

PETITION FOR ESTABLISHMENT
OF THE
ATLAS PEAK VITICULTURAL AREA

December, 1990

ATLAS PEAK VITICULTURAL AREA PROPOSAL

Introduction

This petition for establishment of the Atlas Peak viticultural area was developed with a sensitivity for both the region within its boundaries, and the larger world beyond those boundaries.

The Napa Valley's significance as a wine region demands that care be taken to safeguard the region's integrity. This petition reflects such care, not only for Napa Valley as a whole, but also for viticultural areas already established in the valley, and those that will be established in the future.

This petition likewise takes into consideration an audience beyond Napa Valley; the millions of consumers whose interests the Bureau of Alcohol, Tobacco and Firearms and the Department of Treasury represent. The establishment of Atlas Peak as a viticultural area will aid those consumers by providing more precise information for use in making wine purchases.

Supportive Evidence

1. EVIDENCE THAT THE NAME OF THE AREA IS LOCALLY OR NATIONALLY KNOWN

A. Name Derivation

Atlas Peak is located in Napa County, California, on the western slopes of the Vaca Range that separates Napa Valley and the Sacramento Valley. Atlas Peak is the most prominent peak in the area at 2663 feet elevation.

Due to the peak's prominence as a landmark, Atlas Peak also became the recognized name for the surrounding region. The emergence of Atlas Peak as a regional term is shown by its use on the area's main road, Atlas Peak Road, and its only school, Atlas Peak School. The historical evolutions and locations of the Atlas Peak Road and Atlas Peak School are detailed in Section 2 of this petition. The application of a prominent geographical feature's name to the surrounding region is fairly common; examples of this phenomenon include

at least three viticultural areas: Stag's Leap, Mt. Veeder, and Clear Lake.

The original derivation of the name Atlas Peak for the mountain and region remains unclear, as does the exact date the name was first applied. The earliest print use of Atlas Peak in reference to the peak and region appeared in an article in the Napa County Recorder on July 10, 1875 [Exhibit 1].

B. Local or National Renown

Atlas Peak received initial local and national recognition for the healthful climate of the region. A resort was established on Atlas Peak in 1876 by A.V. Evans, and both advertisements [Exhibit 2] and articles [Exhibit 3] that appeared that year in the Napa County Recorder lauded the relief the region's climate offered to sufferers of asthma and other respiratory ailments. By 1877, Atlas Peak was receiving favorable notice from as far away as Ohio; an article titled "The Thermal Belt: What a Visitor at Atlas Peak Has to Say about the Climate and Scenery" appeared on January 8, 1877 in the Ohio State Journal.

In 1880, the Atlas Peak region received major publicity with the publication by the California State Legislature of Report of the Committee on the Establishment of a State Hospital for Consumptives [Exhibit 4]. Under the auspices of the California State Legislature, three physician members of the State Board of Health researched locations throughout the state for a site on which to build a state-funded hospital for consumptives. Several factors were taken into consideration, including "Equability of temperature, absence of excessive humidity, elevation, exemption from fogs and strong winds, especially cold winds, and an abundant supply of pure water." After reviewing eight potential locations, including three in Napa County, the report stated: "Taking into consideration all the facts presented in the foregoing pages....the committee feel justified in awarding a preference to Atlas Peak, in Napa County." It is worth noting that the other two Napa County locations considered by the committee - Howell Mountain and Mount Veeder - have already become viticultural areas.

Although the hospital for consumptives was never built, the study resulted in wide public awareness of Atlas Peak, and the development of a second resort in the region [Exhibit 14]. Atlas Peak continued to receive print recognition for the healthfulness of its climate well into the 20th century [Exhibit 5].

Atlas Peak has been a wine grape vineyard area since the 1870s. The region's original vineyards received limited publicity prior to 1920, and did not survive Prohibition. However, with the planting of new vineyards starting in 1940 (and continuing today), Atlas Peak has gained a national reputation for the quality of wines made from its grapes. The use of the appellation on Zinfandels made by Rutherford Hill Winery from 1975 to 1980 [Exhibit 6], and the appearance of these wines in the Napa Valley Wine Auction [Exhibits 7, 8, and 9] have highlighted the premium quality and distinctive character of the region's grapes to an appreciative and discerning public.

The reputation that the proposed Atlas Peak viticultural area has developed nationally can also be seen in the writings of such noted wine authorities as Bob Thompson [Exhibit 10] and Charles Olken and Earl Singer [Exhibit 11], who refer to the region as a distinct subdistrict of Napa Valley. Atlas Peak Vineyards, the first winery within the proposed viticultural area, has also received coverage by the wine press [Exhibits 12], which recognizes that the property's location within the Atlas Peak region warrants special mention.

2. HISTORICAL OR CURRENT EVIDENCE THAT THE
BOUNDARIES OF THE PROPOSED VITICULTURAL AREA ARE
AS SPECIFIED IN THE APPLICATION.

The proposed Atlas Peak viticultural area encompasses approximately 11,400 acres of land on the western slope of the Vaca Range, northeast of Napa, California, of which approximately 565 acres are currently planted to vineyards [Exhibit 13]. The varied landscape includes ridges, a hanging valley (Foss Valley), and parts of two canyons (Rector Canyon and Milliken Canyon). Both the viticultural and appellative histories of the region provide compelling arguments for the inclusion of these areas within the boundaries proposed for the Atlas Peak viticultural area.

Vineyards were first planted in the proposed Atlas Peak viticultural area in 1870, when James Reed Harris planted 1000 vines on his property a mile southeast of Atlas Peak. Mr. Harris's first planting was clearly a success, because a report on viticulture that appeared in 1881¹ indicates that his vineyard had grown to five acres, and a 1893 report by the viticultural commissioner for the Napa district² lists him with a total of 47 acres in vineyards.

Assessor's records and published reports reveal a slow, but steady increase in vineyard acreage within the proposed viticultural area from 1880 to 1901. Napa County assessor's rolls from 1887 show W.B. and Charles Hawker with 30 acres of vineyards, William Howe with six acres of vineyards, Mary J. Rose with 17 acres of vineyards, John Grant with six acres of vineyards, C. Moser with 13 acres of vineyards, and James Reed Harris with ten acres of vineyards, all stating property locations as Atlas Peak, Foss Valley, or both. A directory of the grape growers and wine makers of California published in 1890³ lists John Grant as having 15 acres of vineyards, nine acres more than the assessor's rolls indicated three years earlier. A history of Napa County

1. History of Napa and Lake Counties, California (San Francisco, CA: Slocum, Bowen & Co., 1881) page 215.

2. Annual Report of the Board of State Viticultural Commissioners for 1892-93 (Sacramento, CA: State Office, 1893) page 20.

3. Directory of the Grape Growers and Wine Makers of California, (Sacramento, CA: The Board of State Viticultural Commissioners of California, 1891) page 87.

published in 1901⁴, states that Francis Varty, in partnership with Mrs. Dickey, had 30 acres in vineyards on their 2,300 acre property in Foss Valley [All vineyards are shown in Exhibit 14, with approximate locations marked].

This steady growth is surprising in light of the general decline in vineyard acreage in California during much of this period resulting from the spread of Phylloxera, but the previously noted 1893 report by the viticultural commissioner for the Napa district offers an explanation. The listing for James Reed Harris states "In bearing, 14 acres...all European varieties...crop, 30 tons. This vineyard is on Atlas Peak. There is no Phylloxera in this area."

Despite the success of vineyards in the proposed Atlas Peak viticultural area during the 19th and early 20th century, there are no records of a winery in the region during this period. Personal reminiscences of long-time residents and diary entries from this era indicate that grapes grown in the region were hauled by wagon to wineries in or near the town of Napa.

The vineyards in the proposed viticultural area apparently were abandoned after 1920, when Prohibition was enacted, and not reclaimed following the repeal of Prohibition in 1933. Local newspapers and histories did not cover this cessation of vineyard activity, but the experience of other regions suggests that vineyards either died from old age and lack of care, or were pulled out to make way for other crops.

The first new vineyard in the proposed Atlas Peak viticultural area following Prohibition was planted on Mead Ranch, approximately one mile west of Milliken Canyon, in 1940. Beginning in 1981, and continuing to the present, several new vineyard plantings have been developed in the proposed viticultural area, often utilizing sites previously planted to vines in the 19th century [Exhibit 13]. Atlas Peak Vineyards, the first winery in the proposed viticultural area, was also established during this period, along with an adjacent vineyard to supply its present and future grape needs.

In recent years, wines produced from grapes grown in the proposed viticultural area have established a solid reputation for quality and distinctive personality. This

4. History of Napa County (Oakland, CA: Enquirer Print, 1901) page 356.

reputation is the result of a growing interest on the part of the wine industry and wine consumers in specific designations of grape origin, and the subtle shadings of character and style that these locations contribute to the wine. Because it dominated local plantings for many years, Zinfandel grown in the proposed Atlas Peak viticultural area has received the most publicity and recognition for its regional character. Books such as Connoisseur's Handbook of California Wines [Exhibit 15] have pointed to the rich character of Zinfandel from the region. As young vineyards in the region reach maturity, other grapes varieties - including Cabernet Sauvignon and Chardonnay - may well receive individual recognition for their special character.

To address consumer interest in the source of grapes as it pertains to the quality and character of finished wine, one winery outside the proposed Atlas Peak viticultural area has - beginning in 1975 and continuing through 1980 - used their label to highlight the fact that their grapes came from Atlas Peak [Exhibit 6]. The use of Atlas Peak by such a highly regarded producer as Rutherford Hill Winery is a clear indicator of the reputation the region has gained in recent years for distinctive quality and character.

The evolution of Atlas Peak into a regional name began at approximately the same time as vineyard development within the region. Records indicate that Atlas Peak School, located approximately one mile southeast of the peak on the property of James Reed Harris, was in operation by 1870. The original school was destroyed by fire after the turn of the century. When the second Atlas Peak School was built in 1924, it was located in Foss Valley. This Atlas Peak School served as the sole educational center for the region, succeeding not only the original Atlas Peak School, but also the nearby Foss Valley School and Columbus School. This consolidation of local education into Atlas Peak School places Atlas Peak in the context of a regional name for the entire region. This second Atlas Peak school was also lost to fire, but continues to be marked on United States Geological Survey maps [Exhibit 16].

Additional proof of Atlas Peak's elevation to a regional name can be seen in the name's use on the region's oldest access road. Just when Atlas Peak Road received its name is unclear. The road name appears on a Thomas Brothers map of 1940 [Exhibit 17], but is probably far older, as the road dates back to at least 1870. Atlas Peak Road was the only road into the region until the 1920s, and passes through the center of the region. With a route that passes or traverses Milliken Canyon and Foss Valley as well as Atlas Peak, its designation as Atlas Peak Road is evidence that Atlas Peak is the region's recognized name.

Although historically established in a general manner, the precise boundaries of the proposed Atlas Peak viticultural area have been drawn with a sensitivity to both historical evidence and the geographical features that distinguish this region from those surrounding it. Care has been taken to include all the vineyard locations which are responsible for the region's viticultural history, as well as those which have contributed to its reputation in recent years. Likewise, the boundaries have been drawn to respect neighboring regions with their own names, boundaries, and geographical identities.

For most of its length, the western boundary follows the ridge line that separates the Atlas Peak region from Soda Canyon. This boundary is consistent with the historical western limit of the region, which includes Foss Valley in its entirety, but excludes Soda Canyon and its watershed. This boundary also acknowledges the climatic and geological differences between Atlas Peak and the various regions to the west.

By following the ridge line, and crossing Milliken Canyon at its narrowest point, the southern boundary includes vineyards significant to the region's modern history and reputation, such as Mead Ranch. The southern boundary also marks the historical southern limit of the Atlas Peak region.

The eastern boundary of the proposed viticultural area, which follows the 1600 foot contour line, encompasses not only Atlas Peak itself, but also many of the historically significant vineyard sites previously noted in this section. This boundary also recognizes the differences in history, climate, and geology that set Atlas Peak apart from both Wooden Valley and Capell Valley.

The northern boundary - running along the upper reaches of Daglia Canyon, following the ridge line, and crossing Rector Canyon - is defined by the northern limit of the region's distinctive climate and geology. This boundary also separates Atlas Peak from land historically associated with Sage Canyon and Pritchard Hill.

3. EVIDENCE RELATING TO THE GEOGRAPHICAL FEATURES (CLIMATE, SOIL, ELEVATION, PHYSICAL FEATURES, ETC.) WHICH DISTINGUISH VITICULTURAL FEATURES OF THE PROPOSED AREA FROM SURROUNDING AREAS.

Introduction

The proposed Atlas Peak viticultural area is distinguished by several geographical features. These features combine to produce grapes and wines of distinctive quality and character. The special combination of soil, climate, and elevation which is responsible for the unique quality and character of Atlas Peak grapes and wines is detailed in the following two reports, and summarized in the conclusion at the end to this section.

The soil report on the proposed Atlas Peak viticultural area was prepared by Eugene L. Begg. Mr. Begg has a Bachelors of Science degree in soil sciences from University of California at Berkeley and has taken advanced studies towards a Masters of Science degree at University of California at Davis. From 1942 to 1990, he was a soil specialist and lecturer at the Department of Land, Air and Water Resources, University of California at Davis. He has been a member of the California Soil Survey Committee since 1974, and has reviewed new and revised soil series descriptions for the National Cooperative Soil Survey since 1970. Mr. Begg's writings on soil and vegetation have been widely published. He has served as an expert consultant on a variety of soil matters in both regulatory hearings and legal cases.

The climatic overview of the proposed Atlas Peak viticultural area was prepared by Michael Pechner. Mr. Pechner received his Bachelors of Arts degree in Environmental Studies from San Francisco State University in 1980. His broad media experience includes positions as staff meteorologist for KNBR Radio in San Francisco, and weather segment producer for KRON Television in San Francisco. Mr. Pechner founded Golden West Meteorology, a weather consulting firm based in Cordelia, California, in 1968. He currently serves as consulting meteorologist for Associated Press in San Francisco, and for several private clients, including Southern Pacific Railroad, Pacific Telesis, and Stanford University.

SOILS REPORT

PROPOSED ATLAS PEAK VITICULTURAL AREA

Prepared by

Eugene L. Begg

Soils Consultant

Atascadero, CA 93422

October, 1990

SOILS OF THE PROPOSED ATLAS PEAK VITICULTURAL AREA

The proposed Atlas Peak viticultural area, located six to ten miles north-northeast of Napa, is located in the Vaca Range east of the Napa Valley. The area encompasses approximately 11,000 acres and is roughly rectangular in shape, extending approximately seven miles from its southern boundary near Milliken Reservoir northwestward to beyond Atlas Peak and Haystack Peak. The lowest elevation of 760 feet is in Rector Canyon and the highest elevation of 2663 feet is at Atlas Peak, the most prominent peak in the area.

The proposed Atlas Peak viticultural area consists of sedimentary rocks of Cretaceous and Franciscan age capped by volcanic rocks of Pliocene age. These volcanic rocks are made up of tuffs, rhyolites and andesites of the Sonoma Group laid down 2-11,000,000 years BP(1). Subsequently, the region was faulted and uplifted. As a result, the region is a geographical anomaly; an upland "hanging" valley (Foss Valley) more than 1400 feet above sea level, bound by volcanic ridges, and drained by Rector Canyon to the west, and Milliken Canyon to the south.

The general climate of the proposed Atlas Peak viticultural area is characterized by cool, wet winters and warm, dry summers. The plant communities in the proposed Atlas Peak viticultural area show little diversity, due to the narrow range of mean annual rainfall and the relatively shallow relief of the region. On the dryer, shallower soils and southerly facing slopes of the viticultural area, the vegetation is mainly open grasslands with scattered oaks and shrubs and a few digger pines. At higher elevations and on northerly facing slopes with deeper soils, the plant cover changes to denser stands of shrubs and hardwoods, including madrone and black oak.

The interaction of topography, climatic conditions, and plant communities upon the weathering of the different rock types in the proposed Atlas Peak viticultural area has produced a variety of residual upland soils and alluvial valley soils. This broad range of soils in the region was recognized by the USDA Soil Conservation Service in their updated 1978 "Soil Survey of Napa County, California (2)." In their classification and mapping of the soils in the proposed Atlas Peak viticultural area, they identified and delineated 11 soil series. The soils series were the Aiken, Boomer, Felta, Guenoc, and Hambright soils from andesite and basalt; the Forward soils from rhyolite; the Henneke and Montara soils from serpentine; and the Bale, Perkins, and

Maxwell soils from valley fill alluvium.

One factor stands out regarding the soils in the proposed Atlas Peak viticultural area; virtually all are derived from volcanic parent material. Of the 11 soil series, nine have volcanic origin. Only the Henneke and Montara soil series come from anything other than volcanic material, and they constitute only a small percentage of the region's soils.

The soils in the proposed Atlas Peak viticultural area differ from those in surrounding areas such as Napa Valley, Stags Leap, Soda Canyon, Capell Valley, and Wooden Valley. Because both the alluvial soils and the residual upland soils in Atlas Peak are derived virtually entirely from volcanic source material, they lack the diversity of the soils in the surrounding areas, which are derived from both volcanic and sedimentary rock sources.

This mixture of sedimentary and volcanic sources account for the wide variety of deep and generally permeable alluvial soils in the valley locations to the west of Atlas Peak. In mapping Napa Valley, Soda Canyon, and Stag's Leap, the Soil Conservation Service recognized ten alluvial soil series; these being the Bale, Clear Lake, Cole, Coombs, Cortina, Haire, Maxwell, Perkins, Pleasanton, and Yolo series (2). Only three of these series - the Bale, Perkins, and Maxwell - were mapped by the SCS in the proposed Atlas Peak viticultural area. These three alluvial soils are mostly seen at elevations below 300 feet, but in Atlas Peak, they are found at elevations greater than 1400 feet, far above their usual elevation.

The differences between Atlas Peak and the regions to the west are equally obvious when residual upland soil series are considered. Of the nine residual soil series mapped in Napa Valley, Soda Canyon, and Stag's Leap, five series (Millsholm, Sobrante, Bressa, Felton, and Dibble) are from sedimentary rocks, while five series (Boomer, Felta, Forward, Kidd, and Hambright) are from volcanic rocks. None of the residual sedimentary rock soils are mapped in the proposed Atlas Peak viticultural area. Three of the residual soils from volcanic rocks (Boomer, Forward, and Hambright) are mapped in all four locations.

East of Atlas Peak, in Capell and Wooden Valley, the Vaca Range consists mainly of sedimentary rocks of the Cretaceous and Knoxville formations. The alluvial soils on the floors of these valleys consist of the Bale, Cole, Haire, Pleasanton, Yolo, and Clear Lake series. With the exception of the Bale soils, which are volcanic alluvium, all of these series are derived from sedimentary rock, and none are mapped in Atlas Peak. Of the six residual upland soil

series (Bressa, Dibble, Fagan, Lodo, Maymen, Millsholm, and Sobrante) present in these valleys, all are from sedimentary rocks, and none appears in the proposed Atlas Peak viticultural area.

Atlas Peak is differentiated from the region to the north both by soils and by flora. Residual upland soils of the Aiken, Boomer, and Forward series that appear in the proposed Atlas Peak viticultural area are also present in the Howell Mountain region to the north, but the alluvial soils present in Atlas Peak are almost non-existent in Howell Mountain. In addition, higher rainfall on Howell Mountain (40 to 50 inches per year) allows the region to support a diversified plant cover of commercial conifers, hardwoods, and shrubs, one far different than the natural vegetation of grasslands, digger pine and scattered hardwoods seen in Atlas Peak.

SUMMARY

The special features or conditions which separate the proposed Atlas Peak viticultural from nearby areas in Napa County are its unusual topography (an elevated valley surrounded by volcanic mountains of relatively shallow relief), the limited diversity of parent material for soils (almost exclusively volcanic), and the limited diversity of plant communities.

This unique combination of topography, soils, and flora distinguishes Atlas Peak from surrounding regions, and thus justifies approval of the proposed Atlas Peak viticultural area.

REFERENCES

1. California Department of Conservation, Division of Mines and Geology. 1982. Geologic Map of the Santa Rosa Quadrangle, Regional Geologic Map Series, Map No. 2A., maps and charts.
2. United States Department of Agriculture, Soil Conservation Service. 1978. Soil Survey of Napa County, California. 104 pp., 47 map sheets, illus.

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CLIMATIC OVERVIEW
PROPOSED ATLAS PEAK VITICULTURAL AREA

Climatic variations in adjacent land areas are primarily the result of subtle differences in terrain and/or influences. In developing this climatic overview of the proposed Atlas Peak viticultural area, I found such differences clearly defined. As the result of these differences, the climate in the Atlas Peak region is very distinctive, and possibly unique in Northern California.

Located within 40 miles of the Pacific Ocean, the proposed Atlas Peak viticultural area is classified in the Koppen Climate Classification System as having Mediterranean West Coast Climate. This climate is characterized by rainfall which is generally confined to the winter and early springs months and is adequate for dry farming of various fruit crops, late winter - early spring evening low temperatures which only occasionally fall below freezing, and warm summer and early fall temperatures which are moderated in the afternoon and evening by coastal cooling which is often accompanied by fog.

A more precise measurement of vineyard region climate is the climate zone system developed by the viticulture and enology department of University of California at Davis. This system separates vineyards into regions which are defined by heat summations expressed in degree-days. The degree-days of a particular region are determined by averaging the maximum temperature readings every day between April 1 and October 31, and then subtracting 50 degrees per day (the temperature at which a grapevine begins active growth). Readings taken at various locations within the proposed Atlas Peak viticultural area places the region in Region 2, a climate also experienced by the southern portion of the Napa Valley extending from south of Napa to near Oakville. Region 2 is defined as 2,500 to 3,000 degree-days, a fairly cool grape growing climate similar to that in the Bordeaux region of France.

The preceding measurement systems provide preliminary guides to the climate of the Atlas Peak area. My field survey of the area leads me to conclude that Atlas Peak has a distinct microclimate that is a direct result of the region's geography and geology. This conclusion is solidly supported by weather data gathered by stations within the region.

The Atlas Peak area is located on the western slopes of the Vaca Range that separates Napa Valley from the Sacramento Valley, approximately 25 miles north of San Pablo Bay. The terrain of the region is quite varied, ranging from flat and gently sloped plateaus to steep hillsides.

What I found apparent in traveling to and through the Atlas Peak areas is that the influence of San Pablo Bay would be somewhat different there than in nearby areas. The influence of the bay is clear in the region's afternoon and evening cooling during the grape maturation period (as indicated by its placement in Region 2 under the University of California at Davis viticultural climate classification system). However, Atlas Peak's location east of Napa, the region's high elevation, and the narrow canyons that connect it to Napa Valley severely limit the incursion of "advection" fog that - during the summer and early fall - is regularly drawn from the ocean (through the Golden Gate) into Napa Valley as the result of low pressure derived from inland heating. Cool winds generated by ocean and inland pressure differentials moderate afternoon maximum temperatures around Atlas Peak, but only rarely are they accompanied by fog.

Although the elevation of the Atlas Peak region and its location in the hills east of Napa Valley suggest that the region should experience the natural temperature inversions that develop at night in many valleys (including Napa Valley) throughout the year, a comparison of temperature data show this not to be the case. Atlas Peak daily minimum temperatures are usually lower than those in Stag's Leap, Yountville, or Napa. The region's unusual high plateau/ridgetop terrain seems to contribute to this climate aberration, but I feel that the geology of the region is also involved. The Atlas Peak region appears to have a preponderance of very shallow soils, and volcanic rock is apparent on the surface in many areas within the region. Because of the shallow soils and large areas of rock exposure, radiant cooling during the night allows lower minimum temperatures than in surrounding regions, where deeper soils (and the moisture they hold) act as insulation, thus slowing the cooling process.

The unusually strong radiant cooling in the Atlas Peak region also impacts the region's temperatures in another subtle but important way. Because Atlas Peak does not hold heat as well as surrounding regions with deeper soils, temperatures in Atlas Peak fall from the daily maximum very quickly during the growing season. Thermograph readings confirm this phenomenon; they show late afternoon temperatures falling by as much as 30 degrees in two hours.

The elevation of the Atlas Peak region is responsible for another significant climatic variation. The annual rainfall in the Atlas Peak region is greater than that in locations surrounding it, due to the terrain forcing the moist air masses of winter storms upward as they move inland along a southeasterly path from the coast, causing condensation. Because Atlas Peak is the highest point along the Vaca Range for several miles, this orographic lifting is very pronounced in the region. Rainfall measured in a location within the Atlas Peak region averaged 37.5 inches per year over a 45 year period, compared to an average rainfall of 25 to 35 inches per year (depending on location) in Napa Valley, Napa, Wooden Valley, and Capell Valley. Only Howell Mountain, well to the north, has higher rainfall totals.

In summary, I can confidently conclude that Atlas Peak has a distinct microclimate. The geography and geology of the region, as well as its location relative to major weather influences, give the climate the subtle differences previously discussed, and unquestionably affect the character of the grapes grown in the region.

Michael Pechner
Meteorologist

Bibliography

Weather of the San Francisco Bay Region, by Harold Gilliam, University of California Press, 1966.

Climate Through the Ages, A Study of Climate Factors and Their Variations, 2nd edition, Dover Publications, Inc., 1970.

Geography, A Modern Synthesis, by Peter Haggett, 2nd edition, Harper & Row, 1975.

Conclusion

The special character of wines produced from grapes grown in the proposed Atlas Peak viticultural area are the result of a combination of several geographical factors.

The Atlas Peak region is an elevated hanging valley surrounded by volcanic mountains of moderate relief. The soils in the region are almost exclusively volcanic types. The soils of the proposed viticultural area are substantially different from soils in the surrounding regions, which were developed from a mixture of both volcanic and sedimentary rock.

The well drained soils of the region stress the vines throughout the growing cycle, but especially during the late summer and early autumn, when the grapes are reaching maturity. Such stressing limits yields, but is responsible for grapes with exceptional varietal character.

While classified as Region 2 under the climate scale developed by the viticulture and enology department at University of California at Davis, the proposed viticultural area experiences wetter winters and colder overnight minimum temperatures (with a greater likelihood of frost during the spring) than neighboring regions. During the summer and fall ripening season, afternoon maximum temperatures are moderated somewhat by the cooling influences of San Francisco Bay and the Pacific Ocean, but this moderation is rarely accompanied by the fog that is a regular occurrence in neighboring regions. Afternoon cooling is unusually rapid in this region during the summer and early autumn, with drops of as much as 30 degrees in two hours.

This climate, with its rapid afternoon cooling and unusually low overnight minimum temperatures in summer and autumn, provides a very long growing season for grapes. In addition, the rapid cooling and low overnight minimum temperatures allow the grapes to ripen fully and evenly while preserving the natural fruit acid that is critical for balance in wine.

As a result of these geographically-generated factors, wines produced from grapes grown in the proposed Atlas Peak viticultural area display rich varietal character and excellent balance. This distinctive and uniform regional character has been generally recognized, and is a clear and tangible argument for creation of an Atlas Peak viticultural area.

4. DESCRIPTION OF SPECIFIC BOUNDARIES OF PROPOSED
ATLAS PEAK VITICULTURAL AREA.

The following two United States Geological Survey
topographical maps are used to show the boundaries of the
Atlas Peak viticultural area:

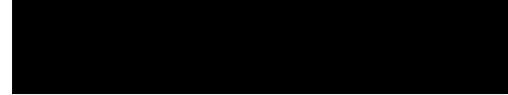
1. "Yountville, California Quadrangle"
7.5 minute series
2. "Capell Valley, California Quadrangle"
7.5 minute series

The boundaries of the proposed Atlas Peak viticultural area
are located in Napa County, California, and are as follows:

Beginning at Haystack (peak), elevation 1672 feet, in
Section 21 of Township 7 North, Range 4 West, Mount Diablo
Base and Meridian; thence generally south and east along the
ridge line approximately 1.5 miles (including the highest
point of unnamed peak, elevation 1443 feet) to the highest
point of unnamed peak with an approximate elevation of 1600
feet, located west of Soda Canyon Road in Section 28 of
Township 7 North, Range 4 West, Mount Diablo Base and
Meridian; thence southeast in a straight line approximately
0.3 miles to the quarter corner marker (shown on the map by
a red +) on the section line boundary between Sections 27
and 28 of Township 7 North, Range 4 West, Mount Diablo Base
and Meridian; thence south and east along the ridge line
approximately 3.5 miles (including the highest points of
unnamed peaks with elevations of 2135, 2102, 1942, 1871, and
1840 feet) to the point where the ridge line reaches the
1600 foot contour; thence generally north and east along the
1600 foot contour approximately 0.8 miles to the point where
the contour crosses the section line boundary between
Sections 1 and 2 of Township 6 North, Range 4 West, Mount
Diablo Base and Meridian; thence generally south and east
along the ridge line approximately 1.6 miles to the highest
point of unnamed peak, elevation 1268 feet; thence east-
southeast in a straight line approximately 1.1 miles to the
point where the unnamed tributary stream enters Milliken
Creek, just south of Milliken Reservoir; thence east-
northeast along the unnamed tributary stream to its source;
thence east in a straight line approximately 0.5 miles
through highest point of unnamed peak, elevation 1846, to
the 1600 foot contour; thence generally north and west along
the 1600 foot contour approximately 10 miles to the point
where it crosses the unnamed tributary of Middle Creek in
Daglia Canyon, in Section 12 of Township 7 North, Range 4
West, Mount Diablo Base and Meridian; thence west and south
along the unnamed tributary to its source; thence due west

in a straight line approximately 0.2 miles to the ridge line, in Section 14 of Township 7 North, Range 4 West, Mount Diablo Base and Meridian; thence generally north and west along the ridge line approximately 1.6 miles (including the highest point of unnamed peak, elevation 2114 feet) to the highest point of unnamed peak, elevation 2023 feet; thence southwest in a straight line approximately 2.2 miles to Haystack (peak), elevation 1672 feet, the starting point.

Respectfully Submitted,

A large black rectangular redaction box covering the signature of Glenn Salva.

Glenn Salva
General Manager
Atlas Peak Vineyards

EXHIBITS

& FOWLER,

UFACTURERS OF

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Carriages,
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Butcher Shop!

ABOUT CALIFORNIA.

About a year and a half ago the editor of the paper, then residing in Memphis, Tennessee, was forced by ill-health to determine to move to California. The fact of his intention becoming known, and the further fact that he had previously resided in California, drew to him each day persons anxious to know something of the Golden State. To get rid of the labor of personal explanations, he wrote a series of letters in the Memphis Appeal, giving a brief description of what he recollected. These letters were copied in thousands of papers among others *Harpers Weekly*, *Frank Leslie's Journal*, and other Eastern papers of vast circulation; and they were finally published by the author in pamphlet form, and had considerable sale. These papers were the first to crystallize thought, and set in motion the tide of emigration that has since been flowing to California from the South-West. As a matter of course the *Resources of California* and the Immigrant Union, under the management of Mr. Wm. H. Martin have since contributed vastly more and better matter to the cause, but the start was given in the accidental manner described.

The local papers since that time have made many efforts to check the tide, but without avail. The people are fleeing from malaria, carpet-bag debt, taxation and the degradation of Negro government. They long to be where white men rule, and where mongrelism is not impending. Of the local papers, none has fought better against us than the *Appeal*, the paper in which the first seeds were sown. Although its arguments are fallacious and its facts imaginary, yet it continues to strive like a weary but brave rower, pulling against the wind and tide. It recently published some articles which were so much out of the way that the editor of this paper answered them, and which were here present in room of our weekly paper on California.

NAPA, CAL., June 15.—It has been a long time since I have had a bout with you, or a talk with your readers. I am going to have both now, with your permission. What led you to reprint those stale fronds of returning dead-beats in reference to California? Who ever returns from here and says he can't get anything to do, or he went hungry, or any other such stuff, is a fraud. There is work enough here for people who wish to work, and there is enough of food, clothing, and living coin to pay for it. Why, my dear fellow, there are more new houses in process of construction in San Francisco to-day than in the entire South. By the way, speaking of houses, the party you quoted from alleged as against us that rents in San Francisco were enormously high.

fact, and what does are in great demand because there is no wish to use them but so to do, I take it, is a very practical thing for working people who monopolize all the savings. The savings bank \$3,000 deposit not quite one year, and quietly digest a full fact. What do bank making a single dollars on real estate? *THE ALBION* did it the other day—loaned \$1,000,000 on the Palace hotel for five years, at nine per cent. per annum. You say that the South, and especially Tennessee, is better for working people than California. Can you maintain that by the logic of figures? Have you got anything to back it save and except your own bare and unaided dictum? You can neither

ABOUT NAPA COUNTY.

(NUMBER TWO.)

Enron Harrover.—In my last your compositor made me say that "ten pounds of grapes yield a gallon of wine." It should have read *fifteen* pounds. In some instances a less quantity than fifteen pounds will suffice, but the average quantity required to make a gallon of wine and supply the deficiencies of waste and evaporation during the first year will be found not to fall short of fifteen pounds.

THE WINE INTEREST.

I propose to devote this paper exclusively to the wine interests. Few people even in our own county know the immense strides our wines have recently made in regard to quality, and the corresponding promising position they are beginning to occupy all over the world. As remarked in my first article, our first plantings of vines were of the Mission variety, which, though very good for the table, were not fit for wine-making. Before we had discovered our error, however, vast sums of money and infinite labor and toil had been expended in planting out great vineyards of this kind; and persons were loth to uproot what had cost so much. So they continued to propagate and multiply their troubles and difficulties. The wine was of a character which could not be introduced; it was unquestionably of an inferior grade as compared with the finer European kinds, and the public would not drink it. This for years gave California wines a bad name, and rendered them unfashionable and unsaleable. They are just recovering from that difficulty, and of which I propose to tell you.

From time to time persons of skill and experience have entered upon the business of wine producing, until the corps of California vignerons now numbers upon its list some of the most intelligent men in the world. These shrewd men, who had learned the business in the best wine producing districts of Europe, said to themselves, "Surely our products ought to be better; we have here a better soil and climate than any we have seen elsewhere; the fault must be in the grapes we are using." This came to be a conviction, and then commenced the experiments which have led us up to our present success. For I affirm that wine producing is here an immense success. Sundry varieties of foreign grapes were introduced and behold, as was predicted, our wines are now second to none in the world. Several varieties of Rieslings have been introduced from

Exhibit 1
Napa County Recorder
July 10, 1875

place of the Rhine wines now imported. This you must understand is a victory already achieved. We have but to go forward in the same line, and our Rieslings will be as famous as any in the world—the Johannis-burger not excepted. Unfortunately, however, the Rieslings are what horticulturists term shy-bearers; that is to say, are not as

Camping Out.

It is growing to be very fashionable for California tourists to camp out. There are many localities sought, none of which we think better than that described by Professor W. C. Damon in a recent letter to the *Appeal*.

It has become quite a religious custom with our people to turn their attention toward Lake County when proposing to go on camping. Lake county will do very well for those who can do no better; but it should be more generally known than it is that there are places just as good, and even superior in all respects, within three or four hours' drive from Napa. It is probable that many of our citizens who are suffering for the want of a change of atmosphere and water would avail themselves of the luxury of a week's camp in the mountains, if they were aware of the excellent facilities we possess almost at our very doors. Many speak of the Soda Springs as a good place for camping. But while the water may be beneficial there is no perceptible difference in the atmosphere, which, after all, is the main thing with most invalids. It is safe to say that there is no place within ten miles of Napa that is more to be free from the fog and the raw chilling winds of the Bay; hence neither the Soda Springs, nor Swan's Blackberry Ranch, nor even Foot Valley are fit places for camping.

But there is a spot twelve miles from Napa, by the mountain road, and nearly due north, that is in all respects equal to Lake; and on many accounts far superior.

The place we refer to is the divide between Foss and Capelle valleys, and in the immediate vicinity of what is known as *Atlas Peak*. Probably the ranch of Albert V. Evans will be found to be the most desirable spot for camping that can be found, when distance, etc., is considered, for the people of Napa. His ranch is on the eastern slope of the mountain, overlooking Capelle valley. Its points of advantage are the following:

1st. It is entirely beyond the fog and cold damp atmosphere of the Bay. Fog there is a thing unknown, even when great billows of white mist envelope Napa valley and penetrate far beyond into Foss and Capelle. The air is as soft and balmy as one could wish—cooler by day and much milder by night than in Napa. There is no trace of dew nor any dampness, and hence little fear of taking cold by lying out overnight. The air is so dry and pure that venison will cure in a few hours without salt. We demonstrated this fact to our entire satisfaction.

2d. The scenery is magnificent. There is hardly a grander sight in the world than to stand on Atlas Peak at sunrise on a foggy morning. This spot commands a view of all Napa valley, Vallejo the Bay, nearly to San Francisco, Suisun, and the vast Sacramento plains beyond.

3d. Water is pure, cool, and abundant springs abound from which bubbles up theelixir of life of which one never tires of drinking. But alas! for the poor camper who must drink Napa water afterward.

4th. Supplies of every kind are abundant, cheap, and of the very finest quality. Deer are very plenty, and are also hares, rabbits, quail, etc.

Mr. Evans raises some of the finest peaches and sweet corn ever found in the Napa market. His blackberries are the finest and earliest to be had in this section, while his peach trees are loaded with peaches, indicating that our biting frost of April did not reach him. Campers can rely upon getting anything they want, and of the very best quality. Our experience of camping in Lake county is that the reverse of all this. Supplies are often hard to get. Weather horribly hot, roads dusty, country parched and burned up, game scarce, scenery ugly, and water as often poor as otherwise.

Hence we advise those who wish to enjoy camping out to stay at home—that is go out to Evans' ranch. He is frequently in town and will take out any parties who may wish to visit his place. They can go out in four hours and return in half the time. Moreover, they will find Mr. Evans a very accommodating and gentlemanly host.

AD OF SUPERVISORS

Final, Nov. 10th, 1876.
 At that that portion of the claims in report of Roadmaster of Road No. 2, heretofore allowed, Nov. 6th, Road District Fund No. 2, is hereby set and rescinded, and thereupon read that all certificates and claims ad October report be allowed out of district Road Fund.
 That the Clerk advertise for sealed bids for the county printing for the year, the contract to commence d. 1877, and terminate February 2d, and proposals will be received till 10 p. m. of 6th day of February, 1877, of that the Assessor of Napa county is to make subdivisions and add to and within the city of Napa on of the city of Napa, at an expense of \$50.
 That the Quarterly Report of the tendent of the Napa county Infirmary quarter ending Oct. 31st, 1876, be same is hereby accepted and ap- ed that Messrs. Robinson and are hereby appointed to have the he Court House repaired at an ex- ot to exceed \$100.

SATURDAY, Nov. 11 1876.
 That Wm. Jennings, of St Helena, gent sink tank, be allowed the sum of er month for the months November mber, 1876, and for January, 1877. action of Mr. Pellet, seconded by reese, it is ordered by the Board admasters Roberts and Downey be y are hereby appointed to go over, d examine the road known as the S. from the ranch formerly known as y ranch to the point where said serts the main county road near the rmerly known as the Sawyer ranch, rt to this Board on or before Mon- y 13th day of November, 1876, at k. m.
 That no further indebtedness will urred by the Board of Supervisors at lamps in Napa, and the Clerk is ordered to notify the Napa City Gas Company that no further bills for umps will be allowed by this Board. r an act of the Legislature entitled d concerning persons under sentence risonment in the county jail in the of Napa, it is ordered that upon the l of the authorities of the city of e Sheriff of Napa county, that said deliver any prisoner confined in the jail under sentence for misdemeanor, e charge and custody of the Marshal city, or other official of said city uto authorized, and said prisoners so d and delivered shall perform labor e public works, or roads or streets of ity of Napa during their respective d imprisonment; provided, however, id prisoners shall not be delivered to ity authorities to perform labor as id whenever in the judgment of said such prisoners are needed to perform on the public works or ways, of the or for other necessary labor to be ned in behalf of the county.

MONDAY, Nov 13th 1876.
 re matter of the report of J. C. Hilby, tendent of the St. Wing road, for work med on the said road, the Board heard t of Roadmasters J. B. Roberts and e Downey, heretofore appointed by board to examine and view the same port thereon; whereupon it is moted e and seconded by Pellet that the e accepted, and the claim allowed. Robinson, Harris and Pellet voting and Dewees "no."
 ered by the Board that the sum of \$50 rporated out of the Contingent Road of Napa County to Road District No. 2, and adjourned for the term

City Trustees

ABOUT ATLAS PEAK

A prophet is not without honor save in his own country, applies to places as well as men. Here we have, in sight of Napa, not but twelve miles distant, a sanitarium for persons with pulmonary troubles which is not excelled by any other place in the State, and is equalled by very few, and still our people know comparatively nothing of it. We hear them talking of going to Santa Barbara, and other southern resorts, when Atlas Peak is infinitely better than any of them.

Somewhat more than a month since the writer had several serious hemorrhages, which were so persistent and prostrated him so much, that he was greatly discouraged concerning the final issue of the attack. As soon as he was able to make the trip he went up to Mr. A. V. Evans, at Atlas Peak, with the hope at least of getting strength enough with which to get through the Winter. In three weeks he returned in better health, and stronger than he was when taken down sick, and has reason to hope that the rascals will wish for his death many years before it occurs.

The accommodations are not equal to those found at first class hotels, but they are good enough for comfort. But you do not go to live in fine houses, or see fine furniture. You go to enjoy the grateful, balmy climate—to climb over the mountains and look upon the grand and beautiful scenery, and get health. From Atlas Peak you can see twenty-six counties, the valleys of the Sacramento San Joaquin and the Sierras; the bays and our own valleys lie at your feet.

To prove our faith we say this: If life and strength is left, we propose to move on the mountain in April next, and start a model chicken ranch. We hope to have Judge Sponey for a near neighbor.

List of Letters.

Remains unclaimed in the Post Office, Napa City, Napa County, Cal., Nov. 15th, 1876.

Baiken, Miss Jane	Law, O
Baeholder, Charles	Litten, W P
Brenard, James J	Miller, Mrs Geo W
Cereda, J	Mozzini, & Co P
Canor, Mrs Julia	Nageret, Mrs
Crandell, Mrs Jane	Olmstead, Dr R H
Crockford, Charles	Page, Clarence W 2
Copper, Miss Mollie	Poco, John
Day, Mrs H O	Puchett, R S 2
Downs, Elida	Reed, Alexander
Ewing, Jas	Rowan, George T
Frost, Mrs Jane	Seoville, R W
Garland, Miss Jennie	Shelprote, Mrs L
Guthrie, Miss Jane	Snider, John D
Graham, Hugh	Sterling, Wm
Honery, Jas D	Turney, M J
Hill, Miss Minnie J	Towland, J F
Lamb, Mrs Ed	Ward, J M 2
Loney, John	Wood, Miss Cleo

FORBIDDEN

Silva, Antonio
 Barloggi, Giovanni
 Barloggi, Giuseppe
 Barembold, Pablo
 Filares, Dolores

Persons calling for any of the above letters will please say "advertised," giving date of list. If not called for within one month, they will be sent to the Dead Letter Office.

J. H. Howland, Postmaster.

Real Estate Transactions.

E. W. Blandel to Edson Adams, undivided fourth of the Sterling Iron Mine, in sections 3 and 4, T. 1 N., R. 6 W.—\$10.
 A. Y. Easterby & Co, to H. Muller, lot 2, block 27, Napa City—\$2,000.
 B. E. Jackson to D. G. Hunt, part of sec- tion 18, T. 1 N., Range 6 W.—\$250.

OUR SAN FRANCISCO LETTER.

WILL W. KEYS

SAN FRANCISCO, Nov. 15, 1876.

The excitement over the election has not yet subsided; crowds still obstruct the passage of the streets in front of the newspaper offices, and the great event is both discussed and discussed by the anxious throng. However, there seems to be a settled conviction that by the 4th of next March we shall know positively whether Tilden, J. Rutherford or Hayes, B. Samuel is to be our next President. At present it looks like they were both elected, though the latest dispatches over the Post's grapevine announces that South Carolina and Louisiana are doubtful, while the Chronicle's grapevine declares positively that both these States are claimed by Florida. In either case it is settled beyond a doubt that the United States will have the next President. The above may look rather mixed to your readers, but were they here, and see for themselves the contradictory dispatches which the writer sees every hour they would speedily arrive at the same conclusion. By the time I finish this I may be able to tell who is the successful candidate, but up to this writing nothing reliable is known, and an immense deal of speculation, to say nothing of the cooked-to-order dispatches of the papers, is indulged in. Both parties are worn out with suspense, and only one wish is expressed by either, namely that it may be quickly settled one way or the other.

Our Board of Supervisors are on the war-path, and declare that gross registration frauds have been perpetrated, that nothing else could account for the amazing increase in the vote of the city within the past year. Out of the 41,800 votes cast, 17,000 have been on separate certificates of registration since the middle of October. This discovery savors strongly of fraud somewhere in the vicinity of the County Clerk's office, and will no doubt lead to a thorough investigation. And if this city was carried by 1,800 or 2,000 fraudulent votes, Mr. Piper will undoubtedly take his seat in Congress. It is to be hoped that this matter will be thoroughly ventilated.

Consequent upon the suspense and anxiety as to the result of the election, business is at a standstill. In the Stock Boards there is nothing doing worthy of note, and people are too tired and anxious to attend the theatres. In fact the Grand Opera House has been obliged to close for lack of patronage, and will not re-open till next week. The California tried to draw a paying house this week by announcing a mass black and white ball.

The Chinese in pegging away year after year at the Palace ton is the chief at tention as vigorous pered that his ec slightly impaired made the name so haps Senator Bar ling us to what an error" got the w usually utilized to make capital of by draw ing upon loyal and virtuous people's sym- pathies. Of it the "crippled war veteran" (that's rich) has even tried the famous Ar- kanzas Hot Springs for his "wounds."
 An immense Anti-Coolie mass-meeting will be held at the Mechanic's Pavilion to- morrow night. All the Anti-Coolie clubs in the city, including the Working Women's League (a new organization) will partici- pate. Mayor Bryant will preside, and ad-

NOTES FROM CALISTOGA.

We have had another fair and farmers are abundant. A vast amount of grapes are rotting on the San Brannin vineyard, leased this year by Mr. D. A. Beckler. Grapes no price.
 The Sociable at Mrs. Tully's on Tuesday evening was well attended, and everybody was pleased.
 The oration on "Heart Culture" was highly applauded. Mrs. Beardslee reads next Tuesday evening.
 We learn that Mrs. Hudson is lying at the point of death.
 A. J. Ohselbro's new hotel is looming up. It will be a fine building when finished.
 We have had quite a time up here, Pres- dent making. On alternate days as the rallies come up, we have Hayes and Tilden for President.

Lake County Items.

[From the Democrat.]

The stage from Cloverdale gets into Lake- port now at 4 p. m.
 The Bartlett Springs stage runs triweekly, leaving Lakeport on the mornings of Mon- day, Thursday and Saturday.
 Last Monday at 2 A. M., Sarahel Dymum who was accidentally shot in the leg on the 10th of September, while hunting, had the wounded limb amputated. He is now feel- ing better than he has since the accident.
 The new machinery of the City of Lake- port arrived at Calistoga last week and is now on the road to Lakeport. It is the in- tention to place the machinery in position the moment it arrives, when the City of Lakeport will be able to show the cleanest pair of heels of any vessel afloat, of her size.

Charcoal for Fattening Turkeys.

"I have made an experiment," says a writer, "in feeding charcoal to fattening turkeys, and the result surprised me." Four turkeys were confined in a pen and fed on meal, boiled potatoes and oats. Four others of the same brood, were also, at the same time, confined in a pen and fed on the same articles, but with one pint of fine pul- verized charcoal mixed with their food—mixed meal and boiled potatoes. They had also a plentiful supply of broken "charcos" in the pen. The eight were killed on the same day, and there was a difference of one and a half pounds in favor of fowls which had been supplied with the charcoal, the being much fatter and the meat greatly im- proved in point of tenderness and flavor."

Choice shipping wheat was quoted at \$1.22 1/2 in San Francisco on Thursday.

Chas. Board, Wounded, Jara Honeycomb, as Head

Exhibit 3

Napa County Recorder
 November 18, 1876

Charles Kather, as everybody knows, is a gr- heared butcher and sells the best of su- However, as short reckonings make long friends all accounts should be settled promptly, as business can be properly conducted that is founded on

seven feet above tide water. Here a substantial brick building was erected, and a reservoir constructed one hundred feet above the level of that at the wells, and capable of holding two hundred and twenty-five thousand gallons. It will be observed that the plans as described embrace both the Hollis and the reservoir systems, having the advantages of both. The elevated reservoir was not completed at the time of this writing, but will be in full operation before its publication.

An opportunity of testing the value of this enterprise occurred soon after the laying of a portion of the pipes. A barn containing a large quantity of hay, and adjacent to an extensive lumber yard and a number of valuable dwellings, took fire in the night. Four hydrants were opened on it with hose, and the pumps were set to work. The fire was about a mile from the pumps. The water was driven through the hose with a pressure sufficient to force it to the height of one hundred and fifty feet, and a force considerably greater could have been applied. The fire was confined to the barn, when, beyond a doubt, without the water works much other valuable property would have been destroyed.

Seven miles of pipe had been laid through the streets of Alameda in the beginning of October, and the pipe for seven additional miles was on the ground. A large proportion of the citizens were enjoying the use of the water in their dwellings, and the streets were kept sprinkled every day from the same source. Mr. Thompson informed me that the supply in his wells, so far from diminishing, had increased, the water appearing to have found additional sources of access. Some impression had been made on other artesian wells in the neighborhood, the water being lowered in them several feet.

I am not aware that any analysis has been made of the water, but its sensible qualities are excellent for drinking and for culinary and detergent purposes. The rapidity with which it is conveyed from the wells and reservoirs through the pipes, keeps it always fresh and never deteriorated by stagnation.

There are numerous other localities in California where artesian water can be obtained. In places the supply consists of surface water, and in others it is derived from the stratum of gravel or sand, resting on a layer of rock, and covered by a roof of some elevated region more or less distant, through which the water enters and percolates through it. The water then rises to the surface at the foot of a river bed or of a lake. At Alameda, the water rises from a near river bed, half a mile or a mile from the extremity of the channel along the shore, and probably receiving its supply from the ditches, the line of which is a few miles from the shore.

Exhibit 4

It is well known that a private individual devising a waterworks for his own

Alameda waterworks are altogether due the merit of Mr. Thompson alone is due the merit of

All the expenses were drawn from

REPORT

OF THE

Committee on the Establishment of a State Hospital for Consumptives,

MADE IN PURSUANCE OF A

CONCURRENT RESOLUTION OF THE LEGISLATURE,

APPROVED APRIL 30, 1880.

To his Excellency GEORGE C. PERKINS, Governor, and the honorable Senate and Assembly of the State of California:

During the session of the Legislature, convened January, eighteen hundred and eighty, the following concurrent resolution was adopted:

Senate Concurrent Resolution No. 25, relative to appointment of three members of State Board of Health to consider the subject of a hospital for consumptives.

Resolved, the Assembly concurring, That a committee of three members of the State Board of Health, to be designated by the Governor, be and are hereby appointed to consider the subject of a State Hospital for Consumptives, to determine a suitable locality, to investigate the probable cost, to devise a general scheme for the construction and management of such an institution, and to report the results of their investigations to the Legislature at its next session.

In accordance with the above resolution, commissions were issued to the following members of the State Board of Health, viz.: Drs. H. Gibbons, Sr., M. M. Grannis, and F. W. Hatch. Dr. Grannis having deceased in June last, Dr. W. R. Cluness was appointed to fill the vacancy.

For the purpose of explanation, it may not be considered irrelevant to reproduce at this time the petition of the California State Medical Society upon which the above action of the Legislature was based:

To the honorable the Legislature of the State of California:

At a regular meeting of the State Medical Society held in the City of San Francisco, April sixteenth, eighteen hundred and seventy-nine, the undersigned were appointed a committee to petition the Legislature to take action looking to the establishment of a "State Hospital for Consumptives."

California, as a State, occupies a somewhat peculiar and exceptional position. It invites immigration on account of its mineral resources, its vast agricultural advantages, the adaptation of its soil and climate to the cultivation, not only of the ordinary productions of the farm, but, in many sections, of tropical and semi-tropical fruits, while, at the same time, it has held out inducements to settlement based upon sanitary advantages of which few of the other States can boast. Hence, it has become the resort not only of the young and vigorous, and those seeking to engage in active industrial or business pursuits, but by the weak and dependent, by invalids seeking to avail themselves of the benefits, real or imaginary, which the climate affords. A very large proportion of this latter class are sufferers from chronic pulmonary complaints, victims of consumption, whose coming has been encouraged and hastened by the laudatory and sometimes injudicious accounts given of the special advantages of the climate by interested landowners or enthusiastic travelers. That some derive benefit from the change, and are

apparently restored to health, is true; but the misfortune is that very many whose strength is already far spent and who are sufferers from the advanced and generally incurable stages of disease, come only to reap disappointment and to die among strangers. It is, to a large extent, from this class, unable to work, without means or friends, that our hospitals are filled. How many such find their way to California, the public, it is believed, have but a faint conception.

In eleven hospitals reporting to the State Board of Health for eighteen hundred and seventy-eight, there were, in a total of 1,884 patients admitted, 127 cases of consumption, or nearly 7 per cent. In San Francisco alone—eighteen hundred and seventy-eight and eighteen hundred and seventy-nine—out of a total of admissions amounting to 3,174 patients, 245 were due to consumption, or nearly 8 per cent.; and John S. Mittell, Esq., in remarks on this subject in its relation to San Francisco, has shown that, as a rule, "about 300 consumptives, 200 of them from other counties, are admitted annually to the county hospital, and the expense to San Francisco of these 200 phthisical patients from other parts of the State is perhaps \$13,000 a year, enough to provide for 600 patients of other classes, since the consumptives live longer and cost more on an average than the others."

The history of many of these invalids, antecedent to admission to the hospital, we are commonly unable to trace, yet sufficient is known to warrant their classification with those to whom the remarks above made apply.

The question is not so much as to the propriety of imposing upon a few counties the expense of caring for and supporting—often for many months—this increasing class of invalids, or of taxing a few for what, in the opinion of many citizens, should of right be made a State charge; the argument upon which we rely is of a higher and more honorable character; it is above all considerations of dollars and cents; it looks only to the welfare of these unfortunate invalids. It is strictly a question of philanthropy—essentially humanitarian in its nature. It is to benefit the sick and suffering; to save life, when this is possible; to place the invalid under such conditions of locality, climate, regimen, and general management, as shall be most favorable to improvement of health, and possibly to ultimate recovery. Such conditions are seldom found in our county hospitals. Observation has shown that certain sections of the State are more favorable to the consumptive than others; that certain conditions of climate, as soil, elevation, temperature, and humidity—that the adoption of certain habits and modes of living—are, it might almost be said, essential to success in the treatment of consumption. Many of our county hospitals are not properly located to supply these advantages; some of the conditions just mentioned are wanting; some of them are unsuitably constructed; and not many have accommodations for the class of invalids under consideration—without doing injustice to others, the proper subjects of their care. It is only in a State institution, eligibly located, suitably equipped, specially constructed and adapted to the hygienic treatment of consumption, that the full benefit of our climate may be demonstrated. It is not impossible that such a demonstration, besides fulfilling all the obligations which the spirit of philanthropy imposes, may, by its favorable result, be the means of attracting population, and thus amply repaying the cost expended. Under the existing circumstances, the State is losing in sanitary reputation. Should the measure recommended be adopted, it cannot fail to gain.

Doubtless, a considerable proportion of those who now find their way into our county hospitals and die there, would, if a proper place were provided for treatment, recover their health and become useful and profitable citizens. Many, not entirely destitute, would avail themselves of the advantages afforded by such an institution; many others, not able to perform hard labor, could be profitably employed in those out-door exercises which would form an essential part of its hygienic management; and there is no reasonable doubt that it would eventually be almost, if not quite, self-sustaining.

Being fully persuaded of the expediency of the proposition embodied in this petition, and of the benefits which would result therefrom, not only to the unfortunate invalid, but to the reputation of the State, the undersigned respectfully submit the subject to the consideration of the Legislature.

F. W. HATCH,
W. AYER,
W. P. GIBBONS,
Committee.

SACRAMENTO, February, 1880.

The range of duty imposed by the concurrent resolution is extensive and responsible, and by no means easy of fulfillment. The field of observation is wide; there are so many localities in which one or more of what are considered essential requisites to become the seat of an institution such as it is proposed to establish, so many which have acquired a certain amount of reputation as sanitary resorts, and in behalf of which, local interests and prejudices are evoked, that it is no easy matter for your committee entirely to exclude all extraneous influences, or, possibly, even their own preconceived ideas. In almost all sections of the coast mountain regions, and, possibly, of

the Sierras, from the extreme north, to San Diego, in the foothills and elevated valleys of Shasta, of Tehama, of Lake, of Sonoma, of San Luis Obispo, and San Bernardino, localities may be found equaling in climatic features almost any in the United States, or perhaps in the world.

Then, again, different forms of phthisis—different stages of the same form—may require different climatic influences, thus increasing the embarrassment of the situation. What we may hope to do, is to indicate that climate which, under ordinary circumstances, and in by far the greater number of cases the experience of the profession has shown to be most suitable.

The elements generally demanded for the location of a State Hospital for Consumptives are, in the judgment of your committee:

First, a certain equability of temperature; second, the absence of excessive humidity; third, elevation; fourth, exemption from fogs and strong winds, especially cold winds; fifth, an abundant supply of pure water. With regard to the first of these, there will probably be no dissenting opinion. It is admitted by all who have considered the climatic influences proper for the consumptive, that great variability of temperature, sudden vicissitudes, an extreme daily range, and, less prominently, a wide yearly range, are, in proportion to their prominence, hazardous to the susceptible constitution of the victim of pulmonary disease.

With regard to the second proposition, there is some diversity of opinion, even among the most intelligent observers; or, rather, there are different views entertained as to the degree or percentage of humidity most grateful to the patient, and favorable to recovery. The position assumed by the committee is, it is believed, sustained by the weight of authority. Statistics published by C. H. Williams, and others, seem to set this question almost at rest; and it is a matter of common observation that for most cases of phthisis a dry atmosphere is much less depressing than a moist one. A certain amount of relative humidity is, indeed, necessary; the argument is against its excess. The percentage of moisture generally thought to be most agreeable in a state of health, is about seventy-five; in the cases now under consideration, it is much less. Dry air is stimulating; moist air is sedative, particularly when warm; and this is true not only of its constitutional influence, but of its local effect when inhaled. Most forms of phthisis seem to demand the former; catarrhal phthisis—a not uncommon form—is thought to do better in the latter. Dry and stimulating air is best suited for the first or early stage of the disease—generally, also, for the second; a moist and sedative air to the third stage; yet the commonly injurious effects of humidity appear to be contracted in some way by the presence of saline vapors in the atmosphere, as on sea voyages, or near the coast in certain localities. This latter fact is exemplified by the salutary influence of the climate of San Diego and similar localities in the southern part of the State. As between dry and warm, and dry and cold climates, the latter are preferable when there is sufficient force remaining in the individual to maintain a circulation and bodily temperature.

Intimately associated with a low percentage of atmospheric moisture is the elevation; and, doubtless, this latter owes much of its beneficial influence to its co-existence with other important auxiliary elements, as low atmospheric pressure, equability of temperature, and a clear sky,

or sunlight. Without such associate conditions as admit of daily exercise, within proper limits, and outdoor life, the element of altitude would be of inconsiderable utility. Without entering into a review of this subject as shown by statistics, it may without trespassing beyond the legitimate purpose of this report, be in place to state that Lombard, quoted by Dr. B. F. Lincoln, of Boston, found that the lower altitudes of Switzerland (from 1,250 to 1,650 feet) had a mortality by consumption amounting to 10.2 per cent. of the total mortality; the regions of medium elevation (1,725 to 2,700 feet) had 9.1 per cent.; the high regions (2,700 to 4,000 feet) had 5.1 per cent.; while above 5,000, he states, the disease disappears entirely. In the Peruvian Andes, it is said that consumption is not known above 5,000 feet, while on the coast it extensively prevails. Upon the Mexican plateau it seems to disappear at an altitude of 7,000 feet.

It should be borne in mind, however, that the benefits to be derived from both these conditions of humidity and altitude are not to be assigned exclusively to them. There must be taken into account the other elements alluded to—the equability of temperature, freedom from cold winds, the resources of the place for diversion of mind, for agreeable exercise, and, above all, for outdoor life.

In addition to what has already been said, other requisites indispensable for the usefulness of a State asylum for the consumptive are accessibility, and a dry temperature such as not to render outdoor labor oppressive. The proper plan for such an asylum contemplates suitable work for the patients.

The pernicious influence of frequent fogs and strong cold winds requires no demonstration. It is mainly due to the prevalence of these two features at certain seasons that the climate of San Francisco is regarded as being so much more unsuitable for consumptives than other points southward on the coast. Their effect is seriously felt by those visiting the metropolis from the interior while in good health, and they are to be considered the slow causes of the development of certain organic changes in those constantly subjected to their influence. How much more likely must they be to become the exciting agents of disease in the sensitive organization of the sick. Hence the impropriety, not to say cruelty, of sending patients with consumption from other parts of the State to San Francisco.

It is needless to say that the considerations thus briefly sketched have been kept in view by your committee in their investigation of the subject committed to their charge.

The duties imposed by the joint resolution of the Legislature, under which they are acting, embrace several distinct propositions—"to determine a suitable locality; to investigate the probable cost; and to devise a general scheme for the construction and management of such an institution."

In seeking to discharge the first of these duties, the committee have visited several portions of the State, having regard especially to their supposed advantages, and in respect of some, their established reputations as sanitary resorts. The points especially examined were: Atlas Peak, Veeder Mountain, Howell Mountain, Pope Valley, near Etna Springs, and Troutdale—all in Napa County; Lakeport, in Lake County; The Sierra Madre Range, in Los Angeles County; Ojai Valley, in Ventura County; San Diego and its vicinity. Santa Barbara had been previously visited by the members of the committee.

By the unexpected death of Dr. M. M. Chumley, a vacancy occurred

upon the committee early in our investigations. Dr. W. R. Clunness was appointed to fill his place.

A brief reference to the localities visited seems appropriate, and will not be without interest as a contribution to the climatology of the State. Commencing with Napa County and its many inviting retreats for the invalid, we mention—

ATLAS PEAK AND VICINITY.

This region, situated on the ridge of the Coast Range Mountains, east of Napa Valley, has, of late years, attracted considerable attention on account of its equability of temperature, its freedom from fogs, or from harsh winds, the dryness of the atmosphere, and its supposed advantages as a residence for the consumptive. Its elevation is about 1,500 feet; its mean Winter temperature is 50°, its Summer temperature 74°; and its mean annual relative humidity only 45 per cent., or 51 in Winter and 39 in Summer. It is within twelve miles of the City of Napa, easily accessible from the entire central portion of the State and from the coast, and the soil is well suited to the cultivation of grain, fruit, and vegetables. The climate of this ridge is remarkable for its healthfulness; no malarial diseases are known there; there is an abundance of pure water; the atmosphere, though sometimes warm for a short period at noon, is never oppressive; the evenings are agreeably cool and invigorating; the Winters are mild; and excellent facilities are afforded for camp-life and out door exercise at all seasons of the year.

Some meteorological observations are given below; others may be found in the chart:

RESULTS OF METEOROLOGICAL OBSERVATIONS AT ATLAS PEAK.

(Reported by A. P. EVANS.)

March, 1876.—Highest temperature, 72°; lowest, 32°. Average change every twenty-four hours, 9.7°. Average difference between wet and dry bulb, 6.1°. Number of clear days, 22; rainy days, 5.33; cloudy days, 3.66.

April, 1876.—Highest temperature, 71°; lowest, 38°. Average change every twenty-four hours, 11.13°. Average difference between wet and dry bulb, 7.66°. Number of clear days, 20; hazy, 4.66; cloudy, 3.66; fog and rain, 1.

May, 1876.—Highest temperature, 78°; lowest, 40°. Average change every twenty-four hours, 12.48°. Average difference between wet and dry bulb, 11.94°. Number of cloudy days, 28; hazy, 2; rainy, 1.

June, 1876.—Highest temperature, 94°; lowest, 45°. Average change every twenty-four hours, 7.63°. Average difference between wet and dry bulb, 12.03°. Number of clear days, 28.33; hazy, 1.66.

July, 1876.—Highest temperature, 90°; lowest, 52°. Average change every twenty-four hours, 10.42°. Average difference between wet and dry bulb, 16.09°. Number of clear days, 30; hazy, .66; rainy, .34.

August, 1876.—Highest temperature, 85°; lowest, 50°. Average change every twenty-four hours, 10.42°. Average difference between wet and dry bulb, 17.16°. Number of clear days, 30; cloudy day, 1.

September, 1876.—Highest temperature, 86°; lowest, 55°. Average change every twenty-four hours, 10.67°. Average difference between wet and dry bulb, 18.27°. Number of clear days, 30; cloudy, 1.

October, 1876.—Highest temperature, 82°; lowest, 43°. Average change every twenty-four hours, 8.27°. Average difference between wet and dry bulb, 9.33°. Number of clear days, 23.67; cloudy, 2.66; hazy, 2.34; rain, 2.33.

November, 1876.—Highest temperature, 71°; lowest, 41°. Average change every twenty-four hours, 10.4°. Average difference between wet and dry bulb, 10.43°. Number of clear days, 21.67; cloudy, 1.33; hazy, .67; rainy, .33.

December, 1876.—Highest temperature, 62°; lowest, 38°. Average change every twenty-four hours, 14.67°. Average difference between wet and dry bulb, 9.23°. Number of clear days, 27.34; hazy, 1.66.

The situation on the ridge is well adapted for such a hospital as would be required for consumptives. It is a nearly level plain, for a great part of the claim; there are no cañons or ravines; the soil is a rich, dark, sandy loam, bearing abundantly of fruits and vegetables. Green corn, we were told, was distributed to friends in the valley on Thanksgiving Day, eighteen hundred and seventy-nine. There are 120 acres, nearly all suitable for cultivation. The place may be purchased for \$6,000.

The day—October seventh, eighteen hundred and eighty—on which Atlas Peak was visited by the committee was thought to be an unfavorable one. A heavy fog rested over the valley and upon the mountain sides; yet upon reaching the Peak, we were informed that no fog had been observed there.

The property is owned by Mr. A. P. Evans.

VEEDER MOUNTAIN.

The Veeder Mountain is located on the west side of Napa Valley, twelve miles from Napa City, at an elevation of 2,300 feet. The little plain on the east side of the mountain, to which the attention of the committee was particularly called, has an altitude of 1,800 feet. It faces the south and east, and affords a beautiful landscape. The land is said to be unsuitable for the cultivation of grain, but vegetables and fruit trees grow luxuriantly. Tomato vines live during the Winter. A fine stream of cold water runs through the place, and springs near by afford an inexhaustible supply.

The location is a good one for a State hospital for consumptives, and affords excellent facilities for camping out amid clusters of redwood trees. There are said to be an abundance of trout in the stream, and of game on the hills. Three hundred and twenty acres of land are owned by Mr. Wing, which are offered for \$7,000.

The temperature at midday in Summer, as in almost all other mountain localities, rises sometimes as high as 98°, but only for a few days each season, the early morning minimum temperature being 48° or 50°.

A communication from Mr. Wing gives the following specific information: "The lower part, near Dry Creek, is heavily wooded and timbered. The quantity of wood on the place is estimated at from 10,000 to 12,000 cords, besides a large quantity of redwood timber. There are six fish ponds—two large, and four small. * * * There are very few places in the mountains so well supplied with pure spring water; and the fountains of it are so elevated that it can be carried to every part of the place in pipes—enough for fish ponds, domestic use, bathing, and irrigation. * * * The large redwoods in the deep cañons afford fine shade and romantic spots for invalids in warm weather. There are some forty or fifty redwood groves, such as the camping party were using when you were here."

The following temperature table for July, August, and a portion of September, of the present year (eighteen hundred and eighty), will give a fair idea of the Summer climate of this place, so far as concerns this one element. It has been furnished by Mr. Wing:

JULY.				AUGUST.				SEPTEMBER.			
Date.	7 A. M.	12 M.	8 P. M.	Date.	7 A. M.	12 M.	8 P. M.	Date.	7 A. M.	12 M.	8 P. M.
1				1	60	80	50	1	61	84	68
2				2	62	82	60	2	68	88	74
3				3	64	82	62	3	60	90	68
4				4			60	4			
5	47	70	51	5	66	76	64	5			
6	44	77	70	6	66	82		6			
7	53	80	60	7	60			7	50	84	62
8	62	78	62	8	66	90	66	8	60	86	64
9	66	70	68	9	66	84	64	9	56	84	60
10			62	10	56	80	60	10	64	90	64
11	64	80	62	11	64	78	58	11			
12	60	84	70	12	66	78	54	12	54	82	60
13	70	86	68	13	62	82	56	13	52	72	
14	72	90	70	14	52	76	58				
15	68	80	68	15	62	86	68				
16	68	82	64	16	64	80	60				
17	62	86	60	17	48	76	58				
18	54	80	60	18	46	82	64				
19	52	78	58	19	56	88	68				
20	46	60	60	20	60	84	66				
21	50	80	62	21							
22	56	88	64	22		72	64				
23				23	50	72	58				
24	62	80	58	24	58	74	60				
25	52	80	56	25	56	82	58				
26	48	76	60	26	50	84	56				
27	52	74	58	27	54	86	58				
28	48	76	56	28							
29				29	50	74	56				
30	50	74	56	30	48	76	60				
31	60	76	52	31	54	82	60				
	52.6	79.6	61.5		54.5	77.4	60.2		59.3	84.6	65.7

The thermometer is exposed on the west side of the house, seemingly somewhat to reflected heat at or about midday.

A mile or two before reaching Mr. Wing's, is a tract of 164 acres of equally good land, better adapted to the cultivation of grain, and offering similar advantages for sanitary purposes, which can be purchased, it is said, for \$1,500. It is on higher ground than the place of Mr. Wing, the elevation being about 300 feet greater—or not far from 2,100 feet. It has seven or eight springs of pure water, affording an inexhaustible supply. There are now about eighty acres of good tillable land, and thirty acres more that can be easily prepared for the cultivation of a vineyard. The wood on the place is estimated at from 3,000 to 4,000 cords. The whole property is inclosed with a good fence.

HOWELL MOUNTAIN.

Leaving St. Helena, the summit of Howell Mountain is reached after a ride of eight miles. According to the information received, its elevation is probably about 1,600 to 1,700 feet. As was found to be the case wherever the committee visited, the climate at the time seemed to be exceptional. The ride from St. Helena was for the most part through a cold fog, and on arriving at the summit we were informed that some fog had hung over the locality for an hour or so for several mornings. At 10 o'clock A. M. it was clear and pleasant.

The atmosphere is evidently dry and invigorating, and the temperature agreeable, except at noon, when, as in all other interior localities in California, it may be warm for two or three hours. The temperature at 10 A. M., was about 70° (July), and we were told that it occasionally rose at the hour of maximum to 80° or 90°, rarely to 95° or 96°. The nights are cool yet free from the humidity observed in the valley. It is an excellent place for the camp for outdoor life; and but for the liability to fogs would be an excellent locality for a hospital. Probably these do not occur sufficiently often to constitute a serious objection. The locality appears to be a continuation of the range of hills which form the seat of what is known as the "Thermal Belt," and which constitutes a marked feature of Atlas Peak and the other points on the eastern side of Napa Valley, though, from its greater altitude, it is colder in the Winter season. The climate corresponds, however, in the main, with the possible exception of the more frequent occurrence of morning fogs. It was stated that fogs seldom reach the summit of Howell Mountain, though observable on its western slope, at lower elevations. This is quite probable, and the occurrence of fogs at the time of our visit in July, eighteen hundred and eighty, was like the same climatic feature in other localities visited by the committee, quite exceptional.

Land suitable for the purpose of a hospital, according to information received, can be obtained here at a cost of from fifteen to twenty dollars per acre, including water privileges for a hospital, its situation and surroundings being adapted for outdoor life during the greater part of the year, and much of it capable of cultivation.

It is quite probable that on the eastern slope of this mountain, even near the summit, fogs would not be felt. The ridge is a part of that thermal belt of which much has been said by writers on our climate, and which, on account of its remarkable uniformity of temperature, and its dry, pure atmosphere, has been regarded to be peculiarly adapted for a residence for the invalid. It has been observed that while on some parts of this ridge the fogs or mists which sweep along the valley on the west and the western slope of the hills, rising almost, yet rarely, quite to the summit, almost never reach across the latter to the eastern slope.

Blake's "Sanitarium," not far off, on St. Helena Mountain, and Atlas Peak, further south, are the only two points on this ridge at which regular meteorological observations are taken, and from these we are able to form a general idea, modified by local peculiarities, of the climate of Howell Mountain. There are, however, some important differences. At Blake's there are no fogs, and the place is regarded by Dr. Blake as being the nearest locality to San Francisco where there are no fogs in Summer. The range of temperature at Blake's—the mean of the maxima and minima—in January, eighteen hundred and seventy-eight, was 49.2° (maximum), and 39.2° (minimum); in July, 81.5° and 59°. The highest temperature of January was 59°; the lowest, 29°. The highest in July was 92°, and the lowest, 45°. Probably, and such is the opinion of Dr. Blake, the temperature range is not materially different on Howell Mountain. Dr. Blake writes, as regards Howell Mountain: "I expect the range of temperature is about the same as here, but it must be in the region of occasional Summer fogs, as the redwood grows on the mountain, and I believe it only flourishes where there are occasional fogs during the Summer."

The committee visited this place about the last of July. It is upon the north side of Mount St. Helena, about eight miles from Calistoga, the altitude at the house, which is built upon a flat, being 1,575 feet. Although no regular meteorological observations have been taken here, the atmosphere is known to be dry, and its temperature possessing the general characters observed a little higher up, on the same side of the mountain, at Blake's Sanitarium. The latter, however, is 2,100 feet in altitude, and has its temperature somewhat modified by that circumstance, and by topographical differences. The air is pure, fresh, and invigorating, the climate such as to admit of an outdoor life for the greater part of the year. There is an abundance of water; a fine trout stream runs through the place, near the house, and game—deer and quail—abounds in the hills. The place in the vicinity of the house is well protected from strong winds, and fogs are said never to prevail. There are from fifty to sixty acres susceptible of cultivation, the remainder being wooded land.

The climate here may be somewhat colder than at Blake's, and the Summer range probably greater.

This place may be purchased, including improvements, four horses, carriage, etc., for \$2,500.

LAKEPORT, LAKE COUNTY.

Lakeport lies on the west side of Clear Lake, about forty-eight miles from the terminus of the Napa Valley Railroad at Calistoga. The location is in one of the most beautiful valleys in the State, possessing a reputation as a sanitary resort unsurpassed by any other. It is, and has been for years, the favorite camping-ground for invalids from the northern and middle sections of the State. It has been from the ranks of such invalids that the country about the lake has been in great part settled, and the present physical character of the adult population, as well as the healthful vigor of the children, attests the invigorating influence of the climate. No malarial fevers originate here; fogs are rarely observed; and it is protected, on the west, by a ridge of the coast range mountains from the cold, moist winds which are felt in the coast valleys.

No regular meteorological record has been kept, though the atmosphere is essentially dry. Venison, of which there is an abundance in the vicinity, suspended in the open air, dries, but does not decay. The extreme Summer temperature does not vary greatly from that of the vicinity of Sacramento, though the duration of high temperature daily is much less. The Winters are colder, yet the thermometer is said to fall but seldom below 15° below the freezing point; orange trees, we were informed, survived the Winter of eighteen hundred and seventy-nine-eighty, which was one of the coldest experienced for some years.

The rainfall during the season of eighteen hundred and seventy-eight-nine was about 47 inches.

The elevation appears to be not far from 1,200 feet.

Extending their investigations to the southern part of the State, the committee visited Ojai Valley, in Ventura County, the Sierra Madre Range, in Los Angeles County, and San Diego, in San Diego County. Santa Barbara had been previously visited by two mem-

bers of the committee. These are more particularly described and commented upon below.

SANTA BARBARA.

Santa Barbara lies upon the coast, nearly 300 miles southeasterly from San Francisco, sheltered on the northwest by Point Conception, and southerly by the Islands of San Miguel, Santa Rosa, and Santa Cruz. It has acquired, at home and abroad, a reputation for the possession of a climate favorable for the consumptive, and is resorted to by many in the various stages of pulmonary disease. It is to be recommended for its equability of temperature for the greater part of the year, and its freedom, as compared with more northern points on the coast, from severe winds. In the early stage of consumption it seems to be well adapted as a Winter residence.

The table of temperature and humidity, given below, exhibits these two important climatic elements in a favorable light. During the Winter season, especially, the temperature is equable, possessing a mean for November, December, and January of 59.6°, 55.2°, and 55.03°, respectively, while the mean relative humidity for the same period is 65.5, 64, and 70 per cent. The rainfall at Santa Barbara has an average of 14.71 inches (mean for eight years).

In the Summer the temperature is higher than in more northern localities on the coast; but there is, during this season, a certain amount of wind not well tolerated by the sensitive organs of the sick.

Fogs are said to prevail here at this season, though to an extent greatly less than further north.

The following table of temperature and humidity at Santa Barbara was prepared by Dr. L. M. Dimmick:

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MEAN TEMPERATURE AND HUMIDITY AT SANTA BARBARA.

(Reported by Dr. L. M. DIMMICK.)

DAY OF MONTH.	1870.										1871.
	APRIL.	MAY.	JUNE.	JULY.	AUGUST.	SEPT.	OCTOBER.	NOV.	DEC.	JAN.	
	Mean Daily Temperature.	Mean Daily Humidity.	Mean Daily Temperature.	Mean Daily Humidity.	Mean Daily Temperature.	Mean Daily Humidity.	Mean Daily Temperature.	Mean Daily Humidity.	Mean Daily Temperature.	Mean Daily Humidity.	Mean Daily Temperature.
1	66	62	66	60	68	73	72	80	68	71	73
2	67	61	67	61	68	76	72	78	68	68	68
3	65	64	61	61	71	81	70	71	61	61	61
4	60	77	59	62	66	76	67	70	66	66	66
5	51	76	62	73	63	80	67	75	66	77	66
6	57	77	65	63	62	68	68	77	67	76	64
7	54	72	63	73	65	89	69	77	68	71	64
8	61	66	64	67	66	68	65	65	71	71	65
9	58	55	59	70	66	64	70	66	70	73	69
10	54	49	61	73	65	68	72	62	69	73	67
11	54	36	58	78	68	63	72	71	70	73	68
12	62	51	60	71	62	72	67	80	68	73	67
13	59	55	60	57	68	75	68	74	66	72	69
14	60	55	60	66	66	74	68	74	66	71	69
15	65	57	62	62	65	78	69	69	69	71	66
16	71	58	60	60	69	72	68	69	69	65	79
17	62	72	62	44	69	74	66	76	68	71	66
18	59	71	64	57	67	75	65	68	65	73	66
19	59	69	63	59	65	77	68	77	67	70	64
20	59	69	64	56	68	70	68	72	66	64	68
21	58	76	63	51	68	69	72	79	65	66	63
22	59	77	65	62	69	68	73	78	66	73	63
23	57	66	64	66	67	76	72	85	67	75	63
24	61	67	68	67	66	79	73	74	65	78	79
25	62	71	67	60	68	79	73	72	65	79	85
26	66	70	70	67	68	80	70	73	64	76	71
27	74	53	60	61	68	75	69	70	64	75	68
28	77	63	62	73	67	77	69	70	63	74	67
29	72	58	61	68	68	77	71	74	63	67	69
30	62	61	67	51	69	75	71	70	68	73	75
31	---	63	63	---	---	70	77	66	68	---	60

OJAI VALLEY.

A ride of fifteen miles from San Buenaventura, over a shaded and romantic road, brings the traveler to Ojai Valley, a beautiful range of country, lying at an elevation of about 1,200 feet, surrounded in the greater portion of its circumference by high hills which protect it from the ocean winds, and, for a portion of the year, from fogs. The latter are said not to prevail to a very injurious degree, and the Spring and Fall months are described as being exempt.

The climate is evidently dry, though no observations have been taken there, and equable. It is also invigorating upon the system. The Summer temperature rises almost too high, at times, even to

98° or 100°, but this is not usual, nor is the effect oppressive or debilitating as in lower altitudes and more humid climates. The valley is shaded by large and beautiful oaks, which there seems to be conservative spirit and good sense enough among the inhabitants, to allow to grow unmolested. Water is said to be abundant.

Careful inquiries seem to establish the following facts regarding this place:

The elevation of the Lower Valley at Nordhoff is about 1,000 feet above the sea level; that of the Upper Ojai Valley, about 1,200 feet.

The range of temperature in Summer is from 70° to 96°. Last Winter, eighteen hundred and seventy-nine and eighteen hundred and eighty, the lowest temperature for a few nights was 26°.

The humidity of the valley is low, although there have been no observations made to demonstrate the fact.

Fogs rise over the valley occasionally, mostly in May and June; they are dissipated at an early hour of the morning. An abundant supply of water can be had by means of artesian or flowing wells.

Land can be obtained at from twenty to fifty dollars per acre, according to cultivation.

SIERRA MADRE VILLA, LOS ANGELES COUNTY.

This attractive place is located in the foothills of the Sierra Madre Mountains, northeasterly from Los Angeles, and thirteen miles distant; the elevation is about 800 feet. It is protected, to a great extent, from the winds which prevail in the valley, and is sufficiently removed from the ocean not to be affected injuriously by the sea breezes, or seriously by fogs. The latter occasionally hang over the vicinity, but only for a brief period, and, according to the testimony received, they are quite exceptional. The temperature is given in the following table, kindly furnished by Mr. J. C. Davis, who has resided on the place for many years. It is not improbable that the thermometer at its maximum elevation was frequently subjected to influences which raised the mercury above the true temperature. Under proper exposure the mercury seldom rises, even in the valleys of California, as high as 110°. Reports to the contrary are evidently based upon faulty exposures:

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SUMMARY OF THERMOMETRIC OBSERVATIONS.

At Summit Hill, Los Angeles County, for six years ending December 31st, 1873.

Months.	1870.			1871.			1872.			1873.			1874.			1875.		
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.
January	38	66	53	39	79	55.5	36	71	55	41	84	62.5	36	74	55	38	72	55
February	42	64	63	35	75	55	42	79	60.5	35	75	55	38	72	55	46	76	60.5
March	40	65	62.5	42	81	61.5	41	83	62	42	82	62	38	74	56	58	80	59
April	38	89	63.5	38	87	62.5	40	92	66	35	91	63	44	82	63	34	88	61
May	43	96	64.5	48	95	71.5	43	87	70	48	89	68.5	46	88	67	49	95	72
June	47	90	68.5	48	92	70	46	110	73	53	94	73.5	51	98	71.9	50	95	74.5
July	56	98	77	56	100	78	50	94	73	52	104	78	60	96	78	53	92	72.5
August	52	95	73.5	56	105	80	55	103	75	56	98	77	56	100	78	58	103	80
September	53	95	79	54	102	78	52	104	78	50	102	76	53	98	75.5	56	92	74
October	44	100	72	50	102	76	48	99	73.5	48	96	73	50	91	70.5	56	98	77
November	44	86	65	44	86	65	46	89	65	46	93	68.5	41	83	62	49	80	64.5
December	35	79	57	42	89	61	41	80	60.5	40	80	60	41	80	60.5	42	80	61
Means for six years	44.3	88	66.5	46	90	68.1	44.5	91.7	66.4	45.5	82.3	68.1	48.5	86.3	65.9	47.4	87.5	67.5

Comparing the figures given in the above table with those obtained from other well known sanitary resorts, it is found that while the mean of the monthly temperatures for six years at Sierra Madre, in January, is $56^{\circ} 5'$, it is reported by Mr. Hittell to be 50° at Atlas Peak; 45° at Blake's; 52° at Los Angeles; 53° at Santa Barbara; and 51° at San Diego.

The same authority, and method of comparison for July, gives us: 76° for Sierra Madre; 74° for Atlas Peak; 73° for Blake's; 75° for Los Angeles; 68° at Santa Barbara; and 72° at San Diego.

Sierra Madre is, therefore, $6^{\circ} 5'$ warmer in January than	Atlas Peak.
Sierra Madre is, therefore, $11^{\circ} 5'$ warmer in January than	Blake's.
Sierra Madre is, therefore, $4^{\circ} 5'$ warmer in January than	Los Angeles.
Sierra Madre is, therefore, $3^{\circ} 5'$ warmer in January than	Santa Barbara.
Sierra Madre is, therefore, $5^{\circ} 5'$ warmer in January than	San Diego.
Sierra Madre is, therefore, 2° warmer in July than	Atlas Peak.
Sierra Madre is, therefore, 3° warmer in July than	Blake's.
Sierra Madre is, therefore, 1° warmer in July than	Los Angeles.
Sierra Madre is, therefore, 8° warmer in July than	Santa Barbara.
Sierra Madre is, therefore, 4° warmer in July than	San Diego.

As compared with the Sacramento Valley, Sierra Madre, in January, is $11^{\circ} 5'$ warmer than Sacramento, and in July, 3° warmer. The latter, as just now stated, may be due to a faulty exposure of the thermometer.

The range of the monthly means between January and July is: For Sierra Madre, $26^{\circ} 5'$; for Los Angeles, 23° ; for Blake's, 28° ; for Atlas Peak, 24° ; for Santa Barbara, 15° ; for San Diego, 21° . The greater thermometric range at the Sierra Madre is accounted for by the increased heat of Summer, not the greater cold of Winter. The table shows the temperature of this place to be occasionally much higher than this. The mean of the monthly means for six years, in August, was $77^{\circ} 7'$; for September, $76^{\circ} 7'$; and in August, eighteen hundred and seventy-one, and again in December, eighteen hundred and seventy-five, the monthly mean was as high as 61° .

Admitting the absence of any circumstances to give inaccuracy to the observations, especially as to the maximum temperatures, the same result is not uncommon in the foothills of almost all our mountain ranges, yet the atmosphere is seldom oppressive, and the heat is less severely felt than even much higher temperatures in the more humid localities of the valleys. These extremes, too, are of but short daily duration, and, by virtue of the rapid radiation and evaporation going on in these elevated regions, speedily give way to a more moderate and delightfully refreshing temperature. By midday, moreover, a gentle breeze floats in from the ocean, tempered in its chilliness and deprived of very much of its humidity, by its passage over the valley for a distance of more than thirty miles.

In the absence of humidity tables, this important climatic element cannot be accurately ascertained, but the atmosphere may be safely set down as being dry.

Malarial fevers never prevail at this place. This is the testimony of all who are familiar with it.

Other locations, less improved, but equally eligible in a sanitary point of view, can be obtained in the immediate vicinity of the Sierra Madre Villa, on the same mountain range. One, at present the property of Mrs. L. Hall, was brought to the notice of the committee. It consists of $233\frac{1}{4}$ acres—sixty acres being tillable land. It has excellent pasturage, an abundance of pure water, and a large

orchard, containing fruit trees of almost every variety. There are some buildings on the premises of not much value. A stream runs through the place, affording sufficient water, it is said, for the irrigation of a "section of land," and, in addition, an "undeveloped" spring capable of yielding as much more. The water supply, we learn, has been determined at 124 miner's inches, under the usual 4-inch pressure—equal to about 160,000 gallons for every twenty-four hours. The price set upon the place is \$10,000.

The region of country here is believed to be a favorable one for those suffering from pulmonary complaints, well adapted as a residence for the consumptive, in the early period of disease, while its other advantages—the local scenery, the beautiful landscape, embracing the Valley of San Gabriel and the neighboring hills—render it exceedingly attractive.

Should a hospital for consumptives be located in the southern portion of the State, the vicinity of the Sierra Madre Villa would seem to be well suited to the purpose.

SAN DIEGO.

The climate of San Diego presents many features of peculiar interest in a sanitary point of view, due to the location of the place on the eastern border of the Bay of San Diego and to the topography of the region. The highest portion of the town is said to lie at an elevation of about sixty feet above the sea, and about four or five miles distant.

San Diego has long been regarded as among the most favorable of the many places of resort which Southern California affords. Its climate partakes generally of that of the coast localities, modified by its topography and distance from the ocean. Its mean temperature, according to the tables of the Smithsonian Institute, arrived at by means of observations taken during nearly twenty-one years, is 62.11° ; while the annual range is given by the same authority at $10^{\circ}-9^{\circ}$ greater than at San Francisco. The mean temperature of Spring is given at 60.14° ; of Summer, 69.67° ; of Autumn, 64.55° ; and of Winter, 54.09° —showing a difference of only 15.58° between the Winter and Summer, yet the greatest difference between any two consecutive months is only 6.12° —October and November. These figures are not materially different from those given by the chart for eighteen hundred and seventy-six.

The prominent climatic features of the place may be stated to be an equable Summer temperature, with light winds from the west and northwest, and an agreeable range between day and night, while the Winter is so mild that frost seldom does damage to vegetation.

It has been shown above that the mean Winter temperature for twenty-one years was only 54.09° . Comparing this with the same mean for other coast localities, we find it 4.09° higher than at San Francisco, 0.86° and 4.18° less than at Santa Barbara and Los Angeles respectively. The northwest winds appear to be more apt to prevail and attain a higher velocity at this season, or, at least, from January to April, though they seem to be only exceptionally disagreeably severe (Dr. Hoffman, on Climate of San Diego). The humidity of the place is due mainly to its proximity to the coast, but this is considerably less than at some other more northern settlements. It is this element of the climate—its lower relative humidity—which

has seemed to constitute one of the chief advantages of this section of the State, in a sanitary point of view, in the Winter season especially, over other towns along the coast.

To this must be added the mildness of the temperature and its exemption from sudden extremes.

The town itself—New San Diego—seems to the temporary observer to be less favorably located as a resort for those suffering with phthisical disorders than are Old Town, or the projected localities of Roseville and La Playa. The latter are upon the western border of the bay with a range of hills intervening towards the ocean, and are much more protected from the winds which sweep in either from the northwest or southwest.

The country in the interior from San Diego for a number of miles is an elevated mesa, susceptible of the highest cultivation. Beyond, in the hills, the climate is said to be much more dry, less subject to the winds, and many locations may be found possessing in a very marked degree, the elements to be sought for as a residence for the invalid.

To the kindness of a member of the San Diego Society of Natural History, we are indebted for the following table containing meteorological statistics collected at a few of the prominent points in the interior:

	JANUARY, 1870.						JULY, 1870.					
	San Diego	El Cajon	Valle de la Vieja	Pine Valley	Julian	Oakwood	San Diego	El Cajon	Valle de la Vieja	Julian	Oakwood	Pine Valley
Mean temperature.....	61	47	42	38	34	47	6	67	72	-----	60	63
Maximum temperature.....	65	66	62	66	65	65	74	95	100	-----	94	94
Minimum temperature.....	39	30	30	17	28	32	57	64	52	-----	56	46
Monthly range.....	26	36	22	39	27	33	17	41	48	-----	38	48
Greatest daily range.....	22	31	20	39	23	26	13	33	32	-----	31	31
Mean daily range.....	13	19	14	18	11	13	10	20	23	-----	23	21
Mean of hottest day.....	69	58	59	47	47	56	69	75	83	-----	75	80
Mean of coldest day.....	48	43	42	30	30	40	62	63	58	-----	62	54
Mean relative humidity.....	77	80	66	60	77	74	59	73	62	-----	79	75
Lowest relative humidity.....	37	41	19	10	32	19	28	23	22	-----	31	15
Rain, in inches.....	8.41	3.83	4.00	7.04	11.01	6.17	0.06	0.02	0.01	-----	0.0	0.0
Number rainy days.....	10	12	9	13	11	12	1	1	1	-----	0	0
Prevailing winds.....	SW	SW	W	W	W	W	W	W	W	-----	SW	W
Number cloudy days.....	3	-----	4	4	6	1	12	6	-----	-----	6	-----
Altitude, feet.....	62	600	2500	4200	4500	800	-----	-----	-----	-----	-----	40
Distance from sea, miles.....	6	12	26	40	40	17	6	12	20	40	17	-----

There are no intervening hills between Julian and the sea, the descent being gradual. Pine Valley is about eight miles to the seaward of the crest of the mountain plateau on which it stands. Protection from the north and northeast winds is afforded by the ridge of mountains extending easterly from the Santa Rosa Range, giving, as remarked in the notes furnished us, "the west half of San Diego County the form of an extensive amphitheater, the point of convergence being the bay. Directly under the lee of the Santa Rosa and Santa Marguerita hills, vegetation is much earlier than elsewhere. * * * grasses covering the valleys with a carpet of green, while to the southward, on the hills and mesas surrounding the bay, the seeds have hardly begun to germinate." Local differences of topography occasion local variations in the climate of the high mesa

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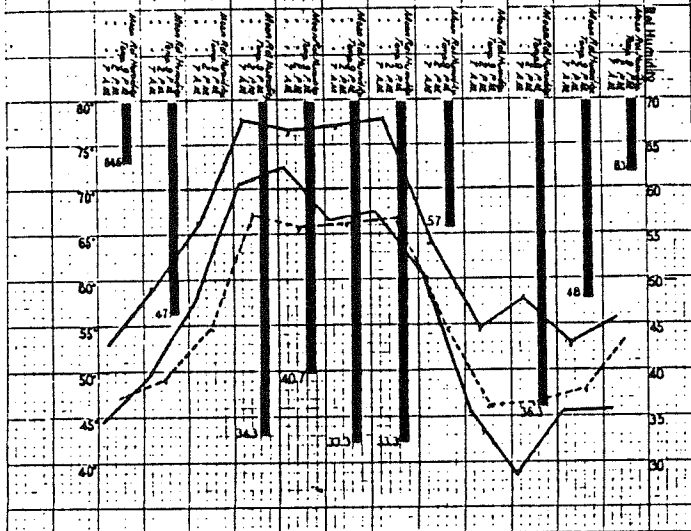
CHART OF TEMPERATURE AND HUMIDITY.

ATLAS PEAK.

BLAKE'S.

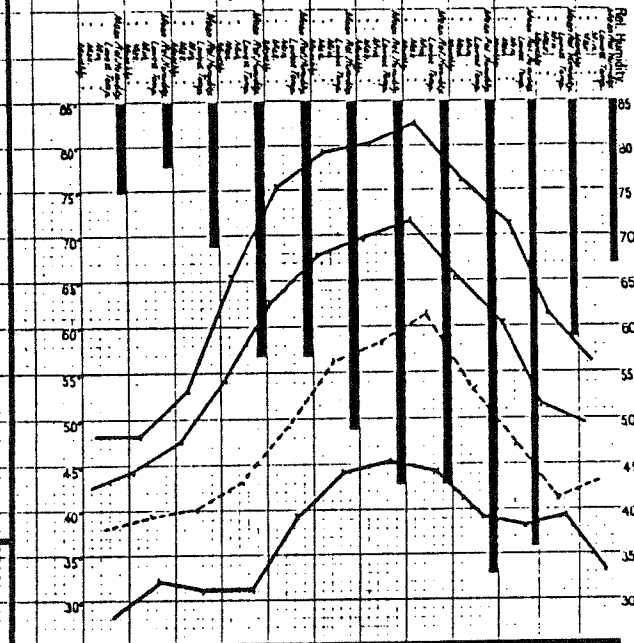
Mean Temperature and Humidity at Atlas Peak, Napa Co.
1876 and 1877. Elevation 1500 Ft.

Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb.



Temperature and Humidity at Blake's Samaritan,
St. Helena Mountain 1878. Elevation 2100 Ft.

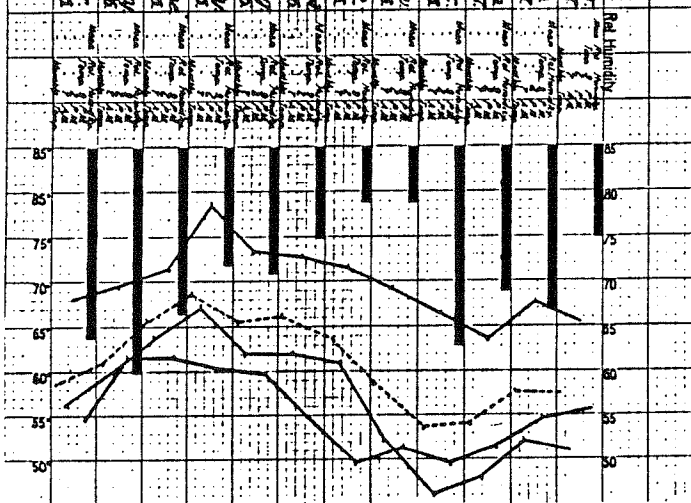
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.



SANTA BARBARA

Mean Temperature and Humidity 1876 and 1877

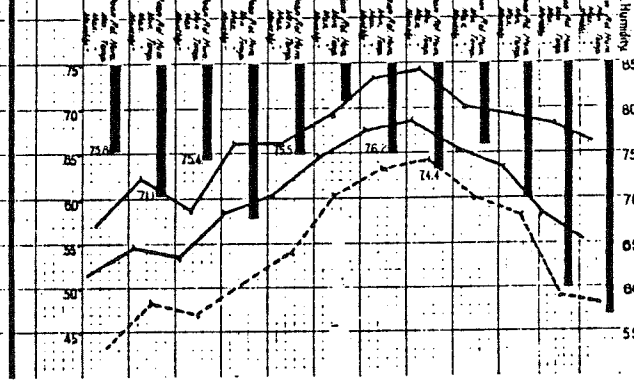
Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb.



SAN DIEGO

Mean Temperature and Humidity 1876

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.



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nearer the bay, due to the greater or less protection from the ocean winds.

That the climate of San Diego and its surroundings does exert a favorable influence over some forms of phthisis in the early stage, there can be no doubt. Abundant evidence of the fact is shown by the history of many persons now resident there—histories which seem to include among other factors the one all important one of a correct diagnosis. A greater number of such cases may be met there than in almost any other portion of the State. Such, too, is the testimony of the intelligent medical gentlemen living there, and to whose courtesy and assistance the thanks of the committee are due.

As compared with Summit Hill (Sierra Madre Villa) in Los Angeles County, the temperature of San Diego is, according to the table given above, 11° less in July, and 5.5° less in January; the range between these two months is 5.5° greater at Summit Hill than at San Diego. Even as compared with Atlas Peak, while the mean temperature of the latter is 1° less in January, and 9° greater in July than at San Diego, the range has been shown to be 14° greater; in fact, the extreme annual range of the thermometer, taking the months of January and July as a basis, is less at San Diego than at any point now under review, from which statistics have been received.

These results differ slightly from those obtained by a comparison of the figures given by Jno. S. Hittell, and which were used when remarking upon the climate of Summit Hill.

There is a similar discrepancy in the records of humidity, which the table gives at 77 per cent in January for San Diego, and 59 per cent in July. Using these figures, we find the relative humidity at San Diego to be 20 per cent greater in January than at Atlas Peak, and 18.3 per cent greater in July.

Low fogs seldom visit San Diego, but the upper atmosphere is often misty in the early morning, the sky brightening by nine or ten o'clock A. M. Such was the case for two or three days in August of the present year.

Strong winds are not common. The prevailing direction of the current is from the northwest and west, increasing in velocity from early morning until three or four o'clock P. M., when they gradually decline to a gentle breeze.

During the hours of highest temperature, the air is not oppressive; the nights are cool and refreshing.

Malarial fevers do not originate here.

The average rainfall is nine inches.

Probably certain localities east of the town, further removed from the ocean, might be even better suited to the consumptive, than just on the bay.

The lesson taught by this investigation is one which it would be well to bear in mind in all our speculations as to the influence of climate with its several factors of elevation, temperature, and humidity, that no invariable or arbitrary rule can be with certainty laid down, and that other circumstances, not readily recognized or understood, do sometimes concur in upsetting our wisest theories, or appear as formidable exceptions to even the legitimate deductions of experience.

Yet, however true it may be that the climate of San Diego is superiorly adapted to certain forms and stages of consumption, it is believed that the theorems as laid down in a preceding part of this

report, as to the efficacy of elevation and atmospheric dryness and temperature, will be found to be true as a general rule—a rule, as just stated, not without exceptions, and one of the most prominent of these is the vicinity of San Diego.

SUMMARY.

With so many locations before them, all of them more or less favorable in respect of climate, it is by no means easy for the committee to award superiority to any one upon this single consideration. The question of accessibility assumes an importance beyond that which would ordinarily attach to it, and, taken in connection with adaptability to outdoor life, and especially to outdoor labor, must necessarily exercise almost a controlling influence.

Keeping in view, however, the principles laid down in the beginning of this report, we ought to endeavor to obtain a location whose climate is neither too cold in Winter nor too warm in Summer—presenting a happy medium between these two extremes.

Such a climate is that of San Diego; but it lacks, at least for a very large number of invalids, the important elements of elevation and Summer dryness. Its inaccessibility, too, by the present means of conveyance, is such as would seem scarcely to justify its selection. The cost of transportation from the northern and central portions of the State would constitute a very considerable item of expense.

This latter objection, in a minor degree, rests against the Sierra Madre Range, near Los Angeles, which otherwise presents advantages unexcelled by those of any other portion of the State visited by the committee. In a very short time, if the hospital now under contemplation be established and prove successful, another similar institution will, almost of necessity, be demanded by the southern portion of the State. The opening of communication with the Atlantic States by railroad, through Arizona, will give impetus to immigration by that route, and Los Angeles must become, in consequence of the many attractions it presents, social, agricultural, and climatic, its rendezvous. As now with the other route, so will it be with this—many of those who come will be adventurers in search of health; victims of pulmonary disease; friendless and moneyless, and a hospital in the northern part of the State would be quite as inaccessible to them as would such an institution at Los Angeles now be to the people of the northern and central counties. The committee feel themselves scarcely justified, however, in anticipating this condition of things, and of giving it preponderating weight in their deliberations. Were the question now one involving the establishment of two hospitals, there would be less embarrassment.

The same factor, inaccessibility, must be urged against Ojai Valley and Santa Barbara, each of which presents many advantages during certain portions of the year for the consumptive, at that stage of the disease in which benefit from any climate may be expected.

Of the different localities visited in Napa Valley, we have regular meteorological reports from only one—Atlas Peak. These are suggestive of a climate admirably suited to the class of diseases under consideration. It has a mean temperature in July of 74°, and in January, 50°; a mean relative humidity for the warm months of 39 per cent., and for the cool months, 51 per cent., or an annual mean of 45 per cent. It has a moderate elevation, within a medium which

adapts it to the largest class of invalids, and it is said to be quite exempt from fogs, and from the winds which often sweep the valley. There is an abundance of water, with a little labor there may be procured shade for tents and recreation, and there is an adaptability to outdoor life and labor during almost the entire year. In this respect, as in the location and character of the land, it is superior to any seen in this section of the State. The road from Napa City to this place can with slight expense be made an excellent one.

There is a distinction to be made between a Winter climate suitable for consumptives and a proper Summer climate. As a rule, San Diego would represent one of the very best localities for the first, and Santa Barbara might be ranked with it; the mountains, at suitable elevations, give us the latter. In some respects Atlas Peak is a representative of both, as far as can be determined by meteorological statistics. If we had equally exact statistics of the climate of the other points in this county visited by the committee, perhaps the same might be said of some of them.

Of the other localities in the same county we have a partial record of temperature, through Mr. Wing, of Veeder Mountain. The estimate made of its humidity is theoretical to some extent, yet probably correct. It is doubtless sufficiently dry, and, if we may credit the statement of Mr. Wing, it is quite exempt from fogs. The elevation (2,300 feet) brings it within the desired limits. There is some foundation for the opinion advanced by Dr. Blake, that the redwood never flourishes except in the region of fogs, yet it appears to be contradicted by the experience of Mr. Wing, just stated. It is probable that they are quite exceptional here, at least in that portion of the tract of land in the vicinity of the house.

Howell Mountain, about six miles from Blake's Sanitarium, but probably two or three hundred feet lower, does not differ materially in temperature from the latter, though no records are available; while Troutdale, in the opinion of the committee, though of a somewhat lower altitude, affords advantages otherwise quite equal to those of Howell Mountain in respect of climate. Both of these places are well timbered, and have an abundance of pure, clear water. They are both sufficiently accessible.

The only locality visited in Lake County was Lakeport, to which reference has been already made. Doubtless its climate would render it a suitable place for a hospital for consumptives. There is probably no region in the central portion of the State more frequented by invalids, especially those with pulmonary disease. Possibly the reputation of the mineral springs, so abundant in the vicinity, may have stimulated the movement of invalids there, and formed one of its popular attractions; but beyond these—before these were very widely known—it had obtained recognition for the excellence of its climate, and its superiority as a sanitary resort for the consumptive had been fully attested by a number of cases in which the progress of disease seemed to have been completely arrested.

With the present means of travel, however, Lakeport, in the opinion of the committee, would be too inaccessible to the great majority of the proper subjects for treatment in the institution under contemplation. The committee are uninformed as to the number of consumptive patients now thrown upon the charity of the county, but at the most, they must fall far short of the great number to be found in other

counties to whom some of the other localities named above would be more accessible.

The following chart of the meteorology of some of the locations referred to above will fairly exhibit their most prominent features.*

Taking into consideration all the facts presented in the foregoing pages, and, where other things are equal, the relative accessibility of the different localities visited, the committee feel justified in awarding a preference to Atlas Peak, in Napa County. The meteorological records kept at this place, and to which your committee have had access, afford a more correct basis for an intelligent estimation of its prominent climatic features than the unsupported though doubtless conscientious testimony obtained in regard to others.

While thus expressing a preference for Atlas Peak, the committee are compelled in justice to admit the claims, in some respects quite equal, of other localities in Napa County, and it has been with much diffidence, and only after a full, careful, and, they believe, unprejudiced deliberation, that they have arrived at a conclusion.

The decision of the committee has been made with reference to a single hospital convenient to the population of the greater portion of the State. The time will probably come when additional accommodations will be required for the southern counties, from which a hospital in Napa County would be too remote to be made generally available. Should such a necessity arise, we have already in this report expressed a preference for the Sierra Madre Range, near Los Angeles.

With this general review of the prominent localities visited by the committee, and the expressed judgment as to the selection to be made, we pass to a very brief consideration of the other subjects included in the resolution under which we act.

The requirements of a sanitarium for consumptives involve, above all things, a suitability to out-of-door life, and a certain amount of exercise. While a comfortable home is to be provided for all, and indoor apartments for those requiring them, the modern view of the treatment of consumptives enjoins upon all capable of adopting it a life as much as possible in the open air, and exercise within the limit prudent for each individual. In inviting the unfortunate victims of this disease to a home provided by the State, it is not to be supposed that they go there for the enjoyment of a life of ease and indolence. The benefit of climate alone would, under such circumstances, be inconsiderable, and a charity so beneficent would fail of its highest purposes.

Among the regulations proper to be adopted, therefore, would be the apportionment among the inmates of a certain amount of work, such work as a very large proportion of those who would be likely to

* EXPLANATION.—The red lines on chart, for Blake's and San Diego, indicate the mean monthly temperature; for Atlas Peak and Santa Barbara, they indicate the mean temperature at 7 A. M. The dotted lines, for Blake's and San Diego, show the mean minima of temperature; for Santa Barbara, the mean monthly temperature; and for Atlas Peak, the mean at 9 P. M. The chart is in error in transposing the broad black line for relative humidity at Atlas Peak to the space properly occupied by the 9 P. M. temperature—an error which brings the 7 A. M., and 2 P. M. temperatures out of their proper places. In other words, the headings, "Mean Rel. Humidity, Mean Temp. 9 P. M., Mean Temp. 2 P. M., and Mean Temp. 7 A. M.," should each be moved one space to the left. The plain black curved line indicates, therefore, the mean temperature at 2 P. M. instead of at 7 A. M., as appears on the chart. The upper black curve, for Santa Barbara, shows the mean temperature at 2 P. M.; at Blake's and San Diego, the mean maxima. The lower black curve, for Santa Barbara, indicates the 9 P. M. temperature; at Blake's, the lowest temperature experienced during the month.

apply for admission could perform, not only without detriment, but with positive benefit; work not irksome and unpleasant, but light and agreeable; work so adapted to the individual and his tastes and inclinations, as well as to his physical condition, as to afford occupation for the mind and exercise for the body. Probably, by the labor thus obtained, most of the light work about the place could be performed—in the field, in the garden, in improving and beautifying the grounds.

Much of the success of an institution of this kind must depend upon the ability and discretion of the medical Superintendent, his judgment as to the amount and kind of work proper to be performed by each individual, his discernment of character, and his skill in the detection of impostors or malingerers.

The accommodations required for a hospital like that under contemplation would be simple and, as compared with the elaborate architecture of other hospital buildings, inexpensive. A great many of the patients would probably be benefited by sleeping in tents, or in the open air, in suitable places, and when the weather permitted. It is remarkable how unlikely consumptives are to take cold while sleeping in the open air.

But buildings would be required for the officers and attachés of the institution, as well as for those for whom the occupation of tents would be imprudent, and for all during inclement weather.

An arrangement similar to that recommended for convalescent hospitals would seem suitable for the institution proposed. This is explained by a recent author, Wylie: "An administrative building, containing the necessary offices and dwelling-rooms for the Superintendent. Connected with this, in the rear, should be a general kitchen and two dining rooms—one for each sex. On either side of this administrative building, there should be a long row of simple cottages, connected with the dining rooms by a covered way. These huts should be about twenty-five feet square and ten feet to the eaves, with windows on three sides, and should contain four beds each. No drainage pipes should be laid on in these cottages. Special arrangements at some distance, should be made for water-closets, and, when necessary, earth-closets could be used in the huts. In selecting the occupants for each hut, the strong should be put with the weaker patients and compelled to take care of them to a certain extent, by keeping their quarters clean, etc." By this arrangement, males and females are separately provided for.

In the proposed plan for "quarters" for the patients, the danger of foul air, or gases from sewers or cesspools, would be entirely avoided. No general ward or wards, in which the patients are to sleep and live, are provided; thus avoiding contamination of the atmosphere of the sleeping apartment as well as the discouraging effects upon the mind, resulting from the promiscuous association of those in different stages of disease—effects which can be only bad when those in curable stages are placed in close proximity to the incurable.

A general ward—probably two, one for each sex—might be required for accidental diseases liable to arise in a community as large as this would probably be; and this could be erected, of simple and inexpensive construction, separately from the other buildings. The cottages might be arranged for six or eight beds without interfering with the general plan, or adding greatly to the expense.

The structures contemplated might be plain and cheap, without

superfluous ornamentation. The extent to which accommodations, such as tents, cottages, or sleeping apartments, dining-room facilities, etc., are to be provided, cannot be determined with any degree of accuracy, and hence the cost of the undertaking must be, for the present, conjectural. These things would depend upon the number of patients admitted, and, to a very great extent, upon the judgment of the Superintendent—his discrimination and his skill in preventing the practice of deceit and imposition.

In the seventeen hospitals reporting to the State Board of Health for the year ending July first, eighteen hundred and eighty, seventy-two cases of consumption were admitted during the year. At the City and County Hospital in San Francisco, there were, in addition, two hundred and ten cases admitted, making a total of two hundred and eighty-two cases admitted to hospital treatment. These do not include all the cases admitted to the hospitals, for a considerable number of these institutions have made no report even of this one item. Among these, are the important ones of Alameda and Los Angeles.

It is not probable, however, that all who seek admission to the county hospitals would enter a hospital for consumptives. Some would apply too late to bear removal. But, on the other hand, an asylum for consumptives having been established, it is to be expected that many who, as long as possible, avoid the proffered charities of the counties, would seek at an early day the benefits to be afforded by the purer air, the better climate, the more exact sanitary regulations of the State institution. Right here, in the opinion of the committee, lies one of the most serious objections which can be urged against the establishment of such a hospital—the temptation it would afford to unworthy persons, to an influx of the phthisically disposed from neighboring States, and the consequent abuse of a most beneficent and noble charity. All these things could be avoided, however, by judicious regulations and strict terms of admission, and their faithful enforcement by the proper authorities. The nature of these regulations should be a subject for future consideration, and is not included under the duties assigned to this committee. By the adoption and observance of proper rules, governing not only the admission of patients, but their habits, their modes of life, their exercises, their labor, it is believed that the institution proposed would prove a most worthy and successful charity, sustained at an expense quite inconsiderable, when compared with the immensity of the benefits it would be the means of dispensing.

Respectfully submitted, for the committee.

H. GIBBONS, M. D.,
W. R. CLUNESS, M. D.

Concurring.

F. W. HATCH, M. D.

HEALTH LAWS OF THE STATE OF CALIFORNIA.

POLITICAL CODE OF THE STATE OF CALIFORNIA.

PART III—TITLE VII.

CHAPTER II.

PRESERVATION OF PUBLIC HEALTH.

ARTICLE I. STATE BOARD OF HEALTH.

II. VACCINE AGENT.

III. HEALTH AND QUARANTINE REGULATIONS FOR THE CITY AND HARBOR OF SAN FRANCISCO.

IV. HEALTH REGULATIONS FOR THE CITY OF SACRAMENTO.

V. HEALTH AND QUARANTINE OF OTHER CITIES, TOWNS, AND HARBORS.

ARTICLE I.

STATE BOARD OF HEALTH.

- SECTION 2978. Who constitute the State Board.
2979. Duties of.
2980. To report as to the effect of intoxicating liquors.
2981. Time and place of meeting. To elect President and Secretary. No member except the Secretary to receive compensation.
2982. Duties of Secretary. Salary of Secretary.
2983. Expenses of, limited.

Who constitute the State Board.

2978. The State Board of Health consists of seven physicians—two of the City of Sacramento, and five from other portions of the State—appointed by the Governor for the term of four years.

Duties of.

2979. The State Board of Health must place themselves in communication with the local Boards of Health, hospitals, asylums, and public institutions throughout the State, and take cognizance of the interests of health and life among the citizens generally. They must make sanitary investigations and inquiries respecting the causes of disease, especially of epidemics, the source of mortality, and the effects of localities, employments, conditions, and circumstances on the public health, and gather such information in respect to these matters as they may deem proper for diffusion among the people. They may devise some scheme whereby medical and vital statistics of sanitary value can be obtained, and act as an Advisory Board to

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HISTORY OF
Solano and Napa Counties
CALIFORNIA

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979.419

WITH
BIOGRAPHICAL SKETCHES
OF

*The leading men and women of the Counties, who have been
identified with its growth and development from
the early days to the present time*

31787
HISTORY BY
TOM GREGORY
AND OTHER WELL
KNOWN WRITERS

Exhibit 5

ILLUSTRATED
COMPLETE IN ONE VOLUME

FEB 17 1940

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CHAPTER XXXII.

HISTORY OF NAPA COUNTY.

By C. B. Seeley.

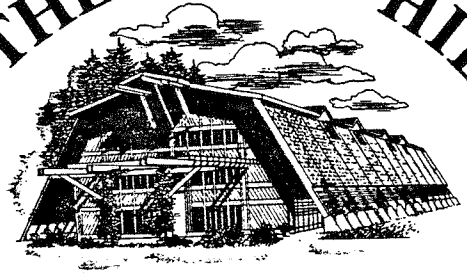
The writer can select no locality more favorable for bringing to the notice of the reader a comprehensive view of the mountains and valleys of Napa county than some elevated point on St. Helena mountain. Standing within the county's extreme northern boundary and at an altitude of 4,500 feet above the sea level, Napa valley, over thirty miles in length and varying in width from one to five miles, stretches away in the distance until ultimately meeting the waters of the bay. On the west and near the city of Napa, Brown's valley with its attractive suburban homes nestles between low, cultivated hills on either side. On the east from the point of observation lies Pope valley, ten miles in length and from one to three miles wide. Then follows Chiles valley, six miles in length and of varying width from one to three miles, and beyond a range of intervening hills is to be seen Berryessa valley, ten miles in length and from one to three miles in width. Three smaller valleys may be mentioned, namely: Capell, Gordon and Wooden valleys, which, with Berryessa, yield annually large crops of grain to the farmer. The streams in all the valleys find an outlet to the bay either through Napa river or Putah creek, in Berryessa valley.

On the western range of the valley appears Mt. Veeder, a prominent elevation named for a pioneer clergyman of those early days. On the east and near St. Helena is Howell mountain, an elevated plateau some miles in width and being noted for its favorable climatic conditions. Atlas peak is another elevation east from Napa and highly recommended as a health resort. Mt. George, a little farther south and belonging to the same mountain range, stands two thousand feet above the sea level and smooth at crest as the crown of its aged owner, A. Van Der Nailen, the distinguished author and scientist, who passes part of the year near his Radium Spring, whose waters, gushing from the mountainside, possess, as he claims, the "elixir of life," which confronts and repels the approach of advancing age.

The flora of Napa county, plants indigenous to its uniform climate, are worthy of mention. There is scarcely a growth of any kind unfriendly to its generous soil. Here are to be seen nearly all the cereals as well as the deciduous fruits familiar to the agriculturist; the apple, the pear and the peach, together with cherries, plums, prunes, apricots and grapes. Walnuts, almonds and olives are also grown throughout the county, while some of the semi-tropical fruits, such as the orange and lemon, are likewise to be noted, though as yet they are not of commercial value. But Napa's undisputed claim to the world's admiration is the charm of its beautiful scenery. Let the observer stand upon the summit of some elevation during the month of May and behold this far-famed valley in all its native grandeur. Its parallel ranges clothed in emerald with ever-changing shadows—vineyards, orchards and cheerful abodes where happiness abides, spring flowers with whose breath the winds are laden, crystal streams sparkling in the sun as they hurry to their ocean home, the gentle breeze from off the sea, vocal with the lark's liquid notes voicing his praise to early spring—all united in presenting a picture of such transcendent loveliness as to merit the words of that lover of the beautiful who thus paid tribute to an enchanted scene:

"The landscape saw its Lord and smiled."

RUTHERFORD HILL



1979

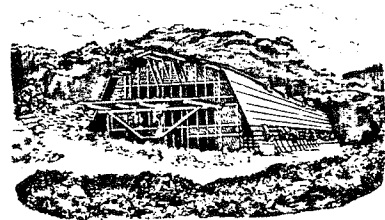
Napa Valley

ZINFANDEL

MEAD RANCH — ATLAS PEAK

PRODUCED AND BOTTLED BY
RUTHERFORD HILL WINERY, RUTHERFORD, CALIFORNIA U.S.A.
ALCOHOL 14.3% BY VOLUME

RUTHERFORD HILL



1980

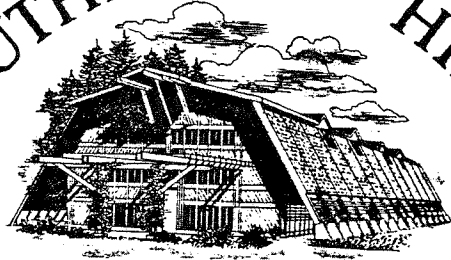
Napa Valley

ZINFANDEL

Mead Ranch/Atlas Peak

PRODUCED AND BOTTLED BY RUTHERFORD HILL WINERY
RUTHERFORD, CALIF., USA • ALCOHOL 15.4% BY VOLUME

RUTHERFORD HILL



1975
Napa Valley

ZINFANDEL

MEAD RANCH — ATLAS PEAK

Produced and Bottled by
RUTHERFORD HILL WINERY, RUTHERFORD, CALIFORNIA
Alcohol 13.2% by volume

RUTHERFORD HILL



1976
Napa Valley

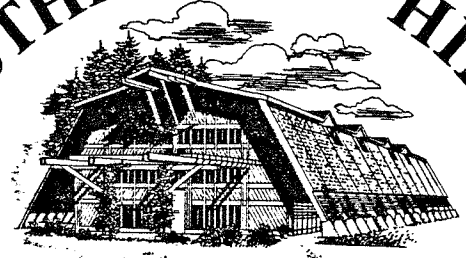
ZINFANDEL

MEAD RANCH — ATLAS PEAK

Produced and Bottled by
RUTHERFORD HILL WINERY, RUTHERFORD, CALIFORNIA
Alcohol 13.4% by volume

Exhibit 6

RUTHERFORD HILL



1977

Napa Valley

ZINFANDEL

MEAD RANCH—ATLAS PEAK

PRODUCED AND BOTTLED BY
RUTHERFORD HILL WINERY, RUTHERFORD, CALIFORNIA
Alcohol 15.7% by volume

RUTHERFORD HILL



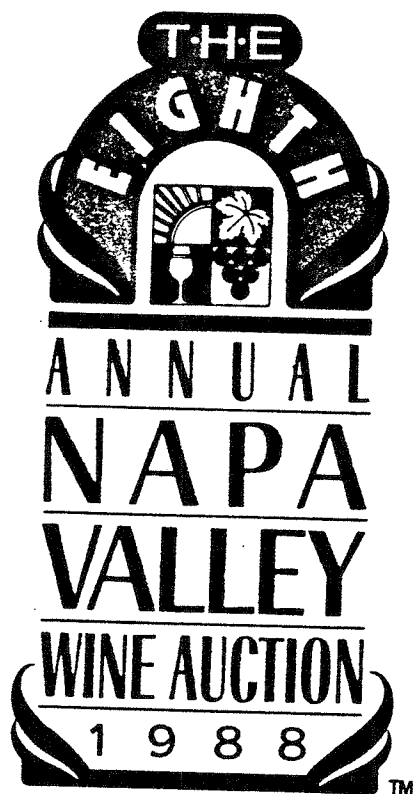
1978

Napa Valley

ZINFANDEL

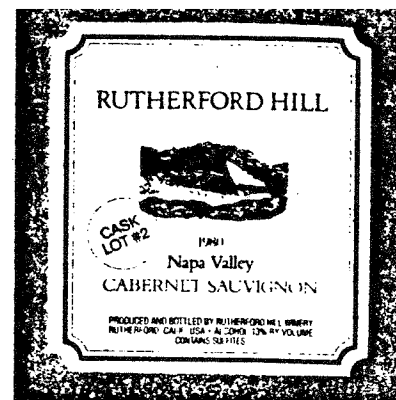
MEAD RANCH—ATLAS PEAK

PRODUCED AND BOTTLED BY
RUTHERFORD HILL WINERY, RUTHERFORD, CALIFORNIA
Alcohol 15.6% by volume



*June 16, 17 and 18, 1988
900 Meadowood Lane
St. Helena, California 94574
Celebrating the 150th Anniversary
of the Planting of Wine Grapes
in the Napa Valley*

Exhibit 7



Located on a wooded slope overlooking the Napa Valley, **Rutherford Hill Winery** produces a limited line of premium varietal wines. The winery was founded in 1976 by Bill Jaeger, and in the estate tradition draws grapes from partners' Napa Valley vineyards. To marry the proper grape varietal to soil and climate, vineyards have been selectively sited in the Oak Knoll, Rutherford and St. Helena sections of the valley. • Winemaking under Jerry Luper combines methods that are highly innovative as well as traditional. A "winery within a winery" concept predominates, with each varietal and vineyard block kept separate throughout vinification to maximize its expression. Aging takes place in small French oak barrels within our well-known hillside caves which are carved more than half a mile into the steep hills behind the winery. • Rutherford Hill Chardonnay, Merlot, Cabernet Sauvignon, Gewurztraminer and Sauvignon Blanc are round and harmonious wines with distinct varietal character. They have a reputation for consistent style and quality and have won numerous medals in the past decade. In addition, our wines are known for their drinkability, due in part to a deferred release program in which wines are given substantial bottle aging until judged by the winemaking staff to be ready to enjoy. Rutherford Hill also offers Reserve wines in outstanding vintage years. •

LOT NO.	WINE DESCRIPTION	VINTAGE
	CABERNET SAUVIGNON—Cask Lot #2	1980
	A Library selection from a limited original release, this wine has been described as complex, very well integrated and balanced, with rich and concentrated flavors. It is offered in an unusual progression of bottle sizes within a wooden case.	
191.	1 imperial, 1 magnum, 1 750ml	per lot \$250
	CABERNET SAUVIGNON	1980
	MERLOT	
	A dramatic pairing from our Library, these imperials express the huge proportions of the 1980 vintage. Both wines possess great depth of fruit and excellent balance, and will age gracefully well into the 21st Century. The imperials include a special pouring cradle.	
192.	1 imperial each varietal	per lot \$250

THE AMERICAN ISSUE

CONSTITUTIONAL PROHIBITION IS IN EFFECT

ALL LIQUOR STAINS WIPED FROM THE STARS AND STRIPES

THE AMERICAN ISSUE is a new independent magazine devoted to the study of the American Constitution. It is published by the American Constitution Society, 1111 14th Street, N.W., Washington, D.C. 20005. The magazine is published quarterly. The first issue was published in January, 1977. The magazine is published by the American Constitution Society, 1111 14th Street, N.W., Washington, D.C. 20005. The magazine is published quarterly. The first issue was published in January, 1977.

193.	1 case	per lot \$150
194.	2 cases	per case \$150
195.	2 cases	per case \$150
196.	5 cases	per case \$150

VINTAGE PORT

1985

A pre-release auction offering, from an extremely limited production. Grapes were drawn from 50 year old Mead Ranch Zinfandel vines atop Atlas Peak, then vinified in the classic Port style with the addition of oak-aged pot still Brandy. This is a rich and fragrant dessert wine, in traditional Port bottles.

197.	1 case	per case \$150
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LONG VINEYARDS



Long Vineyards is owned by Bob and Zelma Long and produces Johannisberg Riesling, Chardonnay and Cabernet Sauvignon. Seventeen acres of vines, planted in 1966-1970, grow on steep, north-facing, rocky-loam soil in the hills east of Rutherford above Lake Hennessy. Long Vineyards produces about 2,500 cases annually. • Bob and Zelma are pleased to donate the wines listed below to the 1988 Napa Valley Wine Auction for the benefit of the hospitals and Community Health Clinic Olé and for those who enjoy fine wines.

LOT NO.	WINE DESCRIPTION	VINTAGE
	CHARDONNAY	1985
	CABERNET SAUVIGNON	1984
	JOHANNISBERG RIESLING	1986
	The Chardonnay and Riesling are grown at Long Vineyards. This is the first time the Riesling has been bottled in magnums, a total of 12 were made. The Cabernet is from the U. C. Davis Vineyard in Yountville and only 30 magnums were made.	
198.	1 case, 6 magnums, 2 magnums each varietal	per lot \$250

Prior to 1921, doctors could write prescriptions for up to one pint of liquor every ten days if it would give relief from "known ailments." In 1921 it was ruled that a known sufferer from a "known ailment" could get one quart every ten days. Pharmacies also made and sold therapeutic tonics as allowed by law. These concoctions of sweet wine with beef extract and minerals added to make them "suit for use for beverage purposes" were popular among the citizenry. One of the more famous ones was Paul Garrett's Cucamonga Made Virginia Dare Wine Tonic.

Severe frost somewhat reduced the crop size. Tonnage was placed at approximately 12,000 tons.



This year marked the first effort to amend the 18th Amendment to allow winners to sell light wine.

The 1982 Napa Valley Wine Auction

Exhibit 8

*June 19 and June 20, 1982
900 Meadowood Lane
St. Helena, California USA*

maker's practiced eye, the wine receives the attention required to bring forth the most from the grape with a minimum of handling.

Buehler Vineyards is committed to making the finest wines and dedicated to the precept that the quality of the grape is the determining factor in the quality of the

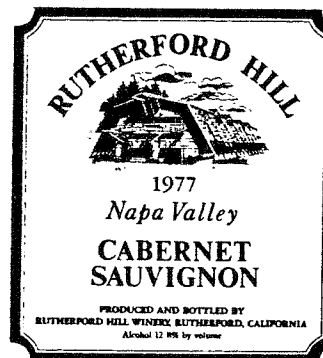
wine. Quite simply put, it is impossible to make great wine with anything less than the best grapes. To that end the winery uses only the grapes from the estate's meticulously tended hillside vineyards.

The grapes are picked at the precise moment of ripeness and crushed immediately. Relying on

his skill and experience the wine-maker's express goal is capturing the essential character of the grape in the bottle and producing a finished wine that is the outstanding example of its type. The achievement of this goal is the result of the winery's total dedication to quality and attention to detail.

Lot No.	Wine Description	Vintage	
3000	Cabernet Sauvignon	1978	
	This is one of only two Jeroboams bottled by the winery from its inaugural crush. Terry Robards awarded this wine top honors over twenty-seven other California Cabernets in 1981. His description from The New York Times is as follows. "Inky dark color, intense bouquet of cedar and cassis, great body and texture."		
189.	1 jeroboam		per lot \$100
	Cabernet Sauvignon	1980	
	This is one of only four Jeroboams bottled by the winery in this vintage. These grapes which earlier produced the 1978 vintage yielded scarcely eight hundred cases to be released this fall.		
190.	1 jeroboam		per lot \$75
	Cabernet Sauvignon	1981	
	Currently aging in oak		
191.	1 case		per lot \$135
192.	2 cases		per case \$135
193.	2 cases		per case \$135
194.	5 cases		per case \$135
195.	10 cases		per case \$135

Rutherford Hill



Designed to appear as an old California barn, Rutherford Hill Winery located on the eastern hillside above the village of Rutherford is, in every sense, a contemporary winemaking facility.

Phil Baxter, winemaster since the winery's inception, is dedicated to creating wines of balance,

flavor, and drinkability. The newest technological advances in winemaking are continuously explored, always searching for the simplest means to make wines of consistent excellence.

Basic to winemaking at Rutherford Hill is the belief that the best grapes make the best wines.

Napa Valley vineyards of winery partners, including the highly regarded Curtis Ranches, provide grapes for most of its releases.

Featuring a full-bodied Chardonnay, Rutherford Hill's white wine list includes a dry spicy Gewurztraminer, a dry Johannisberg Riesling and a surprisingly

continued

pleasant, crisp Sauvignon Blanc from newly-planted vines. Heralded red wines consist of a delightfully drinkable Cabernet Sauvignon and its popular cousin,

the berry-like Merlot. A full-bodied Pinot Noir and a robust Zinfandel from fruit grown on 40-year-old vines at the Giles Mead

ranch atop Atlas Peak complete the list.

Rutherford Hill markets wines throughout the United States and in many foreign countries.

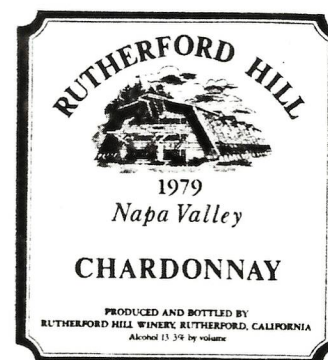
Lot No.	Wine Description	Vintage	
	Cabernet Sauvignon	1977	
	Blended with 20% Merlot and aged in French Nevers Oak this wine is soft and cedary in flavor. Currently drinkable it is worthy of aging.		
196.	1 imperial		per lot \$50
	Chardonnay "Cellar Reserve"	1980	
	Aged in Limousin Oak this full bodied - wine shows a lively acidity complimented by a vanilla wood flavor. It promises a long life.		
197.	1 methuselah		per lot \$75
	Chardonnay "Cellar Reserve"	1981	
	A Chardonnay of strong varietal character made more complex by a blending of selected lots some of which were barrel fermented. It will be bottled in August 1982.		
198.	1 case		per lot \$120
199.	2 cases		per case \$120
200.	2 cases		per case \$120
201.	5 cases		per case \$120
202.	10 cases		per case \$120
	Gewurztraminer	1977, 1978, 1979, 1980	
	Spicy as its name implies, these Gewurztraminers are excellent companions of light foods as well as exotic cuisine.		
203.	4 bottles, 1 of each vintage		per lot \$70
	Merlot	1975	
	This wine has a berry-like fragrance but hints at the strength of its 20% blend of Cabernet Sauvignon. It has a subtle velvety texture with a long finish.		
204.	1 case		per lot \$90
	Merlot	1980	
	After completing its 18 months of aging in French oak this mellow red wine will be bottled in August 1982. It is similar in style to earlier award-winning releases.		
205.	1 case		per lot \$75
206.	2 cases		per case \$75
207.	2 cases		per case \$75
208.	5 cases		per case \$75
209.	10 cases		per case \$75
	Zinfandel—Mead Ranch	1975, 1976, 1977, 1978	
	This is a vertical offering of big intense Zinfandels. The last two are of late-harvest style yet dry, while the first two are more traditional. All are made exclusively from grapes harvested from 40 year old vines at the Mead Ranch on Atlas Peak.		
210.	4 bottles, 1 of each vintage		per lot \$80

The 1981 Napa Valley Wine Auction

Exhibit 9

*June 20 and June 21, 1981
900 Meadowood Lane
St. Helena, California USA*

Rutherford Hill



Though the cellar exterior pays architectural tribute to the grand old barns of Northern California, Rutherford Hill Winery is in every sense contemporary.

Winemaker Philip Baxter and consulting enologist-partner R. Bradford Webb use the finest steel fermenters and most modern equipment to bring the new wines of each vintage into being. From that point forward, they need to intervene very little while the wines age, primarily in oak.

As much as skill and superior equipment can do, an old truth remains: The best wine can be made only from the best grapes. In the end, this is Rutherford Hill's guiding principle.

A great majority of the grapes for Rutherford Hill wines come

from vineyards owned and tended by managing partners in the winery. The William Jaeger family's Curtis Ranches, a few miles north of Napa city, and the Freemark-Carpy-Wood Ranches, between the cellars and Rutherford town, provide all of the grapes for most of the wines on Rutherford Hill's list. Only one—a special Zinfandel—comes entirely from an independent grower.

Established only in 1976, Rutherford Hill already won acclaim for both red and white wines.

First among the whites is the richly flavored, full-bodied Chardonnay from Curtis Ranches. A fine, almost-dry Gewürztraminer, a fruity Johannisberg Riesling, and a beautifully crisp Pinot Noir Blanc are companions to the Chardon-

nay. The happy prospect of a Sauvignon Blanc waits only for maturity of vines newly planted in a partner-owned vineyard at Rutherford.

Foremost among the red wines is a Cabernet Sauvignon of the generous proportions for which the Napa Valley is so well known. Its elegant cousin is the berry-like Merlot. A full-bodied Pinot Noir from Curtis Ranches attracts favorable notice. Finally, Rutherford Hill produces a robust, unique Zinfandel from fruit grown on 40 year old vines at the Giles Mead Ranch atop Atlas Peak east of Napa city.

Currently the winery is marketing 60,000 cases annually. The production goal is 200,000 cases, to be reached as affiliated vineyards achieve full maturity.

Lot No.	Wine Description	Vintage	Quantity
420.	Cabernet Sauvignon This wine combines an initial intense Merlot aroma with the rich fragrance of fully developed Cabernet Sauvignon berries. From its long aging in French oak, the subtle complexities of tannin and vanillin enhance the wine's charm. Quite drinkable as a young wine, additional cellaring will add a desirable mellowness to its balance and finesse.	1976	1 case
421.	Cabernet Sauvignon The 1976 and 1978 vintages are described above and below. The 1977 is very similar in style to the highly acclaimed 1976. The nose is full, berrylike and rich. As delicious as the flavors are now, they will improve and develop in the coming years.	1976, 1977, 1978	6-pack/2 bottles each
422.	Cabernet Sauvignon This wine is very similar in style to the highly acclaimed 1976. The nose is full, berrylike and rich. As delicious as the flavors are now, they will improve and develop in the coming years.	1977	1 case
423.	Cabernet Sauvignon Even in its extreme youth, this wine exhibits the qualities that have so impressed wine connoisseurs in the 1976 vintage. We are looking forward to enjoying its promise in the years to come.	1978	1 six litre bottle

continued

Lot No.	Wine Description	Vintage	Quantity
424.-428.	Cabernet Sauvignon Phil Baxter, our talented winemaker, blends the Cabernet with approximately twenty percent Merlot to produce a wine of complexity and finesse. We use Nevers oak for aging the wine and it benefits from bottle aging at the winery before release. Further cellaring by the purchaser will result in a wine of superior bouquet and taste.	1980	1 barrel* (225 litres)
429.	Chardonnay The 1978 and 1979 are described separately in the next sections. The 1977 was our first Chardonnay, and we are very pleased with the wine. It exhibits full varietal flavor plus the nuances of new 60-gallon Limousin oak barrels. The subtle blending of the lively Chardonnay character with French oak yields a balanced wine, beautifully appropriate with fine food.	1977, 1978, 1979	6-pack/2 bottles each
430.	Chardonnay—Napa Valley Following a very successful first release in 1977, Rutherford Hill Winery has come into its own with this honeyed, beautifully balanced wine. The restrained use of new Limousin oak plus the intense fruit of fully mature grapes yields a complex wine to rival the Montrachets of Burgundy. Drink it now, or cellar it for even greater enjoyment.	1978	1 case
431.	Chardonnay	1979	1 six litre bottle
432.	Chardonnay This 1979 Chardonnay reflects a balance of varietal flavor, oak, and alcohol. As is our tradition, the wine is 100 percent Chardonnay and is suitable for drinking now, although cellaring for two to three years will give it more bottle bouquet and complexity.	1979	1 case
433.-437.	Chardonnay This wine is aged, in part in new Limousin oak. The remainder is held in stainless steel to preserve the varietal flavor. Owning our own vineyards allows Phil Baxter, our winemaker, to develop his own style, so beautifully typified in the 1978 vintage.	1980	1 barrel
438.	Gewürztraminer The 1976 represents the first year of production for Rutherford Hill and winemaker Phil Baxter successfully produced a crisp, dry, spicy Gewürztraminer setting the style for subsequent vintages. The wine is interesting now, and had developed a bottle bouquet unique to this grape. In the 1977 vintage, the strong Gewürztraminer character is muted to provide a more graceful dinner companion. It is styled to show a delicate floral nature. A barely perceptible sweetness was retained to balance the varietal bitterness and crisp acidity. This wine is a natural accompaniment to sweet, smoked or spiced meats, such as ham, German sausage, or paté.	1976, 1977, 1978, 1979, 1980	5-pack/1 bottle each
439.	Zinfandel—Mead Ranch The Mead Vineyard, with its 40-year-old vines at the 1200 foot elevation level, struggles each year to produce a tiny crop of fruit with very concentrated flavors. The raspberry-like fragrance and the youthful pepperiness of the 1975 vintage attest to the merit of the single vineyard designation on the label. The oak accent comes from finishing in large Yugoslavian casks and American barrels. The 1976 Zinfandel from Mead Ranch is fuller and more peppery than the 1975, our first, and has more depth on the palate. The wine shows that a classic style of Zinfandel is possible with Napa Valley grapes from an old, non-irrigated vineyard high up on Atlas Peak. Here the grapes, which achieve their finest flavors and most distinctive qualities, result in this sturdy rich wine. The 1977 is a big, high alcohol Zinfandel in the style of the Late harvests of Essences. The fruit was fully ripe and the resulting wine is rich and thick, although dry. It is a wine to enjoy with cheeses, nuts, or alone at the end of a meal. The 1978 is a robust, big fruity wine with high alcohol, but not an Essence or Late Harvest style. For fans of Napa Zinfandels, this is a beautiful, distinctive vintage.	1975, 1976, 1977, 1978	1—4-pack

continued

FULLY
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AND UPDATED

The
SIMON & SCHUSTER
Pocket Guide to

CALIFORNIA
WINES



BOB THOMPSON

A FIRESIDE BOOK
PUBLISHED BY SIMON & SCHUSTER INC.
NEW YORK LONDON TORONTO SYDNEY TOKYO

Exhibit 10

old job just a mile or two up the road. Richard Arrowood's winery went up in 1987, but his debut Chardonnay comes from 86, and his inaugural Cabernet Sauvignon from 85. Both are blended from several vineyards belonging to independent Sonoma growers. Initial volume is 8,000 cases; the goal is 15,000.

NYR: Chardonnay (understated fruit, firm textures); Cabernet Sauvignon (conventionally styled first vintage).

ARROYO SECO AVA

Centered on the town of Greenfield is a randomly shaped, fog-cooled, windblown, seldom-rainy sub-AVA of MONTEREY. Nearly all of it lies on valley floor between the Salinas River and hills to the e., but a skinny arm runs into hills w. of the voluminous but almost completely underground Salinas River. The district contains fewer than half a dozen wineries but nearly 8,500 acres of grapes, all planted since 1972. White Riesling has surpassed other varieties, but Chardonnay, Pinot Blanc, and Gewürztraminer do ever better as growers learn to deal with the local climate's curious demands.

ARROYO WINERY, VINCENT Napa T \$5.75-\$10.50 A grower/producer with 60 acres near Calistoga, Arroyo launched his estate label with three reds from 84 and a white from 85. Current production is 1,200 cases. NYR: Chardonnay (big, well marked by wood); Cabernet Sauvignon (big, rustic, thunderously oaky 84); Petite Sirah (ditto); and Gamay Noir.

ARTHUR VINEYARDS, DAVID Napa T \$13 On the same hill as Chappellet and Long Vineyards, this family winery was a newcomer with the vintage of 85. The only wine is an estate Chardonnay; current production is 2,500 cases; the vineyard's potential is 6,000. NYR: Chardonnay.

ASHLY Santa Clara T \$16.50 The partnership leases space to make an annual 1,000 cases of Monterey Chardonnay. The first vintage: 84. NYR: Chardonnay (to date, dark-gold, ultratoasty heavy-weight).

ATLAS PEAK VINEYARDS Napa T \$? Under development by Great Britain's Whitbread, Italy's Antinori, and France's Bollinger is a 300-acre vineyard high up on Atlas Peak, and an estate winery tunneled into the same hill e. of Napa city. The firm has crushed some trial lots, but the earliest possible release date for any wine is 1991. The winemaker is Dr. Richard Peterson (ex-Monterey Vineyard). The roster of wines may include one of California's few varietal Sangioveses to date but will be anchored in a Cabernet Sauvignon-based red, a Sauvignon Blanc-Semillon blend, and a Chardonnay.

AU BON CLIMAT Santa Barbara T \$13-\$25 Partners Adam Tolmach and James Clendenen make 5,000 cases per year of the great Burgundian varietals, both from bought-in Santa Barbara grapes. Of late they have been working on the run after a rented winery near Los Alamos

was bought out from under them before their new one on the Bien Nacido Vineyard was ready; they made the 89s in their permanent home. Their first vintage was 79.

*** Chardonnay (definitely of the toasty school); Reserve Chardonnay (the regular only more so; to come from Benedict Vineyard from 87 onward); Pinot Noir (complex with fruit, wood; has been its most attractive early). NYR: Pinot Noir-Benedict Vineyard (starts with 88); Pinot Noir-Bien Nacido Vineyard (also starts with 88).

AUDUBON CELLARS Alameda T \$4.50-\$13.50 The winery is the outgrowth of a label designed to raise funds to preserve wildlife, first used on 84s. Audubon became the whole identity of the Berkeley winery after a 1987 change of ownership. Under the direction of Hubertus von Wulffen, all of the grapes are bought-in from Napa, Sonoma, and San Luis Obispo counties. Yearly volume: 30,000 cases.

NYR: Sonoma Chardonnay-Sangiacomo (attractively rich 86); Sonoma Chardonnay-Wilson (just off the pace of its sibling); Napa Sauvignon Blanc-Pope Vineyards; Napa Cabernet Sauvignon; San Luis Obispo Zinfandel; Pinot Noir Blanc; blanc and rouge.

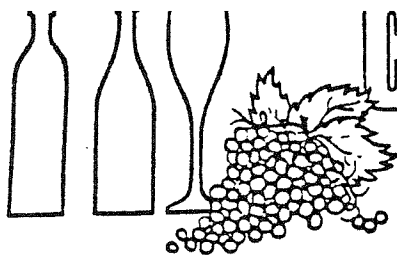
AUSTIN CELLARS Santa Barbara T \$4-\$25 After several vintages at Firestone Vineyards, brash Tony Austin opened his own winery in 1981 and forthwith set out to define the styles of Santa Barbara wines for himself and his peers. Austin has not done that, but it has achieved some intriguing results. Thus far all of his wines have come from bought-in Santa Barbara grapes; an estate vineyard is in the works in rolling country not far from his original employer's vines. The production goal is 20,000 cases.

*** Pinot Noir (variable; at its best an enticing synthesis of varietal, regional, and wood flavors) 83 84; Botrytised Sauvignon Blanc (rich in flavor and texture alike, and able to age to greater complexity than the early flavors promise) 84 86.

** Sauvignon Blanc (well off-dry, definitively vegetative); Gewürztraminer (also off-dry, perfumey), and Chardonnay.

BABCOCK VINEYARD Santa Barbara T \$6-\$16 A 40-acre, family-owned ranch on s.-facing slopes in the lower Santa Ynez Valley was first planted to vines in 1979. The label began with an 83 Johannisberg Riesling made in leased space; a permanent cellar went up in time for the 84s. Production is at 7,000 cases, all from estate grapes. NYR: Johannisberg Riesling (usually off-dry but some dry, barrel-fermented lots); Gewürztraminer (same program as Riesling); Sauvignon Blanc; Chardonnay (regular and reserve bottlings); and Pinot Noir. All steady, sound.

BAILY VINEYARD Temecula T \$6-\$10 Phil and Carol Baily grow Riesling and buy local grapes for the rest of their annual 1,800 cases. The first vintage: 86. NYR: White Riesling (dry and off-dry); Chardonnay; Sauvignon Blanc; Late Harvest Sauvignon Blanc; Muscat Blanc; White Cabernet; and Cabernet Sauvignon-Nouveau.



CONNOISSEURS' GUIDE to California Wine

JAN-FEB 77

MAY 03 1977

CHARDONNAY

\$5 and less

At dinner the other night, our host, a visitor from Cleveland, served an Auxey-Duresses with the first course. After explaining that he was an unreconstructed Francophile and given to finding bargains like this one from a small Burgundian town near Neursault, he issued a challenge to his California guests.

"Your top Chardonnays may have drawn even with the better French wines but I don't know of a California wine that can compete with this Auxey-Duresses for value. It sells for about \$4.00 here and probably less back East."

Since we had just completed a comparative tasting of Chardonnays, we could immediately identify a number of fine values. We mentioned Heitz non-vintage and Beringer Centennial Cask Chardonnays to him as proof that excellent values also exist in the lower priced California offerings. Besides, we think he'll find those wines better balanced and more attractive overall than his Auxey-Duresses.

That "show of bravado" has distinct limits. As we found in this series of tastings, bargain-priced Chardonnays are not flooding the market. The reasons for this sparse supply are found in the nature of the grape, industry economics and recent history.

Chardonnay is a relatively flexible grape in some ways. It ripens to maturity under the chilly

this issue . . .

CHARDONNAY: \$5 and Less 1

Five dozen inexpensive Chardonnays graced our table. We recommend a dozen to put on yours.

NAPA VALLEY APPELLATIONS 7

CONNOISSEURS' GUIDE talked to the local experts and offers its proposal for meaningful appellations in Napa County.

CABERNET 1970: Series Tasting . . 12

You could start drinking some of your 1970 Cabernets -- but why not wait awhile. Most of them will enjoy a long happy life.

GENERIC RED WINES. 14

We tasted our way through 67 cork finished wines with names like Burgundy, Claret, and Red Table Wine. A number of fine values emerged.

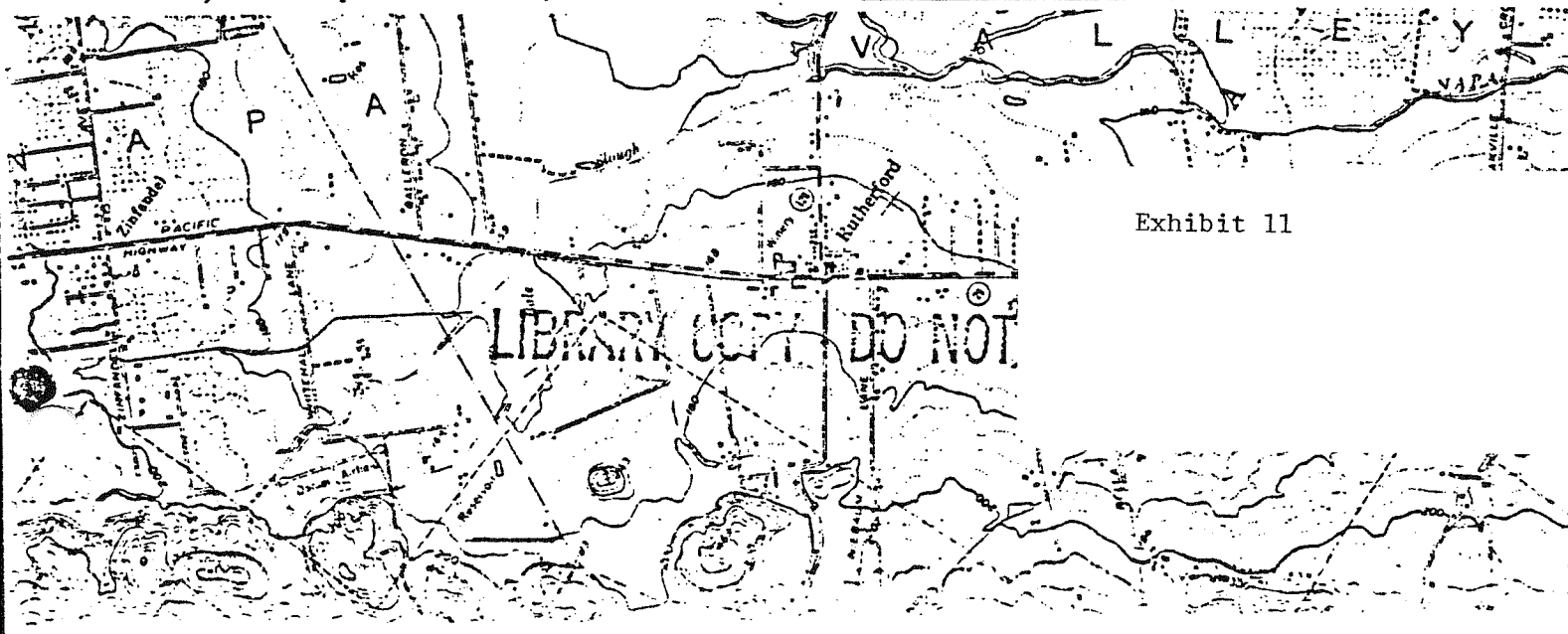
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The Napa Valley from Oakville north to Saint Helena may be the capital of California's premium wine industry.

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Napa Valley Appellations

The rules governing what may or may not appear on wine labels are about to change. Some terms will simply become more "truthful" than they have been in the past (minimum varietal content will probably be raised from 51% to 75%). Others will disappear entirely or be so changed in meaning that they will have to be considered "born-again" wine terms (Late Harvest, Spatlese and other intimations of extraordinary grape quality). Broad and somewhat meaningless appellations will also change as the push for small area appellations grows.

At the recent hearings in San Francisco and Washington, the government's foremost wine label rule makers listened carefully and sympathetically to a wide range of consumer and industry positions. When we were finally able to corral their half dozen key people, we discovered that the question in BATF's mind is not whether the current laws should change but rather by how much they should change.

In addition to the regulatory minima issues, BATF has begun to wrestle with another important issue -- the identification of small area appellations. In some ways, this is the most significant question facing the industry. For it is the one regulatory issue that will, over a period of years, lead to qualitative increase both in winemaking and in consumer information. Since it is the kind of change that affects dollar return on grapes, such appellation identification could serve as the incentive that will motivate growers to pull Johannisberg Riesling out of areas like the West Rutherford Bench which produces lousy to mediocre Rieslings and fine Cabernets. As a publication directly concerned with the quality of wine, the subject of appellation control is of great interest to us. In our constant tasting and research on winemaking we have come to have great appreciation for the difference that climate and soil means to the character and quality of wine. We're thus intrigued about any approach that may result in the production of grapes in the areas where they will achieve their highest potential. It is with this interest that we are wading into the debate on appellations.

There has been considerable debate about small area appellations. For every unique interest there is a view. Small growers in prestige areas are ready to change the law now. Wineries which have built substantial reputations on current appellations are not. Inglenook for instance, takes grapes for its Estate Bottled wines from all over Napa County and is able to identify them all as Napa Valley. Under the proposals we favor, Inglenook would have to retreat to the common denominator of Napa County. At the same time it could identify its Cask Cabernets as West Rutherford Bench and its Gewurztraminer as "Napa/Oak Knoll" since all the grapes for those wines come from very specific vineyards in those locales. Inglenook may not favor a change that complicates their marketing strategy. But the irony is that its talented winemaker, Tom Ferrell, is justifiably proud to be getting his grapes from areas he believes to be advantageous for those grapes.

AN APPELLATION PROPOSAL FOR THE NAPA VALLEY

We have chosen to focus on the Napa Valley because we believe it offers more information of the kind that winemakers like Tom Ferrell use to select grapes than any other area in California. The Napa Valley has a long and continuous viticultural history -- the kind of history that grows out of trial and error. In some parts of the Valley, vineyards have existed for more than a century. And it is Napa Valley wines which, for the most part, have created the standard against which other California wines are judged.

When one neither grows grapes in Napa County nor makes wine from such grapes, one lacks the first-hand experience to shoot easily from the hip about specific small area appellations. Drinking the finished product is useful, and is the only true and ultimate test, but it doesn't qualify us as vineyardists or scientists. We decided to look elsewhere for that background.

In gathering the information for this initial foray into small area appellations, we turned to those whose experience is longer and more schooled than ours. We combined our knowledge of the wines with the local experts' knowledge about the viticultural elements that shaped those wines. In essence, we pushed them to explain why wines from various areas in Napa County offer the unique character we have been identifying over the years. We then brought their perceptions and ours together into what we are offering here as the first, comprehensive view of small area appellations in Napa County.

We have identified nineteen separate areas that seem to have unique grape-growing characteristics. Along the way, we looked at, and abandoned, schema that included as few as three and as many as 300 separate viticultural identifications. We have no faith in nineteen as the appropriate number of small area appellations. Rather it seems to be the best approximation of reasonable differences we have been able to generate out of the information we have gathered. We offer those nineteen here in the confident expectation they will be challenged. We offer them as the gauntlet to spur a healthy debate of the issue. And to that end, we will circulate this first cut at small area appellations to every interested party in or out of the Napa Valley and ask for a critique based on their views.

One final note. In preparing this article, we talked at great length with some of the Napa Valley's leading winemen. The views of Andre Tchelischeff, Laurie Wood, Brother Timothy, Louis Stralia, Nat Fay, Roy, Roy Jr. and Walt Raymond and many others helped shape our final conclusions, recommendations and suggestions. But in the final analysis, it is we who weighed the evidence and held it up against the proof from the wineries themselves. Thus, if there be folly in this attempt to forge new ground, it is ours. If there is truth, we deserve credit simply for choosing our advisors well.

THE TRADITIONAL VIEW

In 1944, U.C. Davis Professors Amerine and Winkler introduced a very useful concept. They segregated grape-growing regions by the amount of heat to which vines would be exposed during the growing season. As explained in General Viticulture (U.C. Press, Chapter 4), "Heat summation means the sum of the mean monthly temperature above 50°" during the period of vine growth and grape production. The baseline was set at 50° F because there is almost no shoot growth below this temperature. The summation is then expressed as 'degree days'. For example, if the mean for a day is 70° F, the summation is 20 degree-days. If the mean for June is 65° F., the summation is 450 degree-days (15 degrees times 30 days).

Amerine and Winkler compared heat summation data with viticultural areas noted for success with various grape varieties and divided California into five climatic regions. Region I is the coolest (less than 2500 degree-days) and is comparable to European areas which excel in White Riesling and Gewürztraminer. Region II is warmer (2501-3000 degree-days) and is comparable to Bordeaux. Region III (3001-3500) is comparable to the Rhone and Tuscany. Region IV (3501-4000) compares with the Midi and Region V (4001+) experiences conditions comparable to Mediterranean growing areas.

Subscribers to the gross, heat summation method of viticultural area definition would divide the Napa Valley into three major segments. The first, lying south of Yountville, is spoken of as Region I. It is generally a cold area relative to the others because of its proximity to San Francisco Bay as well as the morning foggy overcast that seems to hang on longer in this area than further up the valley.

The second, Region II, lies north of Yountville and extends up to approximately Lodi Lane. At Lodi Lane the Valley narrows to approximately three quarters of a mile. In addition, a gently rolling hillock of sorts somewhat separates this Region II from the area that lies to its north.

From this point, the Valley widens out again into a warmer area. The distance from Lodi Lane to Tubbs Lane is approximately six miles. In general, this area, Region III, seems better suited to varieties like Zinfandel and Petite Sirah than to more delicate grapes.

The people with whom we spoke in preparing this article took those gross degree separations into consideration in describing viticultural districts within the Napa Valley. As our discussions with them proceeded, however, the degree-day distinctions became increasingly blurred by important variables such as elevation, exposure to the sun, soil composition and proximity to water. For the most part,



our informants abandoned the degree-day distinctions when it came to describing specific viticultural areas. So have we.

SOUTH OF YOUNTVILLE (Region I)

If you've ever experienced the cold, insistent wind that comes with the San Francisco fog, you know in your bones why the area of Napa County closest to the Bay is called a cold region. To be sure, it is warm enough to grow grapes -- but only those varieties that are able to ripen with moderate summer heat. Chardonnay, Pinot Noir, Johannisberg Riesling and Gewurztraminer are the major varieties that are successful here. There are important micro climatological and soil differences within this area, of course, which separate it into several distinct viticultural districts.

Carneros/Huichica

This southernmost Napa and Sonoma Counties grape-growing area extends from the Bay marshes to the beginnings of the Mayacamas Mountains and the City of Napa. It is the coldest of a cold area and contains many important vineyards.

The Carneros/Huichica area was recognized early for its potential and was an important vineyard area in the 1880s. Phylloxera devastated the vineyards and the replanting of premium varieties was not begun until Louis Martini acquired 200 acres in 1942. Since that time important vineyards for Beaulieu, Charles Krug, Robert Mondavi, Beringer, Buena Vista, Carneros Creek and Domaine Chandon have been planted.

Consumer recognition and the fame of the area is primarily emerging from wines made from independent grower Rene DiRosa's Winery Lake Vineyard. It supplies Chardonnay to the likes of Veedercrest, Burgess, Spring Mountain, Cuvaion and ZD and Pinot Noir to many of the same wineries as well as to Robert Mondavi. DiRosa's property, like much of Carneros/Huichica has flatlands and hilly terrain. Some wineries insist on his hillside grapes on the theory that they attain more balanced ripeness. This is particularly important since some of DiRosa's Chardonnay has failed to ripen satisfactorily in the last couple of years. Huichica is also the name given the area originally by the Indians who inhabited it prior to the mid-1800s. Carneros District seems to be the appellation in current use.

Napa/Oak Knoll

The Napa Valley begins in the flat, rich soils that lie north of the City of Napa. From Napa to Yountville and from the Silverado Trail to the slopes of the Mayacamas Mountains the grape-growing conditions are still relatively cold. Like Carneros/Huichica, the area is generally hospitable to the colder varieties. As one moves up the valley from Napa, the temperatures begin to show moderate increases during the growing season. Chardonnay produced in the Napa/Oak Knoll area, for instance, seems to resemble Carneros more than some Chardonnays produced just south of Yountville.

Christian Brothers, Beringer, Inglenook, Robert Mondavi, Beaulieu and the new Trefethen Winery have extensive vineyards in this area. Inglenook's very attractive Gewurztraminer was grown in Napa/

Oak Knoll on the Trefethen Ranch.

YOUNTVILLE TO ST. HELENA (Region II)

There are those who argue that the "Napa Valley" begins north of the Yountville Hills. What they mean is the broad Napa River flood plain that opens to view after you round the hill on the St. Helena Highway or drop down from the pass between the hills on the Silverado Trail. Napa Valley natives refer constantly to the "fog break" created by the Yountville Hills. They also suggest that the territory north of Yountville running up to St. Helena generally experiences moderately warm heat accumulations (Region II) that separates it from the areas south of the Yountville hill line and north of Lodi Lane territorial barrier. Stag's Leap, due east of Yountville, is included in this argument since it shares the warmer temperatures and the reputation for fine Cabernet.

Within this area lies some of the most noted vineyards of the Napa Valley. It is an area in which micro climate, soil structure and exposure vary widely -- even within the same vineyard. It is an area that produces both marvelous Cabernets and rich and full Chardonnays for which California and the Napa Valley have earned worldwide recognition. It is also the area of the Napa Valley most appropriate for the identification of fairly small, distinct viticultural districts.

Stag's Leap

The Stag's Leap wineries area lies in the hills and sub-valleys east of the Silverado Trail. The area is warmer than the main valley floor north or south of it because of its exceptional protection from the chilling elements, its sunny exposure and the red, ferrous soil and craggy hillsides which seem to soak up the sun's rays during daylight and radiate heat longer into the evening.

A number of important vineyards are located in Stag's Leap. The distinctiveness of the wines they have yielded adds to the justification for considering Stag's Leap as a separate, distinct viticul-

Here's to you, Mr. Hiaring!

Mr. Philip Hiaring is the crusty Editor/Publisher of Wines and Vines, a trade publication that has appointed itself "The Authoritative Voice of the Grape and Wine Industry". In a recent editorial, Mr. Hiaring wrote the following about CONNOISSEURS' GUIDE (and others):

"There is a breed of writers about wine that persists in painting the industry . . . as a bunch of confidence men. The latest rash of intemperate comment has come out on the subject of appellations of origin. . . . (their) shrill charges . . . are pretty vinegary in my glass. I am sick of them and their authors."

Well, dear readers, it seems that we stand accused of spoiling Mr. Hiaring's tippie. We despair for his gastric stability when he gets a gander of this further intemperance on our part.

essary to draw specific boundaries.

THE MOUNTAINS

At its widest point, the Napa Valley is not more than four miles broad. The hills that rise so sharply from the Valley floor are both picturesque and productive. As much as 100 years ago, some of the finest vineyards of the Napa Valley were up in the hills rather than on the flatlands. A few managed to survive but most were lost and have had to be restored. Jack Davies has made a great restoration of Schramsberg, Jerome Draper and Fritz Maytag have developed premium vineyards where the once famous La Perla Vineyards were planted and Michael Robbins plans new vineyards where Miravalle once earned fame.

There is strong belief in the quality of mountain grapes. For example, Cuvaision's Philip Togni wants to base both his Chardonnay and Cabernet on mountain grapes even though those varieties would seem to want somewhat different climates for success. It is his belief that shallow, sparse soils in this case retard the Chardonnay somewhat and give it more complexity.

In our discussions with him, Togni did not specify which mountain he preferred for his grapes. He simply wanted "mountain grapes" and seemed content to get them from either side of the Valley and from several locations.

Still, there are both climatologic and geologic differences between the areas. Grapes from these individual mountains have the kind of interesting distinctiveness that often separates one commune from another in Burgundy or one village from another along the Rhine. For that reason, we propose the following Napa Mountain viticultural districts.

Mount Veeder

Home of Mayacamas Vineyard, Mt. Veeder Vineyards and Veedercrest Vineyards (1978) this mountain has produced a string of impressive wines. Mayacamas Cabernets have been enormous, flavorful, full-bodied and extraordinarily tannic. Even with the blending in of some Valley grapes, Bob Travers produces far bigger, more chocolaty wines than are produced entirely from the Valley floor. Mike and Arlene Bernstein's Mt. Veeder Cabernets to date have been as big as the Mayacamas but softer.

Spring Mountain

From the floor of the Napa Valley, the mountain range to the west seems to present one continuous geographic barrier. In point of fact, Spring Mountain is its own separate area defined generally as the broad watershed that lies west of St. Helena. It has supported vineyards for over 100 years and is probably more responsible than any other Napa hillside for creating the mystique of "mountain grapes."

A number of varieties are grown on Spring Mountain. It is not appropriate to say that the place is only red wine country -- but the list of important Spring Mountain wines gives that impression. Petite Sirah offered by both Freemark Abbey and Ridge is grown in the York Creek Vineyard of Fritz Maytag located near the top of Spring Mountain Road.

Cabernet from the Draper Vineyard goes to Inglenook. Gamay from the Spring Mountain area has been made by Ridge Vineyards and Carneros Creek Winery. Cabernet grown in Stuart Smith's new vineyard at the very top of Spring Mountain is being crushed by Cuvaision. In 1975, when Napa Valley wineries were proclaiming the vintage as a "Pinot Noir" year, Cuvaision received Cabernet from Smith at an impressive 25° Balling. The wine is inky, brawny and concentrated.

Diamond Mountain

We'll leave it to the mapmakers to determine where Spring Mountain ends and Diamond Mountain begins. Suffice it to say that the hillside north of St. Helena running up to Calistoga contains three wineries whose widely disparate product seems to disprove the whole notion of "distinct viticultural districts" in mountain areas. Stony Hill makes superb Rieslings, Gewurztraminers and Chardonnays. Schramsberg is in the champagne business and if there ever was a winery product desiring cold weather grapes, champagne is surely it. The Diamond Creek Winery, on the other hand, has made rich, ripe, enormously tannic Cabernets from the same general area. This is simply a demonstration of the varied effects of mountain area soils and exposure. However, even with as few as three wineries sharing the area, we believe it has a potential for a separate identity. We would identify the whole mountain area west of the Valley and north of Spring Mountain as Diamond Mountain.

Howell Mountain

At the southern end of this hilly area, almost directly across the valley from Spring Mountain, is Howell Mountain. The old Sourverain property of Lee Stewart, now operated as Burgess Cellars, is located on Howell Mountain. The continuing success of that winery has encouraged other plantings on Howell Mountain but it seems too early to separate a handful of vineyards from the larger area.

Pritchard Hill

Pritchard Hill lies another half dozen miles farther south of Howell Mountain. It is a separately identifiable area that is rapidly becoming known for its own wines. All Chappellet wines from Johannisberg to Cabernet are produced there. Recently, the Mt. Veeder Winery made a tremendously successful Chardonnay from grapes grown in the Long Vineyard on Pritchard Hill (see New Releases).

LESSER AREAS IN NAPA COUNTY

Pope Valley and Chiles Valley are small, dry micro climates tucked into the hills east of the Napa Valley floor. Increased elevation and shorter growing seasons give them different character than the Valley. The Martini Winery has recently planted in Chiles Valley.

Wooden Valley, about six miles east of Napa has 800-1000 acres in grapes that go to the big wineries. Atlas Peak, east of Pritchard Hill, has been the source of superb Zinfandels. Gordon Valley has yielded a fine Muscat of Alexandria.

Napa Valley's International Team

Vintners From Three Countries Join Forces To Bring New Varietals And Methods to the U.S.

By James Suckling
Paris

When Piero Antinori of Tuscany and Christian Bizot of Champagne make their first California wine this year, they hope it will prove that the European art of blending can produce an elegant style of wine, even from a mountaintop in the Napa Valley.

They may even use non-traditional grape varieties for California, including such Italian varieties as Sangiovese, Aglianico and Grechetto.

Antinori and Bollinger are minority owners of a budding winery project in the Napa Valley that plans to release its first wine in limited quantities, no more than 1,000 cases, by 1990. Decades later they expect production to reach 120,000 cases.

"The wine will be a blend; that is pretty clear," said Champagne Bollinger's Bizot, sipping a glass of his Champagne at the Hotel Crillon in Paris after a meeting with three other directors of the recently formed California company, Separg ("grapes" spelled backward).

"In Champagne, we basically show if we are good or bad by our blend. That is why I am so keen on the idea."

Added Italian vintner Antinori, "We don't have many clear ideas yet but this is quite clear. I prefer a blend of grapes rather than a single grape. We have the same basic ideas and it will be very easy to make decisions."

Antinori has made a reputation in Italy blending French varieties, such as Cabernet Sauvignon, with such traditional types as Sangiovese. Tignanello, which blends 10 percent to 15 percent Cabernet Sauvignon with the Sangiovese, has been a bench mark in the Chianti region. Antinori has also been experimenting with blending Chardonnay

and Sauvignon Blanc with Grechetto and other local varieties in Orvieto.

Their 800-acre property is located on Atlas Peak overlooking the Napa Valley. Of 600 plantable acres, 170 are already rooted in Chardonnay and Cabernet. About \$30 million is expected to be spent on the project. The primary backer is Whitbread & Co. PLC with an 80 percent interest through its U.S. subsidiary Whitbread North America. Antinori and Bollinger have split the remaining 20 percent.

Veteran Winemaker

The venture recently appointed a president, veteran California winemaker Richard Peterson, formerly with The Monterey Vineyard. He was brought in to "flesh out" the working concept, according to Cornelius Marx, president of The Buckingham Wile Co., a division of Whitbread North America. Peterson is also bullish on both ideas — blending and new varieties.

"We are not tying any of our hands behind us," said Peterson. "We are completely open. That is the excitement about it."

For the first few years, an experimental winery will be operating on the property to help provide information on which grapes and blends should be made. Tiny lots of wines, perhaps as small as five gallons each, will be produced. These samples will be made from blends of various grape varieties grown in different areas on the property. They will serve as the basis for making a final decision on the production.

"I don't know any other way of doing it," said Peterson. "The basic idea is that we intend to find what does best. At Monterey we planted thousands of acres of different grapes from the outset. That was a terrible mistake. We are going to plant a few vines. We are not in it for next week. It will be many years."

"The odds are that we will make the style of wine that we want to make better by blending than by 100 percent varietal," Peterson said.

Peterson said that when California producers blended in the past, the idea was not to make a new wine. "They did so with the idea that they would slightly improve the Cabernet they blended or Chardonnay they blended," he said.

"They would put some Merlot in and say that it was still Cabernet but maybe a little better."

Besides blending, the company directors seem to agree that Cabernet and Chardonnay, popular as they are, are not the only way. "We want to make a better wine," said Peterson. "It doesn't have to be Cabernet necessarily. We want to do something different but first-class. We don't want to limit ourselves."

The criteria for planting will be the soil and climate, Peterson said. He said that the property on the Atlas Peak has many different soil types and micro-climates.

"One soil type needs irrigation on one schedule and it may be wrong for another," he said. "There are slopes in some areas, flat lands in others. We don't know what is going to happen on the higher slope areas or the lower slope. In our experimental plantings we will try the various things on various soils."

Antinori has been surprised by the differences in temperatures between the valley floor and the upper areas of their land. A difference of 10 degrees is not uncommon.

He also seemed positive that Sangiovese, the primary red grape in Chianti and Brunello di Montalcino, would thrive on Atlas Peak. Nebbiolo, the other great red of Italy used for Barolo and Barbaresco, would not be suitable.



The Atlas Peak property: Antinori thinks Sangiovese grapes will thrive here

"We tried in Italy and we have found that planted in any place other than Piedmont, Nebbiolo doesn't give good results," said Antinori.

Aglianico was the red he seemed the most interested in testing. It is an ancient variety originally from Greece that is only planted in the Campania region of Southern Italy near Naples. Winemaker Antonio Mastroberardino has built his reputation on the grape with his Taurasi wine.

"In my opinion it is a fantastic variety," said Antinori. "We are trying it in Tuscany and Umbria now, and it may be good for California."

Aside from grape varieties, Peterson seemed to think that four or five different wines would eventually be made at the property. "The wines are going to be very serious and that means they will age well."

According to Marx, the wines should retail for more than \$10 a bottle. "We are looking at a fairly premium price," he said.

Proprietary Name

The group still has not decided on a name for the property. But the directors agree that the wine will carry a proprietary name. "We all agree that this is the direction to take, more of a proprietary name than varietal," said Antinori. Opus One, Marlstone and Calcaire are exam-

Exhibit 12

The Wine Spectator
June 1-15, 1986

ples of other California wines that carry proprietary names.

Long before anyone considered a name or grape type, these familiar names in the wine world came together as part of a corporate strategy engineered by Whitbread's Julius Wile Sons & Co., the U.S. agent of both Antinori and Bollinger.

Marx said that Julius Wile has a wine strategy built on three legs: Italy, France and California. With a solid foundation in the first two, Wile looked for a winery in California a few years ago to fill the gap but came up empty-handed.

"After doing lengthy analysis, we decided the only way to enter California was to own the means of production," he said. "We could develop from the ground up."

Bizot also thinks business first. "It will in due course improve the sales power of Julius Wile on the wine side, and therefore we have a stronger wing to fly on," he said.

Antinori has hoped for years to start a winery in California. Despite news reports, he never seriously considered doing a project with Sebastiani. He jumped at the chance to get in on the Whitbread project.

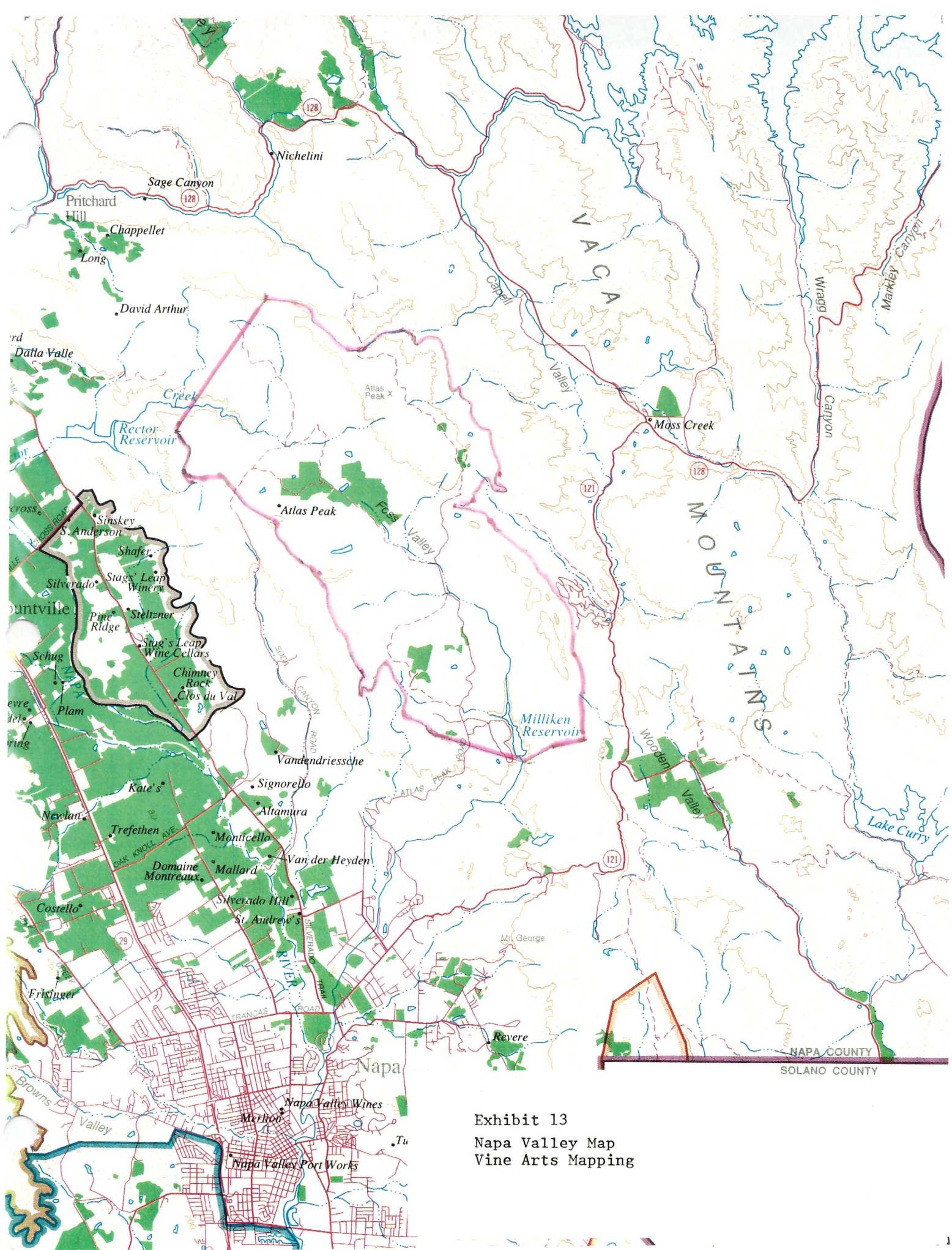
"When we had this opportunity, we took it," he said. "I have been personally a great admirer of what the California producers have done for the past 20 years."

Peterson also had hoped for an opportunity such as this. He had felt in "exile" in Monterey and looked forward to starting from the beginning again.

"Monterey is doing great now," Peterson said. "The wines are very nice and reliable. There is no pioneering. I am putting my pioneering boots back on. I didn't know there was a region totally new and different from the rest of Napa Valley in the Napa Valley."

Whether they are pioneering or promoting European winemaking ideas, few new foreign ventures have come in with such formidable financial and informational resources. Blending with unique grapes is not new to California but taking the time to find out what makes the best wine may be.

"We do not intend to copy Europe," said Peterson. "We intend to do something different. We want the best of both worlds. We don't care if we make a profit tomorrow. We are doing this for 100 years."



Ⓜ = resort

④ = vineyard

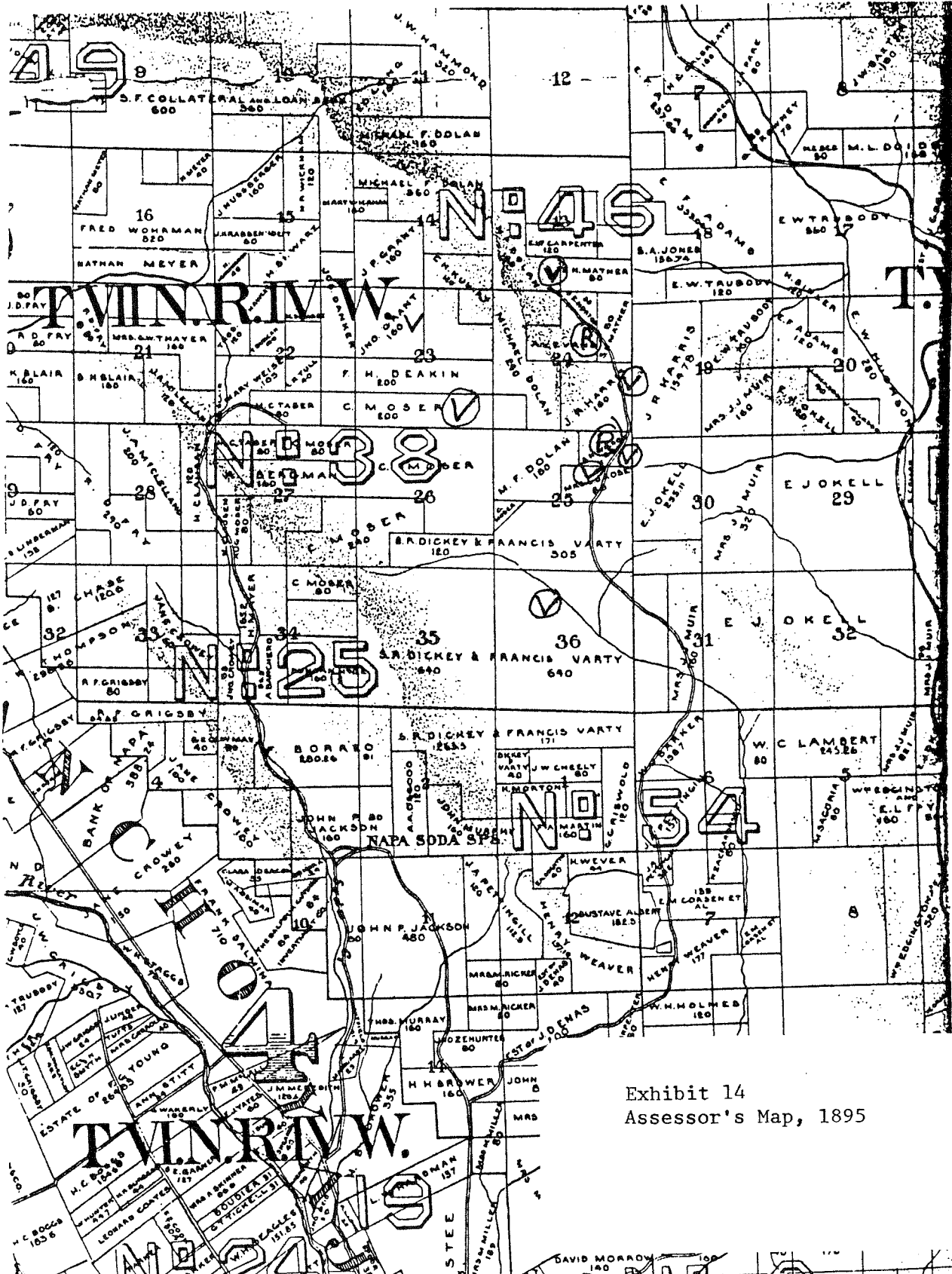


Exhibit 14
Assessor's Map, 1895

The wine ratings and descriptions in this book are based substantially on evaluations that appear in *Connoisseurs' Guide to California Wine*, the leading publication covering the California wine scene. The symbols and their meanings are as follows:

- *** An exceptional wine, worth a special search.
- ** A distinctive wine, likely to be memorable.
- * A fine example of a given type or style.
- A wine of average quality. The accompanying tasting note provides further description.
- Below average. A wine to avoid.
- ✱ A wine regarded as a "best buy," based on price and quality.

The Connoisseurs' Handbook of California Wines

Third edition, revised



by Charles E. Olken and Earl G. Singer

Editors of *Connoisseurs' Guide to California Wine*

and Norman S. Roby



ALFRED A. KNOPF NEW YORK

1984

site in Lake County near Middletown. In true pioneering spirit, Rudd and his family are clearing the hillside a few acres each year and are mainly planting red varieties, with a few trial acres of whites. Current production consists of rich, ripe, but balanced reds and also limited amounts of late harvest and port wines. Sonoma County Zinfandel and Petite Sirah have drawn outstanding review notices.

RUTHERFORD HILL WINERY Napa 1976 This is a new label, although the winery was operated by Pillsbury as Souverain of Rutherford earlier. Several partners behind Free-mark Abbey, who own large acreage in Napa, decided to acquire these premises instead of building a new winery. The first series of varieties released was of average quality (the reds were inherited in the transaction). By the 1978 vintage the white varieties were of above-average quality, and the reds had become more interesting also. Production has leveled off at 100,000 cases.

Cabernet Sauvignon: Medium-bodied, some fruit, noticeable oak ♫/♫

Chardonnay: Fruity, round, oaky ♫/♫

Johannisberg Riesling: Flowery, balanced, slightly sweet ♫/♫

Merlot: Ripe, slightly heavy, deep, oaky ♫/♫

Zinfandel: From Atlas Peak east of Napa Valley; ripe, rich, often high in alcohol ♫/♫

RUTHERFORD RANCH CELLARS (ROUND HILL CELLARS) From vineyards in the hills west of St. Helena, 1,200 cases of Zinfandel, 1,700 cases of Cabernet, and 1,500 cases of Sauvignon Blanc are produced. 1,000 cases of Chardonnay from the Gamble Ranch (Napa Valley) round out this line of wines. The reds have been exceptional.

♣ **Zinfandel:** Ripe varietal, big, rich, and tannic ♫/♫

♣ **Cabernet Sauvignon:** Complex aroma and flavors, tannic ♫/♫

RUTHERFORD VINTNERS Napa 1977 This compact winery with its 30 acres represents working retirement for former Louis Martini employee Bernard Skoda. Cabernet Sauvignon, Johannisberg Riesling, and Pinot Noir come from the adjacent vineyard; a sweet muscat is made from Fresno grapes, and a Chardonnay from the Alexander Valley. Production is at 15,000 cases with plans to double. The quality record to date shows a series of generally dull wines.

SAGE CANYON WINERY Starting with 1,200 cases of Chenin Blanc crushed at borrowed facilities in 1981, the plan is to

double production, add Chardonnay, and build a Napa Valley winery. The goal is 8-10,000 cases.

SAGE CREEK WINERY Another label belonging to Bandiera Wines, which uses it for a line of varieties grown in the Chiles Valley, a remote corner of the Napa Valley Viticultural Area where Bandiera's owners farm 200 acres. The wines—Cabernet, Chardonnay, and Sauvignon Blanc—have aroused little excitement.

ST. ANDREW'S WINERY Napa 1980 2,000 cases of Chardonnay are produced annually with about 20% of the grapes coming from the 65-acre vineyard surrounding the winery. Most of the harvest is sold to Chandon.

ST. CLEMENT VINEYARDS Napa 1975 Small winery producing limited quantities (7,500 cases) of high-quality wines. Only Cabernet Sauvignon, Chardonnay, and Sauvignon Blanc are offered, all in oaky, long-aging style. Prices are high but not out of line for quality.

Cabernet Sauvignon: Good varietal, oaky, fairly tannic style ♫

Chardonnay: Oaky, fat style with good varietal fruit ♫/♫

Sauvignon Blanc: Tight, weedy, oaky flavors ♫

ST. FRANCIS WINERY Sonoma 1979 New winery in Kenwood surrounded by 100 acres of vineyards containing 5 cool-climate varieties. Initial success was enjoyed practically across the board, and production grew to 12,000 cases with twice that amount anticipated by mid-decade.

Chardonnay: Estate-grown, deeply fruity, well-balanced, oak-edged ♫/♫

Gewurztraminer: Slightly sweet, floral, attractive, varietal spice ♫/♫

SAINTSBURY Napa 1980 A very successful new venture, Saintsbury offers medium-bodied and medium-priced Chardonnays and Pinot Noirs which have been greeted with marked enthusiasm by consumers and critics.

SANFORD WINERY Santa Barbara 1982 Sanford dropped out to start on his own and displayed great early success with a rich, deep, barrel-fermented Chardonnay.

SANFORD & BENEDICT VINEYARDS Santa Barbara 1970 Emphasizing barrel-fermented Chardonnay and Pinot Noir, the winery is now producing 10,000 cases a year. Its limited

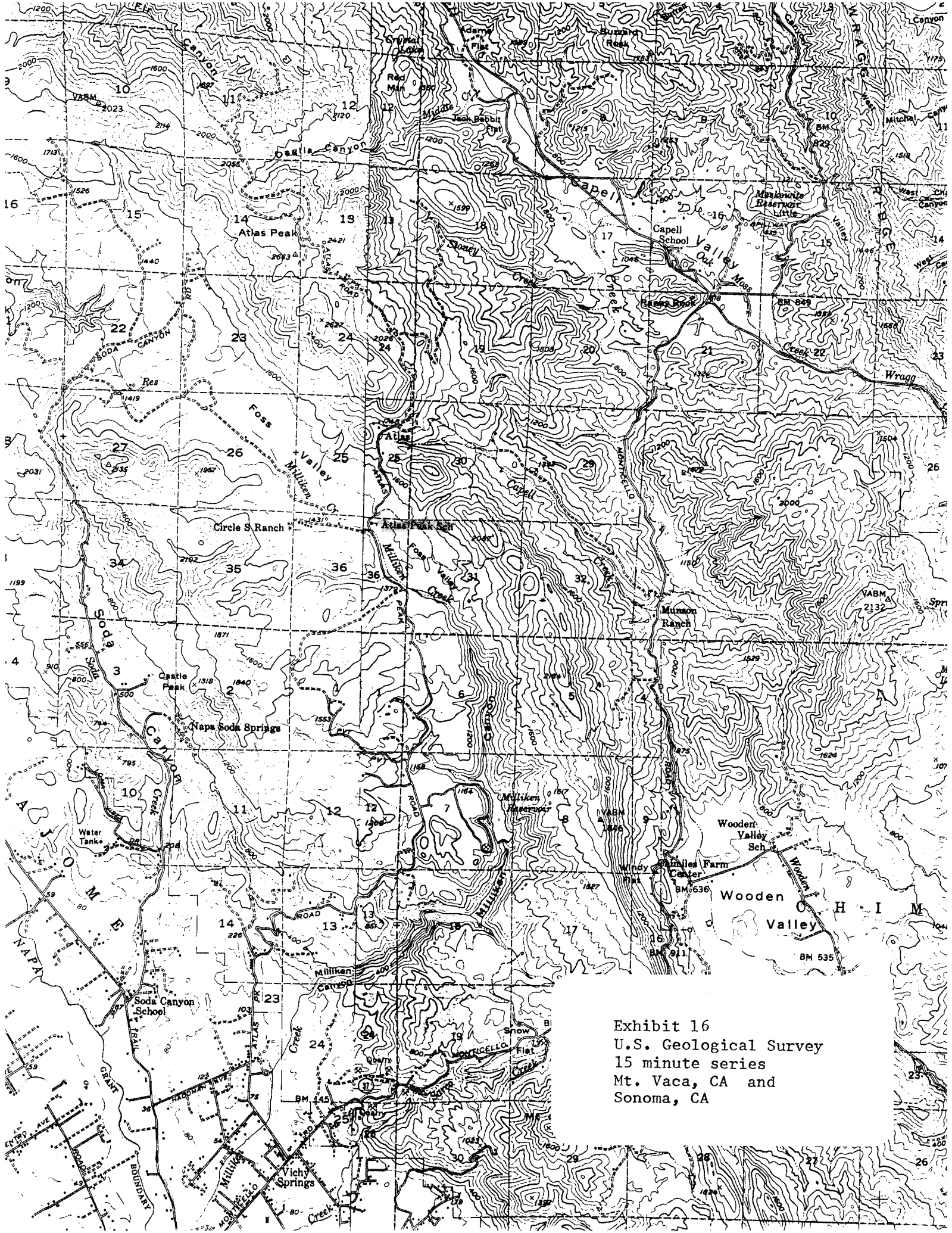


Exhibit 16
U.S. Geological Survey
15 minute series
Mt. Vaca, CA and
Sonoma, CA

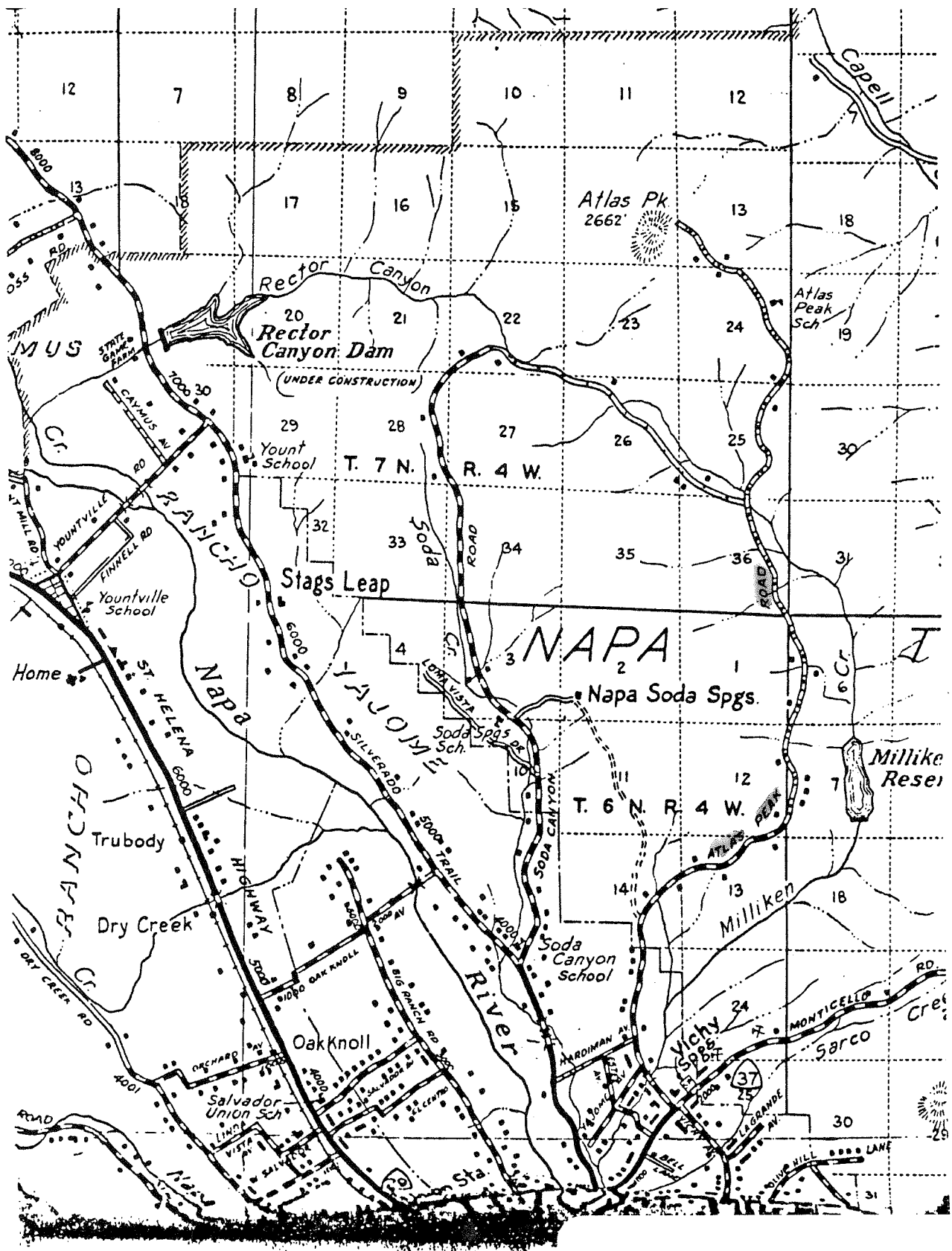


Exhibit 17

Thomas Bros. Map, 1940