

13530.0 Girard Winery
Winery Use Permit
Water System Feasibility
February 21, 2014



Stacey Harrington
Napa County Planning, Building, and Environmental Services
Department of Environmental Management
1195 3rd St. Room 101
Napa, Ca

Project: Girard Winery – New Winery and Tasting Room Use Permit
Water System Feasibility
1077 Dunaweal Lane
Calistoga, CA 94515
APN: 020-150-017

Stacey,

This letter is provided in support of the Girard Winery Use Permit application to construct a new onsite winery and tasting room. Specifically, this letter shall provide preliminary information with respect to the Technical, Managerial and Financial Capacity of the winery to operate the proposed system.

PROJECT AND SITE BACKGROUND

Vintage Wine Estates owns and operates the existing “Clos Pegase” water system (ID # 28-01007) located at 1060 Dunaweal Ln in Calistoga, Ca (APN: 020-150-017). The system is currently regulated as a Transient Non-Community water system. Attached please find the most recent water system permit dated 3/22/13.

Vintage Wine Estates is applying for a Use Permit to construct a new winery and tasting room onsite; the Girard Winery. With the Use Permit, it is proposed to also serve water to the proposed Girard Winery using the same system. A new supply main, storage tank, booster pump, and distribution system will be required.

The existing water system permit will need to be updated to include additional piping and service connections for the Girard Winery, as well as any additional documents which must be updated as a result.

WATER SYSTEM NAME

The water system shall be known as:

The Clos Pegase and Girard Wineries Water System

REPORT PREPARATION

This report was prepared for Girard Winery by Ben Monroe, P.E. of Always Engineering, Inc. Questions or comments regarding the content of this report should be directed to:

Ben Monroe
Always Engineering, Inc.
131 Stony Circle, Suite 1000
Santa Rosa, Ca 95401
Office: (707) 542-8795 x17
Cell: (707) 318-7099
BenM@alwayseng.com

TECHNICAL CAPACITY

A. System Description

The existing water system for Clos Pegase Winery consists of the following features; one active onsite well (Well #2), pressure tanks, sediment filter, softeners, 58,000 gallon storage tank, pressure tanks, ultraviolet disinfection, and potable use. The well is located on 1077 Dunaweal Lane, Calistoga (APN: 020-150-012), where it supplies the residence and Clos Pegase Winery.

A water system schematic is attached.

B. Source Adequacy Assessment and Evaluation

The Clos Pegase and Girard Wineries Water System is sized for ultimate build-out of the parcel and therefore the supply and demand, and infrastructure is expected to be sufficient for at least the next 10 to 20 years. In order to determine the adequacy of the water system, the volume of supply from each source and demand from each use is estimated and evaluated on the following pages:

a. Supply Capacity Assessment

The proposed source for the Water System is as follows:

- Source 1: Well #2

Well #2 produces approximately 23 gpm per the well logs, but the current pump supplies 18 gpm. A copy of the well log is on file with the County and can be provided upon request. There is one additional onsite well which is not used. No surface water is used in the system and therefore the Surface Water Treatment Rule does not apply.

Therefore, the current available supply for the domestic uses onsite is approximately 18 gpm. An 18 gpm supply is sufficient to supply 1,080 gallons an hour which is sufficient to supply 8,640 gallons over 8 hours or 25,920 gallons operating for 24 hours a day. This is capable of producing 9,460,800 gallons when operating for 24 hours a day, for 365 days a year.

b. Demand Assessment

Onsite water use demand from the system is from the following uses:

Clos Pegase and Girard Wineries

- Winery Processing
- Winery Employees
- Wine Tasting
- Wine Events

All vineyard irrigation is provided by the onsite reservoir pond. Well No .2 is dedicated to potable uses only.

Demand from each winery is presented below:

Clos Pegase

Winery Process Amended Permit Application

Annual Use	=	920,000 gal/year
Peak Harvest Day	=	5,759 gpd

Winery and Residence Domestic Use

Annual Use (assumes peak day 365 days/year)	=	651,702 gal/year
Peak Day	=	1,785 gpd

Therefore the total water demand for the Clos Pegase is calculated:

Peak Daily Demand

Winery PW + Winery Domestic + Residence	=	7,544 gpd
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Annual Demand

Winery PW + Winery Domestic + Residence	=	1,517,702 gal
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Girard Winery

Winery Process

Annual Use	=	920,000 gal/year
Peak Harvest Day	=	5,759 gpd

Winery Domestic

Peak Day	=	1,675 gpd
Annual Use	=	611,375 gal/year

Therefore the total water demand for the Girard Winery is calculated:

<u>Peak Daily Demand</u>			
Winery PW + Winery Domestic	=	7,434 gpd	
<u>Annual Demand</u>			
Winery PW + Winery Domestic	=	2,183,077 gal	

Landscape Irrigation

Landscape Irrigation is provided by another onsite well and/or treated process wastewater and therefore does not impact the public water system demands.

TOTAL WATER DEMAND

For the purposes of simplifying this analysis, all peak water uses are assumed to occur on the same day. This is not the case, as peak winery use only occurs during the months of harvest (Sept – Oct) and typically does not overlap with events. Given the above water demands, the peak water use for the Clos Pegase and Girard Wineries is estimated as follows:

Peak Daily Water Demand

Peak flows are estimated as follows:

Peak Daily Demand for Clos Pegase + Peak Daily Demand for Girard =

$$7,544 \text{ gpd} + 7,434 \text{ gpd} = 14,978 \text{ gpd}$$

As demonstrated above, the Well No. 2 can produce 25,920 gpd alone and is more than sufficient to supply water to meet the peak onsite daily uses. The well will only have to operate for 832 minutes (13.8 hours) to provide this volume of water. A storage tank of sufficient volume will be provided for the proposed Girard Winery. A booster pump system will meet the peak hourly use from this tank.

Annual Water Demand

Annual demand for the Clos Pegase and Girard Wineries is the summation of all onsite annual average use and is calculated as follows:

Winery PW + Winery Domestic + Residential	=	
1,840,000 gal + 1,095,475 gal + 325,851 gal	=	3,261,326 gal

The well only needs to operate for a period of approximately 125 days (3,020 hours) in order to supply water for the entire year.

This analysis assumes winery peak domestic uses occur 365 days a year, which will not be the case.

c. Water Quality Assessment

Previous testing indicates that the water is of good quality. Sediment filters, pH adjustment, water softening, and Ultraviolet disinfection are the only treatment components provided. The existing Well No. 2 has been sampled and only requires treatment to remove hardness. If required, a current sample will be collected and submitted for testing.

A review of all parcels within 500' of the property line has been done to identify any potential hazardous spills. A map is provided to demonstrate this. There are no spills within 500' on any adjacent parcels

d. Consolidation Feasibility

It is proposed to connect to the Clos Pegase Winery to supply Girard Winery, as described in this report.

MANAGERIAL CAPACITY

A. Ownership

The parcel and water system is owned by a Vintage Wine Estates, with Pat Roney being the corporate officer. A copy of the Deed of Trust for the parcel can be submitted to the County to document this. Vintage Wine Estates also owns and operates the existing public water system for Clos Pegase Winery and Cosentino Winery.

B. Organization

The Clos Pegase and Girard Wineries Water System will be operated by Jason Duval, the Clos Pegase Water System Manager. Mr. Duval reports directly to Mr. Roney and has experience operating the water system at the Clos Pegase water system for 15 years. In the event that Mr. Duval is not available during a water system emergency, Glen Hugo the Girard winemaker shall be responsible for water system operation. Vintage Wine Estates will contract out for all legal, engineering, and maintenance of the water system.

C. Water Rights

The Owner's water rights to the groundwater sources have been demonstrated by a copy of the Deed of Trust for the Parcel on file at the County. The parcel is not located within a groundwater basin that has been classified as being in overdraft, or subject to groundwater adjudication procedures.

D. Emergency/Disaster Response Plan

A complete Emergency/Disaster Response Plan has been submitted to the Napa County office of Environmental Management (NCEM) for the Clos Pegase Winery Water System. An updated plan will be generated when the Girard Winery Water System is designed

FINANCIAL CAPACITY

A. Budget Projection

Vintage Wine Estates, Clos Pegase, and Girard Wineries are not currently encumbered by any judgments, liens, or other financial liability that would prevent operation of the Clos Pegase and Girard Wineries Water System. The majority of the system components are already installed with the exception of the new storage tank, booster pump, and distribution to Girard. Purchase and installation of these components for the system is projected to cost approximately \$50,000. Replacement of the entire treatment system is also expected to cost approximately \$15,000. Approximately \$6,000 per year and \$30,000 for the first five years will be required for operation of the Clos Pegase and Girard Wineries Water System. The costs of system maintenance and replacement will be covered by wholesale and retail wine sales.

We trust that this letter and attachments is sufficient to allow processing of the Girard Winery Use Permit for a new winery and tasting room. Please feel free to contact us with any additional questions, comments, or requirements.

Sincerely,



Robert Osborn, EIT
ALWAYS ENGINEERING, INC.
Engineering Technician



Ben Monroe, P.E., QSD/QSP
ALWAYS ENGINEERING, INC.
Project Manager

Enclosures

cc: Heather McCollister
Pat Roney (Vintage Wine Estates)





A Tradition of Stewardship
A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Hillary Gitelman
Director

March 22, 2013

CLOS PEGASE WINERY
JASON DUVAL
1060 DUNAWREAL LANE
CALISTOGA, CA 94515

Dear Water Purveyor,

Subject: Clos Pegase Water System Amendment (WS/484/PMT)

On March 7, 2013 an application was submitted for an amendment to the Clos Pegase Winery Water System located at 1060 Dunaweal Lane, Calistoga, CA 94515. At this time the application has been approved. The permit to operate has been attached, please read the permit in its entirety and note that this permit amendment is an addendum to the previously issued permit and all conditions noted therein.

Please feel free to contact me if you have questions or comments regarding this notice at (707)251-1072.

Regards,



Jahniak McGill
Registered Environmental Health Specialist

Planning Division
(707) 253-4417

Building Division
(707) 253-4417

Engineering & Conservation
(707) 253-4417

Environmental Health
(707) 253-4471

Parks & Open Space
(707) 259-5933

STATE OF CALIFORNIA

DOMESTIC WATER SUPPLY PERMIT

Issued To

Clos Pegase Winery

28-01007

By

The Environmental Health Division of Planning, Building, and
Environmental Services



PERMIT NO.: 484

EFFECTIVE DATE: 3/21/2013

WHEREAS:

1. *Jason Duval* on behalf of *Clos Pegase Winery Water System* submitted an application to the Division of Environmental Health on *3/7/ 2013* for an amendment to the Domestic Water Supply Permit issued to the *Clos Pegase Winery Water System*.
2. The purpose of the amendment, as stated in the application, is to allow the *Clos Pegase Winery Water System* to make the following modifications to the public water system:
 - a) *Add sodium hydroxide injection for pH adjustment*
 - b) *Remove the Calcite filters*
 - c) *And a kinetic softener*
3. The *Clos Pegase Winery Water System* has submitted all of the supporting information required to evaluate the application.
4. The Division of Environmental Health has evaluated the application and the supporting material and has determined that the proposed modifications comply with all applicable State drinking water requirements.

THEREFORE:

1. The Napa County Department of Environmental Management hereby approves the application submitted by the *Clos Pegase Winery Water System* for a permit amendment. The Domestic Water Supply Permit issued to the *Clos Pegase Winery Water System* is hereby amended as follows:

a) *Sodium Hydroxide injection is approved for pH adjustment.*

2. This permit amendment is subject to the following conditions:

a) The only sources approved for potable water supply is as follows:

Source	PS Code	Status	Capacity	Comments
001	2801007-001	Disconnected	unknown	Well 1
003	2801007-003	Active	23 gpm	Well 2

Two-40 gallon Sanitron Ultra Violet water purifiers, both with 40 gpm flow restrictors, and an additional 40 gpm ultraviolet unit with a 20 gpm flow restrictor are approved as *precautionary* treatment for this water system. Replacement bulbs must be stored onsite at all times and an employee must be trained to replace the bulbs.

One sodium hydroxide injection unit using the filter cases for contact time to assist with pH adjustment

One Kinetico Softener is approved for the removal of iron and manganese.

A 58,000-gallon tank which is lined with a COOLPRO Polypropylene PP78 sanitary liner is approved for water storage.

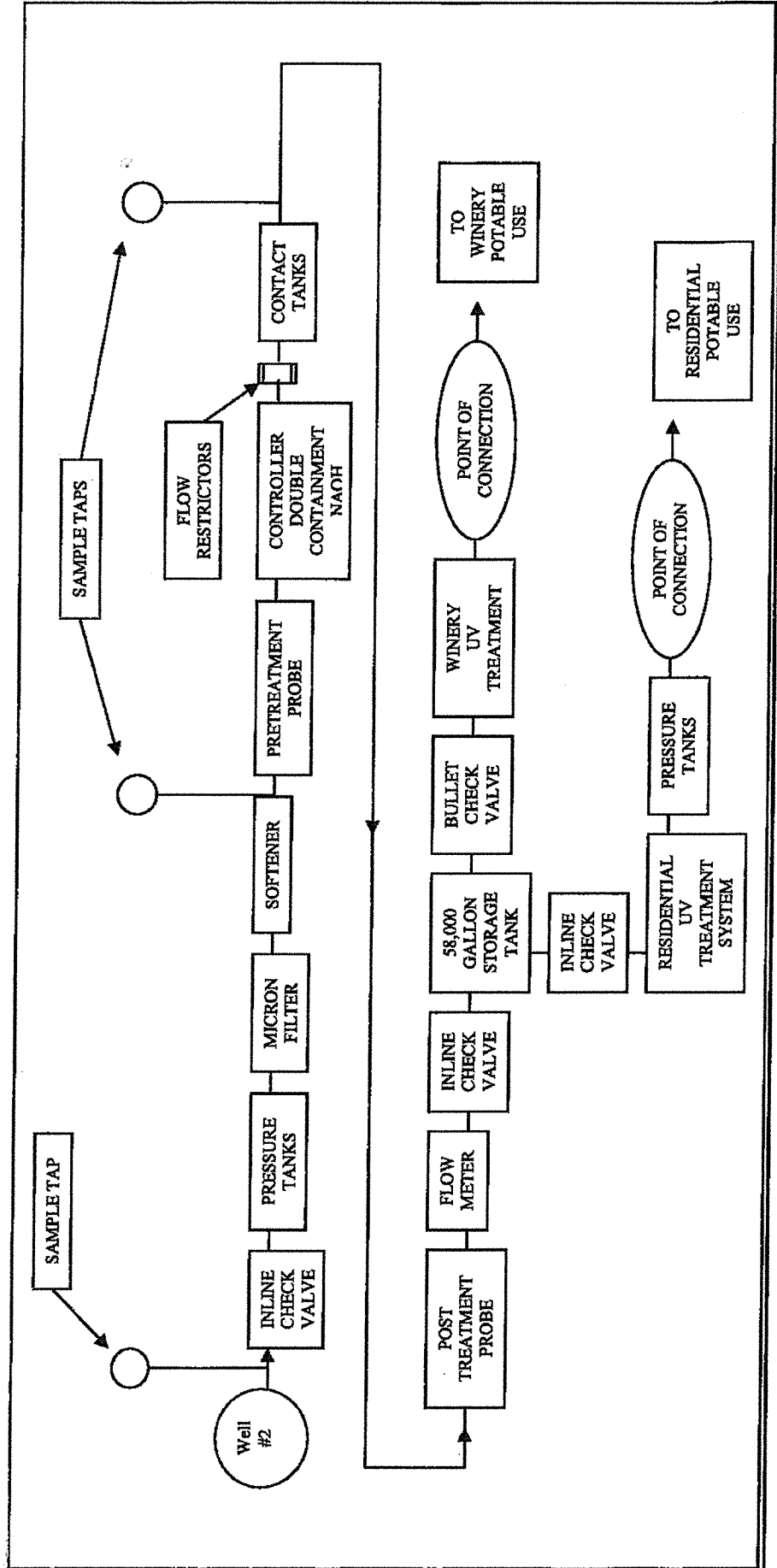
- b) Bacteriological and chemical tests shall be performed in compliance with the requirements of the California Drinking Water Standards, and the water system shall comply with all reporting requirements. See attached chemical testing schedules

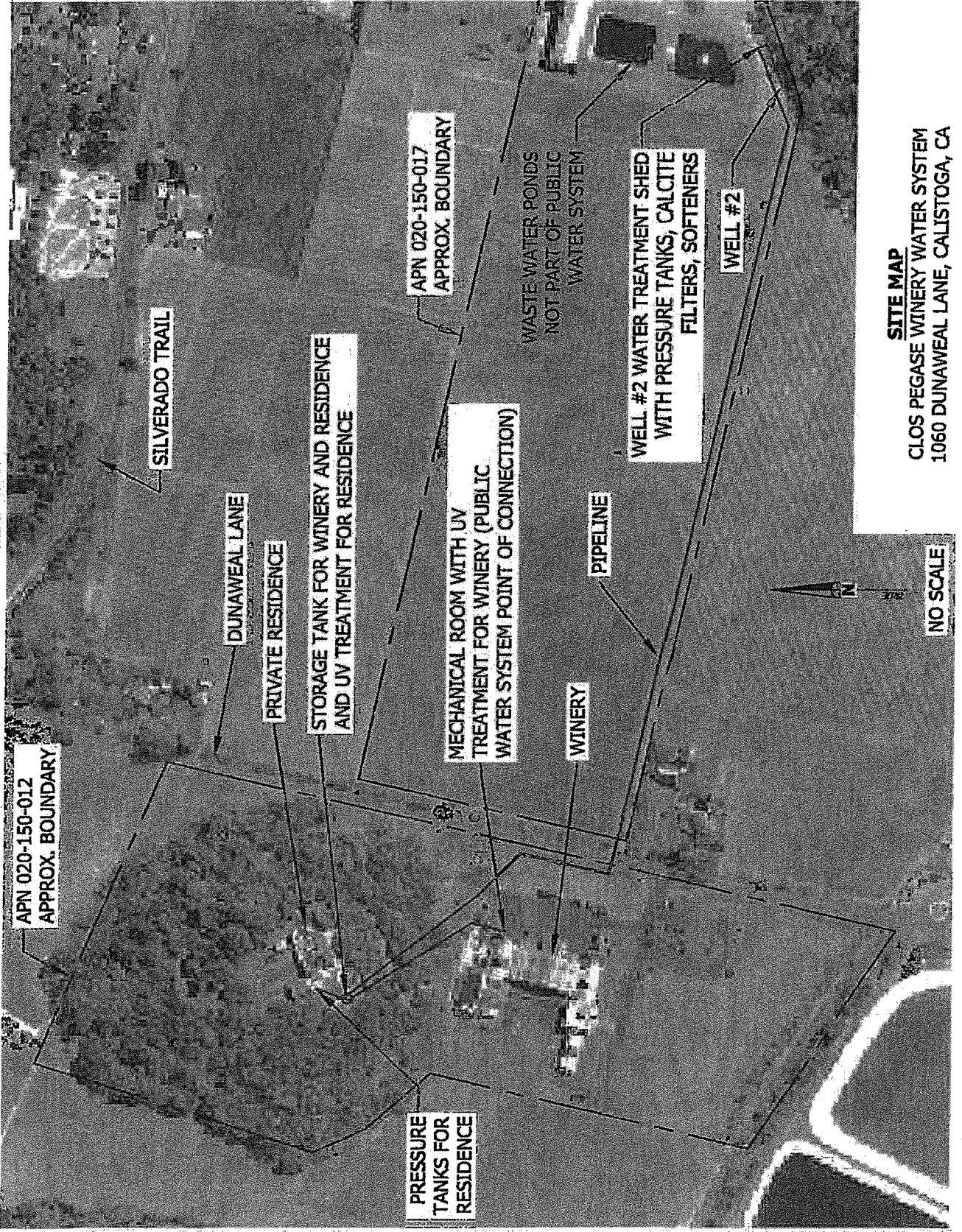
Quarterly bacteriological reports from an approved lab must be submitted to this office no later than the 10th day following the end of the sampling period. The bacteriological samples shall be collected from the location specified on the Bacteriological Sample Siting Plan. The source chemical monitoring sampling must be completed as shown on the attached chemical testing schedule

- c) The application states that the backwashing filter is plumbed to a sump which disposes to the processed wastewater ponds. This connection must be via an air gap to provide adequate backflow prevention.

CLOS PEGASE WINERY WATER SYSTEM

SYSTEM SCHEMATIC





APN 020-150-012
APPROX. BOUNDARY

SILVERADO TRAIL

DUNAWAEL LANE

PRIVATE RESIDENCE

STORAGE TANK FOR WINERY AND RESIDENCE
AND UV TREATMENT FOR RESIDENCE

PRESSURE
TANKS FOR
RESIDENCE

APN 020-150-017
APPROX. BOUNDARY

MECHANICAL ROOM WITH UV
TREATMENT FOR WINERY (PUBLIC
WATER SYSTEM POINT OF CONNECTION)

WINERY

PIPELINE

WASTE WATER PONDS
NOT PART OF PUBLIC
WATER SYSTEM

WELL #2 WATER TREATMENT SHED
WITH PRESSURE TANKS, CALCITE
FILTERS, SOFTENERS

WELL #2



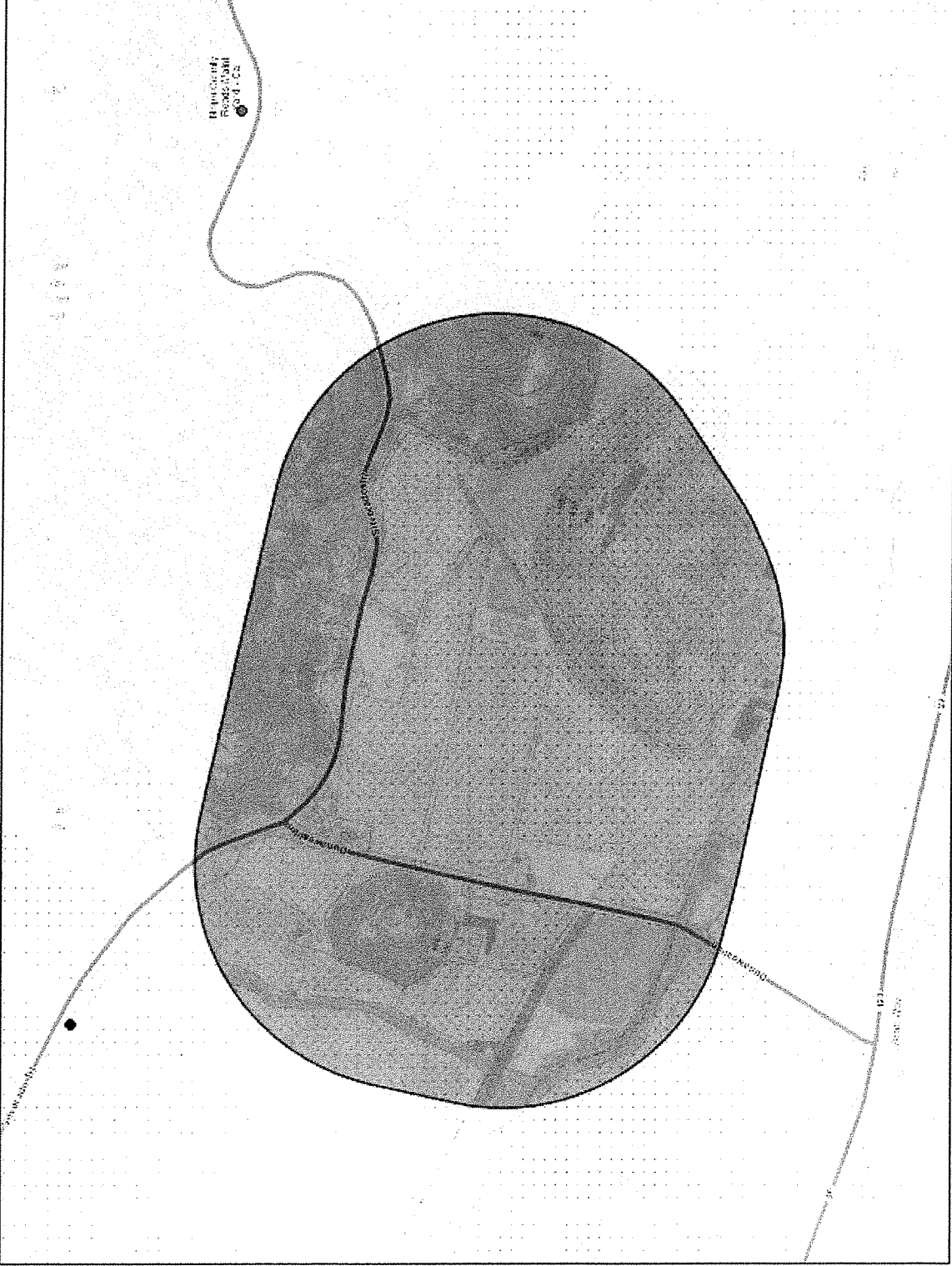
NO SCALE

SITE MAP
CLOS PEGASE WINERY WATER SYSTEM
1060 DUNAWAEL LANE, CALISTOGA, CA



County of Napa
California

County of Napa GIS



Highway 123
Road 123
0.1 mi

Disclaimer: This map was prepared for informational purposes only.
No liability is assumed for the accuracy of the data delineated hereon.

This map was printed on 11/6/2013

Notes

Blank space for notes.

2,572.3

1,286.15 2,572.3 Feet

RECEIVED

MAY 07 2014

Napa County Planning, Building & Environmental Services

DECLARATION
(Nontransient-Noncommunity)

I, PATRICK ROUS, declare that I understand the definition of a public water system, as defined in the California Health and Safety Code (CH&SC), Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 1, Section 116275(h), to mean that a **public** water system is "a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year."

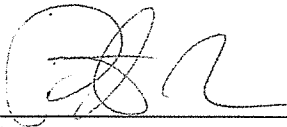
Furthermore, I understand the definition of a nontransient-noncommunity water system, as defined in Section 116275(k), to mean "a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year."

Furthermore, I declare that I understand that Section 116275(e) defines human consumption as "the use of water for drinking, bathing or showering, hand washing, or oral hygiene."

Furthermore, I declare that I understand that Section 116725 of the CH&SC states that "Any person who knowingly makes any false statement or representation in any application, record, report, or other document submitted, maintained, or used for purposes or compliance with this chapter (California Safe Drinking Water Act (AB 2995)), may be liable for a civil penalty not to exceed five thousand (\$5,000) for each separate violation or, for continuing violations, for each day that violation continues." In addition, Section 116730 of the CH&SC states that violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.

In recognition of the above, declaring that I understand the definition of a public water system and the penalty for giving false information, I declare that my facility, Clos Pegase and Girard Wineries Water System, does not meet the definition of a nontransient noncommunity water system because it does not serve more than 24 people more than 6 months out of the year.

5/2/14
Date


Signature