

EXHIBIT D

Attachment D

PHASE I WATER AVAILABILITY ANALYSIS

File #: P ____ - ____ Owner: Vintage Wine Estates Parcel #: 047 - 280 - 017

This form is intended to help those who must prepare a Phase I Water Availability Analysis. **The Department will not accept an analysis that is not on this form.**

BACKGROUND: A Phase I Water Availability Analysis is done in order to determine what changes in water use will occur on a property as a result of the project. Staff uses this information to determine whether the project may have a adverse effect on groundwater levels. If it may, additional information will be required. You will be advised if additional information is needed.

PERSONS QUALIFIED TO PREPARE: Any person that can provide the needed information

PROCEDURE:

STEP 1: Prepare and attach to this form an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used shown

STEP 2: Determine the allowable groundwater use allotment for your parcel(s).

Total size of parcel(s)	<u>365</u>	acre(s)
Multiply by parcel location factor	x <u>0.5</u>	acre-foot per acre per year (see back)
Allowable groundwater allotment	= <u>183</u>	acre-foot per year

STEP 3: Determine the estimated water use for all vineyards on your parcel(s) currently and after the planned conversion; actual water usage figures may be substituted for the current usage estimate (please indicate if this is done). Estimate future use for both the vineyard establishment period and thereafter

Current Usage:

Number of <u>planted</u> acres	<u>231</u>	acres
Multiply by number of vines/acre	x <u>1089</u>	vines per acre
Multiply by gallons/vine/year	x <u>90</u>	gallons of water per vine per year
Divide by 325,821 gallons/af	= <u>85</u>	af of water per yr used for vineyard irrigation

Future Usage:

Number of <u>planted</u> acres	<u>47</u>	acres
Multiply by number of vines/acre	x <u>1361</u>	vines per acre
Multiply by gallons/vine/year	x <u>70</u>	gallons of water per vine per year (long-term)
	<u>90</u>	gallons of water per vine per year (establish)
Divide by 325,821 gallons/af	= <u>14</u>	af of water per yr used (vineyard long-term)
	<u>18</u>	af of water per yr used (vineyard establish)

STEP 4: Using the guidelines on the next page, actual water usage figures, and/or detailed water use projections, tabulate the existing and projected future water usage on the parcel(s) in acre-foot per year (af/yr) {1 af = 325,821 gallons}.

Existing Usage:

Residential	_____	af/yr
Farm Labor Dwelling	_____	af/yr
Winery	_____	af/yr
Commercial	_____	af/yr
Vineyard(long-term)	<u>85</u>	af/yr

Future Usage:

Residential	_____	af/yr
Farm Labor Dwelling	_____	af/yr
Winery	_____	af/yr
Commercial	_____	af/yr
Vineyard(long-term)	<u>99</u>	af/yr

“ (establish) _____ af/yr

Other Agriculture	_____ af/yr
Landscaping	_____ af/yr
Other Usage	_____ af/yr
TOTAL	85 af/yr

“ (establish) 18 _____ af/yr

Other Agriculture	_____ af/yr
Landscaping	_____ af/yr
Other Usage	_____ af/yr
TOTAL	99 af/yr

STEP 5: Attach all supporting information that may be significant to this analysis including but not limited to all water use calculations for the various uses listed

Parcel Location Factors

The allowable allotment of water is based on the location of your parcel. Valley floor areas include all locations on the floor of the Napa Valley and Carneros Basin except for groundwater deficient areas. Groundwater deficient areas are areas that have been determined by the Department of Public Works as having a history of problems with groundwater. All other areas are classified as Mountain Areas. Public Works can assist you in determining your classification.

Parcel Location Factors

Valley Floor	1.0 acre foot per acre per year
Mountain Areas	0.5 acre foot per acre per year
Groundwater Deficient Area (MST)	0.3 acre foot per acre per year

Guidelines For Estimating Water Usage:

Residential:

Single Family Residence	0.5 acre-foot per year
Farm Labor Dwelling	1.0 acre-foot per year (6 people)
Second Unit	0.4 acre-foot per year
Guest Cottage	0.1 acre-foot per year

Winery:

Process Water	2.15 acre-foot per 100,000 gal. of wine
Domestic and Landscaping	0.50 acre-foot per 100,000 gal. of wine

Commercial:

Office Space	0.01 acre-foot per employee per year
Warehouse	0.05 acre-foot per employee per year

Agricultural:

Vineyards	
Irrigation only	0.2 to 0.5 acre-foot per acre per year
Heat Protection	0.25 acre foot per acre per year
Frost Protection	0.25 acre foot per acre per year
Irrigated Pasture	4.0 acre-foot per acre per year
Orchards	4.0 acre-foot per acre per year
Livestock (sheep or cows)	0.01 acre-foot per acre per year

Landscaping:

Landscaping	1.5 acre-foot per acre per year
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STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20739

Application 29391 of Clos Pegase Winery
1060 Dunaweal Lane, Calistoga, CA 94515

filed on December 23, 1988, has been approved by the State Water Resources
Control Board SUBJECT TO VESTED RIGHTS and to the limitations and conditions of this Permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source:	Tributary to:
<u>(1) Carneros Creek</u>	<u>Napa-River thence</u>
<u></u>	<u>San Pablo Bay</u>
<u>(2, 3) Unnamed Streams</u>	<u>Mud Slough thence</u>
<u></u>	<u>Napa River</u>
<u></u>	<u></u>
<u></u>	<u></u>

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	* Section	Town- ship	Range	Base and Meridian
Diversion to Offstream Storage North 650 feet and East 650 feet from the SW corner of projected Section 29	SW $\frac{1}{4}$ of SW $\frac{1}{4}$	29	5N	4W	MD
Storage, Rediversion and Diversion to Offstream Storage, Reservoir #1 South 650 feet and West 350 feet from the NE corner of projected Section 31	NE $\frac{1}{4}$ of NE $\frac{1}{4}$	31	5N	4W	MD
Storage and Diversion to Offstream Storage, Reservoir #2 North 1,500 feet and East 100 feet from the SW corner of projected Section 32	NW $\frac{1}{4}$ of SW $\frac{1}{4}$	32	5N	4W	MD
Offstream Storage, Reservoir #3	NE $\frac{1}{4}$ of NE $\frac{1}{4}$	31	5N	4W	MD

County of Napa

* **Projected**

3. Purpose of use:	4. Place of use:	Section	Town- ship	Range	Base and Meridian	Acre
SEE ADDENDUM						

The place of use is shown on map on file with the State Water Resources Control Board.

ADDENDUM

Application 29391Permit **20739**

* Projected

[illegible]

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed a total of 147 acre-feet per annum to be collected from November 1 of each year to April 30 of the succeeding year as follows: 49 acre-feet per annum in Reservoir #1, and 49 acre-feet per annum in Reservoir #2 and 49 acre-feet per annum in offstream Reservoir #3. (0000005)

This permit does not authorize collection of water to storage outside of the specified season to offset evaporation and seepage losses or for any other purpose. (000005I)

The maximum rate of diversion to offstream storage shall not exceed 4.5 cubic feet per second. (000005J)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Construction work shall begin within two years of the date of this permit and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, this permit may be revoked. (0000007)

8. Construction work shall be completed by December 31, 1996. (0000008)

9. Complete application of the water to the authorized use shall be made by December 31, 1997. (0000009)

10. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

11. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

12. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust. (0000012)

13. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

14. Permittee shall install and maintain an outlet pipe of adequate capacity in each dam as near as practicable to the bottom of the natural stream channel in order that water entering Reservoirs No. 1 and No. 2 which is not authorized for appropriation under this permit can be released. Before starting construction, permittee shall submit plans and specifications of the outlet pipes to the Chief of the Division of Water Rights for approval. Before storing water in the reservoirs, permittee shall furnish evidence which substantiates that the outlet pipes have been installed in each dam. Evidence shall include photographs showing completed works or certification by a registered Civil or Agricultural Engineer. (0050043)

15. For the purpose of determining the amount of water diverted and used under this permit, permittee shall install and maintain devices satisfactory to the State Water Resources Control Board, at each point of diversion as specified in the permit. Permittee shall keep records of all water diverted and used under this permit and summarize such diversions and use in the annual progress report by permittee. (0060046)

16. Permittee shall allow a designated representative of Carneros Hills Wine Company and Robert A. and Karen I. Mueller and all successors in interest, reasonable access to each reservoir for the purpose of verifying staff gage readings and determining water levels in the reservoirs. (0070047)
(0100047)

17. Permittee shall bypass all flows in the Unnamed Stream tributary to Mud Slough, as described in Application 29096, until such time as such prior storage rights of Carneros Hills Wine Company (under any permit issued pursuant to Application 29096) and the prior rights of Robert A. and Karen I. Mueller under Permit 20277 issued pursuant to Application 29073 are satisfied during the current collection season. Permittee shall not be obligated to release water in the reservoir(s) below the previous October 1 staff gage reading unless permittee has withdrawn water from the reservoir(s) for consumptive purposes since October 1. Permittee shall not be obligated to release water in the reservoir(s) that can be demonstrated to have been diverted from Carneros Creek and/or pumped from subsurface draitiles (which will not intercept surface water flows) and wells. (0000051)

18. For the protection of fish and wildlife, diversions under this permit from Carneros Creek shall be subject to maintenance of the following minimum bypass flows:

- (a) from November 1 through November 30, bypass a minimum of 2.5 cubic feet per second.
- (b) from December 1 through February 29 of the succeeding year, bypass a minimum of 10 cubic feet per second.
- (c) from March 1 through April 30, bypass a minimum of 2.5 cubic feet per second.

No diversion from Carneros Creek is allowed under this permit if the total streamflow is or would be reduced below the designated amounts.

Bypass flows shall be measured at the existing rated staff gage at Old Sonoma Road Bridge over Carneros Creek. Permittee shall be responsible for assisting in the maintenance of this gage and shall supply a rating curve for the gage to the State Water Resources Control Board within 30 days from the date of this permit. (0140060)

19. Permittee shall install a screening device, satisfactory to the California Department of Fish and Game, to screen the intake on the diversion works on Carneros Creek. Said screening device shall be in place prior to any diversion of water from Carneros Creek under this permit. (0000063)

20. The State Water Resources Control Board reserves jurisdiction over this permit to change the season of diversion to conform to later findings of the Board concerning protection of beneficial uses of water in San Francisco Bay. Action to change the season of diversion will be taken only after notice to interested parties and opportunity for hearing. (0000094)

21. For wildlife access to reservoirs, permittee shall allow reasonable wildlife access across the place of use. Any fencing erected on the permittee's property shall not preclude access by the wildlife to the reservoirs. (0400500)

22. For the protection of riparian habitat, permittee shall not remove riparian vegetation or develop land within the corridors of riparian vegetation along Carneros Creek and the unnamed streams tributary to Carneros Creek except that necessary to construct the diversion structures. (0400500)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:


Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: MAY 20 1994

STATE WATER RESOURCES CONTROL BOARD


Chief, Division of Water Rights

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20737

Application 29603 of Clos Pegase Winery

1060 Dunaweal Lane, Calistoga, CA 94515

filed on November 1, 1989, has been approved by the State Water Resources Control Board SUBJECT TO VESTED RIGHTS and to the limitations and conditions of this Permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source: Tributary to:

<u>(1)(2R) Carneros Creek</u>	<u>Napa River thence</u>
<u></u>	<u>San Pablo Bay</u>
<u>(3R)(4)(5)(6)(7) Unnamed Stream</u>	<u>Carneros Creek thence</u>
<u></u>	<u>Napa River</u>
<u></u>	<u></u>
<u></u>	<u></u>

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	* Section	Township	Range	Base and Meridian
All by California Coordinate System, Zone 2 Diversion to Offstream Storage					
(1) North 210,700 feet and East 1,905,050 feet (2R) North 208,750 feet and East 1,907,450 feet	NW $\frac{1}{4}$ of NW $\frac{1}{4}$ SW $\frac{1}{4}$ of NE $\frac{1}{4}$	32 32	5N 5N	4W 4W	MD MD
(3R) North 208,850 feet and East 1,906,350 feet (4) North 209,600 feet and East 1,906,750 feet	SE $\frac{1}{4}$ of NW $\frac{1}{4}$ NW $\frac{1}{4}$ of NE $\frac{1}{4}$	32 32	5N 5N	4W 4W	MD MD
(5) North 209,750 feet and East 1,905,800 feet (6) North 209,950 feet and East 1,905,600 feet	NE $\frac{1}{4}$ of NW $\frac{1}{4}$ NE $\frac{1}{4}$ of NW $\frac{1}{4}$	32 32	5N 5N	4W 4W	MD MD
(7) North 210,300 feet and East 1,904,900 feet	NW $\frac{1}{4}$ of NW $\frac{1}{4}$	32	5N	4W	MD
Offstream Storage, Reservoir CP #1	N $\frac{1}{2}$ of NW $\frac{1}{4}$	32	5N	4W	MD

County of Napa

* Projected

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acre
SEE ADDENDUM						

The place of use is shown on map on file with the State Water Resources Control Board.

ADDENDUM

Application 29603

Permit 20732

*** Projected**

[illegible]

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 150 acre-feet per annum to be collected from November 1 of each year to April 30 of the succeeding year. (0000005)

This permit does not authorize collection of water to storage outside of the specified season to offset evaporation and seepage losses or for any other purpose. (000005I)

The maximum rate of diversion to offstream storage shall not exceed 4.5 cubic feet per second. (000005J)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Construction work shall begin within two years of the date of this permit and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, this permit may be revoked. (0000007)

8. Construction work shall be completed by December 31, 1996 (0000008)

9. Complete application of the water to the authorized use shall be made by December 31, 1997. (0000009)

10. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

11. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

12. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust. (0000012)

13. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

14. For the protection of fish and wildlife, diversions under this permit from Carneros Creek shall be subject to maintenance of the following minimum bypass flows:

(a) from November 1 through November 30, bypass a minimum of 2.5 cubic feet per second.

(b) from December 1 through February 29 of the succeeding year, bypass a minimum of 10 cubic feet per second.

(c) from March 1 through April 30, bypass a minimum of 2.5 cubic feet per second.

No diversion from Carneros Creek is allowed under this permit if the total streamflow is or would be reduced below the designated amounts.

Bypass flows shall be measured at the existing rated staff gage at Old Sonoma Road Bridge over Carneros Creek. Permittee shall be responsible for assisting in the maintenance of this gage and shall supply a rating curve for the gage to the State Water Resources Control Board within 30 days from the date of this permit. (0140060)

15. Permittee shall install a screening device, satisfactory to the California Department of Fish and Game, to screen the intake on the diversion works on Carneros Creek. Said screening device shall be in place prior to any diversion of water from Carneros Creek under this permit. (0000063)

16. The State Water Resources Control Board reserves jurisdiction over this permit to change the season of diversion to conform to later findings of the Board concerning protection of beneficial uses of water in San Francisco Bay. Action to change the season of diversion will be taken only after notice to interested parties and opportunity for hearing. (0000094)

17. For wildlife access to reservoirs, permittee shall allow reasonable wildlife access across the place of use. Any fencing erected on the permittee's property shall not preclude access by the wildlife to the reservoirs. (0400500)

18. For the protection of riparian habitat, permittee shall not remove riparian vegetation or develop land within the corridors of riparian vegetation along Carneros Creek and the unnamed stream tributary to Carneros Creek except that necessary to construct the diversion structures. (0400500)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

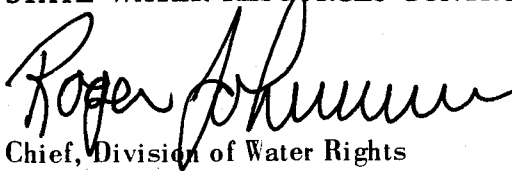
Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated:

MAY 11 1994

STATE WATER RESOURCES CONTROL BOARD

for 
Chief, Division of Water Rights