm) exceeding the States MCL of 2 ppm. Historic and current fluoride concentrations (3.19 to 3.5 ppm) are above the States MCL.

⁴ Monterey Bay Analytical Services (MBAS), Analytical Results, dated August 29, 2012, sampled August 16, 2012.

⁵ Monterey Bay Analytical Services (MBAS), Analytical Results, dated August 29, 2012, sampled August 16, 2012.

As stated above, a primary COA would be to have a satisfactory POE single-connection groundwater treatment system.

POINT-OF-ENTRY GROUNDWATER TREATMENT SYSTEM

Since no water system is proposed, and based on COA that each residence will have their own POE single-connection groundwater treatment system, BHgl has provided generic treatment system components which will consist of the latest technology to reduce and/or remove the elevated constituents of concern and other trace metals and secondary constituents in the groundwater for meeting State secondary DWS.

The below generic groundwater treatment system could accommodate the needs of each single family dwelling, with no treatment for irrigation use, as it would be cost prohibitive. The groundwater treatment system components per/parcel would include;

Point-of-Entry Treatment Components:

- One, 5,000 gallon Raw Water Storage Tank
- One, 2,000 gpd Ozone System,
- One, Spin-Down Filter (1-inch inlet/outlet) with manual or automatic flush,
- One, 1hp Feed Pump -220v (1-inch inlet/outlet)
- One, 20-inch big-blue 25-micron pleated filter,
- One, 20-inch, big-blue 5-micron pleated filter,
- One, 2-cubic foot, 45 grain Water Softener -110v (1-inch inlet/outlet) with brine tank and auto refill and backwashing,
- One, 2-cubic-foot Iron/Manganese Filter -110v (1-inch inlet/outlet) with carbon/potassium-permanganate and auto backwashing,
- One, 20-inch, big-blue 5-micron pleated filter,
- One, 1,5000 gpd 4-stage Reverse Osmosis (RO) Unit -220v with automatic drain and recycle valves and 0.5hp high pressure (220 psi) booster pump,
- One, 1,000 gpd Fresh Water Storage Tank,
- One, 1hp Variable Frequency Drive (220v) Constant Pressure Pump,
- One, 20-inch, big-blue reusable calcite neutralizer cartridge,
- One, 20-inch, big-blue carbon polish filter (6-months or 25,000 gallons)

All waste-brine from the treatment system unit (roughly 1.2 gpm during operation) will be discarded to the sanitary system/leach-field. The waste stream generated from the treatment system is considered negligible and will not have any significant impact to the leach-field or sanitary sewer system.

We recommend that pre-post treatment samples (for the main constituents of concern) be obtained monthly for the first 3 months to verify the treatment system is working appropriately. Based on the groundwater analytical results, additional filtration may be necessary to help extend the life of the RO unit. Following 3 consecutive rounds of groundwater analysis, the post treatment sampling frequency should be quarterly for two-years, and thereafter, determine effectiveness and frequency and either bi-annual or annual sampling.

Associated costs for the treatment system components are estimated at \$12,000. Installation costs are estimated at \$6,000. Quarterly sampling and reporting and annual maintenance is estimated at \$1,800-\$2,200.

SUMMARY AND CONCLUSIONS

Based on the information reviewed, it is likely that each well can each achieve a post-recovery pumping rate of 3 gpm/connection and be maintained as a long-term water supply. Due to the costs to implement source capacity testing, the Vasquez are requesting source capacity testing be demonstrated after MCEHB approves the split of one parcel to two parcels with a remainder parcel, such that, each parcel will have an individual well with point-of-entry single-connection groundwater treatment system and appropriate deed notifications.

This concludes our brief letter report on the Vasquez Property and its well field.

LIMITATIONS

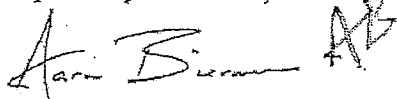
Our service consists of professional opinions and recommendations based on the data compiled. *Bierman Hydrogeologic P.C.* bases the conclusions provided upon the tests and measurements, using accepted hydrogeologic principles and practices of the groundwater industry.

Additionally, conditions in water wells are subject to dramatic changes, even in short periods of time. The techniques employed in conducting pump testing may be subject to considerable error due to factors within the well and/or aquifer, which are beyond our immediate control or observation.

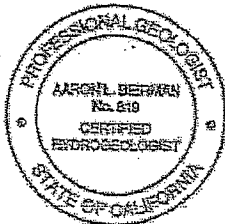
Therefore, the data included within this report are valid only as of the date and within the observational limitations of the test or installation conducted. The test conclusions are intended for general comparison of the well and/or aquifer in its present condition against known water well standards and/or guidelines. The analysis and conclusions in this report are based on information reviewed, and field-testing which are necessarily limited. Additional data from future work may lead to modification of the opinions expressed herein.

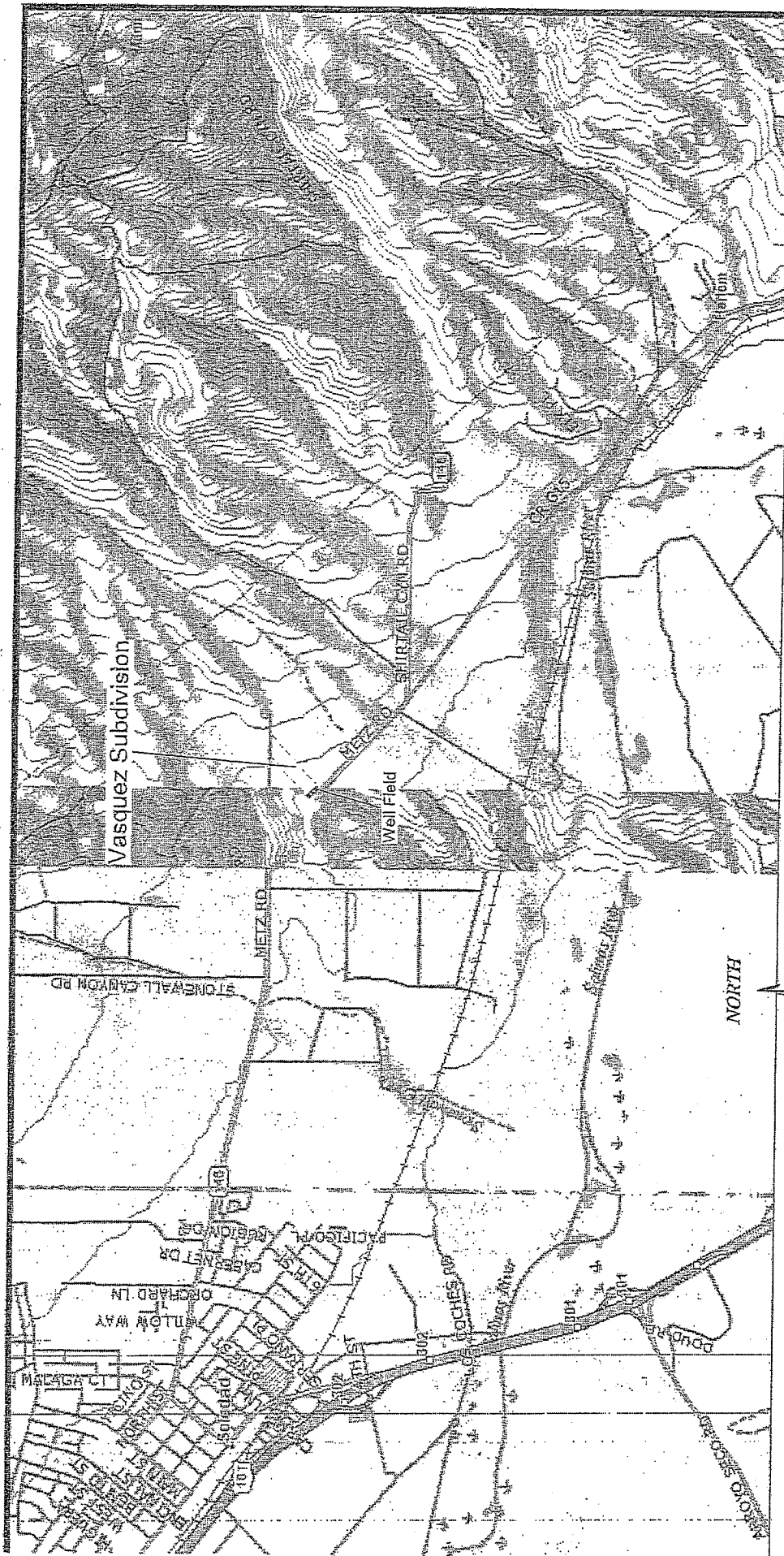
In accepting this report, the client releases and holds *Bierman Hydrogeologic, P.C.* harmless from liability for consequential or incidental damages arising from any different future pumping rate, calculated well yield or water quality that was expressed herein. Our report is not a guarantee of any water production rate, yield or water quality.

Respectfully submitted,



Aaron Bierman
Certified Hydrogeologist #819





BIERMAN
Hydrogeo Logic
 A Professional Company
 Hydrogeologic Consulting & Water Resource Management

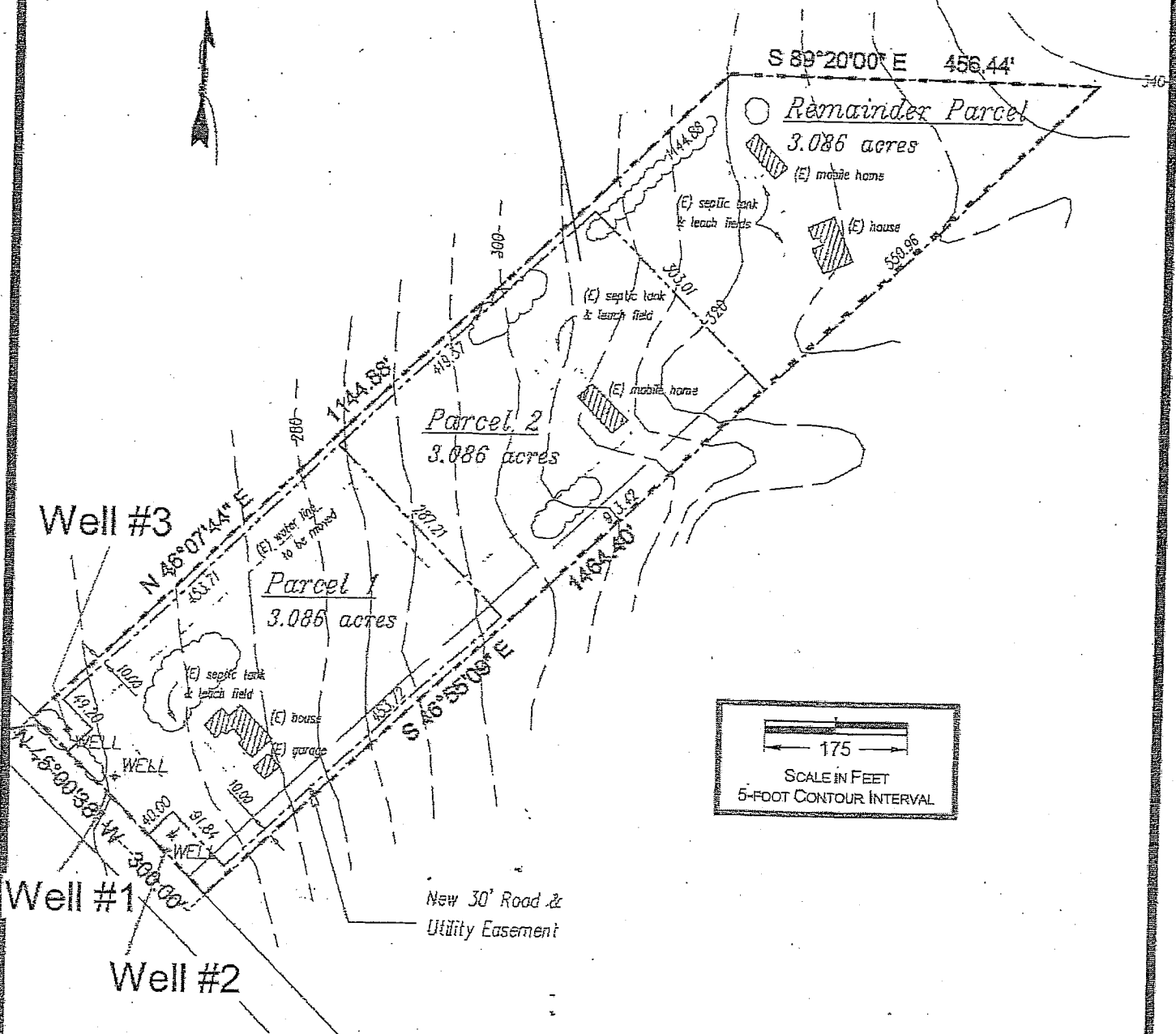
LOCATION MAP
 APN: 001-761-037
 Monterey County, California

FIGURE
1

Dr. A. Dorman, March 11, 2012

Vasquez Subdivision

NORTH



Basemap from Maureen Wruck Planning Consultants, 21 West Alisal Street, Suite 11, Salinas, CA 93901.
Basemap scanned and re-scaled to fit this figure. Overlay by Bierman Hydrogeologic

BIERMAN
Hydrogeologic
A Professional Company
Hydrogeologic Consulting & Water Resource Management

SITE MAP
APN: 257-121-019
Monterey County, California

FIGURE
2

By: A. Bierman, September 12, 2012
Vasquez/Figures/Site Map_Portrait

DUPLICATE
Driller's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **e020569**

Page 1 of 1

Owner's Well No. **VASQUEZ #1**

Date Work Began **4/13/2005**

Ended **5/9/2005**

Local Permit Agency **MTRY CTY HEALTH DEPT**

Permit No. **95-10437**

Permit Date **5/15/2005**

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE

LONGITUDE

APN/RS/OTHER

GEOLOGIC LOG

DEPTH FROM SURFACE	FL to FL	DESCRIPTION
0:	1:	TOP SOIL
1:	6:	SAND
6:	105:	BROWN SANDY CLAY
105:	162:	BLUE CLAY
152:	385:	D.G.
385:	573:	GRANITE
573:	620:	BROKEN GRANITE

WELL OWNER

Name **FERMIN VASQUEZ**

Mailing Address **34735 METZ RD**

SOLEDAD

CITY CA 93960

WELL LOCATION

Address **34735 METZ RD**

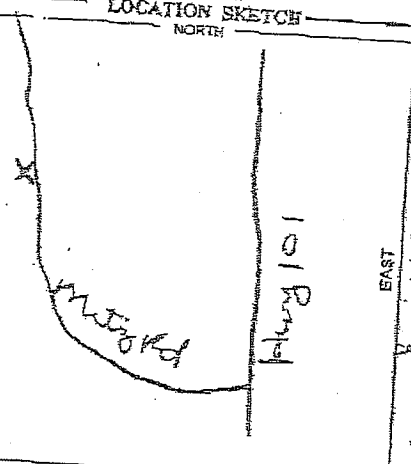
City **SOLEDAD CA 93960**

County **MONTEREY**

APN Book **257** Page **121** Parcel **019**

Township **12 S** Range **5 E** Section **7**

Latitude **36 89 92**



ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify)

DESTROY (Describe Procedures and Materials Under GEOLOGIC LOG)

PLANNED USES (✓)

WATER SUPPLY

Domestic Public

Irrigation Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDICATION

OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (FL) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL _____ (FL) & DATE MEASURED

ESTIMATED YIELD _____ (GPM) & TEST TYPE

TEST LENGTH _____ (Hrs) TOTAL DRAWDOWN _____ (FL)

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

TOTAL DEPTH OF BORING **620** (Feet)

TOTAL DEPTH OF COMPLETED WELL **620** (Feet)

DEPTH FROM SURFACE	BORE HOLE DIA (Inches)	TYPE (✓)				CASING (S)			
		BLANK SCREEN	CON. DUCTOR	PIVA PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	
0:	440	11	✓						
440:	620	11	✓		STEEL	5			

DEPTH FROM SURFACE	FL to FL	ANNULAR MATERIAL TYPE		
		CEMENT (✓)	BEN-TONITE (✓)	FILL (✓)
0:	400	✓		
400:	620			6 X 12

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

CERTIFICATION STATEMENT

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

NAME **SALINAS PUMP COMPANY**

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

ADDRESS **21935 ROSEHART WAY**

Signed *[Signature]* SALINAS CITY CA 93908

WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED **05/23/05** STATE **CA** ZIP **93945**

C-57 LICENSE NUMBER

DWR (ES REV. 11-97)

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DUPLICATE
Driller's Copy

Page 1 of 2

Owner's Well No. WELL #3

Date Work Began 12/19/2007

Local Permit Agency MONTEREY COUNTY HEALTH DEPT.

Permit No. 07-11229

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instructions Pamphlet

No. **e057414**

Ended 1/15/2008

Permit Date 11/20/2007

DWP USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE

LONGITUDE

APN/TS/OHER

GEOLOGIC LOG

ORIENTATION (%)	DEPTH FROM SURFACE	DRILLING METHOD	DESCRIPTION	FLUID MUD
<input checked="" type="checkbox"/> VERTICAL	0	ROTARY	3 TOP SOIL	
<input type="checkbox"/> HORIZONTAL	3		122 BROWN SANDY CLAY	
	122		174 BLUE CLAY	
	174		291 BLUE SANDY CLAY	
	291		442 D.G.	
	442		506 GRANITE	
	506		551 BROKEN GRANITE	
	551		706 GRANITE	
	706		710 BROKEN GRANITE	
	710		775 GRANITE	
	775		800 GRANITE	

WELL OWNER

Name FERMIN VASQUEZ

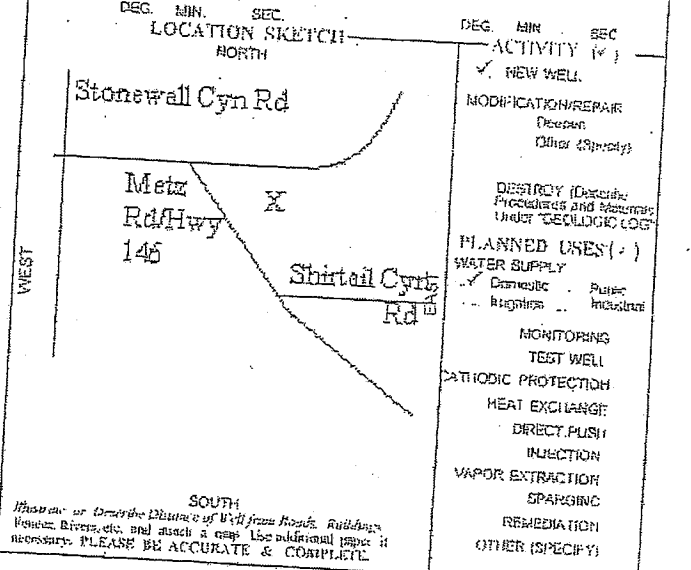
Mailing Address 34735 METZ RD
SOLEDAD
CA 93960

WELL LOCATION

Address 34735 METZ ROAD
City SOLEDAD CA 93960
County MONTEREY

APN Book 257 Page 121 Parcel 019
Township Range Section

Latitude



WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER (Ft.) BELOW SURFACE 1

DEPTH OF STATIC WATER LEVEL 145.5 (Ft.) & DATE MEASURED 1/21/2008

ESTIMATED YIELD 25 (GPM) & TEST TYPE PUMP

TEST LENGTH 6 (Hrs.) TOTAL DRAWDOWN 1 (Ft.)

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

TOTAL DEPTH OF BORING 800 (Feet)

TOTAL DEPTH OF COMPLETED WELL 800 (Feet)

DEPTH FROM SURFACE	BORE HOLE DIA. (Inches)	TYPE	CASING (S)			
			MATERIAL GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	360	10	STEEL	5		
360	460	10	STEEL	5		
460	480	10	STEEL	5		.188
480	580	10	STEEL	5	.219	.188
580	600	10	STEEL	5	.219	.188
600	740	10	STEEL	5	.219	.188

DEPTH FROM SURFACE	ANNULAR MATERIAL TYPE		
	CE- MENT	GEN- TONITE	FILTER PACK (TYPE/SIZE)
0	340	600	6 x 12

- ATTACHMENTS**
- Geologic Log
 - Well Construction Diagram
 - Geophysical Logs
 - Sanitizer Chemical Analysis
 - Other
- ATTACH ADDITIONAL INFORMATION, IF IT EXISTS

CERTIFICATION STATEMENT

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

NAME **SALINAS PUMP COMPANY**
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

21935 ROSEHART WAY
ADDRESS

Signed _____
WELL DRILLER/AUTHORIZED REPRESENTATIVE

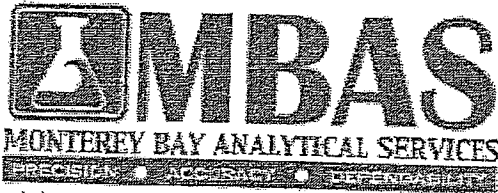
SALINAS CA 93908
CITY STATE ZIP

09/03/08 DATE SIGNED

515945 G-27 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Exhibit _____



4 Justin Court Suite D, Monterey, CA 93940
831.375.MBAS

montereybayanalytical@usa.net
ELAP Certification Number: 2385

Wednesday, August 29, 2012

Hydrogeologic Consult & Water Resource
Aaron Bierman
3153 Redwood Dr
Aptos, CA 95003

Lab Number: AA91003

Collection Date/Time: 8/16/2012 12:00 Sample Collector: BIERMAN, A.
Submittal Date/Time: 8/16/2012 12:20 Sample ID

Sample Description: 34735 Metz Rd. Well #2

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
Alkalinity, Total (as CaCO ₃)	2320B	mg/L	230		2		8/16/2012
Aluminum, Total	EPA200.8	ug/L	21		10	1000	8/17/2012
Antimony, Total	EPA200.8	ug/L	Not Detected		1	6	8/17/2012
Arsenic, Total	EPA200.8	ug/L	6		1	10	8/17/2012
Barium, Total	EPA200.8	ug/L	459		10	1000	8/17/2012
Beryllium, Total	EPA200.8	ug/L	Not Detected		1	4	8/17/2012
Bicarbonate (as HCO ₃ ⁻)	2320B	mg/L	281		10		8/16/2012
Bromide	EPA300.0	mg/L	3.46		0.10		8/16/2012
Cadmium, Total	EPA200.8	ug/L	Not Detected		0.5	5	8/17/2012
Calcium	EPA200.7	mg/L	59		0.5		8/23/2012
Carbonate as CaCO ₃	2320B	mg/L	Not Detected		10		8/16/2012
Chloride	EPA300.0	mg/L	1123		1	250	8/16/2012
Chromium, Total	EPA200.8	ug/L	7		2	50	8/17/2012
Color, Apparent (Unfiltered)	2120B	Color Units	30		3	15	8/16/2012
Copper, Total	EPA200.8	ug/L	Not Detected		4	1300	8/17/2012
Cyanide	QuikChem 10-204	ug/L	7		5	200	8/20/2012
Fluoride	EPA300.0	mg/L	3.34		0.10	2.0	8/16/2012
Hardness (as CaCO ₃)	2340B	mg/L	267		10		8/27/2012
Hydroxide	2320B	mg/L	Not Detected		5		8/16/2012
Iron	EPA200.7	ug/L	834		10	300	8/23/2012
Langlier Index (15 deg. C)	2330B		0.34				8/27/2012
Langlier Index (60 deg. C)	2330B		0.91				8/27/2012
Lead, Total	EPA200.8	ug/L	Not Detected		5	15	8/17/2012
Magnesium	EPA200.7	mg/L	29		0.5		8/23/2012
Manganese, Total	EPA 200.7	ug/L	153		10	50	8/23/2012
MBAS (Surfactants)	5540C	mg/L	Not Detected		0.05	0.50	8/16/2012
Mercury, Total	EPA200.8	ug/L	Not Detected		0.5	2	8/17/2012
Nickel, Total	EPA200.8	ug/L	Not Detected		10	100	8/17/2012

mg/L: Milligrams per liter (=ppm)

ug/L : Micrograms per liter (=ppb)

PQL : Practical Quantitation Limit

H = Analyzed outside of hold time

E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

D = Method deviates from standard method due to insufficient sample for MS/MSD

Exhibit _____



MONTEREY BAY ANALYTICAL SERVICES

RELIABILITY • ACCURACY • RESPONSIBILITY

4 Justin Court Suite D, Monterey, CA 93940
831.375.MBAS

montereybayanalytical@usa.net
ELAP Certification Number: 2385

Wednesday, August 29, 2012

Hydrogeologic Consult & Water Resource
Aaron Bierman
3153 Redwood Dr
Aptos, CA 95003

Lab Number: AA91003

Collection Date/Time: 8/16/2012 12:00
Submittal Date/Time: 8/16/2012 12:20

Sample Collector: BIERMAN, A.
Sample ID

Sample Description: 34735 Metz Rd. Well #2

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
Nitrate as NO3	EPA300.0	mg/L	Not Detected		1	45	8/16/2012
Nitrite as NO2-N	EPA300.0	mg/L	Not Detected		0.10	1.00	8/16/2012
Odor Threshold at 60 C	2150B	TON	2		1	3	8/16/2012
o-Phosphate-P	EPA300.0	mg/L	Not Detected		0.10		8/16/2012
pH (Laboratory)	4500-H+B	pH (H)	7.9				8/16/2012
Potassium	EPA200.7	mg/L	5.5		0.1		8/23/2012
QC Anion Sum x 100	Calculation	%	90%				8/29/2012
QC Anion-Cation Balance	Calculation	%	2				8/29/2012
QC Cation Sum x 100	Calculation	%	93%				8/29/2012
QC Ratio TDS/SEC	Calculation		0.53				8/29/2012
Selenium, Total	EPA200.8	ug/L	18		2	50	8/17/2012
Silver, Total	EPA200.8	ug/L	Not Detected		10	100	8/17/2012
Sodium	EPA200.7	mg/L	738		0.5		8/23/2012
Specific Conductance (E.C)	2510B	umhos/cm	4050		1	900	8/16/2012
Sulfate	EPA300.0	mg/L	1		1	250	8/16/2012
Thallium, Total	EPA200.8	ug/L	Not Detected		1	2	8/17/2012
Total Diss. Solids	2540C	mg/L	2150		10	500	8/16/2012
Turbidity	180.1	NTU	3.6		0.05	5.0	8/16/2012
Zinc, Total	EPA200.8	ug/L	122		10	5000	8/17/2012

Sample Comments:

Report Approved by:

David Holland, Laboratory Director

mg/L: Milligrams per liter (=ppm)

ug/L: Micrograms per liter (=ppb)

PQL: Practical Quantitation Limit

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E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

D = Method deviates from standard method due to insufficient sample for MS/MSD

Exhibit _____

11 of 13 Pages



4 Justin Court Suite D, Monterey, CA 93940
831.375.MBAS

montereybayanalytical@usa.net
ELAP Certification Number: 2385

Hydrogeologic Consult & Water Resource
Aaron Bierman
3153 Redwood Dr
Aptos, CA 95003

Wednesday, August 29, 2012

Lab Number: AA91004

Collection Date/Time: 8/16/2012 12:00 Sample Collector: BIERMAN, A.
Submittal Date/Time: 8/16/2012 12:20 Sample ID

Sample Description: 34735 Metz Rd. Well #3

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
Alkalinity, Total (as CaCO ₃)	2320B	mg/L	274		2		8/16/2012
Aluminum, Total	EPA200.8	ug/L	Not Detected		10	1000	8/17/2012
Antimony, Total	EPA200.8	ug/L	Not Detected		1	6	8/17/2012
Arsenic, Total	EPA200.8	ug/L	5		1	10	8/17/2012
Barium, Total	EPA200.8	ug/L	189		10	1000	8/17/2012
Beryllium, Total	EPA200.8	ug/L	Not Detected		1	4	8/17/2012
Bicarbonate (as HCO ₃ ⁻)	2320B	mg/L	334		10		8/16/2012
Bromide	EPA300.0	mg/L	1.67		0.10		8/16/2012
Cadmium, Total	EPA200.8	ug/L	Not Detected		0.5	5	8/17/2012
Calcium	EPA200.7	mg/L	24		0.5		8/23/2012
Carbonate as CaCO ₃	2320B	mg/L	Not Detected		10		8/16/2012
Chloride	EPA300.0	mg/L	696		1	250	8/16/2012
Chromium, Total	EPA200.8	ug/L	9		2	50	8/17/2012
Color, Apparent (Unfiltered)	2120B	Color Units	25		3	15	8/16/2012
Copper, Total	EPA200.8	ug/L	Not Detected		4	1300	8/17/2012
Cyanide	QuikChem 10-204	ug/L	Not Detected		5	200	8/20/2012
Fluoride	EPA300.0	mg/L	3.19		0.10	2.0	8/16/2012
Hardness (as CaCO ₃)	2340B	mg/L	101		10		8/27/2012
Hydroxide	2320B	mg/L	Not Detected		5		8/16/2012
Iron	EPA200.7	ug/L	330		10	300	8/23/2012
Langlier Index (15 deg. C)	2330B		0.07				8/27/2012
Langlier Index (60 deg. C)	2330B		0.65				8/27/2012
Lead, Total	EPA200.8	ug/L	Not Detected		5	15	8/17/2012
Magnesium	EPA200.7	mg/L	10		0.5		8/23/2012
Manganese, Total	EPA 200.7	ug/L	22		10	50	8/23/2012
MBAS (Surfactants)	5540C	mg/L	Not Detected		0.05	0.50	8/16/2012
Mercury, Total	EPA200.8	ug/L	Not Detected		0.5	2	8/17/2012
Nickel, Total	EPA200.8	ug/L	Not Detected		10	100	8/17/2012
Nitrate as NO ₃	EPA300.0	mg/L	Not Detected		1	45	8/16/2012
Nitrite as NO ₂ -N	EPA300.0	mg/L	Not Detected		0.10	1.00	8/16/2012
Odor Threshold at 60 C	2150B	TON	1		1	3	8/16/2012
o-Phosphate-P	EPA300.0	mg/L	Not Detected		0.10		8/16/2012

mg/L: Milligrams per liter (=ppm)

ug/L : Micrograms per liter (=ppb)

PQL : Practical Quantitation Limit

H = Analyzed outside of hold time

E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

D = Method deviates from standard method due to insufficient sample for MS/MSD



4 Justin Court Suite D, Monterey, CA 93940
831.375.MBAS

montereybayanalytical@usa.net
ELAP Certification Number: 2385

Wednesday, August 29, 2012

Hydrogeologic Consult & Water Resource
Aaron Bieman
3153 Redwood Dr
Aptos, CA 95003

Lab Number: AA91004

Collection Date/Time: 8/16/2012 12:00
Submittal Date/Time: 8/16/2012 12:20

Sample Collector: BIERMAN, A.
Sample ID

Sample Description: 34735 Metz Rd. Well #3

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
pH (Laboratory)	4500-H+B	pH (H)	7.9				
Potassium	EPA200.7	mg/L	2.9		0.1		8/16/2012
QC Anion Sum x 100	Calculation	%	91%				8/23/2012
QC Anion-Cation Balance	Calculation	%	2				8/29/2012
QC Cation Sum x 100	Calculation	%	94%				8/29/2012
QC Ratio TDS/SEC	Calculation		0.54				8/29/2012
Selenium, Total	EPA200.8	ug/L	10		2	50	8/17/2012
Silver, Total	EPA200.8	ug/L	Not Detected		10	100	8/17/2012
Sodium	EPA200.7	mg/L	549		0.5		8/23/2012
Specific Conductance (E.C)	2510B	umhos/cm	2750		1	900	8/16/2012
Sulfate	EPA300.0	mg/L	1		1	250	8/16/2012
Thallium, Total	EPA200.8	ug/L	Not Detected		1	2	8/17/2012
Total Diss. Solids	2540C	mg/L	1485		10	500	8/16/2012
Turbidity	180.1	NTU	1.4		0.05	5.0	8/16/2012
Zinc, Total	EPA200.8	ug/L	14		10	5000	8/17/2012

Sample Comments:

Report Approved by:

David Holland, Laboratory Director

mg/L: Milligrams per liter (=ppm)

H = Analyzed outside of hold time

D = Method deviates from standard method due to insufficient sample for MS/MSD

ug/L : Micrograms per liter (=ppb)

E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

PQL : Practical Quantitation Limit

Exhibit _____

MAUREEN WRUCK
PLANNING CONSULTANTS, L.L.C.

Development Consultants

Planning ~ Land Use & Permitting ~ Subdivisions ~ Mitigation Monitoring ~ Permit Compliance ~ Certificates of Compliance

August 28, 2013

Pat Treffrey, R.E.H.S.
Monterey County Health Department
Environmental Health Bureau
1270 Natividad Road
Salinas, CA 93906-3198

Re: Vasquez Minor Subdivision Water Treatment (PLN040529)

Dear Pat:

This is a follow-up to the Environmental Health Bureau's (EHB) on-going review of the Vasquez minor subdivision application. I have been working on the water quality matter for the past few months and believe I have a solution that should adequately address EHB concerns expressed about fluoride treatment.

We initially proposed a water treatment option (Bierman Hydrogeologic, September 2012). By way of this letter, I am providing a second/preferred/affordable water treatment option to reduce fluoride levels to meet California water quality standards.

Culligan International Company manufactures a treatment system that is listed on the California Department of Public Health Drinking Water Program's *List of Water Treatment Devices Certified for Fluoride Reduction* (Exhibit A – see Culligan International Company Aqua Cleer). Water system treatment technology has advanced to the point that water treatment options are becoming more commonplace and affordable, including residential reverse-osmosis technology.

Culligan conducted water quality sampling at the Vasquez site on June 12th (Exhibit B). Based on their review of testing results, Culligan has confirmed that their *Aqua Cleer* reverse osmosis water treatment unit (AC40) can reduce fluoride by an average of 96.4% (Exhibit C). This technology would bring the water quality well below California state standards of 2.0 mg/L. Installation of this type of residential system is becoming commonplace.

The unit is affordable to the average homeowner to install and maintain. The cost for this unit is \$1,100 installed. Filters need to be replaced annually at a cost of \$51.00 (sediment filter - \$13.00; carbon filter - \$18.00 and 2nd carbon filter – \$20.00). The reverse osmosis

Exhibit _____

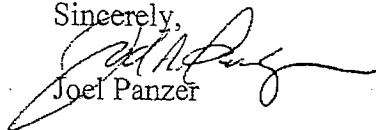
Page 1 of 14 Pages

membrane needs to be replaced every 8 – 10 years (cost of \$140.00). Under contract, Culligan can do the system maintenance/filter replacement.

I have previously sent e-mails to Ray Bullick, John Ramirez and Cheryl Sandoval requesting a Monterey County Code citation verifying water treatment for primary constituents for new subdivisions is prohibited (Exhibit D). To date, there has been no written response to this request for information. Richard LeWarne/EHB indicated in a meeting on March 18th that the water treatment concern for fluoride was a matter of the Technical, Managerial and Financial (TMF) requirements. As noted above, TMF would not be an issue with the Culligan Aqua Clear unit; the initial set-up cost is \$1,100 for each residential unit and maintenance costs are minimal. Finally, the 2010 General Plan Policy PS-2.5 (domestic wells) clearly states that: “(r)egulations pursuant to this policy shall not establish criteria that will prevent the use of the well in the development of the property” and it would seem that use of this well for water supply is be consistent with Monterey County General Plan policy.

I believe that this information and documentation confirms that the minor subdivision can meet water quality standards and that the application can be deemed complete by EHB staff with a recommendation for approval.

Sincerely,



Joel Panzer

Cc: Tony Vasquez, Applicant;
Dan Lister, Project Planner

Attachments:

Exhibit A: California Department of Public Health Drinking Water Program's *List of Water Treatment Devices Certified for Fluoride Reduction*;

Exhibit B: Well Water Sampling Report;

Exhibit C: Culligan Product & Certified Performance Data;

Exhibit D: January 31, 2013 E-mail to EHB

Exhibit _____

List of Water Treatment Devices Certified for Fluoride Reduction

		System Type	Technology
<u>3M Brand from 3M</u>			
09 -2015	3MRO401	under counter	reverse osmosis/carbon
<u>3M Purification Inc.</u>			
06 -1815	Aqua-Pure APRO5500	under counter	reverse osmosis
<u>3M Purification Inc. (formerly Cuno Inc)</u>			
10 -2034	SQC-VIRO-4	under counter	reverse osmosis
<u>Culligan</u>			
10 -1928	Culligan International Company Aqua-Clear	under counter	reverse osmosis
10 -1944	Culligan International Company Aqua-Clear	under counter	RO w/ carbon
<u>Culligan International Company</u>			
10 -1948	Culligan International Company Aqua Clear	under counter	RO/Ion Exchange
10 -1949	Culligan International Company Aqua Clear	under counter	RO/Ion/Carbon
10 -1954	Culligan International Company Aqua-Clear	under counter	reverse osmosis
10 -1955	Culligan International Company Aqua-Clear	under counter	reverse osmosis
10 -1958	Culligan International Company Aqua-Clear	under counter	RO w/ carbon
10 -1959	Culligan International Company Aqua-Clear	under counter	RO w/ carbon
10 -1960	Culligan International Company Aqua-Clear	under counter	RO/Ion Exchange
10 -1961	Culligan International Company Aqua-Clear	under counter	RO/Ion Exchange
10 -1962	Culligan International Company Aqua-Clear	under counter	RO/Ion/Carbon
10 -1963	Culligan International Company Aqua-Clear	under counter	RO/Ion/Carbon
<u>CUNO Inc., a 3M Company</u>			
08 -1902	SQC3	under counter	reverse osmosis
08 -1902	SQC4	under counter	reverse osmosis
08 -1914	SQC-VIRO-4	under counter	reverse osmosis
<u>Ecodyne Water Systems LLC</u>			
06 -1780	Whirlpool WHER 25	under counter	reverse osmosis
<u>EcoWater Systems</u>			
06 -1783	EcoWater ERO-375E	under counter	reverse osmosis
06 -1783	EcoWater ERO-375	under counter	reverse osmosis
06 -1783	EcoWater ERO375 HERO	under counter	reverse osmosis
11 -1978	EcoWater ERO-175	under counter	Mechanical/ROMembran
<u>General Electric Company</u>			
04 -1647	GE RO Filtration System GXRM10RBL	under counter	reverse osmosis

Exhibit B



Facsimile Transmission

From: Name: Water Lab
 Company: Culligan International
 Fax Number:
 Voice Phone: 847-430-2284

To: Name: TONY VASQUES
 Company:
 Fax Number: 831-755-0510
 Voice Phone:

Fax Notes:

Our analysis of your water sample 1312787 for TONY VASQUES is attached.

Please take the survey at https://www.surveymonkey.com/s.aspx?sm=yTuodHczWnbZ5cmHArJCZQ_3d_3d.
 Check out the latest Topic of the month about UV transmittance on myculligan

This facsimile has been sent by an automated system.
 If you received this transmission in error, or would prefer it to be delivered to a different number, contact Rick Cook at 847-430-1284.

Date and time of transmission: Wednesday, June 12, 2013 2:13:32 PM
 Number of pages including this cover sheet: 05

A RightFAX® Communicated Document



9399 W. Higgins Road Suite 1100
 Rosemont, IL 60018

TELEPHONE 847/430-2800
 FACSIMILE 847/430-2284

Report Date: 6/12/2013

Page 1 of 2

CERTIFICATE OF ANALYSIS

ANALYSIS NUMBER: 1312787

Control Number: 58489

Quality Water Ent. Inc.
 625 W. Market Street
 Salinas, CA 93901

Customer: TONY VASQUES
 35905 METZ
 SOLEDAD CA

Account Number: 04252

Zip Code:

Salesperson BOB BARTON

Customer Account #:

cc: 831-755-0510

SAMPLE INFORMATION:

Analysis Type Requested Standard A Analysis

Sampled: 6/4/2013 Supply/Source: PRIVATE WELL Condition: UNTREATED WATER
 Received: 6/10/2013 Sampling Point: WELL HEAD Application: Household

ANALYSIS INFORMATION:

Turbidity(Method 180.1 R 2.	1.3 NTU	Turbidity after filtration	0.7
Conductivity(Method 120.1	2510.0 MMHOS/CM	Est. TDS by Conductivity	1529.3
Color(Method 2120C)	8.8	Color after Acidification	3.5
pH(Method 150.1 R 1982)	7.8	Tannins	<2

Concentrations reported as mg/L (PPM) unless otherwise indicated

CATIONS (Method 200.7)

ANIONS (Method 300.0)

	As Element	As CaCo3		As Element	As CaCo3
Calcium (Ca)	22.5	56.3	Chloride (Cl)	727	1025.1
Magnesium (Mg)	9.3	38.3	Nitrate As N (NO3)	0.8	2.9
Sodium (Na)	508	1107.4	Nitrite As N (NO2)	<0.1	<0.4
Potassium (K)	2.7	3.5	Sulfate (SO4)	<3	<3.1
Strontium (Sr)	0.23	0.3	Bicarbonate	329.6	270.2
Barium (Ba)	0.2107		Carbonate	N.M.	N.M.
Iron (Fe)	0.29		Fluoride (F)	2.5	6.25
Manganese (Mn)	<0.02		Silica (SiO2)	23.2	
Copper (Cu)	<0.003				
Zinc (Zn)	<0.05				

	Mg/L	GPG		Mg/L	GPG		Mg/L	GPG
Cations (CaCO3)	1205.5	70.49	Anions (CaCO3)	1304.5	76.28	Hardness (CaCO3)	95	5.5

Additional Tests

PB by ICP N.D.ug/L As by ICP N.D.ug/L
 Aluminum by ICP <50ug/L

*NA = Not Analyzed NM = Not Measured ND = Not Detected

This report can only be reproduced in its entirety. The results reported here are representative of the sample as received in the laboratory. Unless noted holding times for method 300 may not be followed.

Certifications: CA-01133A; IL-000213; NY-11756; MT-CERT0091; TX-TX269-2003A
 IA-369; VT-VT02199; NELAP Accredited

Richard Cook
 Manager Analytical Laboratory

Analysis Number: 1312787
 Consumer: TONY VASQUES

Page 2 of 2

FEDERAL SAFE DRINKING WATER ACT

All tested parameters exceeding the maximum concentration levels (MCL) established under the "Federal Safe Drinking Water Act"

	Parameter	Found	MCL
PRIMARY:	Turbidity	1.30 ntu	0.50 ntu
SECONDARY:	Est TDS by Cond.	1529.25 mg/l	500.00 mg/l
	Chloride (Cl)	727.05 mg/l	250.00 mg/l

* MCL for Turbidity varies as follows:

1. Municipal Direct Filtration 0.5 NTU
2. Municipal Sand Filtration 1.0 NTU
3. Unfiltered Water Supply 5.0 NTU

TYPICAL POST RO DRINKING WATER UNITS

(Concentrations reported as mg/L (PPM) as the element)

Iron (Fe)	0.0	Magnesium (Mg)	0.2
Manganese (Mn)	0.0	Sodium (Na)	15.2
Zinc (Zn)	0.0	Potassium (K)	0.1
Copper (Cu)	0.0	Chloride (Cl)	29.1
Nitrate As N (NO3)	0.2	Nitrite As N (NO2)	0.0
Sulfate (SO4)	0.0	Fluoride (F)	0.0

These values are typical of new modules on water with a pH of 7-9 at 70-74 F with 500-3000 mg/L total salts operating with 40-70 PSI pressure across the module. Local conditions may yield different results.

DI CALCULATION FACTORS

		GPG	mg/L
Sodium	91.9%	Weak Base Fact X	60.1 1028.0
Alkalinity	20.7%	Carbonic Acid	16.9 288.5
Chloride	99.7%	Cation Fact Y	70.5 1205.7
Carbonic Acid	21.0%	Silica	1.1 19.30
Monovalent Ions	77.3%	Carbon Dioxide	0.5 9.1
Silica	1.7%	Strong Base Fact Z	77.8 1330.5

Analysis Date:

Method	Date	Method	Date
120.1 R 1982	06/11/13	150.1 R 1982	06/11/13
180.1 R 2.0	06/11/13	200.7 R 4.4	06/11/13
2120C	06/11/13	300.0 R 2.1	06/11/13

pH – the acid strength of water on a scale of 0 to 14 (neutral = pH 7.0). Values from 7 → 0 are increasingly more acidic; values from 7 → 14 are increasingly more alkaline. The recommended range for drinking water under the U.S. regulations is 6.5 to 8.5.

Conductivity – the relative ability of water to carry an electrical current, used to estimate the total concentration of dissolved ions.

Turbidity – cloudiness in water caused by the dispersion of light by extremely tiny particles. Measured on an arbitrary scale of Nephelometric Turbidity Units (NTUs). The mandatory maximum under U.S. regulations is 0.5 NTU.

Color – the amount of brownish-yellow color from dissolved tannins from vegetation (like tea) and metals (like rust) and their combinations, measured on an arbitrary scale. The recommended maximum under U.S. regulations is 15 CU.

Silica, SiO₂ – a naturally occurring dissolved mineral, which produces a glassy scale in high temperature equipment but is more important in predicting the life of certain water treatment media.

Hydrogen Sulfide, H₂S – a toxic, noxious, corrosive gas that smells like rotten eggs. Bacteria acting on sulfate or organic sulfur-containing materials in the absence of oxygen produce it. Only "special" water analyses can determine hydrogen sulfide levels.

Total Hardness – the sum of all metal ions which react with soap to inhibit sudsing and form "scum" or "bathtub ring" – mostly Calcium and Magnesium. When heated or evaporated, hard water can cause lime scale that can deposit on sink and shower fixtures and walls and result in loss in efficiency or fuel waste in water heaters, boilers, and cooling systems.

Total Alkalinity – the sum of hydroxide (OH⁻), carbonate (CO₃⁻²), and bicarbonate (HCO₃⁻) ions, which can combine with both acids and bases, which act to buffer water and prevent sudden uncontrolled changes in pH.

Cations – ions (atoms or molecules with an electrical charge) with a positive (+) electrical charge, so named because they go toward the cathode in an electric field. Besides the hardness ions, the main cations in water are sodium, Na⁺, and potassium, K⁺.

Anions – ions (atoms or molecules with an electrical charge) with a negative (-) electrical charge, so named because they go toward the anode in an electric field. The main anions in water are hydroxide (OH⁻), carbonate (CO₃⁻²), bicarbonate (HCO₃⁻) (which together comprise "alkalinity"), sulfate (SO₄⁻²), nitrate (NO₃⁻) and chloride (Cl⁻).

Nitrate/Nitrite, NO₃⁻/NO₂⁻ – important because of toxicity to infants, nitrate comes from fertilizers and animal wastes. Water supplies with high nitrate levels should also be screened for agricultural pesticides and bacterial contamination. The mandatory limit under U.S. regulations is 10 mg/L.

Sulfate, SO₄⁻² – a common mineral component, only rarely occurring at excessive levels, which can cause a temporary diarrhea in visitors who have not become acclimated to it. Recommended U.S. limit, 250 mg/L.

Fluoride, F⁻ – often added to water to inhibit tooth decay. Mandatory U.S. limits range from 4.0 mg/L in northern regions to 1.4 mg/L in southern regions (where more water is consumed).

Chloride, Cl⁻ – a common mineral component, can be found in elevated levels near seawater and other salt supplies, which can cause taste problems and can contribute to corrosion. Recommended U.S. limit, 250 mg/L.

Iron, Fe – cause of metallic taste, rust stains on laundry and porcelain fixtures, and clogging/fouling of equipment. The recommended U.S. limit is 0.3 mg/L.

Manganese, Mn – cause of metallic taste and black stains on laundry and porcelain. Often occurs in combination with iron. The recommended U.S. limit is 0.05 mg/L Mn or a total of 0.3 mg/L of Fe + Mn.

Copper, Cu – cause of green stains on porcelain and fittings, seldom naturally-occurring, usually due to corrosion. The mandatory U.S. "action level" of 1.3 mg/L is tied to the regulation for lead contamination due to corrosion of plumbing materials.

Zinc, Zn – cause of metallic taste and upset stomach. Due to corrosion of galvanized plumbing materials. Recommended U.S. limit, 5.0 mg/L.

Units of Concentration used in this Report

gpg-abbreviation for "grains per gallon" calculated in terms of calcium carbonate equivalents. Multiply by 17.12 to convert gpg into either ppm or mg/L.

ppm-abbreviation for "parts per million." Interchangeable with mg/L.

mg/L-abbreviation for "milligrams per liter." Interchangeable with ppm. (There are one million milligrams in a liter of pure water).

ppb-abbreviation for "parts per billion." Interchangeable with µg/L or micrograms per liter.

µg/L-abbreviation for "micrograms per liter." Interchangeable with ppb. (There are a billion micrograms in a liter).

1000 ppb = 1 ppm; 1000 µg/L = 1 mg/L

THIS ANALYSIS WILL NOT DETERMINE WHETHER A WATER IS SAFE FOR HUMAN CONSUMPTION

Sample Ana
Culligan International Cor
2399 West
Roseme

Control 58489

1312787

SAMPLE SUBMITTED BY:

Account Number: 04252
Account Name: Quality Water Ent
Phone Number: 831 755 0500
FAX Number: 831 755 0510
E-Mail: sheryk@culligan.com
Person Taking Sample: Bob BARTON
Date Sample Taken: 6/4/13 Time Sample Taken: 1030

58489

CUSTOMER INFORMATION:

Customer Name: Tony VASQUES
Street Name:
Customer Account Number:
Address: 35905 METZ
City: SOLICIA State: VA Zip:
Customer reported concern: FLOURIDIE

SAMPLE INFORMATION:

Water Supply: Private Municipal
Source: Surface Well Unknown
Condition: Treated Untreated Cloudy Colored Odor
Sample Point: Faucet Equipment Other WALL HEAD
Application: Household Commercial National Account

Comments:

ANALYSIS REQUESTED:

Standard Analysis: Standard w/TOC: Scale Analysis:
Hemodialysis Basin: Brine Analysis:
Hemodialysis Complete: Depth Filter Analysis:
Resin Analysis: Performed at Rockford Laboratories

Special Analysis: (List Analysis Requested):

For Questions or Special Analysis contact Rick Cook at (647) 430-1264

EQUIPMENT INVOLVED (IF ANY):

LAB USE ONLY:

Sample received in acceptable condition: Yes No
Received by: Date: Time:
If not reason:
Disposition of sample

Litigation samples are not accepted by the laboratory

Customer: Culligan International Company

Please sign: By:

Please print your name:

Exhibit _____

CERTIFIED PERFORMANCE

The Culligan® Good Water Machine Model AC-30, AC-30M, AC-30L, AC-30 Premier, AC-30M Premier and AC-30L Premier Drinking Water Systems have been tested and certified to ANSI/NSF International Standard 58 for effective reduction of TDS, Asbestos, Barium, Cadmium, Hexavalent and Trivalent Chromium, Cysts, Fluoride, Lead, Mercury, Radium 226/228, and Selenium. The Model AC-30 Nitrate, AC-30M Nitrate and AC-30L Nitrate have been tested and certified to ANSI/NSF International Standard 58 for effective reduction of the above substances and Nitrate/Nitrite. Nitrate models are acceptable for treatment of influent concentrations of no more than 27 mg/L Nitrate and 3 mg/L Nitrite in combination measured as N and are certified for Nitrate/Nitrite reduction only for water supplies with a pressure of 40 psig (280 kPa) or greater.



Average removal percentages are as follows:

Asbestos	99.6%	Fluoride	96.4%
Barium	90.1%	Lead	98.6%
Cadmium	98.9%	Mercury	83.1%
Chromium III	97.9%	Nitrate	95.0%
Chromium VI	82.6%	Nitrite	89.6%
Copper	98.9%	Radium 226/228*	80.0%
Cysts (including Cryptosporidium, Giardia Lambliia and Entamoeba Histolytica)	99.99%	Selenium	94.5%
		TDS/Sodium Chloride	91.3%

*Minimum removal based on approved testing methods with Barium as surrogate.

The substances removed by this system are not necessarily in your untreated water. See Performance Data Sheet for exact percentages of contaminant removal.

Culligan® Good Water Machine® Drinking Water Appliance

Your System for Life!

Local Water Expertise

Trusted Leader for Over
75 Years

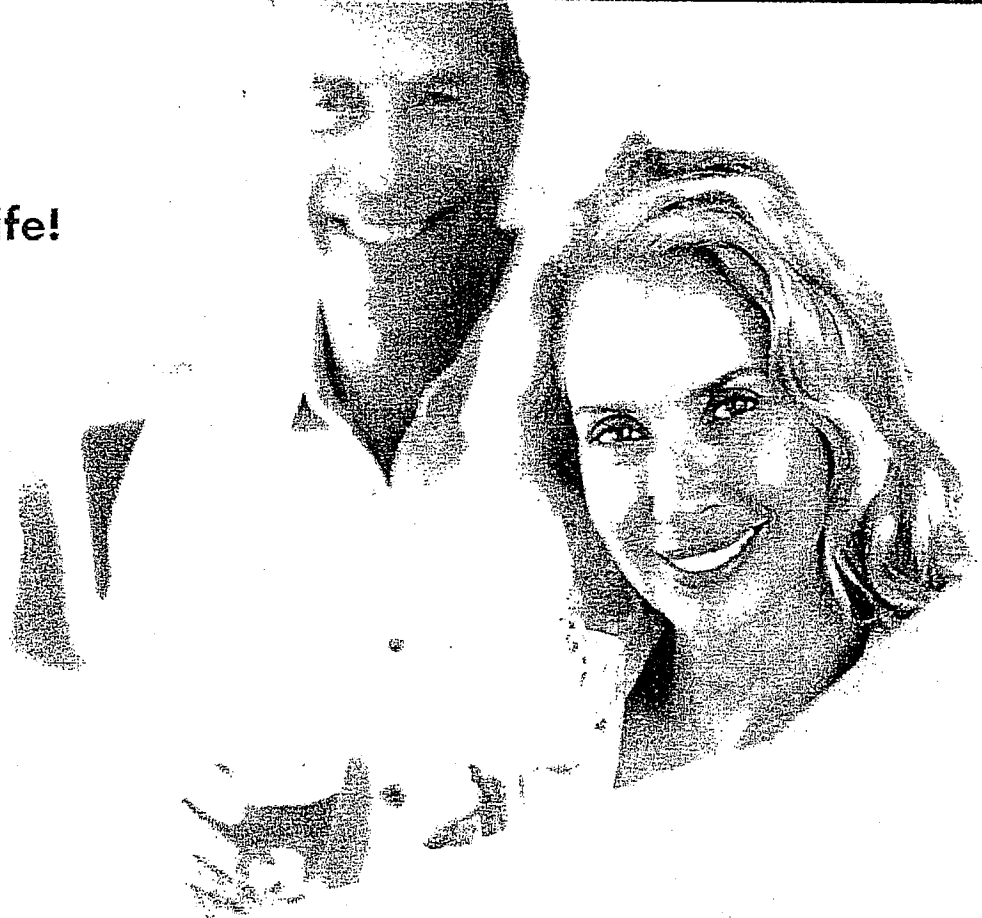
Certified Sales, Installation
and Service Professionals

100% Satisfaction
Guarantee*

Full Service (salt delivery,
filter changes and more)

Affordable Water Solutions
for Home and Business

Complimentary In-Home
Water Analysis



Culligan®

better water. pure and simple.®

Tasting, Quality Drinking Water You Deserve.

Leading a healthy life is a conscious decision—one that you need to work at on a daily basis. To help you feel and perform at your best, various health experts recommend drinking at least eight glasses of water every day. And now staying healthy and hydrated are easier than ever with the Culligan® Good Water Machine® appliance—offered exclusively through your local Culligan dealer.



The Finest in Water Filtration

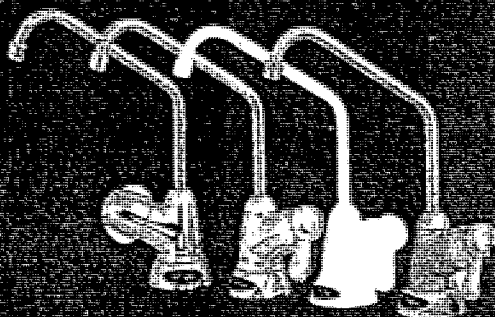
The Culligan® Good Water Machine® appliance's reverse osmosis (RO) filtration method improves the taste and odor of your drinking water and reduces microscopic impurities.¹ With reverse osmosis, water passes through an ultra-thin, semi-permeable membrane, which filters unwanted particles, such as sodium and lead. The result is the deliciously clear water you'd expect from the water experts at Culligan—available in the convenience of your own home, right at your fingertips.

With Culligan®, Getting Clear, Great-Tasting Water Is Easy.

To enjoy the clean, invigorating water provided by the Culligan® Good Water Machine® appliance, just call your local Culligan expert who will professionally install the unit. Ideal for even the largest family, the Culligan® Good Water Machine® appliance is a cost-effective solution that will give you and your family great tasting Culligan water for years to come. Even your kids will prefer the refreshing taste of your new, crystal-clear Culligan water—a great alternative to sugary drinks.

And don't limit yourself to just drinking the water. Use it for cooking and in a variety of other culinary ways to give you and your family:

- better-tasting coffee, tea and juices
- more flavorful soups, sauces and pasta
- richer baby formula
- clearer ice cubes
- crisper fruits and vegetables



- Available in three (3) different colors: white, chrome and brushed nickel
- Constructed of plastic and stainless steel
- Easily mounts on kitchen sink
- Comes with:
 - Integral lights that indicate water quality (see right)
 - Aqua-Clear® faucet rotary operation
 - Air gap faucet (non-air gap version available for international)

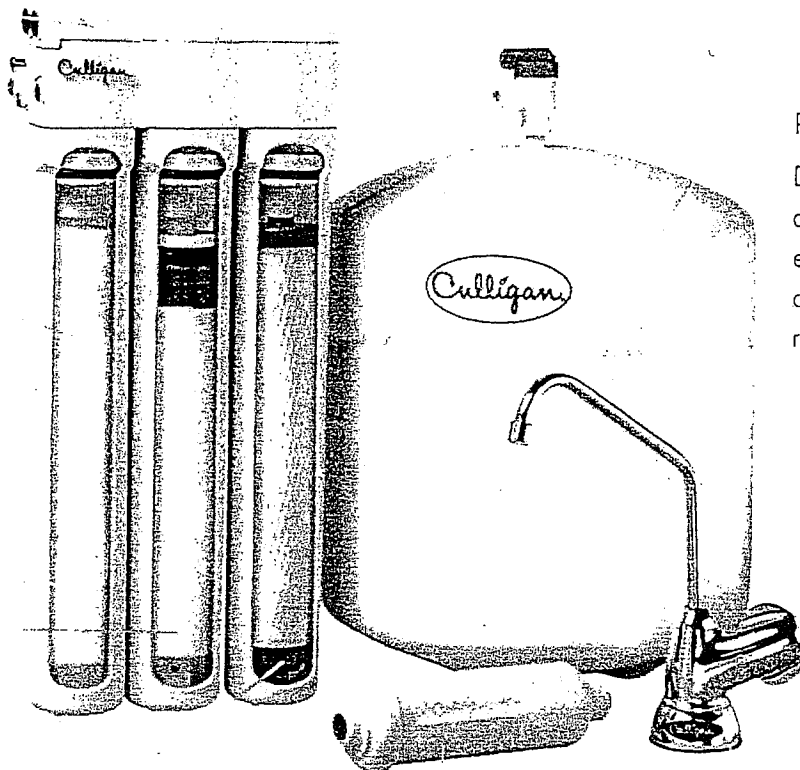
Four-Stage Filtration. Ensures Clear Great Tasting Water.

Manifold Assembly

Houses three separate filter technologies in a unique space saving design.

Automatic Shutoff Valve

Shuts off the system when the reservoir tank is full.



Reservoir Tank

Durable, high-quality steel tank ensures you'll have a plentiful supply of refreshing water.

Sediment Filter

Screens out sediments and particles down to 5 microns that cause cloudy water.

Reverse Osmosis Membrane

Reduces dissolved substances such as radium, lead and many others.†

Carbon Filter

A carbon filter reduces elements that cause water to taste and smell unpleasant, including the taste and odor of chlorine.

Second Carbon Filter

Ensures your drinking water is clear and fresh.

Designer Faucet

Delivers delicious water at the touch of a finger. Available in white, chrome and brushed nickel.

† Consult the Performance Data Sheet for the specific contaminant reduction capabilities of this device.
Limited Lifetime Warranty on Good Water Machine® (excluding expendable filter cartridge & RO membrane)



The Good Water Sentry™ Monitor option continually monitors the RO filter for optimum operation.

- Green means quality Culligan water
- Red means it's time for a filter change



The Culligan® Good Water Machine® has been tested and certified by WQA and is certified to meet NSF standards for RO systems (see back for details)

For over 75 years, Culligan has led the water treatment industry in innovation and service. Culligan products are produced with world-class quality backed by solid warranties** and the most experienced installation and service technicians in the industry.

Your local, reliable Culligan dealer will perform a complimentary, no obligation water analysis and help you choose the system that is just right for your home and family.

Now that's service!

Why Millions Trust Culligan to Deliver the Best Water

- ☞ All Culligan products are backed with a 100% Satisfaction Guarantee*. If you're not completely satisfied within 30 days from the date of purchase, simply notify your dealer for a full refund.
- ☞ Your local Culligan Man[®] has a full-line of quality water softeners, filters, drinking water systems and bottled water to fit any need.
- ☞ Manufacturing takes place under exacting world-class quality control.
- ☞ Culligan products have the industry's most state-of-the-art features because we maintain our own extensive research and development facility. No other water treatment company holds as many patents.
- ☞ With over 800 dealers worldwide in more than 90 countries globally, a Culligan Man[®] is just around the corner to make sure you receive the Culligan water you've come to enjoy.
- ☞ Your local Culligan Man[®] offers salt delivery, filter changes, rentals, financing and more, making Culligan a full-service water treatment company.

The Culligan[®] Good Water Machine[®] is tested and certified by WQA to NSF/ANSI Standard 58 for the reduction of:

Barium	Radium 226/228	Trivalent Chromium
Cadmium	Hexavalent Chromium	Copper
Selenium	Total Dissolved Solids	Lead

CAUTION: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

The contaminants or other substances removed or reduced by this water treatment device are not necessarily in your water. Source water exceeding chemical parameters requires pre-treatment.

Culligan

better water. pure and simple.®

www.culligan.com
1-800-CULLIGAN

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Part No 34907
Printed 3/13



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* All Culligan products are backed with a 100% Satisfaction Guarantee. If you're not completely satisfied with your Culligan Product within 30-days from the date of purchase, we'll refund the purchase price. Dealer participation may vary.

** Warranty available separately.

Exhibit D

Joel Panzer

From: Joel Panzer
Sent: Thursday, January 31, 2013 3:39 PM
To: bullickr@co.monterey.ca.us; 'ramirezj1@co.monterey.ca.us'
Subject: FW: Vasquez Subdivision (PLN040518) (e-mail 3 of 3)

Mr. Bullick and Mr. Ramirez-

I still have not had a response to this e-mail (if Ms. Sandoval did, I don't recall it now). This gets to the heart of the matter: Why can't Mr. Vasquez be permitted to treat for fluoride using devices approved by the California Department of Public Health, Drinking Water Program (see Certified Water Treatment Device Directory)?

It would improve the current conditions and, similar to other subdivision conditions of approval(s), the treatment system must be maintained.

Joel Panzer
Maureen Wruck Planning Consultants, LLC
LOCATED IN OLD TOWN SALINAS AT:
21 W. Alisal Street, Ste. III
Salinas, CA 93901
(831) 771-2557
Planning and Development Consultants
Project Management-Subdivisions-Certificates of Compliance-Permit Coordination
Google us at Mwruck.com

From: Joel Panzer
Sent: Friday, November 09, 2012 3:25 PM
To: 'Sandoval, Cheryl L. x4552'
Cc: ferminhd@aol.com; Treffry, Patrick, T x4556 (TreffryPT@co.monterey.ca.us)
Subject: Vasquez Subdivision (PLN040518)

Hi Cheryl-

When we spoke last week, you said you would follow-up and cite the specific County code section that prohibits water treatment for primary constituents. You also were going to send along samples of staff analysis (reports or letters – I forget which) that clarify the Department's approach/rationale on treatment.

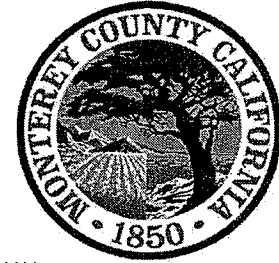
As you know, the Vasquez property is fully developed and they are already using this water source and will continue to use it. Tony Vasquez has been drinking water from Well # 1 for the 25 years he has lived there. It would seem to me that, given these specific circumstances, the project could be approved with a deed notification recorded to address existing water quality conditions and treatment.

I want to be able to better understand this specific treatment issue. Please forward what you have at your earliest convenience.

Sincerely,

Joel Panzer
Maureen Wruck Planning Consultants, LLC
LOCATED IN OLD TOWN SALINAS AT:
21 W. Alisal Street, Ste. III
Salinas, CA 93901

MONTEREY COUNTY



DEPARTMENT OF HEALTH Ray Bullick, Director

ANIMAL SERVICES
BEHAVIORAL HEALTH
CLINIC SERVICES

EMERGENCY MEDICAL SERVICES
ENVIRONMENTAL HEALTH

PUBLIC HEALTH
PUBLIC ADMINISTRATOR/PUBLIC GUARDIAN

September 19, 2013

Joel Panzer
Maureen Wruck Planning Consultant, LLC
21 West Alisal Street
Suite 111
Salinas, CA93901

Mr. Panzer:

This letter addresses those issues that you brought forward in your letter of August 28, 2013, summarized as follows:

1. Information was presented regarding treatment systems for fluoride.
2. You request a code citation regarding not allowing treatment for water sources for new subdivisions and referenced a January 31, 2013 email referred to as attachment D in your letter.
3. General Plan 2010 Policy PS 2.5 is referenced as a reason for allowing treatment for water sources for this subdivision.
4. You point out that the property is already built out.

EHB has received information on water quality and quantity for some of the wells proposed as water sources but not for all. Monterey County Code Chapter 19.03.015L requires this information prior to finding an application complete. The lack of information has been a long standing completeness issue and cannot be deferred as a condition of approval.

Thank you for the information that you provided regarding under counter treatment systems for fluoride also referred to as point of use treatment systems.

In an August 14, 2012 letter (enclosed), Patrick Treffry explained that the Environmental Health Bureau (EHB) is the lead agency in determining the adequacy of a water supply for a proposed subdivision. Because of statewide and local experience with small water systems, namely the lack of capability to obtain and/or maintain treatment systems that will provide consistent and reliable treatment in a manner to protect public health, EHB determined that water source(s) for a subdivision that needs treatment for primary contaminants and is proposed to serve 1 – 14 connections does not have the technical, managerial, and financial capability to provide consistent and reliable treatment resulting in a reliable source of potable water. Therefore, EHB cannot make a health and safety finding that these water sources are an adequate water supply as required in the approval of a subdivision. Patrick also referred to County Code and General Plan policies in regard to adequate water supplies in the August 14, 2012 letter.

In your August 28, 2013 letter as well as a prior letter, you referenced General Plan Policy PS 2.5 in support of your argument for treatment of the water in a subdivision process. As was explained before in Mr. Bullick's letter dated March 25, 2013 (enclosed), this policy does not address a proposed subdivision but a new domestic well for a single lot of record.

In reference to the existing dwellings, EHB approved the construction permits for the existing dwellings based on Monterey County Code Section 15.04.020, which exempts two or more connections occupied by members of the same family on a single lot of record from water system requirements. The existing lot of record has certain development entitlements and has received those entitlements, which allowed the construction of the four existing dwellings.

The proposed subdivision would constitute new entitlements that must be considered in light of public health as well as other considerations. As you are aware the process to consider approval of a subdivision is quite different; requires more detailed information; and may have different and/or additional policies and regulations that must be met than a construction permit for a dwelling.

I believe this has addresses the issues that you raised. If you have any further questions you may contact Cheryl Sandoval at (831) 755-4552.

Sincerely,



Richard LeWarne
Assistant Director
Environmental Health Bureau

cc: Dan Lister, Planning Department
Cheryl Sandoval, Drinking Water Protection Services' Supervisor, EHB
Nicole Fowler, Environmental Health Review Services' Supervisor, EHB

Attachments: August 14, 2012 Letter (Patrick Treffry)
March 25, 2013 Letter (Ray Bullick)

MONTEREY COUNTY



DEPARTMENT OF HEALTH Ray Bullick, Director

ANIMAL SERVICES
BEHAVIORAL HEALTH
CLINIC SERVICES

EMERGENCY MEDICAL SERVICES
ENVIRONMENTAL HEALTH

PUBLIC HEALTH
PUBLIC ADMINISTRATOR/PUBLIC GUARDIAN

August 14, 2012

Mr. Joel Panzer
Maureen Wruck Planning Consultants, LLC
21 West Alisal Street Suite 111
Salinas CA 93901

Via e-mail: joel@mwruck.com

Re: PLN040529 - Vasquez Subdivision
Water Quality / Water Quantity / Long-Term Water Matters
APN 257-121-019-000

Dear Mr. Panzer:

Thank you for your request for additional information regarding the Vasquez Subdivision and matters related to a Hydrogeological Investigation for the proposed source wells on the property. As discussed, each parcel for the subdivision will need to demonstrate it has acceptable, potable water meeting state and county standards for water quality and water quantity. Please reference the Environmental Health Bureau letter to you dated March 13, 2012 that discusses the current status of the three existing wells on the property.

This application has remained incomplete for many years because the applicant has not been able to demonstrate there is an adequate water supply for the project. This project was heard before the Monterey County Planning Commission on February 9, 2011. The hearing was continued upon the applicant's request to conduct additional water quality and quantity tests. As of this date no water quality test results have been submitted and no source capacity tests have been performed to our knowledge.

This project is subject to a consistency analysis with the 2010 General Plan. Staff's focus of review has been limited to matters related to the source of water supply. The Monterey County Water Resources Agency (WRA) has reviewed the two available Well Completion Reports for the two wells drilled in 2005 and 2008 and reports that the two wells are drilled into hard rock (ie. Fractured rock). Hard rock wells tend to decline in water production as demonstrated in areas of Monterey County and in others areas of California.

General Plan Policy PS-3.1 requires that new development shall be prohibited without proof based on specific evidence that there is a long-term sustainable water supply, both in water quality and quantity to serve the development. Please note that Monterey County Code, Title 19,

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Mr. Joel Panzer
Vasquez Subdivision – PLN040529
August 14, 2012
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Section 19.10.070 requires that provisions shall be made for such domestic water supply as may be necessary to protect public health, safety, or welfare, that the source of supply is adequate and potable, and that there is proof of a long term water supply for the proposed project.

Three wells have been drilled that do not meet water standards either due to lack of water quantity or lack of compliance with water quality standards. Please note:

MCC Section 19.03.015 (L) 2 states: *Evaluation of Public Health and Safety Impacts. The source of water within the project boundaries which are to provide groundwater or surface water for the lots shall be evaluated for potential public health and safety impacts. The Monterey County Health Department shall be the lead agency in determining the adequacy of the proposed project's water supply, and in evaluating the health and safety threats to the supply.*

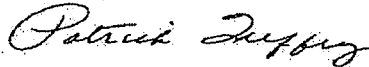
Staff's recommendation was to deny the project at the February 9, 2011 Planning Commission hearing based upon water related matters. To date, no new information has been submitted that would change EHB's position regarding the requirements for long-term water and meeting water quality and quantity per county and state standards. You had mentioned at the hearing you would be conducting source capacity testing perhaps in August 2011. EHB's file does not indicate any testing data since August 2011.

Without demonstrating that a long-term sustainable water supply exists in addition to demonstrating a suitable water source meeting quality and quantity standards the county would not be able to make a Health and Safety finding that supports the project. It is Environmental Health's position that this project is not consistent with policies PS – 3.1 (Proof of Long Term Sustainable Water Supply) and PS – 3.13 (Proof of Adequate Water Supply) and therefore, will not be able to conform to PS – 3.9 (Proof of Long Term Sustainable Water Supply prior to Approval of Subdivision Map).

However, notwithstanding the above deficiencies, if your client chooses to move forward with a Hydrogeological Investigation, you would need to inform EHB and also contact Mr. Tom Moss of the Monterey County Water Resources Agency (WRA) so that a scope of work can be developed for your consultant. Your consultant will have to coordinate with EHB and WRA as the Hydrogeological Investigation is being conducted and the resultant report would be peer reviewed by WRA.

Please feel free to contact me at (831) 755-4556 if additional information is required.

Sincerely,



Patrick Treffry, REHS
Environmental Health Review Services

cc: Richard LeWarne, REHS
Nicole Fowler, REHS
Tom Moss, P.G., WRA

1270 Natividad Rd., Salinas, CA 93906 (831) 755-4507 (831) 796-8680 FAX

Exhibit _____

MONTEREY COUNTY



DEPARTMENT OF HEALTH Ray Bullick, Director

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PUBLIC HEALTH
PUBLIC ADMINISTRATOR/PUBLIC GUARDIAN

March 25, 2013

Joel Panzer
C/o Maureen Wruck
Planning Consultants, L.L.C.
21 W. Alisal, Suite 111
Salinas, CA 93901

Re: PLN040529; APN 257-121-019

Dear Mr. Panzer:

Thank you for your letter of March 2, 2013 following our January 31, 2013 onsite meeting with Mr. Tony Vasquez along with John Ramirez, Director of the Environmental Health Bureau (EHB). During our meeting, you discussed the possibility of conducting water quality tests, which would then be reviewed by EHB to see if the test results met Maximum Contaminant Levels (MCL) set by the California Department of Public Health. Once EHB notified you of the findings your client could then decide whether to proceed with a 72-hour source capacity test. This path is an option for your client.

A February 9, 2011 hearing was finally set before the Monterey County Planning Commission. As you may remember you requested a year continuance during this hearing to perform monthly water sampling similar to a request you had made on behalf of the Weyland/Merril Subdivision. EHB agreed to this proposal and the Planning Commission granted the continuance.

However, no monthly water quality testing was performed. On August 29, 2012, almost 17 months after the continued public hearing, a water quality test was conducted on water samples from Wells #2 and #3. The test results from Well #2 indicates that the concentration for Fluoride is 3.34 ppm which exceeds the MCL of 2 ppm. The test result for Well #3 is 3.19 ppm, which also exceeds the MCL for Fluoride. The MCL is based on adverse health affects to the public.

You cite in your letter that 2010 General Plan Policy PS-2.5 indicates water quality shall not be a basis for preventing development. However, you did not cite the entire policy. The first sentence of the policy, which is pertinent to what land use actions that this policy applies to, and it states:

"Regulations shall be developed for water quality testing for new individual domestic wells on a single lot of record to identify:"

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Joel Panzer
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The portion cited: "...Regulations pursuant to this policy shall not establish criteria that will prevent the use of the well in the development of the property. ..." is at the end of the policy and clearly operates within the parameters of "new individual domestic wells on a single lot of record" and not in a subdivision process.

I understand there was a meeting on March 18, 2013 at the Resource Management Agency between you, Tony Vasquez and family members, Planning Department (Dan Lister, John Ford) and Environmental Health (Richard LeWarne). At the meeting the need for a finding of Technical, Managerial, and Financial (TMF) capability as part of Long Term Sustainable Water Supply (LTSWS) and Monterey County Code Chapter 19 (Subdivision Ordinance) was discussed. Mr. LeWarne explained that EHB has been recommending denial for subdivisions with a water supply that serves 1 – 14 connections if treatment for a primary contaminate is needed based on lack of TMF. EHB has determined that operators of water supplies that need treatment for the creation of new lots of 1- 14 connections do not have adequate TMF based upon statewide and local experience. Currently, there is legislation pending that is trying to provide funds for existing small water systems including single connections to address water quality problems because these water supply operators do not have the TMF to resolve their problems.

Three possible options were discussed:

1. Try to determine at what depths the Fluoride deposits are in the well by taking multiple water quality samples at various depths. If this can be determined, then seal off that portion of the well where the Fluoride deposits are. Sealing off a portion of the well would likely reduce the source capacity, which cannot be determined until after a 72-pumping test is done. Well #3 was identified by Mr. Tony Vasquez as probably the best producer. Therefore, if the Fluoride concentration can be reduced to 2 ppm or lower and the well can produce 3 gpm for each single-family dwelling (sfd) or 12 gpm total adjusted post recovery from the source capacity test then this well would meet the requirements for a 4-connection water system.
2. Perform quarterly testing to determine if the annual quarterly average of Fluoride is 2 ppm or lower for a year.
3. Mr. Vasquez and family members raised the point on several occasions that the property in question has been built out for a number of years and the water supply already exists and presently serves the 4 sfd's. The question was also brought up that if it is already built out or limitations placed on the resultant lots to the effect that there be no further development requiring water use why couldn't a recommendation for approval be made.

Mr. LeWarne explained that the present water system is under a "family exemption" from a health permit because the system serves family members on the same parcel. However, if one or more of the sfd's is occupied by someone other than a family member then a health permit would be required for the present system. Mr. Ford and Mr. LeWarne also discussed our agencies struggle of being able to make a finding of adequate TMF for the operator of the water supplies.

If your proposed subdivision is able to go forward in some manner, the presumption of a LTSWS would be applicable to your project. One of the conditions of approval would be that the applicant would be required to sign a hold harmless agreement. This agreement would require the applicant to reimburse the County for any legal costs that the County may encounter in defending itself if legal action is taken due to this project's approval.

In your letter of March 2, 2013 you indicate that the primary basis of the request is to obtain funding for "handicapped upgrades". I have checked with the Veterans Services Office for Monterey County and find that there is a program for Veterans to do "resident modification" to comply with handicap needs. I urge you to contact

1270 Natividad Rd., Salinas, CA 93906 Phone (831) 755-4505 Fax (831) 755-4880
<http://www.co.mtyhd.org>

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Joel Panzer
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Fernando Rome Marquez at (831) 647-7613 to gain more information on this program. Should you have further questions regarding this matter please contact John Ramirez or myself at (831) 755-4526.

Sincerely,

Ray Bullick
Director of Health

Cc: Tony Vasquez
Supervisor Simon Salinas
Wes Morrill
John Ramirez