



LAND USE SERVICES DEPARTMENT

PLANNING COMMISSION STAFF REPORT

HEARING DATE: October 8, 2020

AGENDA ITEM # 2

Project Description

Vicinity Map

APN: 0644-221-02, 0644-231-03, 0644-221-06, 0644-221-07 and 0644-201-15

APPLICANT: Braavos, LLC

COMMUNITY: 1st District / Chubbuck

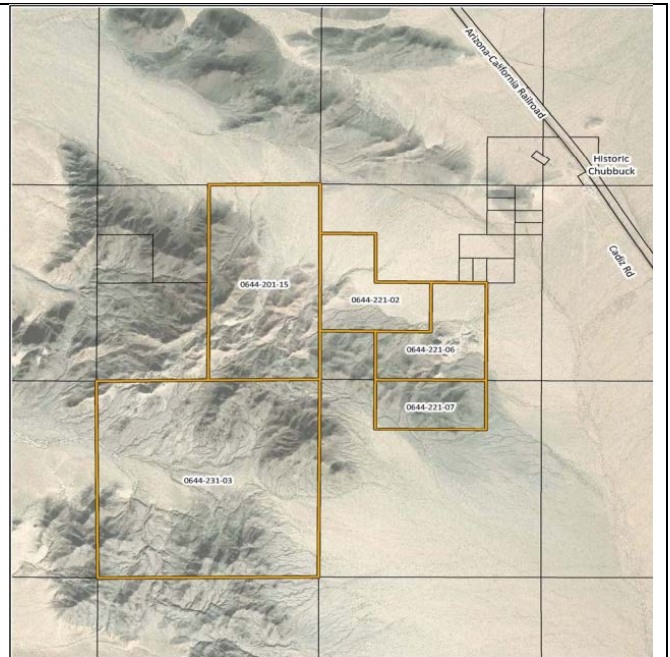
LOCATION: The Mine site is located 32 miles southeast of the town of Amboy and 21 miles south of Route 66 on Cadiz Road.

PROJECT NO: PDCI-2020-0002

CO STAFF: Steven Valdez

APP REP(S): Adam K. Guernsey, Harrison Temblador
Hungerford & Johnson

PROPOSAL: Determination of Vested Mining Rights Based on Past and Anticipated Future Land Use on 1,280 Acres referred to as the Chubbuck Mine.



3 Hearing Notices Sent On: September 24, 2020

Report Prepared By: Steven Valdez

SITE INFORMATION

Project Size: 1,280 Acres

Terrain: Disturbed and undisturbed lands of low to moderate relief.

Vegetation: Grasses and scrub found within natural low desert plant communities.

TABLE 1 - SURROUNDING LAND DESCRIPTION:

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
Site	Chubbuck Mine	Resource Conservation (RC)
North	Vacant	Resource Conservation (RC)
South	Vacant	Resource Conservation (RC)
East	Vacant	Resource Conservation (RC)
West	Vacant	Resource Conservation (RC)

	<u>Agency</u>	<u>Comment</u>
City Sphere of Influence	None	No Comments
Water Service	None	EHS Approved

STAFF RECOMMENDATION: That the Planning Commission **FIND** the recognition of Vested Mining Rights is not a project subject to CEQA; **APPROVE** the recognition and confirmation of Vested Mining Rights and require the submission of a reclamation plan and financial assurances prior to the continuation of any mining activity on the Braavos, LLC's properties; **ADOPT** findings in support of the recognition and confirmation of Vested Mining Rights; and **DIRECT** staff to file a notice of exemption.

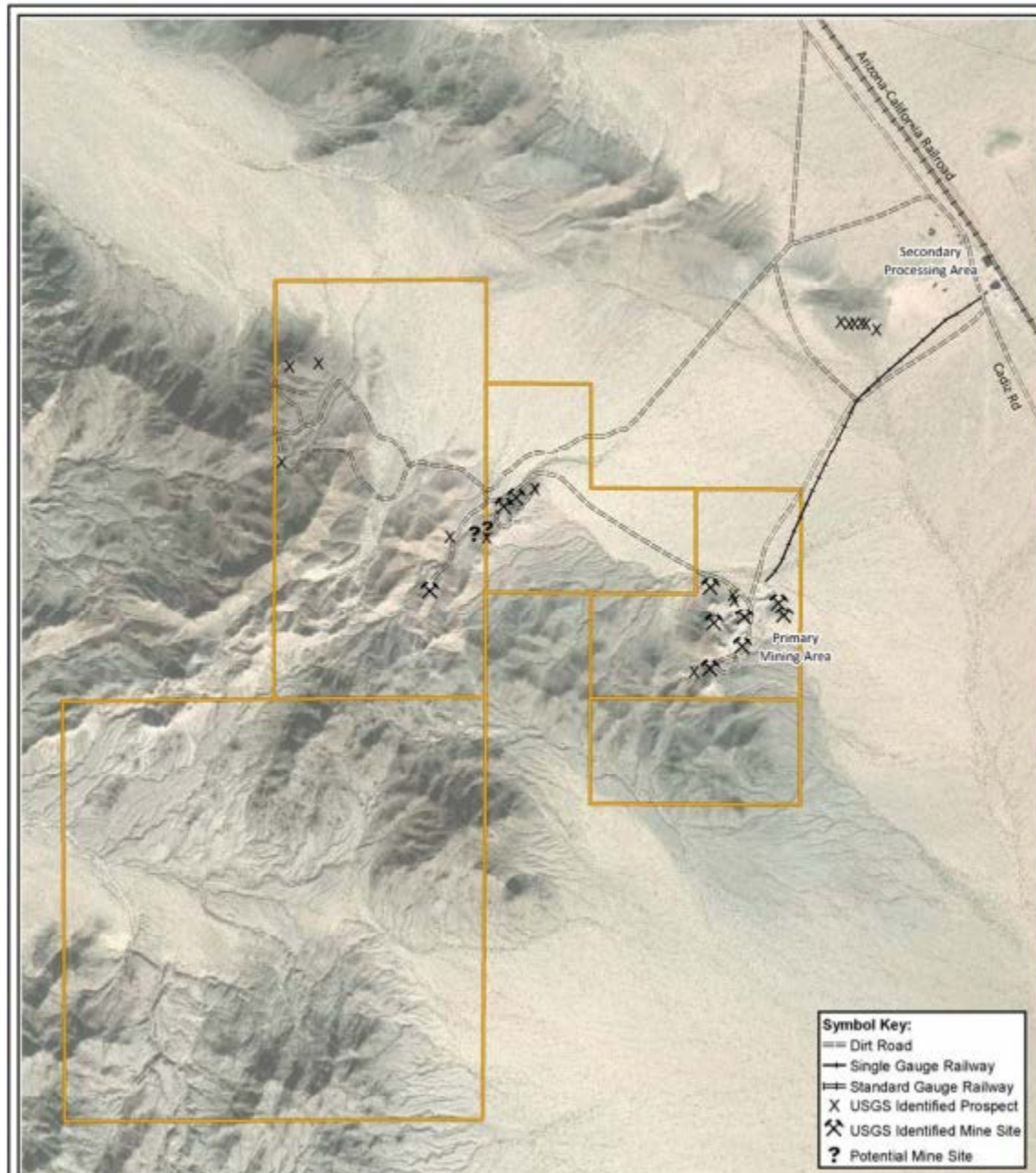
FIGURE 1 – REGIONAL LOCATION MAP

Chubbuck Mine



FIGURE 2 – SITE LOCATION MAP

Chubbuck Mine



EXISTING SITE PHOTOS

Chubbuck Mine





INTRODUCTION AND OVERVIEW:

The County of San Bernardino (“County”) serves as the Lead Agency in land use jurisdiction and is responsible for implementing the requirements of the San Bernardino County Development Code (“Development Code”) and the Surface Mining and Reclamation Act of 1975 (“SMARA”, Public Resources Code Section 2710 et seq. and California Code of Regulations Section 3500 et. seq.). On July 21, 2020, Land Use Services received a request from Braavos, LLC. (“Owner”) to make a determination of Vested Mining Rights for 1,280 Acres of land located 32 miles southeast of the town of Amboy and 21 miles south of Route 66 on Cadiz Road (Exhibit A).

On August 9, 2020, Staff responded to the request with the understanding that the County typically considers recognition of Vested Mining Rights when reviewing applications for a Mining/Reclamation Plan. Staff then suggested that if a Mining/Reclamation Plan is not being prepared, the applicant should submit a General Plan and Development Code Interpretation application to accomplish the goal of recognizing Vested Mining Rights with a noticed public hearing before Planning Commission, as if it were an appeal of the Planning Director’s decision. This application is consistent with that procedural suggestion.

Staff has reviewed and analyzed the request and all available pertinent evidence and believes that the applicant has made a sufficient showing for a Vested Mining Right to be legally recognized. This conclusion is guided by SMARA, various Court decisions as discussed below and provided within the proposed findings (Exhibit B).

VESTED MINING RIGHTS DEFINED:

Formerly, Title 14 of the California Code of Regulations (CCR), Section 3951¹, defined a vested right as follows:

A vested right is the right to conduct a legal nonconforming use of real property if that right existed lawfully before a zoning or other land use restriction became effective and the use is not in conformity with that restriction when it continues thereafter. A vested mining right, in the surface mining context, may include but shall not be limited to: the area of mine operations, the depth of mine operations, the nature of mining activity, the nature of material extracted, and the quantity of material available for extraction.

¹ This section was repealed on December 12, 2017, as the State Mining and Geology Board’s authority to make vested rights determinations was rescinded by the Legislature, Public Resources Code § 2774.4. Nevertheless, this regulation retains utility as a means to evaluate vested rights in the mining context.

A person shall be deemed to have a vested right or rights to conduct surface mining operations if, prior to January 1, 1976, the person has, in good faith and in reliance upon a permit or other authorization, if the permit or other authorization was required, diligently commenced surface mining operations and incurred substantial liabilities for work and materials necessary for the surface mining operations. Expenses incurred in obtaining the enactment of an ordinance in relation to a particular operation or the issuance of a permit shall not be deemed liabilities for work or materials. Expansion of surface mining operations after January 1, 1976 may be recognized as a vested nonconforming use under the doctrine of “diminishing assets” as set forth in Hansen Brothers Enterprises, Inc. v. Board of Supervisors (1996) 12 Cal.4th 533.

As a general rule, the law of nonconforming uses when handling “grandfathered” or “pre-existing uses” identifies three elements that must be in place for a property to have a vested right in a nonconforming use:

- 1) *The use must be in existence prior to the enactment of the restricting ordinance;*
- 2) *The use must have been lawful when begun; and*
- 3) *The use must be of substantial nature so as to warrant constitutional protection of a property right.*

The retroactive application of a zoning law ordinance that extinguishes a pre-existing nonconforming use, without due process, violates well-established constitutional principles. Therefore, the following presents information for the Planning Commission to consider for a quasi-judicial decision.

REGULATORY AND STATUTORY AUTHORITY AND CONSIDERATIONS:

The Development Code and SMARA requires that all individuals and operators contemplating surface mining must acquire (1) a permit from the County, and obtain (2) an approved plan and (3) financial assurances for reclamation prior to commencement. SMARA further requires that all existing or “vested” surface mining operations have an approved reclamation plan and financial assurances to insure implementation of the plan. Otherwise, after March 31, 1988, continuance of mining without an approved reclamation plan and financial assurances is impermissible, even for public agencies and vested mining operations.

Development Code Section 88.03.050 relating to Vested Rights states:

- a) ***Pre-SMARA and post-SMARA right to conduct surface mining operations.*** A Conditional Use Permit shall not be required for any person who has obtained a vested right to conduct surface mining operations before January 1, 1976, as long as the vested right continues and as long as no substantial changes have been made in the operation except in compliance with SMARA, State regulations, and this Chapter. Where a person with vested rights has continued surface mining in the same area subsequent to January 1, 1976, the person shall obtain County approval of a Reclamation Plan covering the mined lands disturbed by the subsequent surface mining. In those cases where an overlap exists (in the horizontal and/or vertical sense) between pre-SMARA and post-SMARA mining, the Reclamation Plan shall require reclamation proportional to that disturbance caused by the mining after January 1, 1976 (i.e., the effective date of SMARA).
- b) ***Other requirements applicable to vested mining operations.*** All other requirements of State law and this Chapter shall apply to vested mining operations.

CASE LAW INTERPRETING VESTED RIGHTS UNDER SMARA:

A number of Court decisions provide guidance for making findings for Vested Mining Rights.

Hansen Brothers. The definitive decision on Vested Mining Rights in California is the California Supreme Court case *Hansen Brothers Enterprises, Inc. v. Board of Supervisors of Nevada County* (1996) 12 Cal. 4th 540 (“*Hansen Brothers*”). *Hansen Brothers* recognized that expansion of existing surface mining operations after January 1, 1976, may be recognized as a vested non-conforming use under the doctrine of “diminishing assets”. The doctrine of diminishing assets recognizes that some nonconforming uses, especially mining, must be expanded in order for the nonconforming use to continue. The Court observed that the very nature of the excavating business contemplates the use of land as a whole, not a use limited to a portion of the land already excavated. *Hansen* articulates four key principles relevant to this application.

First, under the “diminishing asset” doctrine, a vested mining operation may expand into portions of a tract of land that was not yet disturbed on the vesting date if the record shows an objective manifestation of the operator’s intent to devote the entire area to the operation.

Second, a vested mining right includes the right “to engage in uses normally incidental and auxiliary to the nonconforming use.”

Third, increases in production to serve market demand are part of the vested right, and do not represent a change or expansion of use.

Fourth, Vested Mining Rights can be abandoned only upon the occurrence of two factors. First, the owner/operator must intend to abandon the right. Second, there must be an overt act, or failure to act, that implies the owner/operator no longer claims a vested mining right. The party claiming abandonment of a vested right has the burden of showing, by clear and convincing evidence, that a landowner knowingly and intentionally waived its vested rights.

Calvert. The decision in the California Court of Appeals case *Calvert v. County of Yuba* (3rd Dist. 2006) 145 Cal. App. 4th 613 (“Calvert”) recognized that the determination of a surface mining vested right requires a public hearing with reasonable notice and opportunity to be heard.

Hardesty. *Hardesty v. State Mining and Geology Board* (3rd Dist. 2017) 219 Cal. Rptr. 3d 28, previously published at 11 Cal. App. 5th 2017² (“Hardesty”). Hardesty is the only California case that has found an abandonment of Vested Mining Rights. The court held that a landowner abandoned his vested mining right by certifying to the government in an official document “that all mining had ceased, with no intent to resume, which was uniquely persuasive evidence of abandonment.” (*Hardesty* at p. 814.) This explicit certification documented and signed by the landowner evidenced an intent to abandon and discontinue mining operations. No such statement or certification exists in this case.

COUNTY’S LAND USE REGULATION OF MINING:

The County Code, portions of which regulated land uses within the County, was first enacted in 1951. For some land uses, the County Code identified certain zoning areas where such uses were permitted as a matter of right and did not require issuance of a use permit. In 1981, the County adopted a new Title 8 to the County’s Code, commonly called the Development Code. In 1989, the Development Code was updated to include, among other things, the requirement for a Mining Conditional Use Permit (CUP). Surface mining operations that legally existed at the time of enactment of Mining CUP requirements were allowed to continue and operate to the full extent and intended use of

² Review of this case by the California Supreme Court was denied on August 9, 2017, and the case ordered not to be officially published, meaning citation in court is prohibited, Cal. Rules of Court, Rules 8.1105 and 8.1110, 8.1115, 8.1120 and 8.1125. Nevertheless, the Planning Commission is not bound by this restriction and, in any event, this court’s analysis and rationale for this decision is instructive.

the land (including the use of incidental or accessory facilities) at the time of the zoning change with an approved reclamation plan and related financial assurances.

Pursuant to SMARA, PRC Section 2774(a), every lead agency was required to adopt ordinances in accordance with the state policy, which established procedures for the review and approval of reclamation plans and financial assurances and the issuance of a permit to conduct surface mining operations. A mining ordinance required the establishment of procedures, one of which required at least one public hearing. The local ordinance is periodically reviewed by the lead agency and revised, as necessary, to ensure that the ordinance continues to be in accordance with state policy.

The County adopted its original SMARA ordinance (Ord. No. 2062) on March 29, 1976, to enact SMARA regulations as part of Title 6 of the County Code. On May 18, 1981, Ordinance No. 2540 was adopted to shift SMARA from Title 6 to Title 8 of the County Code. The County's SMARA ordinance was subsequently certified by the State Mining and Geology Board ("SMGB") on November 19, 1981. The Board of Supervisors later revised the County's SMARA ordinance (No. 3759) on April 12, 1999, which is currently listed on the State's directory of certified mining ordinances.

The Development Code and SMARA outline requirements for conducting surface mining operations and provide a comprehensive policy for regulation of surface mining operations to assure that adverse environmental impacts are prevented or minimized and mined lands are reclaimed to a usable condition. These requirements include the need to obtain a Mining Conditional Use Permit (CUP), and approval of a Reclamation Plan and financial assurances. An exception to obtaining a CUP may exist if a mining operation was legally established and in existence prior to permitting restrictions; thus a "vested mining right" if formally recognized by the County in a public hearing.

THE APPLICANT'S PROPERTY HISTORY, OWNERSHIP AND DEVELOPMENT:

The parcels of land that are the subject of this application are located within the Resource Conservation (RC) Land Use Zoning District. Mineral resource development (mining) is an allowed land use in RC with an approved Mining CUP.

These additional facts are excerpted from the application, Exhibit "A":

Prior to 1920:

Marcus Pluth and Tom Schofield located 1,600 acres of mining claims along the Parker branch of the Santa Fe Railroad, then-known as the Desert Butte Mine. The claims included the area encompassing what is now known as the Chubbuck Mine and the parcels subject to this Application. (Joe de Kehoe, *The Silence and the Sun* (2nd ed. 2012), at pp. 130 [Exhibit 1]; see also Vredenburg, *The Mojave Desert Mining Community*

of Chubbuck (1981) [Exhibit 2]; Thomas Schofield, Finder of Fabled Dutch Oven Mine, Dies, San Bernardino Sun, September 4, 1954, p. 12 [Exhibit 3].)

1922:

C.I. Chubbuck purchased the mining claims from Marcus Pluth and Tom Schofield. (de Kehoe, supra, at pp. 131 (Exhibit 1); Vredenburg, supra (Exhibit 2).) The mine became known as the Chubbuck Mine. At this time, C.I. Chubbuck owned limestone processing plants in San Francisco and Los Angeles, which was used in the manufacture of cement and other limestone products. (de Kehoe, supra, at pp.130) (Exhibit 1).)

1922-1925:

C.I. Chubbuck hired workers and built infrastructure. The mining operation consisted of three main components: an extraction area, a processing area, and mineral resources held in reserve. The extraction area, where mineral extraction took place, included the limestone outcrops and immediate surrounding area. Initially, mining was conducted underground through a network of tunnels blasted and bored into the base of the limestone outcrops. The Mine ultimately evolved into an open surface mining operation. In addition to mining the base of the limestone outcrops, the cliff sides also were blasted with explosives. Raw limestone was initially processed by a primary rock crusher, which broke limestone into smaller, more manageable sizes that were then sent one-mile northeast to the processing area.

The processing area was adjacent to the rail line and adjacent to the town of Chubbuck. C.I. Chubbuck installed a dirt road and a narrow-gauge track to connect the extraction and processing areas. The processing area initially included a secondary crusher, ball mill and two vertical draw kilns. (de Kehoe, supra, pp.131-133).

When crushed limestone arrived at the processing area, it was fed through the secondary crusher and ball mill to break the limestone into gravel-sized pieces. Material was then placed into the kilns and cooked for 12 hours. Once cooked, burnt lime was stored in 25-gallon cans or bagged for shipment to market. Processed limestone from the lime plant was shipped to market by both train and truck. (de Kehoe, supra, at pp.131-135 [Exhibit 1].)

The Mine included, as is typical of major mining operations, areas held in reserve for future mineral extraction or ancillary activities. In addition, the community of “Chubbuck” soon developed near the Mine. It consisted of approximately 200 people and 26 families, including a school, post office, and store. (de Kehoe, supra, at pp. 143 [Exhibit 1].) The normal work schedule at Chubbuck was 12 hours per day, six or seven days per week. (de Kehoe, supra, at pp. 135 [Exhibit 1].)

May 16, 1924:

The United States government patented the “Lime Quarry 1” and “Lime Quarry 2” placer mining claims, consisting of 320 acres, to C.I. Chubbuck, today current APNs 0644-221-02, -06, and -07, as shown on Figure 5, below. (Mineral Patent, Patent Number 945433 (1924) (Section G, Appendix, at A-11). Chubbuck Lime Company filed articles of incorporation with the Colorado Secretary of State. The stated purpose for the incorporation of the Chubbuck Lime Company was for “mining, quarrying and preparing for moving, limestone and other stone, and such minerals as may be incidentally developed and to manufacture the same into the manufactured form...”

September, 1929

C.I. Chubbuck partnered with National Portland Cement Co. of El Paso to develop a cement plant adjacent to the processing area. The cement plant had a design capacity of 750 barrels of cement per day and could employ up to 200 men. Cement plant workers were housed barracks-style in three bunkhouses built a short distance from the plant. (de Kehoe, *supra*, at pp. 136-37..)

1929-1932

The cement plant, supplied with crushed limestone from the Mine, operated for approximately 18 months until 1932. Shortly after the closure of the cement plant, C.I. Chubbuck relocated the limestone processing plant to the former cement plant site. (de Kehoe, *supra*, at p. 138 [Exhibit 1].)

1937-1938

The Chubbuck Lime Company manufactured, among other products, white-reflecting lime coating for the Colorado River Aqueduct and residential roofing that approximately 90 percent of the houses built in Palm Springs used. (de Kehoe, *supra*, at p.136 [Exhibit 1]; Vredenburg [Exhibit 2].)

May 29, 1943

The Chubbuck Lime Co., Inc. acquired an additional 640 acres in fee from the Southern Pacific Land Company, current APN 0644-231-03. (Section H, Appendix, at A-16.)

March 1947

The State of California patented 480 acres within Section 16, Township 3 North, Range 16 East to C.I. Chubbuck, This land acquisition completed the assemblage of the tracts

comprising the Mine that are subject to the Application. (California Journal of Mines and Geology, Vol. 43 (January 1, 1947) p. 283. [Exhibit 10].)

1949-1952

The Chubbuck Lime Company opened a new extraction area approximately one-half mile from Chubbuck, providing crushed limestone. In this year, the Mine also reportedly suspended sales due to increasing transportation costs and the development of competing products. C.I. Chubbuck sold the Mine to the White Mountain Lime Company. The White Mountain Lime Company operated the Mine from 1949 to 1952, and planned to continue sales into the foreseeable future. Total production of limestone by this time was approximately 500,000 tons. (California Division of Mines, California Journal of Mines and Geology Vol 49, Nos. 1 and 2 (1953) at p.173 [Exhibit 12].)

August 8, 1951

On August 8, 1951, San Bernardino County adopted Ordinance 678 which enacted new land use regulations. (San Bernardino County Ordinance 678 (1951).)

1952-1953

Harms Brothers Construction Company (“Harms Bros.”) acquired the Chubbuck Mine. Harms Bros. planned to open new deposits at Cadiz and to expand its production of industrial lime to other lime products based on increasing demand for white limestone and dolomite.

1954

Harms Brothers stopped materials sales. Shumway, Gary L. et al, Desert Fever: An Overview of Mining in the California Desert Conservation Area, Prepared for Desert Planning Staff, Bureau of Land Management (February 1980) at pg. 84 [Exhibit 15]; Vredenburg, *supra* [Exhibit 2].)

1958

An article in the San Bernardino Sun-Telegram described reports of a major new cement plant at the Mine, comparable to Henry Kaiser’s Cushenbury plant (now owned by Mitsubishi Cement Corporation). The article notes: “[m]ajor limestone deposits in the Chubbuck area are said to be tied up by the cement people and tales of the projected development have even reached nationwide press wires under the name of ‘Cadiz Cement.’” (L. Burr Belden, *Former Through Highway Lapses, Nearly Forgotten*, San Bernardino Sun, April 27, 1958, at 55.)

1985

The Del Gagnon Company purchased 320 acres of Mine through grant deed, APN 0644-201-15. The Del Gagnon Company, founded by Robert Del Gagnon, acquired, held, and sold properties, with significant focus in the Southern California desert. Due to Robert Del Gagnon's personal interests, a portion of the company's portfolio was focused on mining and mineral resource properties including gold, salt, and aggregates mines, and hydrocarbon resources. (Section H, Appendix, at A-26; Declaration of Robert Del Gagnon, ¶ 15 [Exhibit 18].)

1988

In two separate transactions, the Del Gagnon Company purchased an additional 320 acres comprised of APNs 0644-221-02, 06 and 07, and 640 acres comprised of APN 0644-231-03. After acquisition, the Del Gagnon Company operated the Mine as any owner of a significant mineral deposit operates a property of this nature. The Del Gagnon Company paid taxes and held the limestone reserve in inventory while the company monitored limestone markets, conferred with experts in the limestone market, conducted mineral reserve testing, and conferred with transportation companies regarding resumption of sales and bringing the reserves to market. (Section H, Appendix, at A-10; Declaration of Robert Del Gagnon, ¶ 15 [Exhibit 16]).

2014

The Del Gagnon Company transferred their interest in the Mine parcels to the Applicant, Braavos LLC. (Appendix A at A-10; A-20; A-27.) The members of Braavos LLC are the owners of the Del Gagnon Company. (Appendix A at A-10; A-20; A-27.) The applicant purchased available parcels between Chubbuck Mine properties and the railroad along the historical access route. (Declaration of Robert Del Gagnon [Exhibit 18].)

This is only a brief history of the mine. A complete history is provided in the application (Exhibit A).

ANALYSIS:

As detailed above, and more fully described in the application, the Chubbuck Mine has a long and well-documented history that supports the conclusion that surface mining operations began before the County first required a use permit for mining. Further, there is no evidence in the record supporting a conclusion that any vested mining right has been abandoned.

Mining operations began in the early 1920s and continued without interruption through 1954. The record demonstrates that mining operations expanded over time through both

development and progressive land acquisitions. By 1947, the Chubbuck Mine comprised of an approximately 1,600-acre integrated surface mining operation, 1,280 acres of which are the subject of the current application. As of August 8, 1951, the Chubbuck Mine was a major surface mining and mineral processing operation that had legally commenced operations many years prior. The evidence demonstrates that the Chubbuck Mine and activities thereof continued to progressively expand across the property. These facts support a finding of Vested Mining Rights across the 1,280 acres that are subject of the application.

There is also no evidence that the vested mining right has been abandoned. As stated by the Court in *Hansen* “[A]bandonment of a nonconforming use ordinarily depends upon a concurrence of two factors: (1) an intention to abandon; and (2) an overt act, or failure to act, which carries the implication the owner does not claim or retain any interest in the right to the nonconforming use [citation]. Mere cessation of use does not of itself amount to abandonment although the duration of nonuse may be a factor in determining whether the nonconforming use has been abandoned [citation]’ ” (*Hansen Brothers*, supra, 12 Cal.4th at 569.).

As stated by the *Hansen* court, “mere cessation of use does not of itself amount to abandonment.” Indeed, historical cases, as well as common mining practice, confirm that holding a mineral reserve as inventory does not result in abandonment:

There are many cases where from *non-use*[] of a right the inference of abandonment may fairly be made; but that does not apply to such a case as this. It is not so generally true that the owner of mines does work every mine, which he has a right to work; and therefore the relinquishment of the right can not be presumed from the non-exercise of it. **It is well known that mines remain unwrought for generations; that they are frequently purchases or reserved, not only without any view to immediate working, but for the express purpose of keeping them unwrought until other mines shall be exhausted, which may not be for a long period of time.** It is impossible therefore to infer that this right is extinguished, though there is no evidence of the exercise of it....”

(*Seaman v. Vawdrey*, 16 Vesey, Jr. 390. High Court of Chancery, 1810 [emphasis added].³)

³ As explained above, the *Seaman* cases in non-binding precedent in a California court but the analysis and rationale for this decision may be considered instructive for purposes of a quasi-judicial determination.

The *Hardesty* case is the only California case to have found an abandonment of a vested mining right. Critical in the *Hardesty* court's finding was that the operator Hardesty's signed and certified on an official government document that the mine was closed and the operator had no intent to resume operations. Here, there is no evidence in the record that supports a conclusion Vested Mining Rights have been abandoned. Rather, the evidence shows efforts to mine the reserves through holding the Chubbuck Mine's reserves as inventory and preparing for the continuation of mineral sales.

The decision by Planning Commission shall be based on evidence in the record to support findings that the physical use of the land exhibited some level of activity relating to mining, such as material was being extracted, maintaining access, stockpiles and equipment or any other related use of the land that is objectively manifest and recognized as a nonconforming use. The facts show the Chubbuck Mine was in operation when the County enacted Ordinance 678, which took effect on August 8, 1951. According to Ordinance 678, the Mine was originally zoned M-1 (Limited Manufacturing). The M-1 zoning district did not allow mining but allowed existing activities to continue as nonconforming uses. (Ordinance No. 678, §§ 12, 15.5 [Exhibit 13].) Therefore, August 8, 1951 represents the "vesting date" against which Vested Mining Rights must be tested.

To elaborate on the vesting determination, the evidence establishes that C.I. Chubbuck constructed a primary and secondary rock crusher, connecting roads to a rail terminal, a single-gauge railroad to transport crushed limestone from the quarry to the terminal, a lime plant, two vertical kilns, and underground bunkers for oil storage. The Mine shipped crushed limestone and finished lime products by rail to Los Angeles and San Francisco to supply plants that produced cement additives. Due to the Mine's distance from population centers, a town quickly developed for employees and their families. Known as the town of Chubbuck, it eventually grew to 30-40 buildings which housed approximately 24 workers and their families. It included a school and its own post office.

The record also shows that mining operations expanded over time. In 1925, C.I. Chubbuck acquired partners and used the capital influx to expand operations and build an onsite cement plant and a rotary kiln. By 1930, the cement plant was fully-operational and manufactured Portland cement from limestone quarried from the Mine. In the meantime, C.I. Chubbuck continually upgraded his lime plant, crushers, and other machinery to keep pace with market demand. The Mine's products were widely used in the region. As examples, Chubbuck limestone was used in the construction of the Colorado River Aqueduct in 1937-1938, and at one time, 90 percent of the homes in Palm Springs had Chubbuck products in their roof coatings.

C.I. Chubbuck matched the Mine's operational expansion with a series of progressive land acquisitions. In 1924, Mr. Chubbuck obtained patents from the United States government for 320 acres which included the extraction area. In 1943, he acquired 640 additional acres to the southwest in fee from the Southern Pacific Land Company. And in

1947, he secured a patent from the State of California for the remaining 320 acres of the overall 1,280 acres that are subject to this Application. Thus, by 1947, the vested Mine had fully assembled into a large contiguous tract, with contemporaneous estimates of approximately 100 million tons of limestone reserves.

In summary, as of August 8, 1951, the vesting date, the Mine's owners had acquired the entire 1,280 acres subject to this application, the Mine was a major surface mining and mineral processing operation that had legally commenced operating many years prior, and its owners were focused on future growth and expansion. Upon preparation of this staff report, no evidence to-date has been identified which would substantiate an intent to abandon the mine properties and its mineral resources. Therefore, the facts presented herein support a finding of Vested Mining Rights across the 1,280 acres covered by this application.

PUBLIC COMMENTS:

No public comments have been received.

DETERMINATION OF VESTED RIGHTS FOR MINING FOR THE BRAAVOS, LLC'S PROPERTIES:

1. Preponderance of the Evidence: Braavos LLC, has the burden of proof in demonstrating a claim for Vested Mining Rights. The Planning Commission shall determine whether Braavos LLC, by a preponderance of the evidence, has demonstrated through oral testimony, exhibits and public comments, enough evidence to support the claim for Vested Mining Rights. The amount of evidence required is a case-by-case basis.
2. Objective manifestation: A prior CCR Section 3963⁴ provided the following guidance to the SMGB when adjudicating comparable claims:

“Relevant evidence in a proceeding for determination of a claim of vested rights shall be written or oral evidentiary statements or material demonstrating or delimiting the existence, nature and scope of the claimed vested right[s]. Such evidence shall include, but is not limited to, evidence of any permit or authorization to conduct mining operation on the property in question prior to January 1, 1976, evidence of mining activity commenced or pursued pursuant to such permit or authorization, and evidence of any zoning or land use restrictions applicable to the property in question prior to January 1,

⁴ Previously, the SMGB could, under certain circumstances, make a vested rights determination. This authority was abrogated by the Legislature and the resulting regulations, specifically, 14 CCR §3950, “the [SMGB] shall not conduct vested rights determinations.”

1976.” “Such evidence shall be measured by objective manifestations, and not subjective intent at the time of passage of SMARA, or laws, affecting Claimant’s right to continue surface mining operations without a permit. In other words, there must be identifiable evidence or conditions that have a physical basis.”

RECOMMENDATION That the Planning Commission:

1. **FIND** that the recognition of Vested Mining Rights is not a project subject to the California Environmental Quality Act (CEQA) and, even if considered a project, exempt from CEQA pursuant to 14 California Code of Regulations sections 15061(b)(3), 15261(b) and 15301;
2. **APPROVE** the recognition and confirmation of Vested Mining Rights and require the submission of a reclamation plan and financial assurances prior to the continuation of any mining activity on the Braavos, LLC’s properties;
3. **ADOPT** findings in support of the recognition and confirmation of Vested Mining Rights (Exhibit B); and
4. **DIRECT** staff to file a Notice of Exemption.

ATTACHMENTS:

- Exhibit A: Braavos, LLC’s Request for Vested Rights Determination for 1,280 Acres
Exhibit B: Findings
Exhibit C: Court Decisions
 - Hansen Brothers
 - Calvert
 - HardestyExhibit D: California Vested Rights Law, Mark D. Harrison, Esq., February 5, 1998

EXHIBIT A

Braavos, LLC's Request for Vested Rights Determination for 1,280 Acres

Chubbuck Mine Vested Rights

July 2020

Submitted to:

County of San Bernardino
Planning Department
385 N Arrowhead Ave. First Floor
San Bernardino, CA 92415
Tel: (909) 387-8311

Prepared by:

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A. Introduction

Braavos LLC (“Braavos”) owns a 1,280-acre property known as the Chubbuck Mine (“Mine” or “Chubbuck Mine”). The Chubbuck Mine is a high-quality limestone mine that began commercial operations in 1922.

Under California law, a “vested mining right” is a property right. A vested mining right comes into being when a mining operation began before local zoning ordinances first required a use permit for the activity. Because mining is a land use that must move across a property, the California Supreme Court has held that the entirety of the mining property is encompassed in such a right, not merely the area excavated at the time the County first imposed a use permit requirement. Similarly, because mining activity and the sale of mined products can fluctuate and are intensely market dependent, the Supreme Court has also held that the vested right encompasses changes in production volumes and all operational elements necessary to produce materials for market. Holding a vested mining right means that the owner is grandfathered against the need to obtain a use permit. All environmental laws applicable to any other mining operation—whether for reclamation or the protection of water, air, species, and vegetation—apply to a vested mine, even though the requirement to obtain a use permit does not.

State law requires the Planning Commission to hold a public hearing to confirm vested mining rights. This is a unique task because the Planning Commission is not being asked to make a discretionary land use decision. Rather, the Planning Commission’s job is to review the facts presented. If the facts presented support the existence of the vested right, then the Planning Commission must confirm the right. The Planning Commission’s role is thus like that of a panel of judges. The Planning Commission determine the facts, and the facts then confirm and establish the existence of the vested mining right itself.

The facts relating to the history and operation of the Chubbuck Mine are extensive and undisputed. These facts establish that the Chubbuck Mine is vested. Although all relevant facts are detailed in Section C, *infra*, the facts are summarized as follows:

1. The Chubbuck Mine commenced operations in the early 1920’s.
2. The Chubbuck Mine is a large and unique deposit of high-quality limestone. The Mine’s products were widely used in the region. As examples, Chubbuck limestone helped construct the Colorado River Aqueduct in 1937-1938, and at one time, 90 percent of the homes in Palm Springs had Chubbuck products in their roof coatings.
3. Prior to the date the County of San Bernardino first required a use permit in 1951, the Chubbuck Mine had established itself as an important and large-scale commercial mining and lime products operation. The Mine utilized rail spurs, processing equipment, product manufacturing facilities, and processing plants. A town with a school, store, and a post office, also called “Chubbuck,” quickly grew and housed the Mine’s workers and their families.

4. Due to changes in the market for the Mine's products, the owners of the property have not been able to achieve active, high volume sales for many decades. The owners of the Chubbuck Mine have, however, continued to hold the property in inventory as they continue to conduct operations to restore historical sales volumes. These operations include market analysis, mineral testing as to both quality and quantity, and strategic planning for the changing market.
5. Not surprisingly for a deposit with this history, quality, and quantity, at no time has any owner of the Chubbuck Mine ever indicated the intent to relinquish the established mining rights or taken any action that would in any way suggest that such important rights were being given up.

These facts demonstrate the existence of the vested right we are asking the Planning Commission to confirm.

The following submittal provides full factual and legal support for the Planning Commission's confirmation of such rights.

Figure 2: Vicinity Map



Figure 2. Vicinity Map Southeast San Bernardino County

The property description for the Mine is as follows:

- Assessor's Parcel Numbers ("APNs") 0644-221-02, 0644-231-03, 0644-221-06, 0644-221-07 and 0644-201-15
- Sections 15, 16, 21, and 22 of Township 3 North, Range 16 East; specifically, San Bernardino County Assessor's Map Book 0644, Page 20 (as the eastern half of Section 16) Page 22 (as portions of Section 15 and 22) and on Page 23 (as all of Section 21).
- Latitude 34.34368548, longitude -115.288364.

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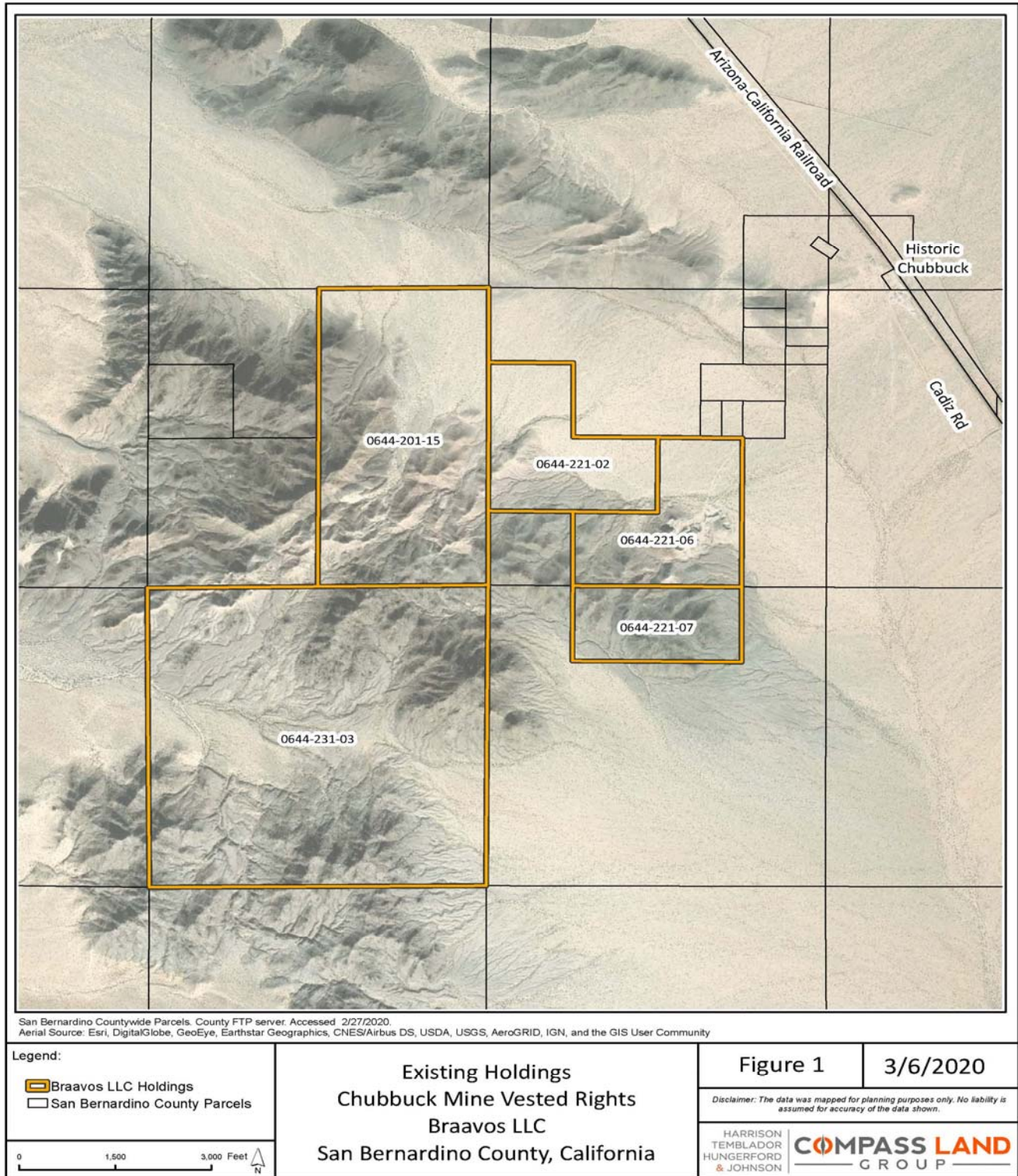
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The Applicant's existing holdings are shown on **Figure 3**, below:

Figure 3: Braavos Holdings



2.0 Applicant Information

Applicant: Braavos, LLC
73-612 Highway 111
Palm Desert, CA 92260
Tel: (760) 346-1101
Contact: Adam Gagnon
adam@delgagnonco.com

Applicant's Agent: Harrison, Temblador, Hungerford and Johnson LLP
2801 T Street
Sacramento CA, 95816
Tel: (916) 228-4224
Contact: Mark D. Harrison, Esq.
mharrison@hthjlaw.com

C. Factual Background

The following is a chronological list of the facts relevant to the vested rights determination. An analysis of the facts against the applicable legal standards follows further below. Documents pertaining to property ownership, such as title reports and patents, are included in and Appendix in Section H, *infra*.. Historical documents, such as newspaper articles, books, and reports are included in Section G, *infra*, as Exhibits.

Prior to 1920: Marcus Pluth and Tom Schofield located 1,600 acres of mining claims along the Parker branch of the Santa Fe Railroad, then-known as the Desert Butte mine. The claims included the area encompassing what is now known as the Chubbuck Mine and the parcels subject to this Application. (Joe de Kehoe, *The Silence and the Sun* (2nd ed. 2012), at pp. 130 [Exhibit 1]; see also Vredenburg, *The Mojave Desert Mining Community of Chubbuck* (1981) [Exhibit 2]; *Thomas Schofield, Finder of Fabled Dutch Oven Mine, Dies*, San Bernardino Sun, September 4, 1954, p. 12 [Exhibit 3].)

1922: C.I. Chubbuck purchased the mining claims from Marcus Pluth and Tom Schofield. (de Kehoe, *supra*, at pp. 131 (Exhibit 1); Vredenburg, *supra* (Exhibit 2).) The mine became known as the Chubbuck Mine.

At this time, C.I. Chubbuck owned limestone processing plants in San Francisco and Los Angeles, which was used in the manufacture of cement and other limestone products. (de Kehoe, *supra*, at pp.130) (Exhibit 1).)

1922-1925: C.I. Chubbuck hires workers and builds infrastructure. The mining operation consisted of three main components: an extraction area, a processing area, and mineral resources held in reserve.

The extraction area, where mineral extraction took place, included the limestone outcrops and immediate surrounding area. Initially, mining was conducted underground through a network of tunnels blasted and bored into the base of the limestone outcrops. The Mine ultimately evolved into an open surface mining operation. (de Kehoe, *supra*, at p. 132 [Exhibit 1].)

In addition to mining the base of the limestone outcrops, the cliff sides also were blasted with explosives. Raw limestone was initially processed by a primary rock crusher which broke limestone into smaller, more manageable sizes that were then sent one mile northeast to the processing area.

The processing area was adjacent to the rail line and adjacent to the town of Chubbuck. C.I. Chubbuck installed a dirt road and a narrow-gauge track to connect the extraction

and processing areas. The processing area initially included a secondary crusher, ball mill and two vertical draw kilns. (de Kehoe, *supra*, pp.131-133 [Exhibit 1].)
Figure 4 below depicts the extraction and primary processing area.

Figure 4: Primary Quarry Site



When crushed limestone arrived at the processing area, it was fed through the secondary crusher and ball mill to break the limestone into gravel-sized pieces. Material was then placed into the kilns and cooked for 12 hours. Once cooked, burnt lime was stored in 25-gallon cans or bagged for shipment to market. Processed limestone from the lime plant was shipped to market by both train and truck. (de Kehoe, *supra*, at pp.131-135 [Exhibit 1].)

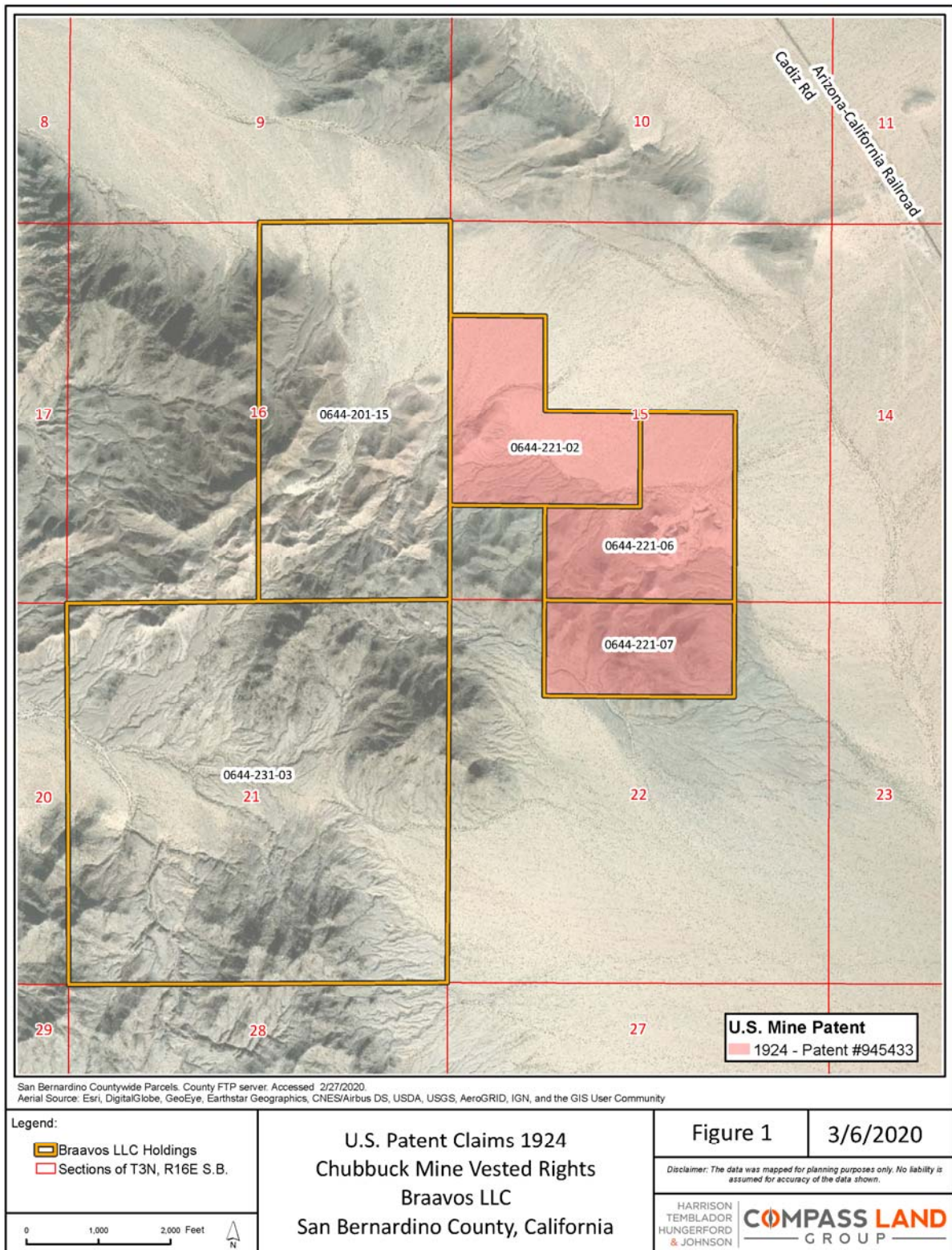
The Mine included, as is typical of major mining operations, areas held in reserve for future mineral extraction or ancillary activities. In addition, the community of “Chubbuck” soon developed near the Mine. It consisted of approximately 200 people and 26 families, including a school, post officer, and store. (de Kehoe, *supra*, at pp. 143 [Exhibit 1].) The normal work schedule at Chubbuck was 12 hours per day, six or seven days per week. (de Kehoe, *supra*, at pp. 135 [Exhibit 1].)

**May 16,
1924:**

The United States government patents the “Lime Quarry 1” and “Lime Quarry 2” placer mining claims, consisting of 320 acres, to C.I. Chubbuck, today current APNs 0644-221-02, -06, and -07, as shown on **Figure 5**, below. (Mineral Patent, Patent Number 945433 (1924) (Section G, Appendix, at A-11).

Chubbuck Lime Company files articles of incorporation with the Colorado Secretary of State. The stated purpose for the incorporation of the Chubbuck Lime Company was for “mining, quarrying and preparing for moving, limestone and other stone, and such minerals as may be incidentally developed and to manufacture the same into the manufactured form...” The articles of incorporation were signed by C.I. Chubbuck. These articles were copied and recorded in California in 1930. (**Exhibit 4.**)

Figure 5: Chubbuck Mine 1924



August 1929 C.I. Chubbuck conveys by grant deed 320 acres (formerly known as the Lime Quarry 1 and Lime Quarry 2 placer mining claims) to the Chubbuck Lime Co. (Section G, Appendix, at A-5.)

September 1929: C.I. Chubbuck partnered with National Portland Cement Co. of El Paso to develop a cement plant adjacent to the processing area. (de Kehoe, *supra*, at pp.136 [Exhibit 1]; *First Unit of Plant Will Be Ready Sept. 15*, San Bernardino Sun, August 18, 1929, p. 15 [Exhibit 5].) The cement plant had a design capacity of 750 barrels of cement per day and could employ up to 200 men. (*Ibid.*) Cement plant workers were housed barracks-style in three bunkhouses built a short distance from the plant. (de Kehoe, *supra*, at p. 137 [Exhibit 1].)

According to the United States Department of Commerce's 1929 Report on the Mineral Resources of the United States, the Mine was producing approximately 16 tons per day. (O.E. Kiessling, *Mineral Resources of the United States 1929 Part II- Nonmetals* (1929) at p. 281 [Exhibit 6].)

1929-1932: The cement plant, supplied with crushed limestone from the Mine, operated for approximately 18 months until 1932. (de Kehoe, *supra*, at p. 138 [Exhibit 1]; see also Exhibit 17.1.) Shortly after the closure of the cement plant, C.I. Chubbuck relocated the limestone processing plant to the former cement plant site. (*Id.* at p. 139.)

1937-1938: The Chubbuck Lime Company manufactured, among other products, white-reflecting lime coating for the Colorado River Aqueduct and residential roofing (de Kehoe, *supra*, at p.136 [Exhibit 1]; Vredenburg, *supra* [noting that approximately 90 percent of the houses built in Palm Springs had roof coatings made with Chubbuck products] [Exhibit 2].)

In January 1938, the U.S. Army Corps of Engineers published a report on the market for minerals to construct a series of hydroelectric dams along the Columbia River. The report noted that white limestone and marble were quarried and ground in a mill at the Mine, and that "[k]ilns at the railroad have a daily capacity of about 15 tons of quicklime. Both lime and various types of crushed limestone are shipped." (U.S. Army Corps of Engineers, *Market for Columbia River Hydroelectric Power Using Northwest Minerals: Section III—Northwest Limestones* (Vol. II 1938) [Exhibit 7].) The report also noted the mine contained approximately 60 million tons of high-calcium limestone (98.43%) and 40 million tons of dolomitic limestone. (*Ibid.*) The Mine produced approximately 100 tons daily of high calcium limestone. (*Ibid.*) Material was shipped to both Los Angeles and San Francisco. (See *Ibid.*)

January 1943: The January 1943 Report of the State Mineralogist described the Mine, in relevant part as follows:

The property comprises 3 patented placer mining claims known as Lime Quarry No. 1, Lime Quarry No. 2 and Lime Quarry No. 3, each claim containing 160 acres, in secs. 10, 11, 15 and 22, T. 3 N., R. 16 E., S.B., and 480 acres in sec. 16 and all of sec. 21, T. 3 N., R. 16 E., S.B., situated on the north end of the Iron Mountains at Chubbuck, a station on the Santa Fe Railroad. Total holdings are 1600 acres. Elevation is 1000 to 1500 feet; owner, Chubbuck Lime Company, C.I. Chubbuck, president and manager

The property has been under production since 1925. The limestone is being quarried from High Lime Ridge located on Lime Quarry No. 2 placer mining claim. The High Limestone Ridge has a general northeast course. The beds of limestone strike N. 30° W., dip 30° to 40° SW. The ridge is 1 ½ miles in length and about a mile wide, and rises above the floor of the desert plain to an altitude of 500 feet. There are also three limestone ridges in a ridge of dolomite which is 1 mile in length and half a mile wide and about 400 feet in elevation above the floor of the desert plain. These deposits are in sec. 16. The main quarry is on High Lime Ridge and is in the s ½ of sec. 15. Limestone has been quarried from four quarries known as No. 1, No. 2, No. 3, and No. 4. No. 4 quarry is 500 feet in length by 200 feet in width by 30 feet high; No. 3 quarry is 600 feet in length by 150 in width and 30 feet high; No. 2 quarry is 500 feet long by 150 feet wide by 30 feet high.

....

The lime products produced are processed lime and pebble lime.

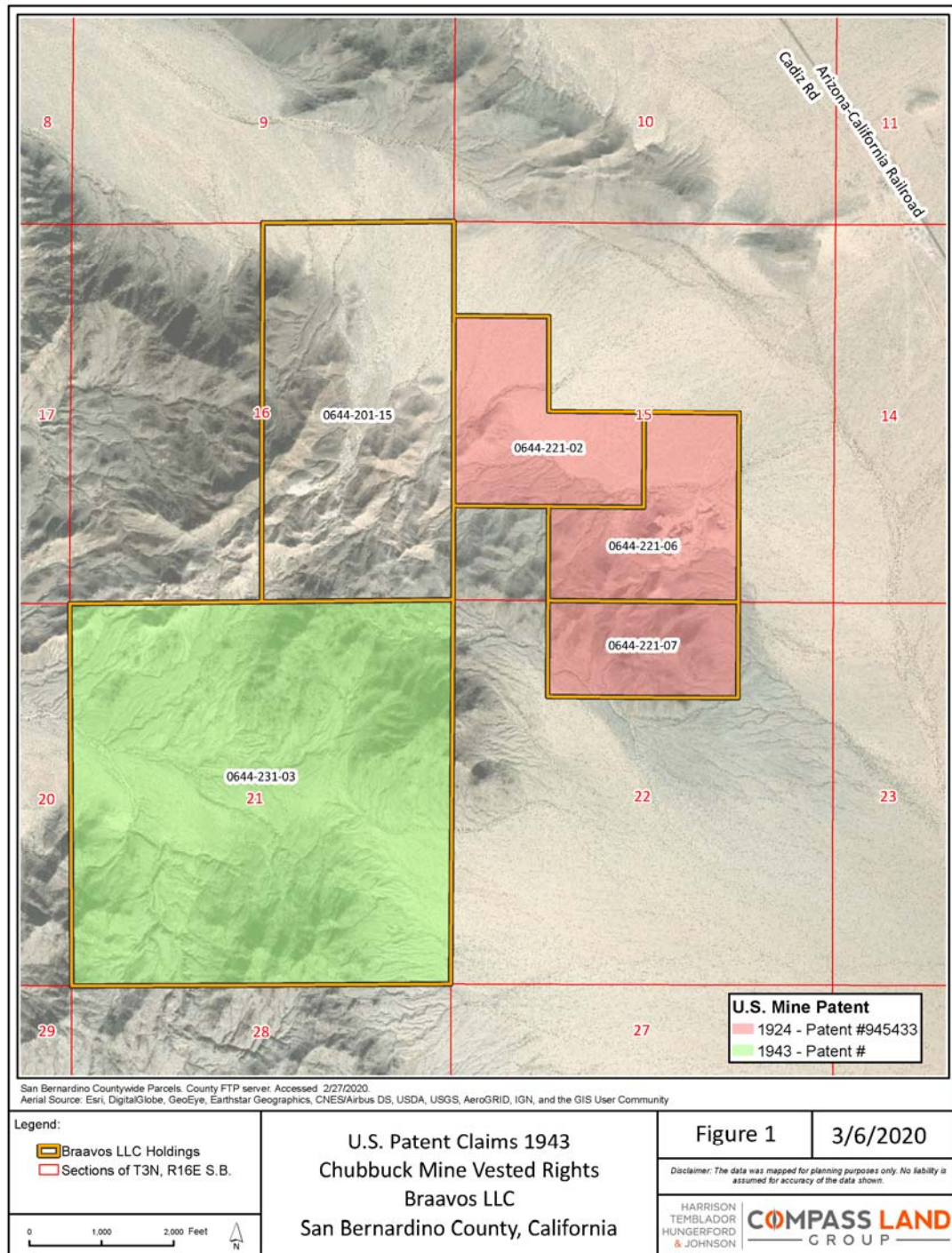
(California Journal of Mines and Geology, Vol. 39 No. 1 (January 1, 1943) p. pp. 519-520 [**Exhibit 8**].)

The same report contains the results of a mineral study indicating that the Chubbuck Mine's limestone quality is 99.8 percent calcium carbonate.

**May 29,
1943:**

The Chubbuck Lime Co., Inc. acquired an additional 640 acres in fee from the Southern Pacific Land Company, current APN 0644-231-03, as shown on **Figure 6**, below. (Section H, Appendix, at A-16.)

Figure 6: Chubbuck Mine 1943



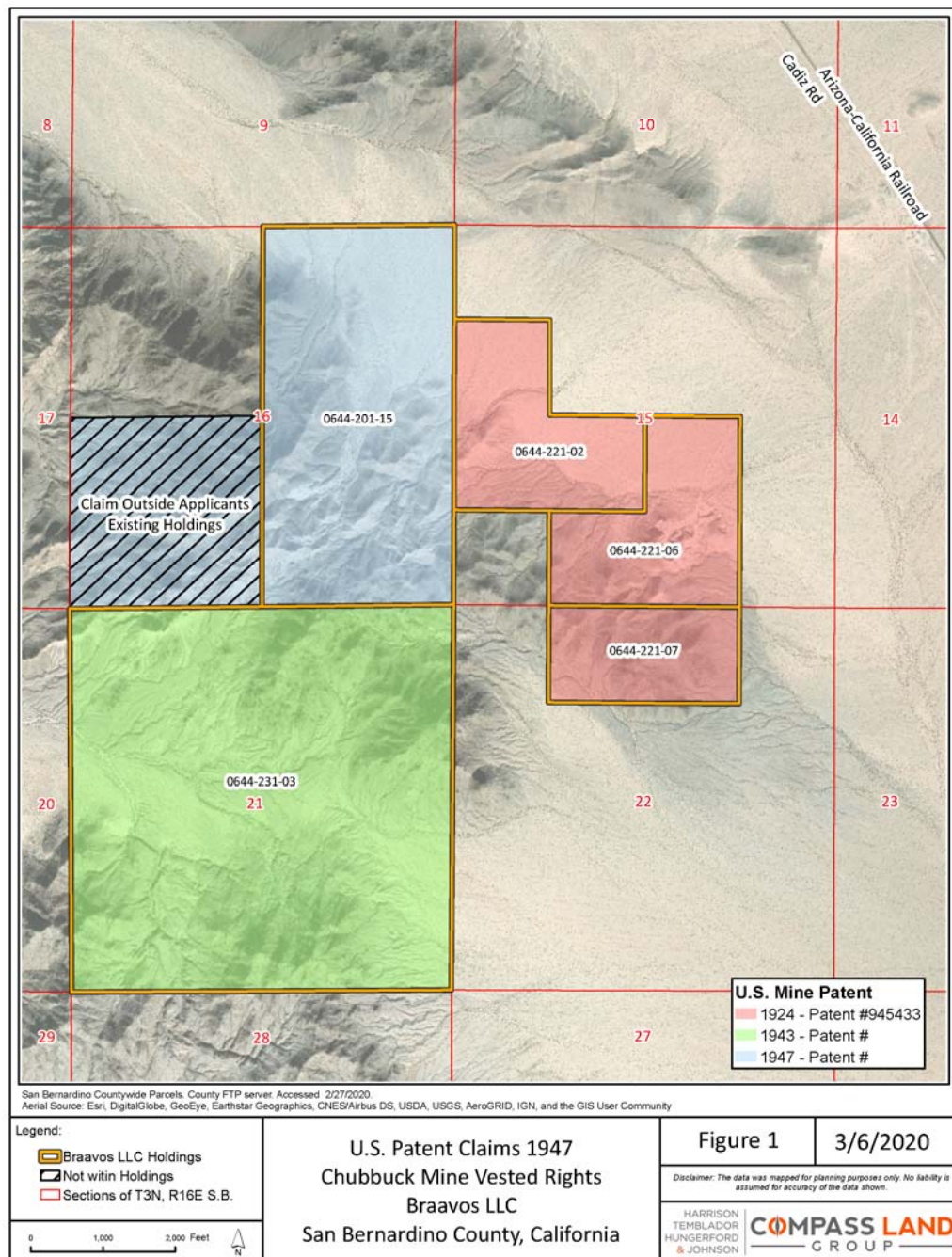
1944

By 1944, C.I. Chubbuck's South San Francisco lime manufacturing plant was the largest of its kind in the United States. (*Col. Chubbuck Wins Award*, San Mateo Times, July 12, 1944, p. 7. [Exhibit 9].)

**March
1947:**

The State of California patented 480 acres within Section 16, Township 3 North, Range 16 East to C.I. Chubbuck, as shown on **Figure 7**, below. (California Journal of Mines and Geology, Vol. 43 (January 1, 1947) p. 283. [Exhibit 10].) This land acquisition completed the assemblage of the tracts comprising the Mine that are subject to this Application.

Figure 7: Chubbuck Mine 1947



1947: The January 1947 Report of the State Mineralogist described the Mine, in relevant part:

Chubbuck Lime Company deposits were first worked from 1925-1930 by Charles I. Chubbuck, and since then by Chubbuck Lime Company with Charles I. Chubbuck, president and general manager The land holdings include three patented association placer claims of 160 acres each in secs. 10, 11, 15, 22, T. 3 N., R. 16 E., S.B.; the E ½ and SW ¼ sec. 16, and all of sec. 21, T. 3 N., R. 16 E., S.B. The land in section 16 was patented in March 1947 to Chas. I. Chubbuck by the State of California.

...

On the quarries opened by 1943, limestone had been worked to a depth of 30 feet, widths of 150 to 200 feet and lengths of 500 to 600 feet.

(California Journal of Mines and Geology, Vol. 43 (January 1, 1947) p. 283. [Exhibit 10].)

1949: The Chubbuck Lime Company opened a new extraction area approximately one-half mile from Chubbuck, providing crushed limestone. (California Division of Mines, California Journal of Mines and Geology, Vol. 47 No. 2 p. 356 (January 1951), [Exhibit 11].)

In this year, the Mine also reportedly suspended sales due to increasing transportation costs and the development of competing products. (de Kehoe, *supra*, at pp. 178-179 [Exhibit 1].)

1949-1952: C.I. Chubbuck sold the Mine to the White Mountain Lime Company. The White Mountain Lime Company operated the Mine from 1949 to 1952, and planned to continue sales into the foreseeable future. Total production of limestone by this time was approximately 500,000 tons. (California Division of Mines, California Journal of Mines and Geology Vol 49, Nos. 1 and 2 (1953) at p.173 [Exhibit 12].)

August 8, 1951: On August 8, 1951, San Bernardino County adopted Ordinance 678 which enacted new land use regulations. (San Bernardino County Ordinance 678 (1951) [Exhibit 13].)

According to communications with County staff, the County zoned the Mine “M-1” (Limited Manufacturing). The M-1 zone did not allow mining or mineral processing uses as-of-right. (*Id.* at §§ 12, 15.5.)

1952-1953 Harms Brothers Construction Company (“Harms Bros.”) acquired the Chubbuck Mine. Harms Bros. planned to open new deposits at Cadiz and to expand its production of industrial lime to other lime products based on increasing demand for white limestone and dolomite. A January 1952 report by the California Division of Mines described Harms Brothers’ activities as follows:

Harms Brothers Construction Company acquired the holdings of the former Chubbuck Lime Company, reopened the quarries and kiln at Chubbuck, San Bernardino County, and is planning to open extensive virgin deposits at Cadiz, San Bernardino County. Harms' present production of industrial lime will probably be expanded to include products of other sorts.

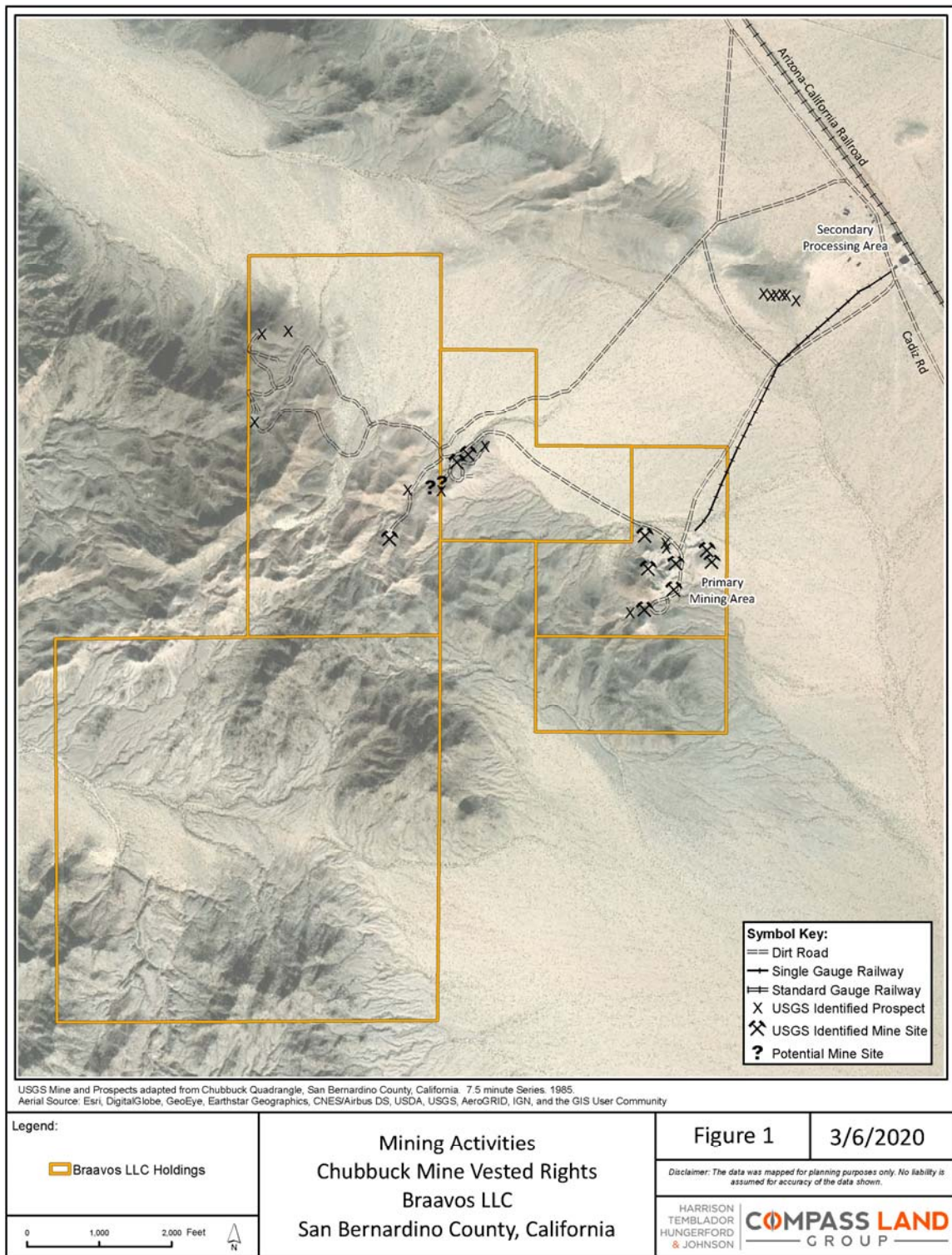
(California Division of Mines, California Journal of Mines and Geology, Vol. 48 No. 1 p. 112 (January 1952) [**Exhibit 14**].)

- 1954:** Harms Brothers stopped materials sales. (Shumway, Gary L. et al, Desert Fever: An Overview of Mining in the California Desert Conservation Area, Prepared for Desert Planning Staff, Bureau of Land Management (February 1980) at pg. 84 [**Exhibit 15**]; Vredenburg, *supra* [Exhibit 2].)
- 1956:** A 1956 United States Geologic Survey map identified the Mine area and included depictions of excavations on APN parcels 0644-221-06, 0644-231-03 and 0644-201-15. (**Exhibit 16**).
- 1958:** An article in the San Bernardino Sun-Telegram described reports of a major new cement plant at the Mine, comparable to Henry Kaiser's Cushenbury plant (now owned by Mitsubishi Cement Corporation). The article notes: "[m]ajor limestone deposits in the Chubbuck area are said to be tied up by the cement people and tales of the projected development have even reached nationwide press wires under the name of 'Cadiz Cement.'" (L. Burr Belden, *Former Through Highway Lapses, Nearly Forgotten*, San Bernardino Sun, April 27, 1958, at 55 (**Exhibit 17**).)
- 1962:** A 1962 California Division of Mines and Geology report on The Portland Cement Industry in California contains a map identifying the Chubbuck Mine as a "limestone deposit active within the last five years." (See **Exhibit 17.1**.)
- 1985:** The Del Gagnon Company purchased 320 acres of Mine through grant deed, APN 0644-201-15. (Section H, Appendix, at A-26; Declaration of Robert Del Gagnon, ¶ 15 [**Exhibit 18**].) The Del Gagnon Company, founded by Robert Del Gagnon, acquires, holds, and sells properties, with significant focus in the Southern California desert. Due to Robert Del Gagnon's personal interests, a portion of the company's portfolio has focused on mining and mineral resource properties including gold, salt, and aggregates mines, and hydrocarbon resources. (Declaration of Robert Del Gagnon, ¶¶ 2, 11. [Exhibit 18].)

The 1985 United States Geologic Survey map depicts the Mine area and includes the mines on APN parcels 0644-221-06, 0644-231-03 and 0644-201-15. (**Exhibit 19**).

Figure 8, below, depicts the extent of mining activities through 1985.

Figure 8: Mining Activities Map



1988: In two separate transactions, the Del Gagnon Company purchased an additional 320 acres comprised of APNs 0644-221-02, 06 and 07, and 640 acres comprised of APN 0644-231-03. (Section H, Appendix, at A-10; Declaration of Robert Del Gagnon, ¶ 15 [Exhibit 16]).

After acquisition, the Del Gagnon Company operated the Mine as any owner of a significant mineral deposit operates a property of this nature. The Del Gagnon Company paid taxes and held the limestone reserve in inventory while the company monitored limestone markets, conferred with experts in the limestone market, conducted mineral reserve testing, and conferred with transportation companies regarding resumption of sales and bringing the reserves to market. (Declaration of Robert Del Gagnon, ¶ 16 [Exhibit 18].)

1999: Robert Del Gagnon entered into a six-month contract with Tri-States Rock & Mineral, Inc. to enter onto the Mine to test, remove, and sell rocks and stockpiled minerals in exchange for per-ton royalties. (**Exhibit 20**).

2002: Robert Del Gagnon entered into a six-month contract with Rocket Materials Inc. to enter the Mine to test, remove, and sell stockpiled materials in exchange for per-ton royalties. (**Exhibit 21**).

2014: The Del Gagnon Company retained TerraMins, Inc. to perform a mineral survey of the Mine to determine the quantity and potential of the reserves. TerraMins based its analysis on existing drilling and sampling data, publicly-available geologic data, and a site reconnaissance. TerraMins' report, dated June 18, 2014, conservatively estimated that there were 80-100 million tons of mineable limestone reserves at the Mine. (**Exhibit 22**.)

2014: The Del Gagnon Company transferred their interest in the Mine parcels to the Applicant, Braavos LLC. (Appendix A at A-10; A-20; A-27.) The members of Braavos LLC are the owners of the Del Gagnon Company.

* * *

D. Analysis

1.0 General Legal Principles

A vested right is a property right, protected by the United States and California constitutions, to engage in mining activities notwithstanding changes in land-use regulations that might otherwise prohibit or restrict that use. Vested property rights have been formally recognized in American law since the origin of zoning ordinances in the early twentieth century. (See, e.g., *Village of Terrace Park v. Errett* (1926) 12 F.2d 239; *Jones v. City of Los Angeles* (1930) 211 Cal. 304, 307; *Beverly Oil Co. v. City of Los Angeles* (1953) 40 Cal.2d 552, 558-559; *County of San Diego v. McClurken* (1951) 37 Cal.2d 683, 686; *Edmonds v. County of Los Angeles* (1953) 40 Cal.2d 642, 651 [*Edmonds*]; *Livingston Rock etc. Co. v. County of L.A.* (1954) 43 Cal.2d 121.)

A vested mining right comes into being when a mining operation began before local zoning ordinances first required a use permit for the mining activity. As stated by the California Supreme Court: “The rights of users of property as those rights existed at the time of the adoption of a zoning ordinance are well recognized and have always been protected.” (*Hansen Bros. Enterprises v. Nevada County* (1996) 12 Cal.4th 533, 552 [*Hansen*], citing *Edmonds*, *supra*, 40 Cal.2d at 651.)

In recognition of this property right, the legislature exempted vested mining operations from use permit requirements the legislature enacted the Surface Mining and Reclamation Act (“SMARA”) in 1975 (see Pub. Resources Code, § 2710 et seq.):

No person who has obtained a vested right to conduct surface mining operations prior to January 1, 1976, shall be required to secure a permit pursuant to this chapter as long as the vested right continues and as long as no substantial changes are made in the operation except in accordance with this chapter. A person shall be deemed to have vested rights if, prior to January 1, 1976, he or she has, in good faith and in reliance upon a permit or other authorization, if the permit or other authorization was required, diligently commenced surface mining operations and incurred substantial liabilities for work and materials necessary therefore. Expenses incurred in obtaining the enactment of an ordinance in relation to a particular operation or the issuance of a permit shall not be deemed liabilities for work or materials.

(Pub. Resources Code § 2776; see also 59 Ops.Cal.Atty.Gen. 641, 644 (1977).)

Because mining, unlike other land uses, must necessarily move across property in order for the use to continue, vested mining rights are treated differently than other vested rights. The California Supreme Court’s 1996 decision in *Hansen* defined vested mining rights in terms of geographic scope, volumetric scope, and operational scope, and remains the leading case in

California and nationally on vested mining rights. The legal principles articulated by *Hansen*, as relevant here, are as follows:

Vesting Date: The vesting date is when mining became nonconforming under the applicable land-use regulations. “A legal nonconforming use is one that existed lawfully before a zoning restriction became effective and that is not in conformity with the ordinance when it continues thereafter. The use of the land, not its ownership, at the time the use becomes nonconforming determines the right to continue the use.” (*Hansen*, 12 Cal.4th at p. 540, fn. 1.) SMARA’s effective date of January 1, 1976 serves as a vesting date only for cities and counties that had not already imposed an earlier use permit requirement on mining operations through their zoning powers.

Scope of Vested Rights:

A. Geographic Scope: Under the court’s “diminishing asset” doctrine, a vested mining operation may expand into portions of a tract of land that was not yet disturbed on the vesting date if the record shows an “objective manifestation” of the operator’s intent to devote the entire area to the operation. (*Hansen*, 12 Cal.4th at pp. 555-556.) This aspect of *Hansen* built on prior courts which had recognized that “[a]n entire tract is generally regarded as within the exception of an existing nonconforming use, although the entire tract is not so used at the time of the passage or effective date of the zoning law. (*McCaslin v. City of Monterey Park* (1958) 163 Cal.App2d 339, 349; *Hansen*, at p. 556 [“The very nature and use of an extractive business contemplates the continuance of such use of the entire parcel of land as a whole, without limitation or restriction to the immediate area excavated at the time the ordinance was passed.”])

B. Operational Scope: A vested mining right includes the right to “engage in uses normally incidental and auxiliary to the nonconforming use”. (*Hansen*, 12 Cal.4th at p. 565.) Under this principle, the mine in *Hansen* included all aspects of mining that were part of the mining business, including in-stream sand and gravel mining, hillside hardrock mining, use of a rock crushing plant and structures necessary or incidental thereto. (*Id.* at 566.)

C. Volumetric Scope: Increases in production to serve market demand are part of the vested right itself and do not represent an expansion of use as a matter of law: [T]he general rule appears to be that an increase in business volume alone is not an expansion of a non-conforming use. . . . (*Hansen*, 12 Cal.4th at p. 573.)

Waiver or Abandonment: Vested mining rights can be considered abandoned only on the occurrence of two factors: (1) actual operator intent to abandon the mine and (2) an overt act, or failure to act, which implies that the operator no longer claims an interest in the vested right. (*Hansen*, 12 Cal.4th at p. 569.) Merely suspending extraction and sale of materials does not abandon a vested mining right. A person claiming abandonment of a vested mining right has the burden of proving, by clear and convincing evidence, that a landowner knowingly waived its vested rights. Doubtful cases are resolved in favor of the landowner. (*Id.* at 564.)

This analysis next considers these general vested rights principles in the context of the specific facts of the Chubbuck Mine.

2.0 Vesting Date

The County enacted Ordinance 678, which took effect on August 8, 1951. Based on information provided by the County Planning Department, the Mine was originally zoned M-1 (Limited Manufacturing). The M-1 zoning district did not allow mining, but allowed existing activities to continue as nonconforming uses. (Ordinance No. 678, §§ 12, 15.5 [Exhibit 13].) According, August 8, 1951 represents the “vesting date” against which vested mining rights must be tested.

3.0 Scope of Vested Rights

Under *Hansen’s* “diminishing asset” doctrine, a vested mining operation is entitled to expand across a tract of land that was not entirely disturbed by mining operation on the vesting date if there were “objective manifestations” of the operator’s intent to devote the entire tract to the mining use as of the vesting date. (*Hansen*, 12 Cal.4th at pp. 555-556.) The existence of actual mining operations is the best possible objective evidence of intent to mine a given parcel. (*Hansen*, at p. 556.)

Moreover, a vested mining right includes the right to “engage in uses normally incidental and auxiliary to the nonconforming use”. (*Hansen*, 12 Cal.4th at p. 565.) Under this principle, the mine in *Hansen* included all aspects of mining that were part of the mining business, including in-stream sand and gravel mining, hillside hardrock mining, use of a rock crushing plant and structures necessary or incidental thereto. (*Id.* at 566.)

Lastly, increases in production to serve market demand are part of the vested right itself and do not represent an expansion of use as a matter of law: [T]he general rule appears to be that an increase in business volume alone is not an expansion of a non-conforming use. . . . (*Hansen*, 12 Cal.4th at p. 573.)

As detailed Section C, *supra*, the Chubbuck Mine has a long and well-documented history that supports the Planning Commission’s confirmation of vested rights. Mining operations began in the early 1920s when the land was then part of an original 1,600-acre set of mining claims. Beginning in 1922, C.I. Chubbuck purchased the claims and began an ambitious set of operations.

C.I. Chubbuck constructed a primary and secondary rock crusher, connecting roads a rail terminal, a single-gauge railroad to transport crushed limestone from the quarry to the terminal, a lime plant, two vertical kilns, and underground bunkers for oil storage. The Mine shipped crushed limestone and finished lime products by rail to Los Angeles and San Francisco to supply plants that produced cement additives. Due to the Mine’s distance from population centers, a town quickly developed for employees and their families. Known as the town of Chubbuck, it eventually

grew to 30-40 buildings which housed approximately 24 workers and their families. It included a school and its own post office. (See generally de Kehoe, *supra*, [Exhibit 1].)

The record also shows that mining operations expanded over time. In 1925, C.I. Chubbuck acquired partners and used the capital influx to expand operations and build an onsite cement plant and a rotary kiln. By 1930, the cement plant was fully operational and manufactured Portland cement from limestone quarried from the Mine. In the meantime, C.I. Chubbuck continually upgraded his lime plant, crushers, and other machinery to keep pace with market demand. The Mine's products were widely used in the region. As examples, Chubbuck limestone helped construct the Colorado River Aqueduct in 1937-1938, and at one time, 90 percent of the homes in Palm Springs had Chubbuck products in their roof coatings.

C.I. Chubbuck matched the Mine's operational expansion with a series of progressive land acquisitions. In 1924, Mr. Chubbuck obtained patents from the United States government for 320 acres which included the extraction area. In 1943, he acquired 640 additional acres to the southwest in fee from the Southern Pacific Land Company. And in 1947, he secured a patent from the State of California for the remaining 320 acres of the overall 1,280 acres that are subject to this Application. Thus, by 1947, the vested Mine had fully assembled into a large contiguous tract, with contemporaneous estimates of approximately 100 million tons of limestone reserves.

Figure 7, *supra*, depicts the geographic expansion of the Mine between 1924 and 1949.

In 1949, the White Mountain Lime Company purchased and operated the Mine intermittently until 1951. In 1951, Harms Brothers Construction Company purchased the Mine, resumed full production, and developed expansion plans. A January 1952 report by the California Division of Mines described Harms Brothers' activities as follows:

Harms Brothers Construction Company acquired the holdings of the former Chubbuck Lime Company, reopened the quarries and kiln at Chubbuck, San Bernardino County, and is planning to open extensive virgin deposits at Cadiz, San Bernardino County. Harms' present production of industrial lime will probably be expanded to include products of other sorts.

(California Division of Mines, California Journal of Mines and Geology, Vol. 48 No. 1 p .112 (January 1952) [Exhibit 14].)

In summary, as of August 8, 1951, the vesting date, the Mine's owners had acquired the entire 1,280 acres subject to this application, the Mine was a major surface mining and mineral processing operation that had legally commenced operating many years prior, and its owners were focused on future growth and expansion. These facts support a finding of vested mining across the 1,280 acres covered by this application.

4.0 No Abandonment

The issue of abandonment – specifically, whether the owners legally waived their vested mining rights – is not a required element of a vested rights analysis under the *Hansen* case. Nonetheless, it is natural to ask whether a mining operation that has not had large scale

commercial materials sales in almost 70 years has been abandoned. In short, there is no evidence whatsoever to support a finding that the vested right which arose in 1951 has been abandoned.

Hansen articulated the rules governing waiver of a vested right in the mining context. Vested mining rights can be waived only on the occurrence of two factors: (1) actual operator intent to abandon the mine and (2) an overt act, or failure to act, which implies that the operator no longer claims an interest in the vested right. (*Hansen*, 12 Cal.4th at p. 569.) An operator must intend to discontinue the mining enterprise to waive its vested rights. (*Id.* at p. 566; see also *Pickens v. Johnson* (1951) 107 Cal.App.2d 778, 787.)

A party claiming that a waiver or abandonment has occurred bears the burden of proving it by clear and convincing evidence. (*City of Ukiah v. County of Mendocino* (1987) 196 Cal.App.3d 47, 56 [“doubtful cases will be decided against a waiver”]; *Hansen, supra*, at 565.)

It has long been recognized that mining property rights are not abandoned by a lapse of time, physical absence from the mine, or failure to extract or sell materials, absent other circumstances. (2 Lindley on Mines (3d ed. 1914) Abandonment and Forfeiture, § 644, p. 1603, available at <https://play.google.com/books/reader?id=4H8VAQAAIAAJ&hl=en&pg=GBS.PA1602>, last visited June 29, 2020.) Indeed, it is an immutable fact that the very nature of mining often requires long periods of “inactivity.” One British case from 1810 illustrates this principle. In *Seaman v. Vawdrey*, the British High Court of Chancery found that an inference of abandonment due to absence from or failure to work a mine was inapplicable to mines. More specifically, the court held that failure to work a salt mine for more than 100 years did not constitute abandonment of the mine. The court explained:

There are many cases where from *non-user* of a right the inference of abandonment may fairly be made; but that does not apply to such a case as this. It is not so generally true that the owner of mines does work every mine, which he has a right to work; and therefore the relinquishment of the right can not be presumed from the non-exercise of it. **It is well known that mines remain unwrought for generations; that they are frequently purchased or reserved, not only without any view to immediate working, but for the express purpose of keeping them unwrought until other mines shall be exhausted, which may not be for a long period of time.** It is impossible therefore to infer that this right is extinguished, through there is no evidence of the exercise of it since the year 1704.

(*Seaman v. Vawdrey*, 16 Vesey, Jr., 390. High Court of Chancery, 1810 [emphasis added].)

In sum, acquiring mineral reserves, monitoring the market, and preparing for active mineral a fundamental component of a surface mining operation. (*Ibid*; Declaration of Donald M. Gustafson, ¶ 22 [Exhibit 23].)

These principles align with California and federal policies which disfavor waivers of mineral rights. In 1982, for example, California adopted the Marketable Record Title Act, which created a

process for retiring “dormant” mineral rights created by deeds or conveyances where such rights were not exercised. (Civ. Code, § 880.020 et seq.) It allows an owner of mineral rights to preserve their mineral rights simply by recording a “notice to preserve” every 20 years, which can be repeated as many times as needed to maintain the rights. Similarly, under federal law, a person holding federal mining claims can maintain those claims indefinitely, without actively mining, simply by filing an annual statement and fee. These laws, while not expressly applicable to vested mining rights, are instructive. They recognize that merely holding mineral interests is sufficient to preserve mineral rights indefinitely and that active production is not a requirement.

Indeed, we have completed an exhaustive survey of vested mining rights across the United States and were unable to find a single reported case where vested mining rights had been abandoned due to lack of onsite activity.

The cases where vested mining rights have been abandoned include an overt act on the part of the landowner to forever disclaim such rights. For example, in a recent California case, the court held that a landowner abandoned his vested mining right by certifying to the government in an official document “that all mining had ceased, *with no intent to resume*, which was uniquely persuasive evidence of abandonment.” (*Hardesty v. State Mining & Geology Bd.* (2017) 11 Cal.App.5th 790, 814.)

Applying these principles here, the record contains no basis for finding that the vested rights arising in 1951 have been abandoned, because there is no evidence of any actual intent, or an overt act, to abandon the Mine’s rights.

After 1951, the Harms Brothers continued mining and intended to expand those operations. Mining operations were halted in 1954 not from an intent to abandon the Mine, but because of market competition and transportation costs. (de Kehoe, *supra*, at pp. 178-179 [Exhibit 1].)

Here, the record shows an unbroken effort by all landowners from 1951 to today to preserve the Mine and all associated rights. Braavos’ members – experienced in the mining business – acquired the Mine with the specific intent of maintaining the Mine until market conditions allowed sales to resume. Over the last 35 years, they have preserved the Mine and held it in inventory. They have paid taxes on the Mine, steeped themselves in the mining business, and monitored the market conditions for a time when a return to active production is viable.

While little specific information is known of the interim landowners that held the Mine between Harms Brothers Construction Company and the current landowner, there can be no doubt that they preserved all existing mining rights. None of these owners acted in any way to prejudice the vested rights – for example, none attempted to engage in any non-mining land use that could imply an intent to abandon. Indeed it is implausible that any interim owner would have acquired a large, existing mining operation adjacent to a rail line – with rail connections to Southern California and beyond – without a specific awareness of its value and the need to preserve the Mine for the possibility of resuming active production. In short, there is no evidence that any owner intended to waive their vested rights or engaged in any act to give effect to such an intention.

Indeed, the value of the Mine was a matter of common knowledge that would have been understood by each interim owner. The declaration of Donald M. Gustafson indicates that the Mine was a prominent and well-known southern California limestone deposit. Mr. Gustafson learned of the deposit in 1955 and he “always considered the Chubbuck Mine an important source of limestone that would have economic value given the right market conditions.” In 1958, another major cement plant was contemplated at the Mine. (California Division of Mines, California Journal of Mines and Geology Vol 49, Nos. 1 and 2 (1953) at p.173 [Exhibit 12]; L. Burr Belden, *supra*, [Exhibit 17].) The only plausible inference is that the owners between Harms Brothers and Braavos acquired the Mine with specific knowledge and awareness of its mineral value and intended to preserve the Mine as a valuable asset.

The current owners purchased the Chubbuck Mine in three separate transactions beginning in 1985. Braavos’ intent to maintain and preserve the Mine’s rights cannot reasonably be questioned. Compared to the salt mine that was not abandoned even though it had not been worked in over 100 years, here the landowners did much more, as would any owner of a significant mineral deposit. As stated in Robert Del Gagnon’s declaration:

Since our acquisition of the Chubbuck Mine, our Company has operated the property as any owner of a significant deposit operates a property of this nature. We, of course, keep taxes current. But more importantly, we hold the mineral reserve in inventory while we monitor limestone markets, confer with experts in such markets, conduct testing as to quantity, quality and volume and confer with transportation companies, in this case the adjacent railroad—the Arizona and California Railroad. We have operated the mine in this way and, obviously, never intended to give up my rights in the Chubbuck mine or ever took any action of any nature that would suggest to anyone that we intended to abandon my Company’s, and our family’s, key holding.

(Declaration of Robert Del Gagnon, ¶ 16 [Exhibit 18].)

Ultimately, Applicant intends to partner with, sell, or lease the Mine to an established mine operator with the financial capability to secure the additional approvals needed to resume active mineral production. (See Declaration of Robert Del Gagnon, ¶ 10 [Exhibit 18].)

Accordingly, no evidence exists on the part of any owner after the 1951 vesting date to waive their mining rights, nor is there any evidence of an overt act or failure to act that implies such a waiver.

E. Conclusion

Braavos respectfully requests that the County, after reviewing the evidence submitted, confirm the following:

1. That surface mining operations commenced at the Mine in the early 1920s, that the range of surface mining operations includes blasting, crushing, sorting, stockpiling, distribution and sales of limestone for cement, lime, and other commercial uses, and that the scope and intensity of the surface mining operations have expanded over time in response to market demand.
2. That the County first adopted a use permit requirement in 1951 (Ordinance No. 678) which represents the “vesting date.”
3. That as of the vesting date, surface mining operations at the Mine were occurring within a contiguous tract of land comprised of approximately 1,280 acres and all or portions of APNs 0644-221-06, 0644-221-07, 0644-231-03, 0644-201-15 and 0644-221-02, and the owner objectively intended to devote the entirety of this area to surface mining operations.
4. That the Mine became vested in 1951 on the 1,280 acres described above and that those vested rights have not been waived or abandoned.
5. That the Mine, and surface mining operations at the Mine, are an existing use that may continue.
6. That the resumption of active surface mining operations at the Mine should occur only with all necessary government approvals and applicable environmental review.

* * *

F. Photos









G. Exhibits

EXHIBIT 1

CHAPTER 8

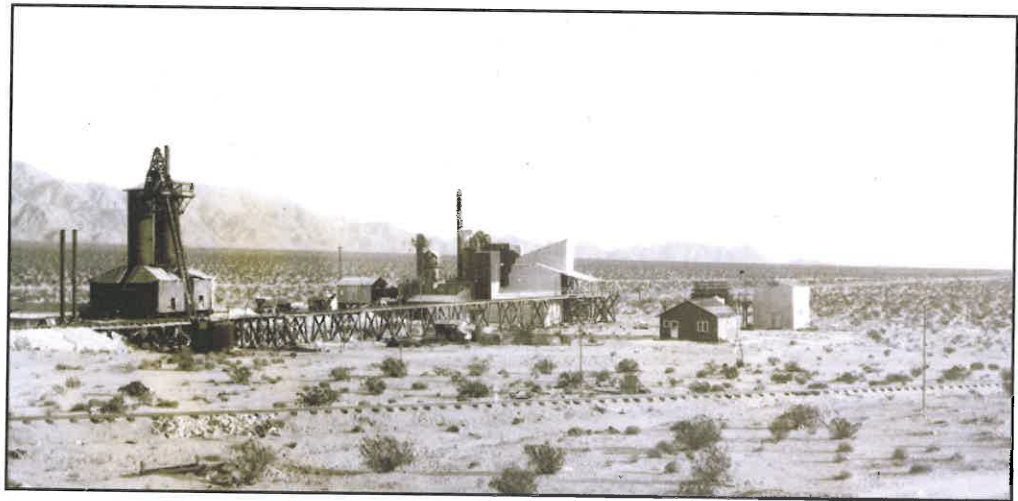
Chubbuck

Concrete sentinels—relics of a mining past.

*Lat 34° 21.3919' N.
Long 115° 16.7796' W.*

INTRODUCTION

A visitor to Chubbuck today sees only empty desert in every direction, which belies the fact that for 25 years this was an active community of about two hundred people. Everyone is now gone—the last person moved away in the early 1950s. What remains of the community today are large concrete pillars and a few scattered cement foundations. The only obvious signs of habitation are the tracks of the Parker Branch of the Arizona & California Railroad which run from north to south and define the eastern limit of where the settlement of Chubbuck once stood. A closer look reveals the hint of a large circular driveway and some foundations, some of which bear the initials of the men who poured the concrete. Among the creosote bushes are scattered piles of rusty tin cans and broken plates. A dirt road leads west from the ruins to the limestone quarry, which was the reason the settlement was there. On most days, the sun beats down from a cloudless sky, and all is quiet.



1934 photograph of the limestone processing mill (left) and cement plant (center) at Chubbuck, California, taken during the short period when both plants were in operation. The dark twin vertical kilns of the limestone plant are on the left, and the cement plant that housed a horizontal kiln is in the center of the photo. The two plants were joined by a railroad trestle that moved crushed lime to the cement plant via a narrow gauge railroad. The small house standing by itself to the right of center served as the company store, the post office, and the assay office. The white building behind the store housed the diesels that generated electricity for the plant and for the homes. The top of a cooling tower is barely visible over the roof of the store. The railroad ties of the narrow gauge railway that ran from the plant to the quarry can be seen running left to right across the photo in the foreground. The Parker Branch of the Arizona & California Railroad, which still runs between Cadiz and Parker, Arizona, is visible behind the diesel generators on the right center of the photo. The view is to the southeast; the southern flank of the Old Woman Mountains tapers down to the desert floor in the far distance.

Photo courtesy of Patricia (Chubbuck) Weeden.

Although there was a school, a post office, a store, and about 26 families in residence, Chubbuck was never really a town; it was a mining camp. It was perhaps the only settlement on the Parker Branch that was not affiliated with the railroad. Everyone in Chubbuck except the schoolteacher and one family, who commuted from Miligan, either worked for the mine or was a family member of one of the miners. Once the mine closed, people moved away to find new jobs and the community vanished.

The description of the town and the story that follows is a montage of memories from several dozen people who had lived in Chubbuck as children. Although the families were poor by modern standards, the children did not know that. They grew up in austere conditions in a remote desert mining community, but as far as these children knew, everyone lived like this. They played in the desert and entertained themselves with whatever was at hand. More often than not, the people I interviewed made a point of telling me that these were some of the happiest times of their lives.

What follows is the story of Chubbuck from some of the people who lived there.



Undated photograph of Charles Inglis Chubbuck for whom the mine and the settlement were named.

Photo courtesy of Helen Stein Chubbuck.

He arrived in San Francisco in early 1906 and set up a building supply business with a partner, Mr. Harris, supplying construction materials—building stone and mortar—to area contractors. The two men could not have foreseen how fortunate the timing was for their fledgling business. In April, 1906, San Francisco was struck by a devastating earthquake; it proved to be a windfall for the men because for the next five years building materials were in high demand as San Francisco set about the enormous task of reconstruction.

By 1921, Charles had expanded his business to include plants in Los Angeles and San Francisco and established a close business relationship with Union Carbide. By this time, Charles had also married Anita O'Brien from San Francisco and had a son, Charles Dixon Chubbuck.

Chubbuck's plants produced crushed limestone, which was used in the manufacture of cement, and

also products called Metropolitan White and Snow Coat. Metropolitan White was sprinkled on the surface of fresh cement to reflect sunlight and aid in the curing process. Snow Coat, gravel-size pieces of crushed limestone, was used as roofing material on houses in Los Angeles. In the days before air-conditioning, the white limestone gravel reflected heat and helped keep houses cool.

The Union Carbide plants adjacent to Chubbuck's plants in Los Angeles and San Francisco manufactured calcium carbide, a key element of acetylene gas. Chubbuck collected the lime mud that was a waste by-product of the acetylene operation and that Union Carbide was happy to see put to use. Chubbuck processed the lime mud in a rotary kiln, ground it to a powder and sold it as hydrated lime for masonry use in construction. Blue carbide flakes in the lime limited its use, however, so Charles set out to find deposits of white limestone that he could use as a bleaching agent. He found a limestone outcrop at a remote site in the Mojave Desert that was included in a mining claim held by two desert prospectors named Marcus Pluth¹ and Tom Schofield.²

Pluth and Schofield became acquainted when they were working borate mines in Death Valley and were two of the few miners who ever made money from desert mining claims. Schofield maintained that any prospector willing to work can make a good living in the desert. He seems to have done well, but many others did not. When Charles Chubbuck learned of Pluth and Schofield, they were working an old mining claim in the eastern Mojave Desert called the Desert Butte Mine, once owned by George Parks

of Needles and A.J. Crowley of Barstow.³ The mine was in a group of small hills on the north end of the Iron Mountains known as the Kilbeck Hills. Although the mine had produced a small quantity of ore in 1914, it was not a particularly productive operation. Geologically, the area is a complex assemblage of deformed igneous and metamorphic rocks, but the claim also included a sizeable outcrop of white limestone, exactly what Chubbuck needed. The outcrop was about a half mile west of the Parker Branch of the Arizona & California Railroad that runs from Cadiz, California, to Parker, Arizona. Chubbuck became immediately interested in the claim, not only because it provided the needed raw material for his plants but also because of its proximity to the railroad, so in 1922 he purchased the 1600-acre claim from the two miners.^{4,5}

ONSET OF OPERATIONS.

Between 1922 and 1925, Charles built the facilities he needed to mine, process, and ship the limestone to his plants in Los Angeles and San Francisco. One by one he also began hiring workers to operate the mine. The plant was adjacent to the Parker Branch of what was then the Santa Fe railroad, about a mile south of a siding named Kilbeck. Whether or not Charles deliberately intended to name the settlement after himself is uncertain, but from the outset the place became known simply as "Chubbuck."

The limestone outcrop that Chubbuck intended to mine was about a half mile west of the railroad so he divided his operation into two centers, one at the outcrop and one next to the railroad tracks. He first built a primary rock crushing plant near the outcrop that would break the large pieces of limestone into smaller, more manageable chunks. As work was progressing on the primary crusher, he also began building a secondary crusher, a ball mill, and two vertical draw kilns a half mile away next to the railroad. The two facilities were joined by a dirt road and a narrow gauge railroad that led from the quarry to the kilns.

Initially the mining was done underground in a network of tunnels. The miners bored and blasted tunnels into the base of the limestone outcrop large enough to accommodate the narrow gauge ore cars. Tracks were laid into the tunnels and the workers would push the ore cars in by hand to be loaded with chunks of limestone. When filled, the cars were pushed back out to the rock crusher. As more and more of the



The limestone quarry at Chubbuck, 1934. Narrow gauge tracks were put down in several places for ore cars to be brought up to the rock face. Once loaded the cars were pushed to the primary crusher. The total amount of limestone taken from the mine is estimated to be 10 to 12 million tons.

Photo courtesy of Patricia Chubbuck Weeden.



1934 photograph of the primary rock crusher with the narrow gauge tracks in the foreground leading from the quarry to the crusher. The buildings in the distance in the center of the photo were the secondary crusher and the kilns at the railroad. View is to the east. Old Woman Mountains in the background.

Photo courtesy of Patricia Chubbuck Weeden.



View of the primary rock crusher site at it looks 71 years later.

Joe de Kehoe, photo.

Hannah Jo (Toothaker) Bass, whose father ran the store, recalled that when the men came home from work at the end of the day their shirts were streaked white with dried salt from perspiration. Rudy Garcia's dad, Raphael "Shorty" Garcia, was in charge of the crushing operations. Rudy remembers his dad coming home from work each day:

overburden was removed, the operation evolved into an open surface mine and the tunnels became unnecessary.

In addition to mining at the base of the outcrop in the tunnels, limestone was also blasted with dynamite from the sides of the rock cliff. Once the dynamiting was done, a crew of eight men used 14-lb sledge hammers to break the large pieces of rock down to pieces small enough to be lifted by hand into the ore car. One can only image how difficult the work must have been in the rock quarry where temperatures in the summer months commonly exceeded 110° and with no shade. The rock is so white that the men developed a permanent squint from the reflected glare. The work was hard and demanding—eight to ten hours a day with a 14-lb sledge hammer was a normal day. No hard hats or steel-toe boots, and even gloves were a rarity.

I would say that when they got through a day's work, they had had it. You know what I mean? I remember my dad being so tired he would just come home, shower, eat, and go right to bed. Get up the next day and do the same thing. I remember my dad coming home and it was like a hundred degrees—still a hundred degrees at six o'clock in the afternoon.⁶

There was a limit to the size of rock that could be put into the secondary crusher and the ball mill, so raw limestone from the quarry was first run through the primary rock crusher to be broken and sorted. The ore cars were filled with limestone at the quarry by men using pitchforks and then were pushed along the narrow gauge track to the primary crusher. A side door on the car was opened to allow rock to spill into a hopper that fed the crusher. Rock coming out of the crusher was then dumped through a "grizzly," a series of equally-spaced iron rails that sorted the crushed rock. Rock that passed through the grizzly went into the ore cars to be taken down to the railroad to the secondary crusher. Large rocks that would not pass through the grizzly were put back through the crusher for a second pass. This entire process was done by hand.

When the mining operation at Chubbuck first got underway in the mid-1920s, rocks coming out of the primary crusher were hauled by truck the half-mile distance down to the ball mill, but this was a slow and tedious process so Charles purchased a small narrow gauge railroad from a winery in Cucamonga, California. The narrow gauge dramatically improved the efficiency of the operation and was immediately dubbed "the dinky." The engine was a gasoline-powered Plymouth motor that had a small cab and a seat. It pulled three or four ore cars at a time and a couple of flatbed cars that were used for hauling men and equipment back and forth from the community to the quarry. Even sixty to seventy years later, the children who lived in Chubbuck fondly remember the dinky, and almost every one of them claims, "My dad drove the dinky." Oftentimes the workers would allow their children to drive it to the mine, an experience they still remember with a smile.

When crushed rock left the primary crusher and arrived at the processing plant down at the railroad, it was run through a secondary crusher and a ball mill to break the rock down further into gravel-size pieces. As with the

Chubbuck Lime Co.		
LIME PLANT		
Apr. 7 1940		
TIME FROM	Mar. 24	TO Apr. 6
NAME	M. Sanchez	
TIME	RATE	AMOUNT
84 hrs	50	42.00
13 "	75	9.75
TOTAL		51.75
DEDUCTIONS		
Commiss	23.41	
Milk	2.10	
Water	1.50	
Taxes	1.04	
TOTAL		28.05
BALANCE		23.70
PAID BY CHECK NO.		

A pay envelope for Mauro Sanchez in April, 1940 shows that for the 2-week period he worked 97 hours—84 hours at fifty cents an hour and 13 hours at seventy-five cents an hour for total wages of \$51.75. From that \$23.41 was deducted for commissary charges, \$2.10 for milk, \$1.50 for water and \$1.04 for taxes leaving him his net take home pay of \$23.70.

Courtesy of Margaret (Sanchez) Chavez.



Chubbuck's primary rock crusher.

California Journal of Mines and Geology, 1943.

rock crusher up at the quarry, the rock was spilled out into the ball mill where it was sifted through another grizzly and several screens to insure it was the correct size before being put into the kiln. If the rocks dumped into the kiln were too large they did not heat efficiently and they clogged up the kiln.

The kilns that Chubbuck originally installed were twin vertical draw kilns—steel cylinders, each about 50 feet tall and 15 feet in diameter, lined on the inside with fire brick. There were small holes on the sides of the kiln so that if the rock got stuck it could be dislodged by jamming iron rods in the holes to knock it free. Vertical kilns are commonplace in England, but were relatively rare in the U.S. They were modeled after blast furnaces used to smelt iron ore. The fire brick and the fire boxes had to

be replaced every so often, so normally one kiln was in operation while the other was undergoing maintenance. The advantage of the draw kiln is that it can be operated relatively continuously, with rock being dumped in at the top and removed at the bottom. They also do not require as much power as a horizontal kiln, which needs a large motor to keep it rotating.

The kilns were fired by a series of burners that used crude oil brought in by a railroad car left on a siding. Chubbuck fed the kilns directly from the tank car until such time as the grace period was over and he would have to start paying rental on the rail car. The remaining oil was then pumped into a large concrete cistern and the tank car was returned to the railroad. The oil in the cistern was steam-heated to reduce the viscosity before it went into the burners in the kiln. The cisterns are still visible at Chubbuck today, but the vertical kilns were dismantled and sold for scrap in the mid-1930s.

An inclined ramp ran to the top of the kilns. Raw limestone from the ball mill was hoisted to the top of the kilns by a cable assembly hooked to an ore car on the inclined track. Once the car reached the top, a trip lever tipped the car over and the limestone was dumped into the top of whichever kiln was in operation at the time. The limestone in the kiln was heated to 1000° C for about 12 hours. A bellows arrangement at the firebox provided temperature control. Once it was fully cooked, the burnt lime

was shoveled out of the base of the kiln and either stored in 25-gallon cans or bagged for shipment.

Processed limestone was shipped from Chubbuck by train and by truck. Railroad cars, parked on a spur that belonged to the company, were filled by a parade of men pushing wheelbarrows. Trucks were also used to haul the bagged limestone

The normal work schedule at Chubbuck was a 12-hour day, six to seven days a week. A shift always had someone who could fill in if a worker needed to take some days off. Although the work at the quarry was halted at night, the boilers and the kiln had to be kept running continuously, so someone was always on duty.



October 24, 1934 photo of the dinky and three ore cars in front of the lime plant at Chubbuck. The bachelor quarters is partially visible as the white building behind the front of the train.

Courtesy of Patricia (Chubbuck) Weeden.



Chubbuck's narrow gauge railroad engine and two ore cars. Everyone knew it as the dinky.

Courtesy of Hannah Jo (Toothaker) Bass.



Unidentified miners working at the rock face at the Chubbuck limestone quarry.

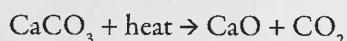
Photo courtesy of Margaret (Sanchez) Chavez.



LIMESTONE PROCESSING.

The chemical process of converting limestone to lime putty and cement is practically a science in itself, but the following is a simplified version.

Naturally occurring limestone is calcium carbonate, CaCO_3 . Heating limestone in a kiln to about 1000°C (1800°F), a process known as calcination, drives off carbon dioxide, chemically alters the rock and produces calcium oxide (CaO).



At this stage it is dangerous and unstable and is known as *quick lime*, or *calcined lime*. Quick lime must be handled with care because it is a hazardous product. It also must be kept dry as it reacts quickly with humidity in the air, or even with the moisture on a person's skin, and can cause serious burns.

Just as heating raw limestone drives off the water, adding water to the quick lime, a process called *slaking* (rhymes with 'taking'), reverses the process—it produces calcium hydroxide ($\text{Ca}(\text{OH})_2$) and heat—under certain conditions it can explode! That is why quick lime is always added to water, not the other way around. Quick lime mixed with water produces lime putty that is used in masonry work.

CHUBBUCK CEMENT PLANT

When Charles Chubbuck started construction of his limestone processing plant in the desert in the early 1920s, he also formed a business relationship with a group of investors from Texas who agreed to build a cement plant adjacent to the lime plant. The Texas consortium was aware of the Metropolitan Water District's plans to construct the Colorado River Aqueduct—an ambitious project that took water from the Colorado River at Lake Havasu on the California-Arizona border and transported it by a series of canals, tunnels and pumping stations west across the Mojave and Colorado deserts to the east side of the Santa Ana Mountains. The aqueduct is still the primary source of drinking water for Southern California and it was the largest public works project in southern California during the Great Depression. The Texas consortium who partnered with Mr. Chubbuck hoped to furnish the cement for the project. Chubbuck, in turn, would provide the cement plant with a ready supply of crushed limestone, a key ingredient in the manufacture of Portland cement. The two plants were built simultaneously and completed about 1925, but they were entirely

separate companies. Both facilities were built adjacent to the tracks of the Parker Branch, the lime plant to the north and the cement plant about two hundred feet to the south. They were connected by a trestle for a narrow gauge railroad that shuttled products back and forth. Unlike the vertical kilns at Chubbuck's lime plant, the cement plant had a horizontal kiln, eight feet in diameter and a hundred and twenty feet long.

The details of the early operations of the cement plant are not well known. It was apparently completed about 1925 and stood idle for one to two years before being placed in operation.⁷ In early 1930, however, a man named Burke brought forty workers out from Texas to bring the cement plant into full operation. Burke was a big man and he left little doubt in the minds of those who saw him that he was from Texas. He apparently made only one trip to Chubbuck. He arrived wearing a dark suit and he drove up in a Pierce-Arrow limousine with a group of well-dressed businessmen, all of whom looked uncomfortable and out of place in the desert. Whether Burke's group were the original owners who built the plant in 1925 or if they purchased it in 1930, is uncertain.

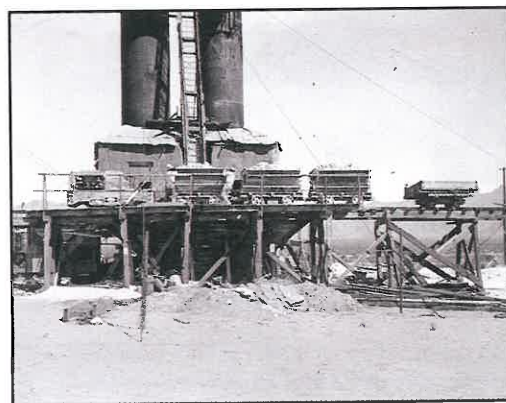
None of the workers Burke brought to Chubbuck had families with them, and the men were housed barracks-style in three bunkhouses built on the side of a low hill a short walk from the plant. Burke's crew included a Mr. Hess, Ralph Whitney, and "Pops" Bartlett. Hess was a young man, well educated, the chemist for the operation, and the *de facto* superintendent. Bartlett, on the other hand, was an old prospector and more typical of the rest of the workers.⁸

Burke hired Ruth Piper, a housewife who had recently moved to Chubbuck with



View looking southeast at the limestone processing mill and the company store/assay office (dark building with windows) in Chubbuck. The back of John Piper's house is the white building on the left margin.

Photo courtesy of John Piper Jr.



October 24, 1934 photo of the dinky and three loaded ore cars on the trestle in front of the twin vertical kilns. Two men are tipping the limestone out of the ore car into a bucket that will hoist the limestone up the inclined track and dump it in the top of the kiln.

Photo courtesy of Patricia (Chubbuck) Weeden.



A discarded piece of fire brick from the vertical kilns lying on the ground at Chubbuck. The initials L.A.P.B.C. stand for Los Angeles Press Brick Company.

Joe de Kehoe, photo.



1977 photo of the oil bunker at Chubbuck used to store crude oil that was piped to the kiln burners. Although the roof is now gone, this is one of the few structures that still survives.

Fred Gibson, photo, courtesy of the Mojave River Valley Museum.

her husband and son, to feed the men, for which she was paid \$700 per month. The Piper's living room and dining room became one big mess hall where Ruth fed forty men four meals a day for about eighteen months until the cement plant closed permanently. These were good wages at the time and Ruth earned almost as much from cooking as her husband did working at the lime plant, but it was hard work.

In spite of the expense of constructing a fully functional cement plant in the desert, it remained in operation for only about two years. By 1932, the plant had been temporarily abandoned, either because of delays in the construction of the Colorado River aqueduct or failure to win the bid for supplying cement to the project. Whatever the cause, the cement plant closed and, with the exception of Ralph Whitney, the forty or so workers who ran the plant returned to Texas. Ralph hung around Chubbuck for a while, doing odd jobs and pining for the favors of one of the young

ladies. He lost a foot in an automobile accident one night near Amboy, moved away and eventually ended up living out the remainder of his life in the psychiatric ward of the Sawtelle Hospital in West Los Angeles.

Even though the cement plant ceased operations, Chubbuck's limestone plant continued to operate without a pause, and much of the equipment from the cement plant that was left behind was acquired by Mr. Chubbuck. The only equipment that was salvaged by the Texas consortium were the large diesel generators that had been used to generate electricity to run the horizontal kiln. These were hauled out on large flat-bed trucks and taken back to Texas.

Within a year or two after the closure of the cement plant, Mr. Chubbuck struck a deal with the owners and began transferring his operation to the larger and more modern facilities next door. Chubbuck's two large vertical kilns were eventually dismantled and sold for scrap in favor of the horizontal kilns. It was not long before Mr. Chubbuck's original lime plant was abandoned and the limestone processing was relocated to the former cement plant.

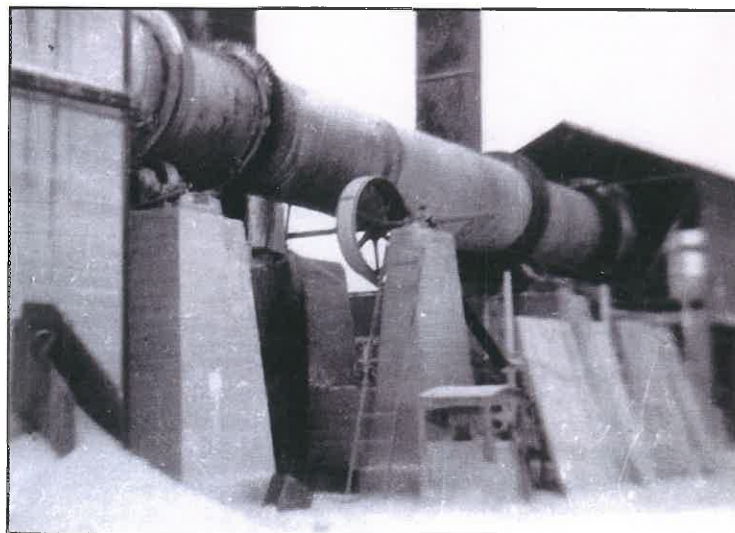
The distinction between Chubbuck's initial operation with the twin vertical kilns and Mr. Burke's cement plant is important because the large concrete foundations that remain at Chubbuck today are the remains of the cement plant that was later converted to the limestone plant. The site where Mr. Chubbuck's vertical kilns and his original limestone plant once stood is today a pile of concrete rubble.

The only visible remains of the primary rock crusher that was once up near the quarry are some large concrete pilings. The alignment of the narrow gauge railroad from the quarry to the plant is still in evidence as a raised berm, and a few of the small ties lie partially buried in the old railroad bed, but the rails are gone. Where the dinky and the ore cars went after the mine closed is a mystery.



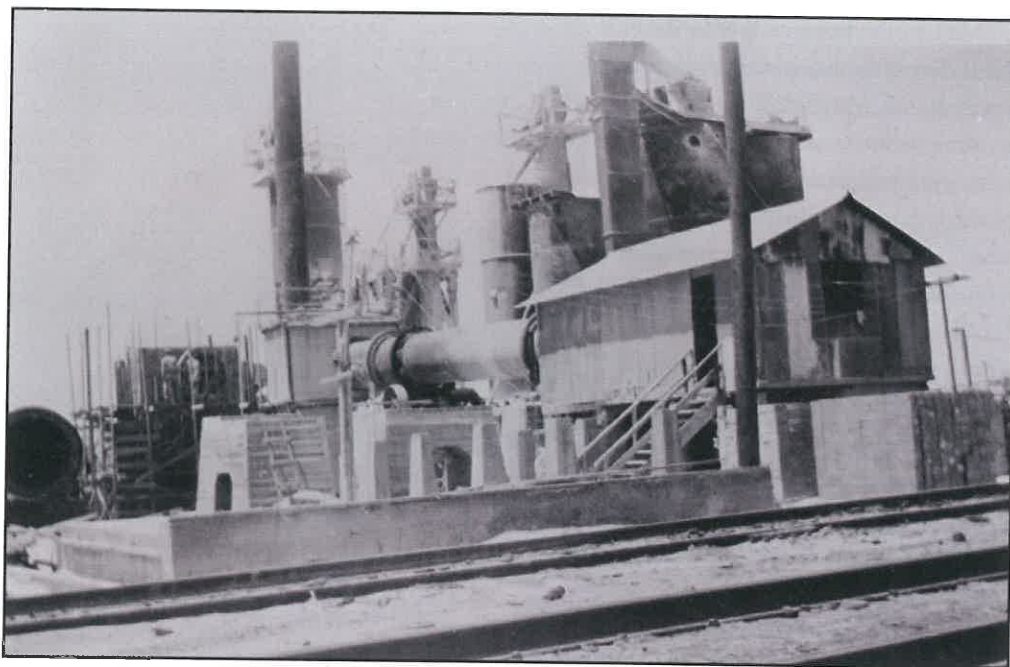
Bertha Piper (left) and Margarite Piper (right), playing in the ore bucket in 1932. When filled with crushed lime the bucket was hoisted to the top of the kiln via an inclined track visible in the center of the photo behind the girls' heads.

Photo courtesy of John Piper, Jr.



Detail view of the large rotary kiln at the Chubbuck cement plant. The silo was used to store finished product before it was put into sacks and shipped.

Photo courtesy of Hannah Jo (Toothaker) Bass.



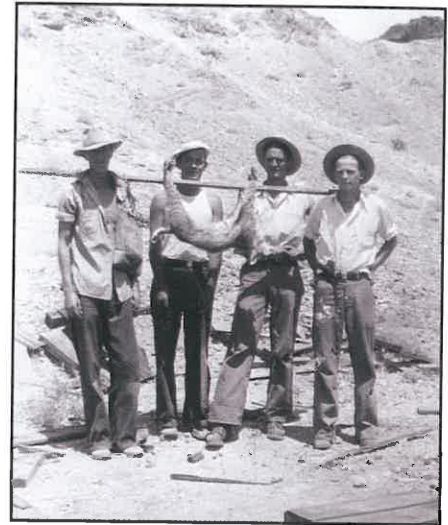
The upper photograph is a view of the cement plant at Chubbuck taken from the railroad looking northwest when the plant was in full operation. The image below taken from the same spot in 2005. Photo above by Fern Morgan, courtesy of Dennis Casebier.

Photo below by Joe de Kehoe.



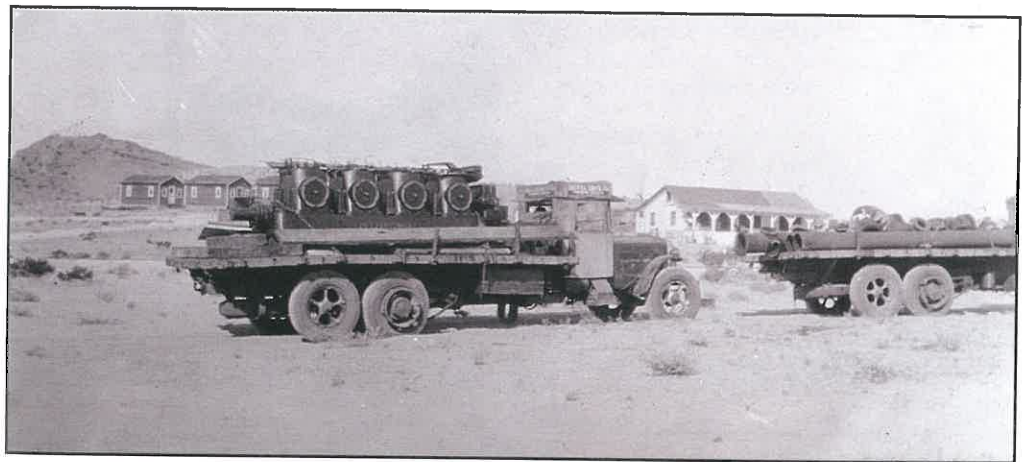
In the center wearing a hat and suit, is Mr. Burke, the owner of the cement plant.

Photo courtesy of John Piper Jr.



Four unidentified men who were employed at the cement plant displaying a bobcat they killed near Chubbuck. The photo is undated. The man on the right has a pistol in his belt.

Photo courtesy of John Piper Jr.



Trucks removing the diesel generators from Burke's cement plant. The white house in the background between the two trucks was the Piper residence. The trucks were so large that they had to let air out of their tires to squeeze beneath the railroad underpass near Cadiz. The three dark colored cabins seen at the rear of the truck on the left were built to house the cement plant workers and were taken over by Mr. Chubbuck when the cement plant closed.

Photo courtesy of John Piper Jr.



Diesel generators were dismantled and removed when the cement plant closed, but Mr. Chubbuck soon had them replaced. The corrugated tin building on the upper right margin of the photo was the shed for the generators. The water cooling tower is visible in the top center of the photo. I wish I could explain the ominous shadow in the foreground.

Photo courtesy of John Piper Jr.



View of the south-facing side of the cement plant at Chubbuck. The terminus of the trestle is in the foreground. The large horizontal kiln is at the base of the smokestack.

Photo courtesy of John Piper, Jr.

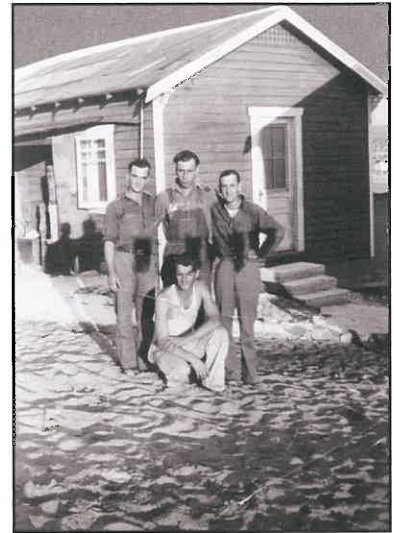
THE FAMILIES.

When Mr. Chubbuck was building the rock crushers and kilns, the workers who were hired to operate the mine began to arrive and build homes for their families. These were Depression years; jobs were hard to find, and even a laborer's job in the desert was better than being out of work.

Between twenty-five and thirty families lived in Chubbuck at any one time, and eight or ten bachelors who were mainly short-term contract laborers. One of the first workers Chubbuck hired was the plant superintendent, Vernon R. 'Verne' Dicks. With the possible exception of Norberto Carlos, Verne lived in Chubbuck longer than any of the other residents. He was superintendent for most of the time during the twenty years that the quarry and processing plant were in operation. He left from time to time because other superintendents worked at Chubbuck also, but Verne always seemed to return. Prior to Chubbuck, he worked at the Lake Norconian Hotel, which was built in Norco, California in 1927 and was famous for its hot sulfur springs. He was a competent, capable mechanic and, together with John and Ruth Piper, was the driving force behind the initiative to establish a school in Chubbuck.

Verne originally lived alone in the large superintendent's house in Chubbuck, but from time to time his ex-wife and their son Don would come out for a visit. Vern eventually remarried and his second wife moved to Chubbuck with him.⁹

Verne's house was by far the largest in Chubbuck and was on the crest of a low hill facing east toward the railroad tracks and the Old Woman Mountains. From his front porch, Verne could look north to the school and the houses where the Mexican families lived, and he had a view to the southeast toward the lime plant. The upstairs bedroom of the two-story house was



Four of the workers brought from Texas to run the cement plant.

Photo courtesy of John Piper Jr.



Undated photo showing details of the corrugated tin shed that housed the diesel generators at Chubbuck. The water tank and cooling tower used to cool the circulating water for the motors is on the left. An ore car sits on the narrow gauge track in the background.

Photo courtesy of Hannah Jo (Toothaker) Bass.



used by Mr. Chubbuck when he came out to visit. Verne's house had a large shaded porch screened on three sides which was a popular place for informal business meetings. It was also used for Sunday School classes. Verne left Chubbuck for the last time about 1945 and is said to have moved to Long Beach, where he took a job with one of the shipbuilding plants.¹⁰



Photo taken in 2005 looking east down the length of the berm that was once the narrow gauge railway in Chubbuck, the dinky. The road on the right side of the photo lead to the quarry. The ruins of the plant are visible to the right of center. The Old Woman Mountains are in the background.

Joe de Kehoe, photo.

Roy Lauer took over as superintendent after Verne Dicks left. Roy moved to Chubbuck with his wife, Katherine (Kitty), and her daughter Clarice—Roy's stepdaughter. The Lauers were apparently only there until about 1948. While in Chubbuck Kitty frequently had to go to the doctor in Needles, but because Roy was needed in Chubbuck to supervise at the plant, he assigned the job of driving her to Eddie Garcia. Eddie recalls that he loved the job because he got to drive Mr. Lauer's 1938 Buick, and when the doctor appointment was over, Kitty treated him to a milkshake at the

drug store.¹¹ When the lime plant closed in 1950, Roy remained working for Mr. Chubbuck and helped him build a plant in Santa Fe Springs.¹²

By the early 1930s, Henry Medina had also arrived. Henry's job was running the dinky and hauling crushed limestone from the quarry to the plant. He later became the town barber and, unlikely as it seems in a place like Chubbuck, he had a reputation—the men called him "lover boy." How he acquired such a reputation in a desolate place like Chubbuck is anyone's guess. One wonders what the women called him. Juan Perez and Mr. Ochoa arrived about the same time and were the *de facto* foremen at the quarry; they supervised most of the blasting and crushing operations in the early days of the mine, a job later taken over by Norberto Carlos.

Raphael 'Shorty' Garcia arrived with his family about 1935 and was hired by Verne Dicks as a laborer in the quarry. It wasn't long, however, before Shorty became Verne's assistant for the primary crusher at the quarry and at the secondary crusher and ball mill at the plant near the kiln. The Garcia family—Raphael, his wife, Jo-

sephina, and their five children—remained at Chubbuck for eleven years before finally moving to Barstow in 1946.

By 1943, there were 24 men employed at the quarry and the plant.¹³ There were also two families named Carlos living in Chubbuck at the same time. Norberto Carlos, who was there from 1937 to 1950, was in charge of the quarrying operation. He was the quarry superintendent and responsible for blasting, for moving equipment around, and for opening and closing down quarries. He had a large family—fifteen children, including an infant who died soon after birth. There was also the Saturnino Carlos family. Saturnino, known also as “Casas,” had eleven children. Saturnino was in Chubbuck from 1931 to 1940, working at the loading area where they bagged the lime into sacks.

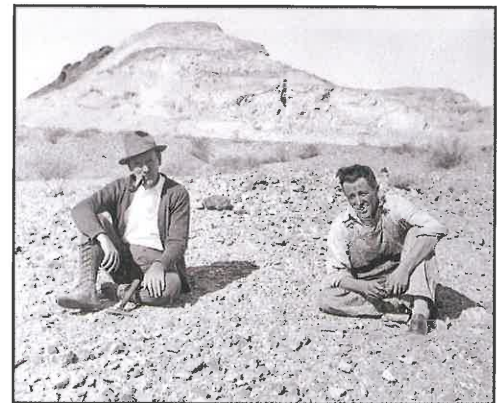
Men who accepted work at the Chubbuck quarry got a job and a paycheck, but that is about all. Their living quarters, transportation, and other amenities were their responsibility. Families were left to themselves to find the time and materials to build their homes and to acquire furniture.

The workers built their homes during their off hours with the help of the others, using whatever building materials could be bought, found, or scrounged. Families arriving later were fortunate because they could move into houses that had already been built and vacated by a family who had moved away. Mr. Chubbuck built a large wood-frame house for the superintendent and a small stucco house as bachelors' quarters, but other workers were expected to



Photo taken 24 October 1934. Mr. Chubbuck (wearing hat) in front of the superintendent's house in Chubbuck. Identity of the man and woman is uncertain. The dark houses on the right margin of the photo are the duplexes that eventually burned down and were replaced with Quonset huts about 1947.

Photo courtesy of Patricia (Chubbuck) Weeden.



Mr. Chubbuck (wearing hat) and Verne Dicks during a geological scouting trip at Chubbuck, October 24, 1934.

Photo courtesy of Patricia (Chubbuck) Weeden.



provide for their own accommodation. When the cement plant was in operation, the owners had built a triplex of houses to accommodate their workers. None of the workers who operated the cement plant had families with them, so the triplex was able to house about forty men. When the cement plant closed and their workers left, Mr. Chubbuck took over the vacant quarters for his workers. No official weather records exist for Chubbuck, but it gets hot! Some former residents can recall heat waves shimmering ten to twelve feet in the air during the day, and during the summer months it was not uncommon for nighttime temperatures to remain over 100 degrees. The houses felt like ovens in the summer and most families put their beds in the yard and slept outside. The parents placed a tub of water between each bed, dipped a sheet in the water, wrung it out, and draped the wet sheet over the children's beds. Evaporation kept the kids cool for an hour or so until the sheet dried, and the process was repeated throughout the night.

In the summer time we all slept out, outside with space. I remember peeking up to look at the stars and the Milky Way.¹⁴

As hot as it was during the summer months in Chubbuck the weather could be frightfully cold in the winter. A family living in Flagstaff, Arizona during an especially severe winter asked to come out to visit their relatives in Chubbuck. After two days in

Chubbuck they got back on the train to return to Flagstaff. They said that they had never been as cold in their lives as they were in Chubbuck.

As unlikely as it seems for the desert, on rare occasions winter storms would blanket the area with several inches of snow that lasted for a day or two before melting. Most homes had oil heaters or a fireplace and some had wood burning stoves where they used pieces of railroad ties as fuel to keep warm.

In spite of the relatively primitive conditions, the people I have met remembered their childhood homes in Chubbuck with a variety of colorful descriptions and happy personal memories.

Paul Limon, who lived in Chubbuck as a small boy from 1935 to 1941 comments,

Everyone had a good-size family. But you know, everybody was happy. You had everything you wanted, which was love, you know, and you have love and caring from your folks, you don't



Abe Limon in Chubbuck, resting on a barrel used to ship the finished lime. Dark stacks in the background are the vertical kilns.

Photo courtesy of Andrea (Arizaga) Limon.

*want anything else. They gave you everything you wanted. Food, before they put it to their mouth, they offered it to you. But, as poor as we were—we were poor people like everybody else in that area and in other places—due to the fact there was no work. When he [my dad] went to work there at Chubbuck, he went to work for thirty cents an hour. Later on, my brother, Abe, went to work there too because he was real ornery—they didn't want him in school—he was too ornery.*¹⁵

HOUSES.

There is a small, low southeast-trending hill in Chubbuck that approximately divides the community into north and south. Most families built their houses on the open flat area north of the hill near the school. Verne Dicks's house, a two-story affair with a large screened porch, was on the crest of the hill facing the railroad. Several houses were also built on the south flank of the hill bordering a large circular drive.

Houses in Chubbuck were most commonly made with railroad ties. In those days the railroad left their discarded ties on the sides of the tracks and they were free for the taking. The interior walls of most of the homes were lath and plaster. Railroad ties anchored into the ground with long steel spikes were used as shoring for the foundation, and concrete was poured into the intervening space to serve as a floor. The walls were made either of interlocking railroad ties stacked one on top of another like a log home or with 2x4s that were covered with tar paper and chicken wire and then covered in plaster. In some homes, the inside walls were lined with the paper sacks that the plant used to bag crushed lime. At least two of these sacks have survived and are preserved at the Mojave Desert Heritage and Cultural Association in Goffs.¹⁶

Roofs were commonly made of corrugated tin or tarpaper, but a few homes had nothing more than a sheet of canvas draped over a wooden frame. Most of the homes had a cement foundation for the floor but a few had dirt floors. The women would sprinkle water on the floors and sweep them until they eventually got packed down and became as hard as cement. Floor coverings consisted of rugs, scraps of carpet or, in some cases, a piece of canvas.

Families commonly arrived in Chubbuck with few personal possessions, but over time and with a bit of



Long time Chubbuck plant superintendent Verne Dicks standing in front of sacks of lime ready to be shipped. Verne was plant superintendent at Chubbuck off and on for nearly twenty years.

Photo courtesy of Hannah Jo (Toothaker) Bass.



Lupe Carlos holding Armando Carlos. Chubbuck, circa 1949/1950. Rodriguez cabin in the background.

Photo courtesy of Hermelinda and Roberto Carlos.

sene lanterns. Chubbuck homes were finally supplied with electric power about 1937. Mr. Chubbuck replaced the diesel generators that the cement company had removed and electric lines were strung on poles throughout the community so electricity could

be fed to the houses from the same generators that provided power to the plant. Donald Chubbuck, Charles's grandson, recalls that the generator was a huge engine that could be heard all over the place. Every so often it would misfire with a loud bang and cause everyone to jump.

Drinking water for the community was periodically brought in by railroad car and the water was pumped to a water tank perched on a foundation made out of railroad ties on the hill behind the superintendent's house. From there, water was gravity fed to the houses by a system of pipes buried a few inches deep in the sand. Only about half of the houses had indoor running water. In most cases there was a spigot in the back yard and water was carried into the house in pails. Folks who were children in Chubbuck at the time remember having teeth that were discolored from drinking water from the rusty tank. However, even after water was piped to the houses, few homes ever



Undated photo L to R: Rita Ramirez, unidentified girls, Joe Sanchez on far right. Note the store and the diesel generator house in the background.

Photo courtesy of Margaret (Sanchez) Chavez.

had indoor toilets. Some of the homes had indoor showers, but it was more common for a family to have a detached shower stall in the back yard.

Rudy Garcia recalls that as a child he would help his mother wash clothes:

We had the old ringer-type washer. We hung clothes on the clotheslines on the right-hand side of the yard. By the time you got to the end of the clothesline the clothes hung up first were already dry. It didn't take five minutes.



Frank "Caddy" Russell came to Chubbuck in 1930 with the Piper family. The superintendent's house in the background with the second story still under construction. Caddy was killed at age 25 in an industrial accident in Los Angeles a few years after this photo was taken.

Photo courtesy of John Piper Jr.

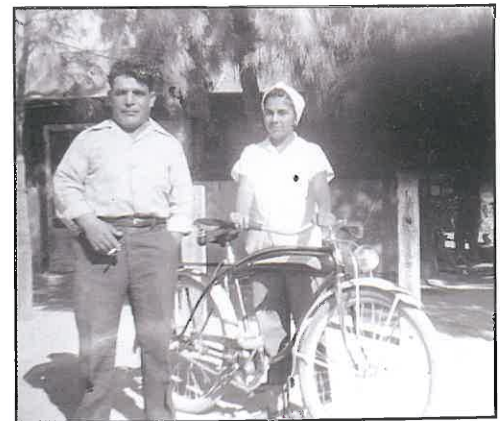


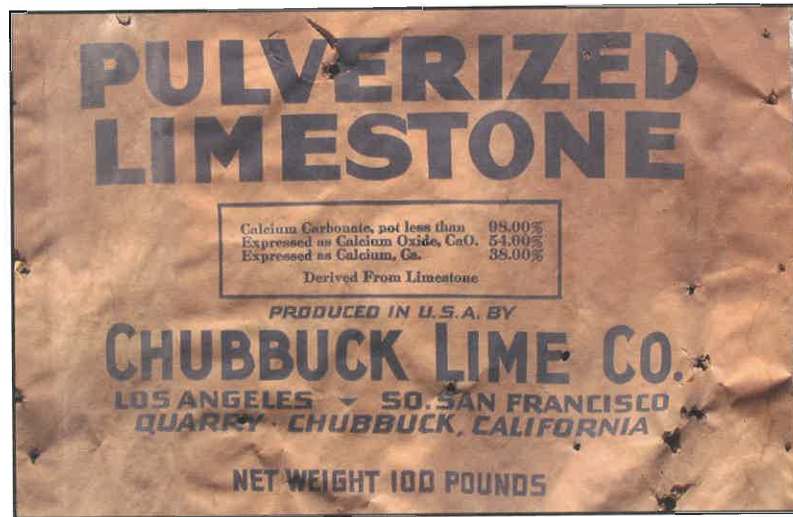
Lorraine Piper in Chubbuck with a pet goat. Note that by this time construction on the superintendent's house in the background is finished.

Photo courtesy of John Piper Jr.

Shorty Garcia (left) and Bertha Bernal in the front yard of the Garcia home in Chubbuck. Shorty was in Chubbuck from 1935 to 1947. Chubbuck residents planted trees in their yards for shade, but when the town was abandoned the trees quickly died from lack of water and no trace of them remains today.

Photo courtesy of Sally (Garcia) Carlos.





Bag used for shipping product from Chubbuck and sometimes used in the walls of the homes to provide insulation. Retrieved from the inside wall of the last house standing in Chubbuck.

Joe de Kehoe, photo.



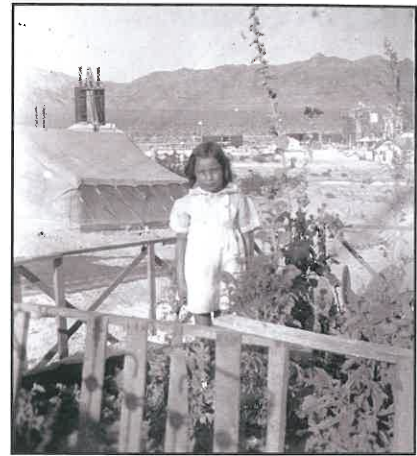
Birthday celebration in Chubbuck, California, 12 September 1938. Front row left to right: Angie Ramirez, Sally (Garcia) Carlos (holding the cake on her 7th birthday), Margaret Sanchez. The girl behind Sally's left shoulder is Juanita Limon, and Genevieve Sanchez is in the back row on the right. The other children are not identified.

Photo courtesy of Sally (Garcia) Carlos.



L to R: Sara Sanchez, Margaret Sanchez, Joe Sanchez, Sally Martinez on the steps of one of the houses in Chubbuck.

Photo courtesy of Margaret (Sanchez) Chavez.



Margaret Sanchez on the porch of their house in Chubbuck. View to the east. The Montiel's tent is visible over Margie's right shoulder. Residents commonly used tents temporarily while they built a more permanent home.

Photo courtesy of Margaret (Sanchez) Chavez.



1934 photo of young Margaret Sanchez in her back yard at Chubbuck. The dark structure behind Margaret is the water tank on the crest of a low hill and used to supply water to the community.

Photo courtesy of Margaret (Sanchez) Chavez.



Photo of the last house standing in Chubbuck, taken in 1971. When this photo was taken the town had been abandoned for about 20 years. This is either the Limon House or the Ramirez house (see site map of Chubbuck).

Photo courtesy of Larry Vredenburgh.



THE PIPER FAMILY.

One of the first families to arrive in Chubbuck was the Piper family—John Henry, his wife, Ruth Ruby Russell, and their two children, John Jr. and Lorraine.



John Piper Sr., age 33.

Photo courtesy of John Piper Jr.

Many families who settled in areas in the eastern Mojave Desert were steered towards a particular place by family or friends who were already there, and this was also true of John Piper. John worked as an engineer for Santa Fe in Kansas until the railroad workers went on strike in 1922, when he took a job running a steam shovel near Topeka. His experience with steam engines was to prove valuable when he moved to California. John and his family eventually moved to Goffs where John's brother-in-law, Finley Phillips, was pumper for the Santa Fe Railroad. By this time the Depression was in full swing and jobs were difficult to come by, especially in a small desert town like Goffs. A friend of John's mentioned that the superintendent of a limestone quarry in a small desert camp called Chubbuck, a man named Verne Dicks, needed someone who understood steam work and boilers. This was right up John's alley so he jumped at the opportunity.

The family car was out of commission at the time, so

John packed a lunch and some water and walked from Goffs to Chubbuck to inquire about the job—a distance of forty-five miles one way! These were hard times.

John got the job and arrived back in Goffs three days later. He packed the family's belongings and moved to Chubbuck with his wife and son. This was in 1930. Their daughter Lorraine remained in Goffs with her Aunt Fannie and Uncle Finley Phillips to finish elementary school. Ruth's brother, Frank "Caddy" Russell, who came along with the family, was also given a job. Caddy was to run the boilers and to help oversee the operation of the two large vertical kilns.

John Jr. remembers his mother as a true pioneer woman. She had several years of experience in hospital nursing and was soon dubbed the unofficial town nurse. John said she always kept a couple of spools of silk thread and some needles handy for stitching up wounds.

The Pipers remained in Chubbuck from 1930 to 1934 and John Jr. remembers this as one of the happiest times of his life.

I knew all of the old engineers and everything at the railroad. The old engineer on the freight train, he said, "Well, do you know how to run a locie?"

And I said, "No."

"Well, why don't you? Your dad should have taught you."

So during the summer I'd always go up and meet him up at the Chubbuck phone booth which was about a mile or so above town. There's a little hill that you come through just before you get into Chubbuck and there's a telephone booth there and I think it said "Chubbuck." 'Course, Archer was farther up. I'd meet him there and he'd reach down and pull me up into the engine and set me on his lap and the train would start and he'd show me how to release the train brakes and the master engine brake and how to operate the throttle and he taught me how to fire the engine and how to feed the boiler. I was seven or eight at the time.

When I got pretty good at running the engine, they'd let me do the switching when we got to Chubbuck. He'd stop the train and then the guys would break the cars loose and then you'd pull the fulls out and put the empties in and re-hook the train and then we'd go towards Milligan, maybe a mile, a mile and a half down the track and then he'd stop the train, or I'd stop it, and then it was kind of a ritual. I'd get out and it would always be hot, you know, it'd be...my God, a hundred and twenty, a hundred and thirty degrees. Get off the train and then he would open up the steam release valve, the blow-off valve and give me a steam bath. It was like throwing cold water on you, you know, if you were standing twenty feet away from it. And then he'd wave at me and then I'd walk back home. And my dog would always come down and meet me. He'd follow the train down. I had a dog named 'Boots' and he followed me everywhere and sometimes the cat, too.

I think the highest we ever recorded on the primitive thermometer on our front porch was a hundred and forty-one degrees. The heat waves would go twelve feet in the air, just like fog. Be a hundred and twenty-one, a hundred and twenty-two at midnight. We'd all sleep outside in beds, winter beds and we had summer beds that we kept in the garage. Bed springs and mattress and a tub of water between each bed. You had nothing but mattress and a sheet and about every fifteen, twenty minutes you'd dip the sheet in the water in the tub and shake



John Piper Sr. and his wife, Ruth, standing by the family car in Chubbuck. In the background, to John's right, is a bed frame. During the summer when it was too hot to sleep inside, families moved their beds outside and slept in the yard.

Photo courtesy of John Piper Jr.

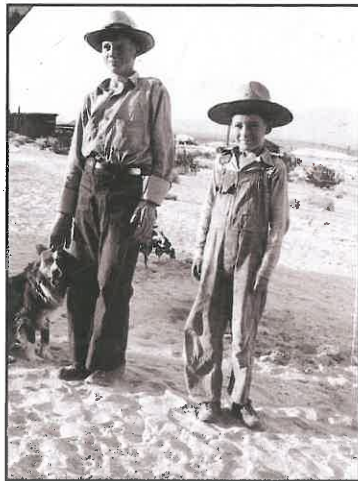


it, cover yourself up and go to sleep until you got too hot again and then you'd do it again.

Another one of John's recollections,

Rudy Perez...his dog got bit on the lip by a sidewinder and the dog's face was swelling and Rudy was crying and I said, "Oh don't worry about it, I know how to cure snakebites." I had an answer for everything back then. So I ran home and got a shotgun shell and a razor blade and I ran back down the road...God, you know, you're talking about two, three city blocks from their house to my house. By this time the dog was becoming lethargic and droopy.

The dog might not have been so complacent had he known what John had in mind for a snakebite remedy.



Don Dicks (left), the superintendent's son, and John Piper Jr. in Chubbuck about 1932. Don lived in Norco and occasionally came to Chubbuck to visit his dad.

We got a hold of the dog and I took a razor blade and I cut his lip where the snake bit him and I cut the end off the shotgun shell, dumped the B-Bs out and poured the gunpowder on the dog's lip. Then I lit a match and lit him ... and boy it was a PTOOW!

All you could see was a fireball going in a hole under the Perez house. I don't know how those dogs could dig a hole because most of the houses had a dirt floor, but the dog had a hole under the house somewhere and that's where he went, in a flash, so to speak, and all I could think of was the house is going to burn down. Rudy and I were both scared to death, but you know the dog lived and it was just the hair on his face that got burned. I saw that cure for snakebites in a cowboy movie or a comic book or something.

He was a little hairless for a while. He was an old mutt Airedale. Not a very big one. Small, but... we were scared to death. Thank God, the dog lived.

THE CHUBBUCK POST OFFICE

Even if the name Chubbuck was an unofficial designation for the small mining community, the name became permanent when the post office was established May 21, 1938.

Prior to Chubbuck having a post office, the mail had been delivered by train in a mail sack that was simply dropped off and taken to Verne Dick's house to be sorted

and distributed. However, Mr. Chubbuck successfully petitioned the postal authorities to set up a post office. It was housed in a room inside the assay office, which also served as the company store. None of the postal records indicate that anyone was ever officially designated as postmaster, however. The first person to work in the new post office was George Carter. He had been injured while working at the quarry, so he wanted a less hazardous job while his injuries were healing. In later years, the mail was handled by Lauren Toothaker, who was also the storekeeper and assayer, and sometimes the postal duties were handled by Verne's wife.

The post office remained in operation until 1950, when it was permanently closed because activities at the mine were coming to an end.¹⁷



Envelope with the first cancellation from the post office in Chubbuck, mailed by Dixon Chubbuck to his wife on May 24, 1938.

Courtesy of Donald Chubbuck.

THE TOOTHAKER FAMILY

In 1939, Lauren Toothaker answered an ad that Mr. Chubbuck had placed in the newspaper advertising for an assayer—one who tests ores and minerals to determine their composition and value. As was common, families did not always travel together when they moved west. Fathers would often work their way to California in search of a new job and the wives and children followed later on. So it was with the Toothakers. Lauren, out of work and out of money, hopped a freight train in Oklahoma hoping to find work in California. When he jumped off the train in Los Angeles, he sprained his ankle badly and limped into Mr. Chubbuck's office to apply for the job. Lauren didn't have any direct experience in assaying, but he was a fairly bright fellow with a few col-



Lauren Toothaker

Photo courtesy of Hannah Jo (Toothaker) Bass.

lege chemistry courses under his belt, so he applied and got the job as assayer in Chubbuck. In addition to his duties as assayer, Lauren was also responsible for running the company store and the post office. The assay office, post office, and store were all housed in one small building next to the plant.

Lauren arrived in Chubbuck by train and worked for almost a year until he saved up enough money to move his family out from Oklahoma. This included his wife, Helen, and his two daughters Hannah Jo, age 15, and Martha, age 11. Lauren had already been working in Chubbuck for a year or so and therefore was well acquainted with the other families, so there was cause for celebration when Helen and her two daughters arrived from Oklahoma. The ladies of Chubbuck all turned out to greet the new family, and each one had prepared some favorite recipe in honor of the occasion. Once Helen got the food home and tried it, however, she found that Mexican food was so spicy they couldn't eat it! The ladies had obviously gone to a lot of trouble preparing the meals, but there was no way Helen or her two

daughters could eat food that was so hot. To avoid causing offense, Helen and Martha waited until after dark for several evenings in a row and pretended to go for a walk so they could bury the food at different spots and no one would be offended.



Lauren Toothaker (in rear) on the dinky at Chubbuck. Middle row, left to right, Norberto Carlos, unidentified man, Hannah Jo Toothaker. Front row, left to right: 'Pee Wee' Hannah Jo's grandmother, and Martha Toothaker.

Photo courtesy of Hannah Jo (Toothaker) Bass.

The Toothaker's house in Chubbuck was two rooms, and on the back end of one room there was a shower stall. The water ran through a pipe buried in the sand from the water tank on the hill to the house, however it was too hot to use right out of the faucet; you had to let it run for a while. The shower head was a gallon bucket with holes punched in the bottom. Although she had grown up on an Indian reservation in Oklahoma, Helen was dismayed at the primitive conditions and never adapted to life in Chubbuck.

Martha recalls that her grandmother, Helen's mother, came to Chubbuck from Oklahoma once to visit the family.

She came to visit us out in the desert and at first she thought this was the end of the world, then she began to really have a good time. For most of civilized history Oklahoma was dry—no alcohol allowed. California, of course, had booze, and we were sitting on the steps of the porch in Chubbuck one evening and the moon had come up and it was gorgeous. It was very quiet and my dad went in and mixed something with sloe gin and gave it to mother and my grandmother. My grandmother said, "Lauren, this is really good grape juice! I really like this." And Dad said, "Yeah, it is pretty good." So Grandma became very talkative. She could talk your leg off anyway, and she had fascinating stories to tell. She grew up in Missouri not too long after the Civil War and my mother was born in Indian Territory. After a few stories she said, "Helen, would you get me another? This grape juice is really good." And Mother said sure, so she fixed her another drink, and my grandmother—finally she had both of these drinks and for somebody who doesn't drink at all or even recognize it, she came in and she tried to put her glass down on the table and missed it by about a foot. That tickled my father so much.

Although he was an able chemist, home improvement projects were not one of Lauren's virtues. When he built an outhouse for the family he was guided more by what he perceived to be most expedient instead of style or functionality. Consequently, he reasoned that privacy was only required for the sides of the outhouse that faced the other people's houses, so the outhouse he built had only two walls! Where the outhouse faced east, toward the railroad tracks and the other houses, it was enclosed. The back of the outhouse facing west, however, was wide open to the mountains. That was nice if you wanted to contemplate the desert scenery, but not much for privacy and it certainly did not meet Helen's standards. The outhouse he built didn't even have a seat; there was just a 2x4 that the occupant balanced on. Although the family complained, Lauren successfully managed to put off doing anything about it. On one occasion, however, Helen happened to be using the outhouse during one of Mr. Chubbuck's visits to the community. Chubbuck decided to walk up the hill to inspect the water tank above the town, unaware that Toothaker had left two sides off of the outhouse. About half way up the hill he passed by the outhouse and was startled to find Helen Toothaker sitting on the toilet only a few feet away. He saw her about the same time as she saw him! Helen was utterly mortified and the only thing she could think to do was to say, "Good morning, Mr. Chubbuck."

Charles politely replied, "Good morning, Mrs. Toothaker," and continued up the hill as if the two had exchanged polite greetings on a city street.

By the time Helen finished she had worked up a full head of humiliation steam and made a beeline for the company store where her husband was working. She



Martha Toothaker, accompanied by her mother Helen, sold pies door-to-door, carrying them in a Hercules dynamite box.

Photo courtesy of Hannah Jo (Toothaker) Bass.

marched into the store and demanded that he build the family a proper outhouse that day! Lauren, who never embraced a home repair project with much enthusiasm, wisely decided that this was one project he should probably do properly. Instead of building the walls from scratch however, he decided to use four abandoned boxcar doors from the railroad cars, which is what he did. This was fine, of course, except that each of the doors was eight feet wide. The outhouse that Lauren built was roomy enough for a dozen people and was easily the size of one of the rooms in their house. But Helen's persistence paid off and she

got her fully enclosed outhouse. Unfortunately, over the next few months a variety of desert wildlife—mice, kangaroo rats, rattlesnakes, bats, and the like—took a fondness to the large, roomy outhouse. On more than one occasion a shrieking mother, daughter, sister-in-law, or grandmother had to be rescued from the outhouse when a critter decided to position itself inside between the occupant and the door.

Lauren's misfortunes with outhouses didn't end there, however. He is the only person in Chubbuck ever known to have burned down an outhouse. Fortunately, Helen was visiting relatives in Oklahoma at the time. On this occasion a big windstorm blew through Chubbuck. Because the outhouse was so large the wind tipped it over on its side. When the wind died down, Lauren decided it would be a good time to burn the waste paper in the pit before he raised the outhouse again, which is what he did. During the night one of the men came running down from the plant saying, "Mr. Toothaker, your house is on fire." It wasn't the house, of course, but apparently a few lingering sparks had ignited the dry, desiccated wood of the outhouse and it went up in flames.

To help relieve some of the boredom the second year she was there, Helen began helping Mrs. Dicks run the post office; they took turns on alternate days. Helen also decided that she would conduct religious classes, partly for her own intellectual stimulation and also to provide some religious instruction for the children.

The Chubbuck community never had a church or any organized religious service. Missionaries stopped by from time to time, but never on a regular basis. Children received religious training from their parents at home or not at all. Helen was a profoundly Protestant woman, and although the families were mainly Mexican Catholics, she took it upon herself to get the children ready for their first communion. She got



Helen Toothaker's Sunday School class poses for a group photo in front of the superintendent's house, April 27, 1941. A stamp on the back of the photograph reads "American Sunday School Union, Ray R. Perry, Missionary, 1091 Evans Street, San Bernardino, CA." By showing this photo to former residents of Chubbuck 21 of the 46 people in this photo have been identified.

Ray R. Perry, photo, courtesy of Hannah Jo (Toothaker) Bass.

permission from Verne Dicks to hold Sunday School classes on the large screened porch of his house, where it was shady and cool. She taught Bible stories and topics such as the Beatitudes, and within a short time more and more of the children and some of the parents began attending regularly. In spite of the relative isolation of Chubbuck, word got out about Helen's Sunday School classes and it was not long before a Catholic priest from Needles showed up all in a huff and insisted on examining the materials that Mrs. Toothaker was using. He feared that she was proselytizing and trying to convert the children to Protestantism—not that he had ever been to Chubbuck before or had ever shown any interest in the spiritual well-being of the children prior to this. The priest was suspicious of her classes, but Helen asked the priest to send her catechisms and whatever materials he wanted the children to learn in preparation for their First Communion and she would be happy to get them ready. Nothing was ever sent, of course, and the priest never returned.



Martha recalls her mother's continuing efforts to get the children ready for their first communion:

When Catholic girls took their first communion, they wore white dresses. Helen took one or two little girls all the way into Needles, dressed in their very finest. We drove to the Catholic Church. The priest there, according to Mama, was not very welcoming to her or to the girls. Mama was so mad; she was steaming when she came out of the church. She had taught the kids and got them all ready for their first communion. That got very sticky very fast. None of the children had been going to church of any kind. Mother was a very Protestant woman, although she wasn't proselytizing, she just was very stern. Anyway she started this class to give the children some vestige of religious education—they didn't know stories in the Bible, they didn't know any of this stuff, so she started this and it hadn't been going for very long at all and a lot of the kids came. What else was there to do, you know? Helen attributed the priest's aggressive attitude to the fact that there wasn't any money coming across his palm.

Helen's Sunday School classes continued off and on about two years until the Toothaker family left Chubbuck and moved back to Oklahoma.

Helen never fully adjusted to living in Chubbuck. She was justifiably concerned about the quality of education available for her two daughters, and she suffered bouts of deep depression that resulted from the lack of any sort of intellectual stimulation in the desert community. There were no libraries, no books, no magazines, no newspapers—nothing whatever to broaden her horizons or keep her in touch with the world. Her daughter Martha said that she remembered coming home from school and seeing her mother sitting in a chair staring out of the window for hours at a time.

The Toothakers left in 1942 to return to Oklahoma. The older daughter, Hannah Jo, remained in Oklahoma; Martha eventually returned to California (but not to Chubbuck) and settled in South Pasadena, where she lives today.

THE COMPANY STORE

Until 1934, the only place for Chubbuck residents to buy groceries was from a weekly produce truck that came by or by driving to Needles or Barstow. However, Mr. Chubbuck eventually sectioned off the assay office to provide room for a post office and a store. The store sold mainly canned goods, but on occasion they also had fresh vegetables. And, of course, they sold beer. Several of the children remember that at the end of the work day their dads would gather beside the store, sit in the shade, drink beer, and eat hot chili peppers. As men will do, they had bets on who could drink a quart of beer without stopping. Delfino Fabila was in charge of the shipping department, where the sacks were filled with finished crushed lime, and he was the

hands-down winner most of the time. A couple of hours after the end of the work day, Delfino would still be at the store drinking beer and his wife, Enriquetta, who had lost a leg and had to walk using crutches, would make her way through the back yards of Chubbuck with a remarkable degree of celerity—and with her eight kids following along behind her like a covey of quail.¹⁸

Richard Sommers, the son of Nellie Sommers, the teacher in Chubbuck, recalls the men sitting around at the store after work.

Oh, they had beer. And the single guys, every payday they'd sit out there after work and drink hot beer and they'd buy these cases of dried red peppers, those little tiny things, and they'd get a handful of those and eat 'em like pretzels and drink hot beer, and along about seven o'clock, why, they'd start singing and they'd sing until two, three, four o'clock in the morning. They gave my brother Stan one of those red hot dried peppers and he went screaming to the house. The lady that lived right next door, she grabbed a handful of salt and rubbed it all on his lips, on his tongue and everything. He was just real young; you know, two and a half, three years old, something like that. And it blistered the inside of his mouth. Man, she went over and she lit into those guys... man, they never did that again. Of course, Stan never did it again either!

Few people paid for each purchase at the store. The storekeeper kept a copy of the receipts in a book under each person's name, and the charges were deducted from the worker's pay packet. Richard continues,

The timekeeper operated it. And he would open the store at noon for half an hour, and then in the evening after work, about three-thirty. He'd keep it open until maybe six, seven o'clock depending on how the people were buying. If there was nobody buying, he'd lock it up; close it to the next day. If you wanted something in between real bad, then you'd go see him at his house and talk to him and his wife, and he'd come and open it. Whatever you needed he'd sell it to you and then mark it on your account there and it would go to the company. They would take it out of your pay. The company would supply the store. But you had to pay for everything.

Although canned goods were available, there was never much variety at the store. More often than not



"Bringing home the bacon (bologna)." All of the children in Chubbuck including young Martha Sanchez shown here looked forward to the arrival of the weekly produce truck.

Photo courtesy of Hannah Jo (Toothaker) Bass.



the store had only canned goods that weren't selling at some other market and that Mr. Chubbuck could pick up at a bargain price. Most families preferred to buy food from Needles, Barstow, or Twentynine Palms whenever one of their neighbors was making a trip in to town, but failing that, they could make do with what was available at the company store. Those fortunate enough to have a car often brought neighbors along when they went shopping or took their list and did their shopping for them.

Families also bought food through the railroad. A wife in Chubbuck would give the train engineer an envelope containing her grocery order and some cash. A few days later the train would stop in Chubbuck on the return journey and the family's groceries would be unloaded along with the envelope containing the change. Not only food, but household items like sewing machines and toys, such as children's bicycles, were purchased in this fashion.

In addition to shopping trips to Needles or elsewhere, residents of Chubbuck could also buy food from Roy Cowl, the man who built Roy's Café on Old Route 66 in Amboy. About once a week, Roy would load his truck with fresh meat and produce and do a circuit of the outlying desert communities to sell food. Unfortunately, Chubbuck was near the end of Roy's route and by the time he got down there most of what was available had already been thoroughly picked over. However, his arrival was always an occasion. Everybody wanted to go down and get fresh food. Roy continued this service for some time, then in later years it was taken over by Mr. Ragland, who owned a store in Bagdad, and still later by Earl Higgins.

Not only was there a problem getting fresh food in Chubbuck, but keeping it from spoiling during the hot summer months was problematic. In the early years, before the houses had electricity, most families used a desert cooler—a wooden box with shelves and with a piece of burlap draped over the front that was kept wet by dripping water on the top. Evaporation of the wet burlap kept the food cool to some extent; it was just slightly better than having nothing at all.

The men on the railroad shared a kinship with settlers in these small desert communities and did their best to ease some of the hardships. Families living in Chubbuck were obviously poor, but being poor in those years and under these circumstances was not necessarily a stigma. In the absence of money and material possessions, friendships and character were more important. Oftentimes the trains coming north from Blythe, before the days of refrigerated railcars, were pulling boxcars of produce packed with ice. The engineers and brakemen on the train sometimes stopped at Chubbuck to deliver mail or machinery, and they turned their back while the children scampered among the cars, loading their small arms with as many chunks of ice they could carry. Two blasts of the train whistle by the engineer was the signal to get back on the ground. The kids then took the ice collected to their house where it was put in the desert cooler.

If the train was on a tight schedule, it might simply slow to a crawl while they

went through Chubbuck and the conductors would slide blocks and pieces of ice out of the side of the train. Once again the children, who made a game out of it, would run alongside, clamoring to be the first to touch a piece of ice and thereby lay claim to it.

I remember Santa Fe... Well, you know the railroad track, we weren't too far away from the railroad tracks and the Santa Fe train used to go to Parker, Arizona, and they go right through there and in summertime they used to throw a lot of ice for the people—throw chunks of ice, blocks of ice. They used to slide 'em off and throw 'em and they were moving, they used to go through there slow, I remember that, and we used to go out there and run to get 'em, you know, to get ice. They used to throw fruit to us, too.

See, when they used to go down there toward Parker and the fields...I don't know if they used to go pick up the fruit from the fields or buy it, I don't know, but when they came back we used to get watermelons, cantaloupe, stuff like this and I remember, they used to go to the side and roll them out and we used to go after them, and they'd be moving all the time.¹⁹

The camaraderie evident between the railroad workers and the people living in Chubbuck was an interesting kinship. The folks running the trains and the families in Chubbuck were still pulling themselves out of the Depression, the country was united by World War II, and they shared the mutual appreciation people have for each other in the desert. The engineers would frequently tie up their newspapers, magazines, and comic books to toss them out to the groups of children that gathered every time a train came through. The newspapers were dutifully taken home for the parents, but comic books were highly prized and fought over, oftentimes ending up in pieces before the kids realized they'd have to put their differences aside and piece it all back together to read it.

MEDICAL CARE

Residents of Chubbuck depended on home remedies for common ailments. The nearest doctor was in Needles, a 70-mile drive over what was at that time mostly a dirt road. Few, if any, of the residents had any medical training whatsoever except what they knew of simple home remedies. Nellie Sommers, one of the Chubbuck schoolteachers, had been a trained nurse, as was Ruth Piper, but most of the time there were no nurses or doctors anywhere close by.

Expectant mothers traveled to Needles, Barstow, or San Bernardino to have their babies. Some went to Amboy to be cared for by Mary Benjamin. Mary was a midwife who delivered dozens of children in the desert communities. But there were times when babies were born at home in Chubbuck, with women of the community and/or the husbands as midwives. Few people can claim to have lived or attended school in



Chubbuck, and fewer still can claim to have been born there. The few who were born in Chubbuck and are known to me are:

NAME	DATE OF BIRTH
Charles Montiel	24 November 1929
Esther Rodriguez	20 September 1932
Rudolfo Garcia	27 August 1933
Ernestina Sanchez	7 December 1935
Rachael Vargas	30 October 1936
Fernando Limon	30 May 1937
Carmen Limon	27 December 1939
Rebecca Montiel	25 January 1941
Marilyn Martinez	19 February 1941

Fernando Limon's birth was even more unique—he was born in a tent in Chubbuck. His brothers and sisters used to tell him a train dropped him off.

Cuts and bruises were treated with whatever home remedies were available. The victim of any serious injury had no choice but to face a two-hour drive to medical facilities and a doctor either in Needles or Barstow. Serious accidents were rare, but there were a lot of smashed fingers and broken toes.

On one occasion young John Piper was watching his dad flatten corrugated plates on a cement floor in Chubbuck using a large cast iron pulley as a weight. When he went to check on the boilers, John told his son, "Don't touch that. It's dangerous." John did what any 7-year-old boy would do in that situation—as soon as his dad was out of sight he imitated his dad and gave the pulley a shove. The four hundred pound pulley started to fall on its side but instead of jumping out of the way John tried to catch it. The pulley smashed the big toes on both feet and three fingers on his right hand. Piper's car was out of service again, so John Sr. borrowed a car from Liz Madera, bundled his son into the old Studebaker and headed for Needles on the 2-lane rutted dirt road. As luck would have it, about 30 miles from Needles, the rod bearings went out on the old car. Operating on his back under the car in the dark, Mr. Piper removed the oil pan, disconnected the rods and used strips of leather he cut from his belt as substitute bearings. They limped into Needles late that night. All the while, John Jr. was in the car nursing his wounds.

They finally arrived at the Santa Fe Hospital where the doctors went to work on John's hands and feet. The toes were just badly bruised, but the tips of two fingers were nearly completely severed so the doctors attempted to reattach them with clamps.



While the doctors were at work on the wounds, John Sr. roused a mechanic friend out of bed and the two of them spent most of the remainder of the night manufacturing new bearings and reassembling the car. The boy and his dad arrived back at Chubbuck about daylight. There were no pain pills in those days and for several days young John was in agony with the wounds to his hand. After about a week one of the reattached fingers turned black—it was obvious the graft had not taken. John's dad snipped it off with a pair of scissors and his mother bandaged it. To this day, John says, his finger is sensitive to cold weather.

There were two serious work-related accidents in Chubbuck, one of which was fatal. The first involved George Carter, one of several bachelors working in Chubbuck at the time. George fell off of the scaffolding at the crushing plant and landed on a large threaded bolt sticking up from a cement piling. Fortunately George landed on the meatiest part of his buttocks. Although he had to be lifted off of the bolt by the other workers, he was lucky. He had a sizeable wound and did not sit down for a while, but there were no broken bones or major blood vessels that were hit. Afterward, George chose not work at the quarry and instead took on jobs at the store and at the post office, always accompanied by his dog.

Saturnino Ornelus, however, was not so lucky. Early one morning Mr. Ornelus went to the rock crusher ahead of the normal crew shift to get the equipment ready for the day's work. The ball mill at the crusher was run by a wide drive belt that ran from the engine to a large flywheel. Apparently the sleeve of Saturnino's shirt got tangled up in the belt as it was moving and he was bodily flung around the flywheel several times before he was thrown clear. When the workers arrived later for the morning shift, they found Saturnino lying in the dirt about fifty feet from the crusher. He was semi-conscious, but his arm had been torn off at his shoulder. His fellow workers hastily threw a mattress onto the bed of a flatbed truck, hoisted Saturnino and his detached arm onto the truck and headed for the hospital in Needles. Although he was in shock, Saturnino was talkative on the trip and even cracked jokes about his accident. Tragically, he died soon after he arrived at the hospital. He apparently had suffered massive internal injuries from being repeatedly pummeled against the concrete by the flywheel. He is buried in an unmarked grave in Riverview Cemetery in Needles.

I have always been puzzled by the absence of a cemetery at Chubbuck. Small railroad sidings like Archer, nine miles north of Chubbuck, and Milligan, 8 miles south were much smaller than Chubbuck and both have cemeteries. Chubbuck, which had considerably more people than either Archer or Milligan, did not have a cemetery; but there was apparently one burial that occurred there.

In 1930, a Mexican family with a newborn child arrived in the middle of summer. The baby simply withered away in the 120 degree heat. John Piper Sr. made a small casket out of wood and carried the child out into the desert for burial in an unmarked



grave while Ruth consoled the parents. The couple left Chubbuck soon after and never returned. The location of the baby's grave is unknown.²⁰

CHUBBUCK SCHOOL

The fact that Chubbuck had a school at all is due largely to the efforts of John and Ruth Piper and the plant superintendent, Verne Dicks. When the Piper family moved from Goffs to Chubbuck in 1929, their older daughter Lorraine remained in Goffs where she had already been attending school, but their young son, John, came with them to Chubbuck and was old enough to start the first grade. Only a few school-aged children lived in Chubbuck at the time and were either being taught at home or not at

all. This was a worrisome situation, so Ruth petitioned San Bernardino County school officials to establish a school in Chubbuck as part of the Needles School District. She was told that in order for them to justify sending a teacher to the desert, the residents would first have to build a school, provide living quarters for the teacher, and register a minimum of ten permanent students. The district would provide books and a teacher, but the people living in Chubbuck would have to provide everything else.

Official attendance records for the Chubbuck school date from 1934 to 1950 (see Appendix II) but the first classes were held two years before, in the 1932–33 school year and the school was still open in 1952.²¹ There were two school buildings built during the time the Chubbuck mine was in operation. The original school was built in the same style as the houses, a stucco building with the one-room classroom and an adjoining room as the teacher's quarters.



1945 photo of Chubbuck students. L to R: Raymond Ramirez, Francis Vargas, Pauline Santini, Philip Carlos. The newly built school house with the large swamp cooler—the only one in Chubbuck—is in the background.

Photo courtesy of Louie and Rita (Ramirez) Carlos.

With the help of the workers in Chubbuck and by acquiring building materials from wherever they could be found, John Piper and the others managed to build the school. The building was not much larger than a two-car garage, had lath and plaster walls, a concrete floor, and a corrugated tin roof, but it was a school. About two-thirds of the space was allocated to the classroom and the remainder was partitioned into

three small rooms as living quarters for the teacher, separated from the classroom by a curtain hung on a piece of wire. On one side of the living quarters there was a kitchen, pantry, and space for a twin-size bed. She had a sink with a five-gallon pail underneath for the drain. The bathroom for the teacher and the students was an outhouse in back. There was no running water in the building and no electricity. The only lights were kerosene lanterns and water had to be hauled from outside. There was a two-burner pressurized kerosene stove for cooking and to heat water for the teacher's bath. While the men were busy building the school, Ruth Piper began the task of recruiting the requisite ten students. Each morning, using the family Pontiac sedan as a school bus, Ruth drove the dirt road from Chubbuck six miles north to the railroad siding at Archer to pick up children from the railroad section house. Ruth dropped the children off at the school and then continued south to Milligan to another railroad section house to pick up a few more students. At the end of the day she would repeat the process to deliver the children back home. Her diligence paid off and she finally managed to register ten students and convince the school district that a teacher was justified in Chubbuck.

THE SCHOOL TEACHER— WILLA MEACHAM RIDDLE

Chubbuck's first teacher, who arrived at the start of the 1932–33 school year, was Willa Riddle. Willa taught in the Chubbuck School on three different occasions for a total of five years, and she was the last teacher employed at the school when it closed in 1954.

She was born Will Cleveland Meacham in Nashville, Tennessee, in 1887, but not surprisingly she later changed her name to Willa. She attended Peabody Teacher's College in Nashville and lived in Oklahoma for a short time, where she married William Edward



Johnny Fabila (standing) and Raymond Ramirez (seated) in front of the new Chubbuck school, 1945.

Photo courtesy of Louie and Rita (Ramirez) Carlos.



Young ladies of the 8th grade graduation from Chubbuck School, 1948. L to R: Angie Ramirez, Sonja Ramsey, Rita Ramirez, Vera Fabila.

Photo courtesy of Louie and Rita (Ramirez) Carlos.



Riddle. The couple moved to California in 1923, and by 1928 Willa had begun her teaching career. Over the next two decades she became a well-known and highly respected teacher in the desert communities and taught at Lanfair, Phelan, Chubbuck, Vidal Junction, Essex, and Amboy.

Her first teaching assignment was at the Lanfair School in 1929, where she taught for two years until the school closed in 1931.²² After Lanfair she taught for a year at Phelan before arriving in Chubbuck. Her annual salary was \$925, paid for the ten months school was in session.

Willa and William Riddle had two sons and a daughter, but when she was teaching at Chubbuck she lived a lonely life. William and the children lived two hundred miles away in Norco, California while Willa lived alone in the teacher's quarters in Chubbuck. Her husband seldom, if ever, visited either Goffs or Chubbuck while Willa was teaching. Fortunately, Verne Dicks, the plant superintendent, also had family in Norco, and Willa was able to ride home with him on weekends to visit her family.

The first two students to graduate from the eighth grade at Chubbuck School were Betty Goodman and Lorraine Piper. Willa thought it would be unceremonious to hold a graduation ceremony for just two students, so the Chubbuck and Goffs schools held a combined graduation ceremony in June 1933.

In addition to teaching the children during the day, Willa began holding evening classes for the adults. Through her efforts, members of several Chubbuck families became literate enough to pass the exam for US citizenship.

When Willa left Chubbuck for the last time in 1944, she and her husband, who decided by this time that he would move to the desert, purchased the store at Chambless Junction which they ran for a few years. While in Chambless, Willa taught briefly at the Amboy school, but she eventually retired from teaching entirely. They sold the Chambless store and moved to Hemet, where she passed away in 1981.

Willa's teaching job at the Chubbuck school was taken over by Nellie Sommers when Willa left.

NELLIE SOMMERS

Nellie King Sommers was born in Shreveport, Louisiana, on August 31, 1901 and was adopted by the Kings shortly thereafter. Mr. and Mrs. King had once mentioned to their doctor that they wanted a child. Soon thereafter, on a rainy night in Shreveport, there was a knock on the door and Mrs. King answered it. Standing there in the rain was a young girl who handed Mrs. King a bundle wrapped in a blanket and said, "The doctor at the hospital told me that you're looking for a baby, and here she is. I hope that you treat her with love and that she is good for you."

She pressed the baby into the arms of an astonished Mrs. King, then turned and disappeared into the night. They never saw the young girl again. The baby, whom they

named Nellie, was only a few days old, and had come into a home with a strong, loving mother but a dictatorial, self-centered father. The King family moved to a farm about thirty miles outside of Shreveport where Nellie was raised. She got along well with her mother, but her father was hot-tempered, strict, and unyielding; in later years the relationship between Mrs. King and her husband was a troubled one. Once when the King family was on the way to town in a buggy, the old mule pulling them stopped in the middle of the road and simply refused to take another step. Nellie's father whipped and cursed the mule and pulled on the bit, but nothing worked; the mule was not going to move. Mr. King got so angry he built a fire under the old mule's belly to make him start walking. The mule merely walked a few steps forward to avoid the fire, which placed the buggy over the flames and it burned to ashes. The father was furious, of course, and Nellie and her mother lived nervously for the next few days until his anger subsided.

Nellie eventually wound up in California and entered the nursing program at Loma Linda University. She was doing well, but school officials found out that she was only seventeen years old and had not graduated from high school, so they kicked her out. She eventually graduated with honors with a degree in education from Walla Walla University in Washington. After graduation, she moved to San Francisco where she married Ralph Sommers, whom she had met when she was attending school in Washington. They eventually settled in the San Bernardino area and had two boys, Richard and Stanton.

Ralph died of pneumonia in 1935. Nellie, who had been managing the home and raising the two boys, was suddenly faced with having to go back to work. She had a master's degree in education from the University of Redlands, but in the Depression, jobs were difficult to come by, especially for women. In 1936, the San Bernardino County superintendent of schools offered to let her teach at a one-room school in a company town named Chubbuck at a salary of \$1,300 per year. Nellie had little choice but to accept. She bundled up their belongings, packed up her two



Nellie Sommers who taught at the Chubbuck school from 1936-1940.

Photo courtesy of Richard Sommers.



boys and headed east out into the desert in a badly overloaded 1929 Pontiac. Her son Richard picks up the story.

Mother, Stan, and I took off for Chubbuck. It was out Highway 66, 120 miles past Barstow and 90 miles from Needles. We turned right and after 32 miles of bumpy dirt road finally arrived at the open lime quarry mining town of Chubbuck—an all Mexican settlement of approximately thirty-five or forty houses made of old railroad ties and tarpaper roofs with dirt floors, 150 or so people and many kids. We moved into a house also made of railroad ties, with



Two photos of Nellie Sommers with school children in Chubbuck. The girl in the white dress in the top photo is tentatively identified as Angie Lara. The other children are not identified.

Photos courtesy of Richard Sommers.

the school room adjoining next door. Mom did not have far to go to work. Just step through a curtain and she was "La Maestra" for some 35 smiling faces from the first to the eighth grade. No electricity, running water, or toilet facilities. A two-holer was in back of the school house. Mother was not only the teacher, but postmaster, doctor, and mother confessor. She mediated marital disputes, delivered babies, sewed up cuts with black silk thread and a needle, and was an ambulance driver when someone required emergency treatment in Barstow or Needles.

They arrived in Chubbuck for the start of the 1936 school year and took up residence in the small apartment curtained off from the classroom at the back of the school building. She had a kitchen, two bedrooms, an outdoor toilet, and a spigot in back of the school for water. Richard, the older boy, slept in one of the bedrooms with his dog. Nellie and her son Stan shared the other bedroom.

At the end of each school year it was customary for the school superintendent from Needles to test the

students in the rural schools to assess what they had learned and to gauge their potential for attending high school. Nellie's kids always scored in the upper ninety-fifth percentile on the tests. This was not what the San Bernardino school officials expected from students in a remote desert mining community and they wanted to know her secret. Nellie's response to him was, "They're just smart kids." Her success, of course, was because she made it fun for the children to study and to learn. For instance, during the school year her students had been studying the missions of California. During their summer vacation Nellie organized several cars and took the six, seventh, and eighth graders on a tour of the missions at Capistrano, San Diego, and Orange. The students were able to meet the padres and they heard firsthand about the missions and how they affected the lives of the early California settlers. On the way back, they visited Boulder Dam. Although the dam was nearly completed it was not yet open to the public. Nellie persuaded the workers to give her students a tour and they were the first school class to tour Boulder Dam. The kids all had their photos taken standing with one foot in Arizona and one foot in California before boarding their cars for the trip back to Chubbuck.

She took several classes on a tour of the Los Angeles Museum of Natural Science. Nothing seemed to be too difficult to arrange when it came to educating her pupils. She made schooling exciting and interesting for the kids and used the older children to a great extent to teach the younger kids, and they liked it. She was a determined woman. In the words of her son Richard, "She had certain standards and morals and ideals that never changed."

The teachers managed to teach all eight grades in one room by seating the



1940 photo of some of the young boys in Chubbuck. Kneeling in front: Jesse Carlos (with sailor cap) and Eddie Garcia. L to R on the car: Joe Sanchez (in the white shirt), Louie Carlos, Raymond Ramirez (without shirt). Frank Vargas's 1939 Chevrolet.

Photo courtesy of Louie and Rita (Ramirez) Carlos.



L to R: Angie Ramirez, Mary Vargas, Vera Fabila, Rita Ramirez. In front of the new Chubbuck school, 1946 or 1947.

Photo courtesy of Louie and Rita (Ramirez) Carlos.

<p align="center">TRANSFER NOTICE</p> <p>Name _____ Grade _____</p> <p>Transferred from this school to _____</p> <p>Birthdate: Mo. _____ Day _____ Year _____ Age _____</p> <p>Parent or Guardian _____</p> <p align="right">Teacher or Principal _____</p>		<p align="center">"We are not here to play—to dream, to drift— We have hard work to do and loads to lift. Shan not the struggle—face it, 'tis God's gift."</p>	<p align="center">SAN BERNARDINO COUNTY SCHOOLS</p> <p align="center">REPORT CARD</p> <p>SCHOOL YEAR 1932-1933</p> <p>Report of <u>Margaret Sanchez</u></p> <p>School <u>Chubbuck</u> Grade <u>First</u></p> <p>Teacher <u>N. Sommers</u></p>
<p align="center">GRADE PLACEMENT CERTIFICATE</p> <p>In the judgment of teacher and principal this pupil should work in the <u>first</u> grade during the year 1932-1933.</p> <p align="right"><u>Nellie Sommers</u> Teacher</p> <p align="right">_____ Principal</p>			<p>My dear Parent:</p> <p>We send you this report at regular intervals so that you may know how your child is getting along in school. By it we try to tell you what success he has had in his studies and what kind of a young citizen he is becoming, so far as the teacher knows him. If he is failing we shall tell you the reason as we see it. This card, however, can give but a limited view of your child's progress.</p> <p>You are always welcome to visit the school to see the ways and the conditions under which your child is getting his education. If you wish a more detailed report of his activities and progress you are most cordially invited to confer with his teacher or principal. We earnestly desire to co-operate with you in every possible way.</p> <p align="right"><u>Nellie Sommers</u> Principal</p> <p align="center">Approved by COUNTY SUPERINTENDENT OF SCHOOLS Ramsay & Plank Co., San Bernardino</p>

<p align="center">PROGRESS IN SCHOOL SUBJECTS</p> <p>This pupil is studying:</p> <table border="0"> <tr> <td>Arithmetic</td> <td>Social Studies</td> <td>Healthful Living</td> </tr> <tr> <td>Language Arts</td> <td>Geography</td> <td>Physical Education</td> </tr> <tr> <td>Spelling</td> <td>History</td> <td>Hygiene</td> </tr> <tr> <td>Writing</td> <td>Science</td> <td>Fine Arts</td> </tr> <tr> <td>Language</td> <td>Nature Study</td> <td>Music</td> </tr> <tr> <td>Reading</td> <td></td> <td>Drawing</td> </tr> <tr> <td>Work Type</td> <td></td> <td></td> </tr> <tr> <td>Recreational</td> <td></td> <td></td> </tr> </table> <p>This pupil: FIRST QUARTER Does strong work in _____ Is weak in _____ In all other studies, work is satisfactory for grade. Days present <u>41</u> Days Absent <u>1</u> Tardy <u>0</u></p> <p>This pupil: SECOND QUARTER Does strong work in _____ Is weak in _____ In all other studies, work is satisfactory for grade. Days present <u>44</u> Days Absent <u>0</u> Tardy <u>0</u></p> <p>This pupil: THIRD QUARTER Does strong work in _____ Is weak in _____ In all other studies, work is satisfactory for grade. Days present <u>28</u> Days Absent <u>2</u> Tardy <u>1</u></p> <p>This pupil: FOURTH QUARTER Does strong work in _____ Is weak in _____ In all other studies, work is satisfactory for grade. Days present <u>26</u> Days Absent <u>5</u> Tardy <u>1</u></p>	Arithmetic	Social Studies	Healthful Living	Language Arts	Geography	Physical Education	Spelling	History	Hygiene	Writing	Science	Fine Arts	Language	Nature Study	Music	Reading		Drawing	Work Type			Recreational			<p align="center">WEIGHT IS ONE INDEX OF NORMAL HEALTH HABITS. YOUR CHILD'S WEIGHT IS:</p> <table border="1"> <tr> <th>Normal or Above</th> <th>1st Q.</th> <th>2nd Q.</th> <th>3rd Q.</th> <th>4th Q.</th> </tr> <tr> <td>Seven % Below Average</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Five % Below Average</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Teacher's Remarks: <u>See above card to learn.</u></p> <p>Parent's Signature: <u>Margaret Sanchez</u></p> <p>Parent's Remarks: _____</p> <p>Teacher's Remarks: <u>Margaret is a good little girl in school and keeps her time.</u></p> <p>Parent's Signature: <u>Margaret Sanchez</u></p> <p>Parent's Remarks: _____</p> <p>Teacher's Remarks: <u>Though absent a lot, she has made fast improvement in her work.</u></p> <p>Parent's Signature: <u>Margaret Sanchez</u></p> <p>Parent's Remarks: _____</p> <p>Teacher's Remarks: <u>See above card to learn.</u></p> <p>Parent's Signature: <u>Margaret Sanchez</u></p> <p>Parent's Remarks: _____</p>	Normal or Above	1st Q.	2nd Q.	3rd Q.	4th Q.	Seven % Below Average					Five % Below Average					<p align="center">GROWTH IN HABITS AND IDEALS OF GOOD CITIZENSHIP</p> <p>The schools are constantly trying to develop and strengthen habits and ideals of good citizenship in every pupil. Good citizenship means working and playing together in a helpful, happy manner for the best interests of all.</p> <p>A check mark (✓) indicates specific item in which improvement can be made.</p> <table border="1"> <tr> <th>CITIZENSHIP</th> <th>1st Quar.</th> </tr> <tr> <td>Effort Is interested and does his best.</td> <td></td> </tr> <tr> <td>Attitude Has right attitude of work and play.</td> <td></td> </tr> <tr> <td>Dependability Depends upon himself and is prompt in meeting his obligations.</td> <td></td> </tr> <tr> <th>CITIZENSHIP</th> <th>2nd Quar.</th> </tr> <tr> <td>Effort Is interested and does his best.</td> <td></td> </tr> <tr> <td>Attitude Has right attitude of work and play.</td> <td></td> </tr> <tr> <td>Dependability Depends upon himself and is prompt in meeting his obligations.</td> <td></td> </tr> <tr> <th>CITIZENSHIP</th> <th>3rd Quar.</th> </tr> <tr> <td>Effort Is interested and does his best.</td> <td></td> </tr> <tr> <td>Attitude Has right attitude of work and play.</td> <td></td> </tr> <tr> <td>Dependability Depends upon himself and is prompt in meeting his obligations.</td> <td></td> </tr> <tr> <th>CITIZENSHIP</th> <th>4th Quar.</th> </tr> <tr> <td>Effort Is interested and does his best.</td> <td></td> </tr> <tr> <td>Attitude Has right attitude of work and play.</td> <td></td> </tr> <tr> <td>Dependability Depends upon himself and is prompt in meeting his obligations.</td> <td></td> </tr> </table>	CITIZENSHIP	1st Quar.	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Pre-First Grade report card from the Chubbuck School for Margaret Sanchez for the 1938/39 school year signed by Nellie Sommers.

Courtesy of Margaret (Sanchez) Chavez.



Nellie Sommers' students at Chubbuck School pose outside their school building in 1938 with their model train project at their feet. Twenty of the twenty-eight students in the photograph have been identified.

Photo courtesy of Margaret (Sanchez) Chavez.

students according to grades, the smaller children across the front rows and the older children in the back. The older children often used to assist the younger students with reading and spelling. Although most of the children who attended the school were Mexican, classes were all taught in English. The kids spoke English at school, Spanish at home, and a mixture of the two while playing with their friends.

If students chose to continue attending school after the eighth grade, their only option was to attend high school in Needles. This meant boarding with a family in Needles during the week, which several students did. San Bernardino County paid a small stipend to certain families in Needles who offered room and board to students from rural areas during the school year. Parents in Chubbuck would take turns driving the students to Chambless Junction on Sunday where they caught the afternoon Greyhound bus into Needles. On Friday the process was reversed—a Greyhound bus brought the students back to Chambless where one of the parents would be waiting to drive them back to Chubbuck for the weekend. Two days later, the whole process was repeated once more. At any one time there might be three or four students commuting to Needles to attend school. It was not uncommon for the boys in Chubbuck to go to work at the quarry once they graduated from the eighth grade. The girls were more likely to attend high school although the drop-out rate was high.



Considering the primitive conditions, the isolation, and the hundreds of other amenities that were lacking in the Chubbuck school, the children did surprisingly well. Students often commented that when they graduated from the eighth grade in Chubbuck they looked forward to beginning the next school year in Needles. However, when the time came, they went to Needles School with no small amount of trepidation, fearing that, because they were coming from a rural school, they would not be as well prepared as their classmates. In fact, just the opposite was true. Chubbuck students found that their teachers had prepared them well; they were academically ahead of the students who had attended grade school in Needles. Teachers in Needles were also surprised and often asked, "Where did you go to school?" "Out of town," they would answer. If they said they were from Chubbuck, either no one would know where that was or they would be ridiculed as country bumpkins.

Rudy Garcia, one of Shorty Garcia's children, recalls his experience of transferring from Chubbuck to Needles.

You know, she prepared us so that we could go on to high school because you had to have certain classes, and then I remember when it got to my ninth grade, she over-prepared us. If we had the time and if you needed, she would meet you after school and what have you. A lot of the things that she taught us, man, the guys in the Needles school system in the eighth grade weren't even getting that, you know.

Students also remember Mrs. Sommers for her fruit salad. At the end of each school year, prior to her leaving for San Bernardino for the summer, she would make a large bowl of fruit salad. She and the students had a weenie roast luncheon that featured her fruit salad to celebrate the close of the school year. Many of the children had never eaten fruit salad until Mrs. Sommers made it for them.

THE STORY OF DUCK BABY BY RICHARD SOMMERS

Most residents of Chubbuck had pets—the place seemed to be overrun with dogs—and some people kept chickens, rabbits, and goats for food, but the most unusual pet was the Sommer's duck, described here by Richard Sommers.

While attending the Orange Show in San Bernardino Stan and I bought a baby duck, a little ball of yellow feathers. We brought her home in a cottage cheese box and named her Duck Baby. We placed the box by the heater in the house and that became her home.

When she heard the door open and close she would create a racket until someone went over and talked to her. "Duck Baby, how are you?" and then she would quiet down and talk back to us, "Pipipipipi." We soon learned that if we left the

radio on while we were gone Duck Baby would think we were still there and would be calm.

As she grew we built a fenced enclosure for her outside of the back door where we also kept a penned rabbit, but Duck Baby would often run free while we were playing kick ball or kick the can game in Chubbuck. How she avoided being eaten by a coyote is a miracle. When we went out to play either Stan or me would pick her up and take her under our arm as you would a small dog and take her to wherever we were going to play. We put her in the shade of a bush while we played and she stayed there. If we started to leave without coming back to pick her up she would start squawking like the dickens and paddle on the sand. If the sand got too hot, she'd lie on her tummy and stick her feet out in back of her and would squawk and squawk and squawk until one of us came and picked her up—and she wouldn't let anybody else pick her up. She'd snap at them and flap her wings at anyone except me or Stan.

Duck Baby and the family dog became good buddies. She laid an egg every day and we often argued about who would get the egg. She continued to lay an egg every day until about the last year of her life, except when she was molting.

When we moved to town she came with us and lived to be 17 years old. One day grandfather went out in the back yard and returned to the house with tears in his eyes. "Duck Baby is dead," he said. She was a great, if unusual, desert pet and everyone missed her.

In 1938, the Needles School District agreed to fund the building of a new school and a teacher's quarters, and a newer wood-frame school was constructed in the early 1940s, but was still a one-room school where the teacher taught grades one through eight. However, the new school had bathrooms with real flush toilets—not an outhouse—for the boys and the girls! It was the nicest looking building in Chubbuck and the only one that had a



Duck Baby in Chubbuck.

Photo courtesy of Richard Sommers.



Undated photo of Chubbuck students outside of their new school engaged in a rare experience of building a snowman. The original photo is undated but was probably taken in 1944 or 1949 when Ludlow and Amboy also reported snow.

Photo courtesy of Sally (Garcia) Carlos.



swamp cooler.²³ The new school, although primitive, was a marked improvement over the original building. It now had wooden floors and a wood-burning stove in the corner to heat the classroom in the winter. Somehow the school acquired a piano that sat in the back of the classroom opposite the wood stove. The teacher's desk and the blackboard were at the front of the room, and on the side wall hung a large Regulator clock.

We used to have a big old key that we used to wind up the clock. Whoever got the best grade, whoever had better behavior, they got to wind up the clock. And whoever was most better behaved, I don't know what kind of grades we were getting, but we used to have the honor of raising the flag in the morning, and bring it down in the afternoon. There was the flag raising in the morning and during the flag raising, the Pledge of Allegiance.²⁴

The teacher's quarters were also greatly improved. Richard Sommers again takes up the story.



New teacher's quarters in Chubbuck with four unidentified children on the front steps. The oil drum on the right hand outside wall was fuel for the kerosene stove.

Photo courtesy of Richard Sommers.

The next summer they built a new schoolhouse along with a house for us to live in, complete with indoor plumbing, a shower, and toilet. It was a two by four frame structure with no siding and 3/4-inch celatex nailed to the studs on the inside. When the wind blew the sand would come through the cracks and crevices. The company had also run electricity to all of the houses that year. We thought we had died and gone to heaven! We were there four years. I look back on it as some of the happiest days of my childhood.

The families living in Chubbuck found their entertainment wherever they could. For the children and the adults, entertainment was whatever you made. There were not many sources of diversion. Families occasionally had parties that were held outside. The big event was going to Needles once a month or to Amboy on Saturday night. Some families made the trip to Cadiz Summit or Mountain Springs for Saturday night dances. After dinner during the summer the families commonly sat around outside at dusk eating watermelon and socializing. The children collected the watermelon rinds and

stacked them in a pile and then waited for the rabbits to show up. Someone counted 160 rabbits one evening. Jackrabbits feasted on the watermelon rinds and feuded over the spoils by thumping the ground with their hind legs. The school building was also used for Saturday night dances, Esther Rodriguez remembers:

A lot of times when they used to have dances or something, they used to push the desks to the side and then we'd have the metal player and the rag tub. In those years, the parents didn't know about babysitters or anything like that. They used to take us. And when we'd get tired we'd sleep on the desks. Yeah, I do remember that. But my parents used to love to dance and it's kind of funny, because once we grew up they quit dancing.

They used to have fun, too, because I remember, like I say, they used to go dancing. They'd say, "Oh, we're going to dance tonight" and I could see my mother scurrying around putting her iron in the stove to curl her hair, and my aunt too, and they would be up there getting everything ready for themselves and then they'd go and they'd have a violin and a horn or whatever and be playing the music and they'd be jumping around and having a good time. Yeah, because we didn't have movies. And I remember my father used to have a radio, a little round radio that he kept just for his use only. We weren't allowed to touch it. He would come home in the middle of the day and he'd have his lunch and listen to the news. Then he'd go back to work. He'd come home in the evening and listen to the news, and I do remember hearing Jack Benny once in a while, you know, when we could, "Oh, can we listen to the radio?"²⁵



Side view of the newly constructed teacher's quarters in Chubbuck. Nellie Sommers' 1937 Ford parked in front.

Photo courtesy of Richard Sommers.

After teaching for four years in Chubbuck, Nellie accepted an offer to teach in Oro Grande, about 20 miles north of Victorville, and she and her two boys moved away and never returned. She continued teaching until the mandatory retirement age of 65, but then worked as a LVN in the maternity ward at the San Bernardino County Hospital for another ten years. Her eyesight eventually failed her, but she refused to move in with her sons or to an assisted living facility. She lived by herself until she died. Her son Richard compared her stubbornness to the old mule her dad had built the fire under. At her 100th birthday party hosted by her family in Tustin, California, Nellie wore a T-shirt with the words, "If I had known I was going to live this long, I would have taken better care of myself."²⁶



Nellie died in Orange, California February 17, 2002 at the age of 101 and she is buried at Pioneer Cemetery in San Bernardino.

List of teachers who taught at Chubbuck for each of the school years.

1932-1933	Willa M. Riddle ²⁷
1934-1935	Vilora Weaver & Willa M. Riddle
1935-1936	Willa Riddle
1936-1937	Nellie Sommers
1937-1938	Nellie Sommers
1938-1939	Nellie Sommers
1939-1940	Nellie Sommers
1940-1941	Mrs. Sibyl Poyner
1941-1942	Margaret Westlake
1942-1943	Florence Foreman; Lulu R. Kuhns,
1943-1944	Willa M. Riddle
1944-1945	Willa Riddle & Mrs. Maulin
1945-1946	Mary Ohre Horton
1946-1947	Mrs. Mabel P. Conner
1947-1948	Mrs. Mabel P. Conner
1948-1949	Mrs. Mabel P. Conner
1949-1950	Mabel P. Conner & Willa M. Riddle

Most, but not all, of the teachers are remembered fondly by the children because they always seemed to have time for those who needed help. They frequently remained after school with the children to help with school work, to give piano lessons, or to prepare lessons for the next day.

THE CLOSING YEARS

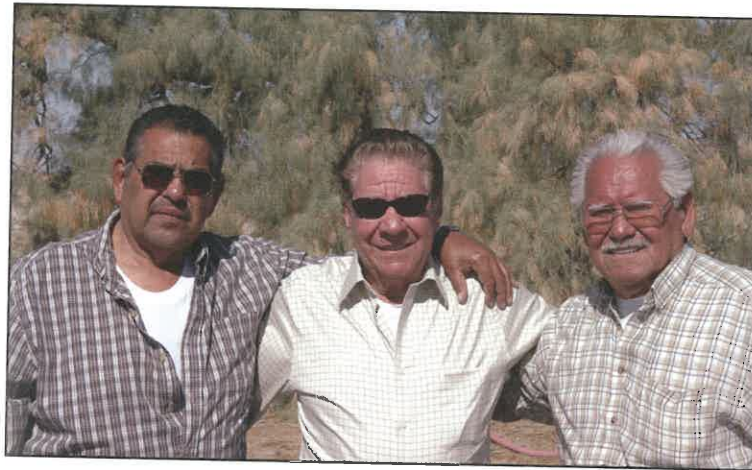
The deteriorating quality of the crushed lime and the ever-increasing transportation costs made the Chubbuck operation less economical each year. The development of new technologies that provided a more efficient whitening agent forced the plant to finally close in the early 1950s. Only a few persistent souls were left, clinging tenaciously to the dream. The inhabitants of Chubbuck were dependent on the mine for their livelihood; once the mine closed, the residents soon moved away and the town was abandoned. Nature is gradually erasing most of what remains. By 1972, the last of the wooden structures was gone and today only the concrete foundations remain to mark the location of where houses once stood.

Mr. Chubbuck retired to Montecito, California and passed away November 9, 1966. His ashes were scattered at sea. His daughter Patricia lives in Montclair, California.

Chubbuck was home for workers employed at the limestone quarry and lime process-

ing mill that was worked almost continuously from 1925 to 1949 as the Chubbuck Lime Co. and intermittently from 1949 to 1952 by the White Mountain Lime Company.²⁸ Today Chubbuck is lonely and deserted; still and quiet. A single stucco building that once served as the dynamite storage bunker stands in the shadow of large, bare concrete pillars that once supported the kiln and the limestone processing plant. A mile to the west, a large white scar on the face of the mountains marks the site of the limestone quarry. The concrete remains and a few scattered foundations of what were once houses provides only a hint of the activities of the twenty or so families and the mining operation that once existed here.

OLD FRIENDS REUNITED.

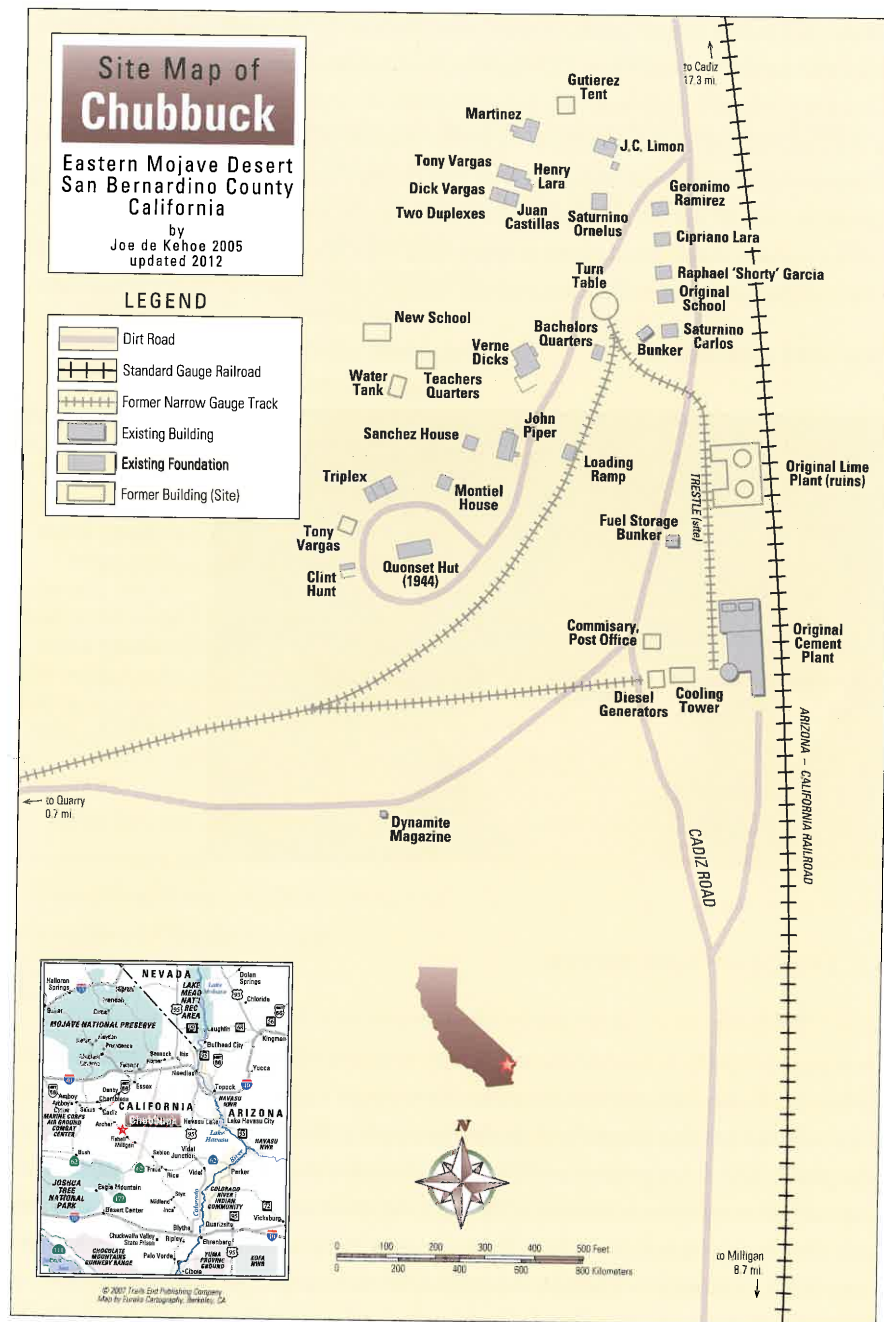


Sixty years after the plant at Chubbuck closed and the families moved away, three former grade school classmates reunite at the site where they grew up. L to R: Louie Carlos, Eddie Garcia, Paul Limon on a visit to Archer and Chubbuck, February, 2007.

joe de Kehoe ,photo.

A WALK THROUGH CHUBBUCK

This is Chubbuck, or more correctly, the remains of Chubbuck. Of what once comprised a community of about twenty-five houses, only two structures still remain relatively intact. Time, fire, and the elements have taken their toll and now only the cement foundations of the homes and the plant remain. Everything that was made of wood is gone. The description that follows is intended as a self-guided tour. The houses are named simply for a person or family who once occupied the house and not necessarily for the first resident. While the mine was in operation, it was not uncommon for workers to move from house to house as their families grew, and in most cases when families moved away from Chubbuck another family moved in to take that worker's place. The most prominent ruins at Chubbuck are the substantial concrete remains of the lime plant adjacent to the railroad. The remains of individual homes are also still evident, but only as foundations and are less conspicuous and are best examined on foot.²⁹



Site map of Chubbuck showing the location of homes, buildings, and roads that once existed there. Today the dynamite magazine, the bunker, fuel storage bunker, and cement pillars of the original cement plant remain standing, but with the aid of this map several foundations of houses can also be identified.

JC LIMON HOUSE was made of railroad ties with a concrete floor and with a smaller, seven by seven foot slab adjacent to the main house that was a room for the older boys. Only the concrete slab with a small concrete stoop and a back porch step remains. Threaded bolts standing upright along the margins of the foundation mark the location of the railroad ties that formed the base of the perimeter walls. A railroad tie imbedded in the concrete marks a former interior wall. The house was occupied by J. Carmen "JC" Limon, his wife Antonia and their five children who lived in Chubbuck from about 1936 until they moved to Amboy in 1941. JC's job in Chubbuck was as the powderman—the dynamite man at the quarry. His oldest son Abe worked at the mine as a laborer. His was probably the last house standing in Chubbuck.

GUTIERREZ TENT SITE When they first moved to Chubbuck several families lived in large walled tents until they could find the time and resources to build a permanent house. This is the approximate site of where the Gutierrez family lived when they first arrived in Chubbuck in the late 1930s. They eventually moved into the Saturnino Carlos House about 1941.

MARTINEZ HOUSE was constructed about 1934 using railroad ties. It housed Manuel Martinez, his wife, Pauline, and their children. Only bits and pieces of a cement foundation that faces southeast and measures about 25 feet by 30 feet remain. The irregularity of the concrete slab gives the impression that new additions were added to the house several times by the occupants.

TWO DUPLEXES Built in the early 1930s, these parallel duplexes were built out of railroad ties. Each duplex was about 75 feet long by 25 feet wide and faced southeast; there was a courtyard between them that was about 30 feet wide. As was the case with the houses, the duplexes were built with a concrete slab for a floor and they probably had wooden walls because there is no sign of chicken wire or plaster rubble to indicate a lath and plaster construction. Tony Vargas, a worker from New Mexico and his cousin, Dick Vargas, lived with their families in the west end of the duplexes. Tony's wife, Tomasa, eventually tired of living in Chubbuck and left him, and Tony moved to the Roman House. Cipriano Lara, his wife, Isidra, their two daughters, and a son, lived in the front of one of the duplexes. Lara was the Santa Fe foreman in Milligan, but the family lived in Chubbuck so that his daughters could attend school. The Laras also occupied a house between the Ramirez and Garcia houses at one time, but the dates of occupancy are unknown. Juan Castillas, an elderly bachelor who worked as a driller at the quarry, lived in the front section of the other duplex. These duplexes caught fire and burned in the early 1940s and were not rebuilt. Norberto Carlos's 1930 Franklin happened to be parked nearby and was also lost in the fire.

After the fire, two Quonset huts were erected on the concrete slabs where the duplexes had been. Andy Lucero and his wife, Juanita, lived in one of the Quonset huts.



SATURNINO ORNELUS HOUSE Santos Foss and Joe Ruiz lived in this house at different times, but the dates they were there are unknown. Santos was married to a Mojave Indian woman. Ruiz, who married Herlinda Carlos, later moved to the house vacated by Shorty Garcia. The slab of cement that is the remains of what was once the floor of the Bachelor Quarters in Chubbuck bears the initials "JR," believed to be those of Joe Ruiz who helped with construction projects. Joe's nickname was "Sarco" because of his green eyes.

One of the last people to occupy this house was a bachelor, Saturnino Ornelus. Ornelus lost his arm and died in a mining accident at Chubbuck and is buried in Needles. Only the rubble of a concrete foundation remains to mark where the house once stood.

GERONIMO RAMIREZ HOUSE faced west and the back of the house was toward the railroad tracks. This house was made of railroad ties and one of the northernmost houses in the line. It was first occupied by the quarry foreman John Perez about 1930 and then by Enrique Rodriguez who lived in the house with his wife, Concepcion "Concha," and their six children. After the Rodriguez family left in 1945, Geronimo and Carmen Ramirez moved in. Henry Rodriguez and Geronimo Ramirez were laborers at the limestone quarry. The outside perimeter of the concrete floor of the house still bears the impression of railroad ties that served as the foundation for the exterior walls. The concrete floor of the house measures about 20 feet by 30 feet and is littered with chunks of wire and plaster debris from the collapsed walls.

CIPRIANO LARA TENT There is just a smooth concrete slab remaining about 15 feet by 21 feet which served as the floor of the Lara's tent. Cipriano was a foreman for the Santa Fe railroad in Milligan. During the week he lived in Milligan, but the family—his wife, two daughters, and a son—lived in Chubbuck so the children could attend school. Cipriano visited the family in Chubbuck on weekends. He later became the foreman at Cadiz. With the exception of the schoolteachers, the Lara family was the only family living in Chubbuck and not connected to the limestone mining operation.

SHORTY GARCIA HOUSE Raphael "Shorty" Garcia came to Chubbuck about 1934 and became the superintendent's assistant. Shorty and his wife, Josephina, and their children remained in Chubbuck for about twelve years until they moved to Oro Grande about 1946. The only thing remaining of the house is a concrete pad that is littered with rubble from the walls that have collapsed inward. The inscription "By E.G. R.G. 5/25/44" (Edward Garcia and Raphael or Rudy Garcia) is inscribed in the cement slab that was once the floor of the house. Edward was Shorty's son and worked in Chubbuck for a time as a kiln burner. The house was later occupied by Joe Ruiz and his wife, Erlinda (Carlos), daughter of Norberto Carlos. The inscription "J.

Ruiz 1947" is etched into each of the two concrete back steps of the house facing the railroad tracks.

ORIGINAL SCHOOL BUILDING The first school in Chubbuck was made of lath and plaster and was built about 1932 with the front door facing the railroad tracks. The eastern two-thirds of the building was a one-room classroom, and the back third was partitioned off from the classroom with a curtain and used as a teacher's quarters. When the new school was built about 1940 Norberto Carlos and his wife, Petra, moved into the vacated school and turned it into a home for their growing family which eventually numbered fourteen children. The only thing that remains of the original school is a concrete pad that is littered with chicken wire and rubble from the remains of the plaster walls.

SATURNINO CARLOS HOUSE is the only house in Chubbuck where some of the exterior walls still remain. The ruins of this house are nearest the front door of the bunker. The house originally faced east toward the railroad tracks and was occupied first by Mr. Ochoa about 1930,³⁰ and then by Saturnino and Angelina Carlos. Saturnino worked at the loading area of the kiln where the products were put into sacks and he also worked as a kiln burner for a while. He remained in Chubbuck about nine years, from 1931 until about 1940. When he left, the house was occupied by the Gutierrez family. In addition to the concrete floor, the back wall and part of the south wall of the building still remain. Saturnino Carlos is purported to be the first in Chubbuck to have an electric washing machine and the first to own a radio.

The BUNKER is a small but substantial concrete building that faces northeast. The walls are made of stone and cement blocks, and has a roof made of railroad ties covered with corrugated tin and a layer of sand and gravel. The windowless building has a cement floor and was built into the side of a low hill. The bunker was a utility shed used for equipment and to store ice that was packed in sawdust and reportedly sometimes lasted through the summer. The building was also used to store flares that were used for emergency lighting when the electrical generators went down. It was apparently never used as a residence.

The BACHELOR QUARTERS was a small bunkhouse that provided sleeping accommodation for six men and was used by temporary laborers. The building was positioned between the bunker and the superintendent's house and was near the turntable of the narrow gauge railroad. Only a small 15 foot by 12 foot concrete pad remains of the bachelors' quarters. The initials "E.R." are etched into the concrete on north end of the pad which may stand for "Enrique Rodriguez" who often helped with building projects. The bachelors' quarters were little more than a bunkhouse—there was a bedroom for two or three bunk beds and a cooking area. Most of the men who lived here made arrangements with the wives of other workers for meals and laundry for which they paid a small stipend.



The SUPERINTENDENT'S HOUSE At 45 feet by 35 feet, this house was the largest house in Chubbuck. It was built facing northeast on the shoulder of the low hill that afforded the superintendent a view of the community and the plant. The measure of one's social standing in Chubbuck, at least in the minds of the children, was based on the how close a family's house was to the superintendent's house. It was a two-story structure with a large porch screened on three sides and a carport on the south wall. The screened porch was popular with the children as a shady place to play. The second story was used by Mr. Chubbuck during his visits to the desert. Other superintendents who worked at Chubbuck and who also occupied the house during their tenure were Mr. Rentmeister and Mr. Lauer. Only concrete rubble remains of the foundations of the house, but the cement walk leading to the back door from the carport is still evident, as are the front steps, which were also made of concrete. A fireplace once stood on the southeast wall of the house. The large square concrete chimney lies amidst the rubble.

NEW SCHOOL About 1940 the Needles School District built a new wooden school with a separate teacher's quarters on the north side of the hill behind Verne Dicks. Albeit still a one-room classroom, it was a decided improvement over the old school because it had indoor plumbing and separate toilets for the girls and boys. It also had a swamp cooler for the hot weather days and a wood stove for heating the classroom in the winter. The building was made entirely of wood. Nothing remains of the new school or the playground.

TEACHER'S QUARTERS A separate teacher's quarters, a much needed improvement, was built at the same time as the new school. It was a plain and simple wood-frame building, but the teacher no longer had to live in a room adjacent to the classroom. The windows had wooden flaps that were propped open with a stick to let in light, but could be fastened closed during windstorms to keep out the sand and dust. As is the case with the new school, nothing remains to mark the site of the teacher's quarters.

WATER TANK Water supplied to the houses in Chubbuck was from a large steel water tank perched on a low wooden platform made out of railroad ties and positioned at the crest of the low hill behind the superintendent's house. Water was brought in by railroad cars and was pumped to the water storage tank from which it was gravity-fed to the houses by a system of buried pipes. Few houses in Chubbuck had water indoors. Most had a spigot out back and water was brought into the house in pails. Only a few scattered pieces of the railroad ties that were used as the foundation for the tank still remain.

TURNTABLE The turntable allowed the narrow gauge train to change directions going to and from the mine. Only a slightly elevated bare patch of ground between the bunker and the superintendent's house marks the location today. The small

patch of ground between the turntable and the original school was once a baseball diamond where visiting teams from Amboy and Cadiz competed with the workers from Chubbuck.

LOADING RAMP The railroad ties that comprise the remains of the loading ramp for the narrow gauge are still in evidence at Chubbuck. This platform was used to load heavy equipment that needed to be hauled to the quarry.

PIPER HOUSE Only a cement slab and rubble remain of the house that was built by John Piper about 1930. The house faced southeast, toward the lime plant, and had a large front porch that ran the length of the house. Piper lived in the house with his wife, Ruth, their son John Jr. and Ruth's brother, Frank "Caddy" Russell. John and Caddy were kiln operators. What remains of the fireplace is still visible at the northeast end of the house, and a large double laundry sink made of concrete rests amidst the rubble. When the Pipers left Chubbuck, the house was occupied by Norberto Carlos and his family. The house had a large porch in front and was made of white stucco. When the Carlos family moved into the old school, Lauren Toothaker, his wife, Helen, and their two daughters, Hannah Jo and Martha, occupied the house because it was larger than where they had been staying. Lauren Toothaker was the assayer in Chubbuck and also ran the store and the post office. The Toothakers remained in Chubbuck for only two years and returned to Oklahoma about 1942.

SANCHEZ HOUSE was occupied by Mauro Sanchez, his wife, Manuela, and their family, who lived in Chubbuck from about 1935 to 1942. Mauro worked mainly at the primary crusher near the quarry. Only a cement slab with a back porch area with charred stubs of railroad ties and cement steps remain of their house.

MONTIEL HOUSE David Montiel and his wife, Lupe, occupied this house for about 18 months in 1940 and 1941. Before moving to Chubbuck, David's job was delivering telegraph messages to Chubbuck from Amboy. When the family first moved to Chubbuck they lived in a large tent and got electricity by stringing wires to the Sanchez's house. After eighteen months in Chubbuck the family moved to Amboy.³¹

TRIPLEX The triplex was first built by the Texas consortium as a place to house the workers for the cement plant. The building was built entirely of wood, so any evidence of it having been there is now gone. Lauren and Helen Toothaker and their two daughters lived in the triplex for a short time before they moved into the Hunt House. The triplex was occupied at different times by Henry and Laura Sera, the Sanchez family, Sally and Jesse Carlos, and Benny Montañón and his Indian wife.

ROMAN HOUSE One of the earliest residents of the Roman House was Tony Vargas, a laborer at Chubbuck. Tony's wife eventually packed up and left him, but he occupied the house until the mid-1940s. When Tony vacated, Robert Bermudez, a laborer, and his wife, Hermelinda, (Carlos) daughter of Norberto Carlos, moved into the house. The last family known to have occupied the house is Henry Roman and his



wife Lupe. Henry worked with Norberto Carlos as a driller at the quarry. Only a vague impression of a foundation remains today where the small house once stood.

The HUNT HOUSE was once occupied by Clint Hunt, his wife, Dorothy, and their two children, Dianne and Douglas. This house was originally built mostly of wood and with a large screened front porch and a carport on the south wall. Clint was the diesel mechanic in Chubbuck but he was also a talented saxophone player and commonly played for dances at Mountain Spring, Cadiz Summit, Amboy, and Kelso. The Hunts lived in Chubbuck from 1938 to 1942 until they bought the gas station and garage at Cadiz Summit on Route 66.

QUONSET HUT Built about 1949 as a residence during the waning years of the quarrying operations, it was divided into living quarters for four families. Only the ribs of the framing and the concrete slab remain today where the Quonset hut once stood. Mr. Ramsey, his wife, Elizabeth, and their daughter, Sonja, lived in this Quonset hut as did a man named Jones, "Jonesy," and his wife, Cathy, from Bakersfield. There were also three other Quonset huts erected in Chubbuck, one near the water tank and two on the concrete pads where the duplexes once stood.

ORIGINAL LIME PLANT Nothing remains of Charles Chubbuck's original lime plant and the twin vertical kilns except broken pieces of concrete and mounds of dirt and limestone rubble. Within this area are scattered pieces of pale yellowish-orange fire bricks marked with three stars and the initials "L A P B Co." which stands for the Los Angeles Pressed Brick Company. These fire bricks once lined the firebox and the vertical kilns and required frequent replacement. The vertical kilns may have been moved to a plant in Barstow, but others believe the kilns were cut up and sold for scrap.

ORIGINAL CEMENT PLANT These large concrete pillars that were once the cement plant are the most conspicuous ruins one sees in Chubbuck today. The pillars once housed two rotary kilns, a large vertical silo, an elevated shed that was the control center for keeping the kilns rotating and at the proper temperature, and a finishing mill. The pillars are surrounded by a large concrete pad that served as the foundation for the diesel plant, cooling tower, company store and the loading facility. Unless physically removed these robust cement pilings are likely to last for several thousand years.

COMMISSARY, POST OFFICE The company store in Chubbuck was originally built by the cement company as an office. When the cement plant closed in 1931, Mr. Chubbuck took over the building and turned it into a combined assay office and a company store known as the commissary. The store sold mostly canned goods and beer. Prior to that, the wooden building served as an assay office. In 1938, part of the store was set aside as a post office, which operated until 1950. The store was a wood frame building that stood north of the generator building and the cooling tower. The post office had the only telephone in Chubbuck. No sign of the store remains today.

DIESEL GENERATOR HOUSE About fifty feet west of the large vertical pillars that housed the rotary kiln are several raised concrete ribs about five feet long and oriented north-south and with 1.5-inch threaded bolts protruding from the cement. These stubs are where two diesel generators that furnished electricity to the plant were bolted down. When the cement plant closed in the early 1930s, the cement company removed the diesel engines. Mr. Chubbuck soon had them replaced and was then able to transfer his kiln operation to the more modern facilities formerly run by the cement company. Eventually wires were run on poles throughout the community, and the homes and the school in Chubbuck were provided with electricity. Only the large rusty threaded bolts protruding from parallel concrete ribs mark the former location of the diesel generators.

COOLING TOWER An elongated cement trough running east-west and about fifteen feet long is visible near the pads where the diesel generators once stood. This trough marks the return sump of the wooden water-cooling tower that circulated water used to cool the diesel engines.

DYNAMITE MAGAZINE, "EXPLOSIVES-A" One of only two buildings that still stands in Chubbuck. Although the door is missing and the walls are pock-marked with bullet holes, the word "EXPLOSIVES-A" is still legible on the side. This building was built by Saturnino Carlos and was used to store dynamite and blasting caps for the mining operations at the quarry.

GETTING THERE

There are several ways to get to Chubbuck, all of which are rough and dusty.

The shortest route is from National Trails Highway. Turn south on Cadiz Road at Chambless Junction and drive about three miles to where the road crosses the railroad tracks. **Cross the tracks with caution. This is the main east-west line of the Santa Fe railroad. Westbound trains are on a downhill grade and travel at high speed. Also, be aware this is a double track. Check in each direction before crossing.**

Once over the tracks the pavement ends. The road to Chubbuck is the wide dirt road straight ahead. After two miles the road makes an S-turn and crosses the single track of the Arizona & California Railroad near a tall radio mast. Follow the road for another 15 miles until you arrive at the concrete ruins at Chubbuck. Although the road is rough in some spots, a 4WD vehicle is not mandatory; the road is manageable for most passenger vehicles. Large motor homes should not attempt this drive because the road crosses several washes. I have witnessed large motor homes caught with the front bumper on one side of the wash and the rear bumper hung up on the opposite side of the wash, with the wheels dangling in the middle.

Another way to approach Chubbuck from the north is via Skeleton Pass Road, but this should only be attempted in high-clearance 4WD vehicles because of the likeli-



hood of encountering soft sand and steep-sided washes. Turn south from National Trails Highway on Danby Road between Essex and Chambless. This is a partially paved wide track that continues in a straight line on a downgrade 1.5 miles to the railroad tracks. At the bottom of the grade, the road flattens out where it crosses Schuyler Wash.

Be aware that on days when thunderstorms occur, Schuyler Wash is susceptible to flash floods; the road may flood and be impossible to cross or to re-cross on your return journey. I have seen standing waves of thick brown muddy water two to three feet high where Schuyler Wash crosses Danby Road. **Continue across the tracks but do so with extreme caution. This is the main east-west line of the Santa Fe railroad and is heavily used. The west-bound trains are on a downhill grade and travel at high speed. Also be aware this is a double track. Check both directions before crossing.**

Across the tracks is the former railroad watering station of Old Danby. Once across the tracks, turn right (west) and follow the road that bears off slightly southwest. The road you are on continues 5 miles to an east-west pipeline road. Here the road forks right and left to follow the pipeline. On the left (east) is the former pumping station, and on the right is an asphalt landing strip. Skeleton Pass Road to Chubbuck is the narrow dirt road heading straight southwest. Follow Skeleton Pass Road 20 miles to the intersection with the railroad tracks and Cadiz Road at the former siding of Kilbeck. After crossing the tracks, turn left (south) on Cadiz Road and drive about three quarters of a mile. The concrete ruins of the Chubbuck lime plant are on the east side of the road.

To reach Chubbuck from the south, turn north from State Highway 62 onto Cadiz Road, 4.8 miles west of Rice. The dirt road passes through Salt Marsh at 10.5 miles, Milligan at 19 miles and arrives at Chubbuck at 27 miles. The road to Salt Marsh is in good shape, but between Salt Marsh and Milligan it is dusty.

No matter which route you decide to take, one should take common sense precautions: let someone know your route and itinerary, have adequate food and water and ensure that your vehicle is in good mechanical condition. Cadiz Road is not heavily traveled. A breakdown could mean spending several days waiting for assistance. Cell phone service in the area is unreliable.

ENDNOTES

- 1 See also Alf, Walter, 1970: Marcus Pluth *in*, *Once Upon A Desert* by Patricia Jernigan Keeling, Ed., p. 96.
- 2 Larry Vredenburg's book *Desert Fever* has an excellent summary of the early days of Chubbuck. Tom Schofield (b. 1854 d. 1954) is buried in the Barstow cemetery. Marcus Pluth (b. 1855 d. 1939) is buried at the Daggett Cemetery.

- 3 California State Mining Bureau, 1919, Report XV of the State Mineralogist, Mines and Mineral Resources of Portions of California, Chapters of State Mineralogist's Report Biennial Period 1915-1916, Dec, 1917, p. 786.
- 4 In addition to the limestone at Desert Butte which was mined for almost twenty-five years, Charles also staked mining claims on limestone outcrops in the Marble Mountains near Cadiz and in the Ship Mountains (Southern Pacific Company, 1964, Minerals for Industry, v. III, Southern California, p. 175). These claims were held in reserve in case the limestone at the Desert Butte claim ran out, but none of these other claims were ever developed.
- 5 Belden, L. Burr, 1960, Famous 'Mines' Lost and Defy Search Efforts, San Bernardino Sun-Telegram, January 10, 1960, pg. B 8.
- 6 Rudy Garcia interview, 25 January 2006.
- 7 John Piper Jr. recalls that when his family moved to Chubbuck in 1930, construction of the cement plant was fully completed but the plant was standing idle. Mr. Burke started up operations at the cement plant a few months after the Piper family arrived. Possibly, the cement plant was built later than 1925 and was coincidentally finished and started operations about the time the Piper family arrived in Chubbuck.
- 8 John Piper Jr. interview, 15 January 2005.
- 9 There is some confusion over the names of Mr. Dicks first and second wife. His first wife may have been Isobel and the second wife may have been named Edith, but this is uncertain. Edith may have been the name of his stepdaughter.
- 10 Jack Riddle Interview, 29 November 1994. Verne apparently returned in the early 1950s, however. See footnote 12 below.
- 11 Eddie Garcia interview in Chubbuck, 17 March 2007.
- 12 Chubbuck mine superintendents, from earliest to latest; references in parentheses:

Mr. John B. Rentmeister 1937-1940 approx. (Richard Sommers; Ruben Carlos). Rentmeister took over the job of superintendent when Verne Dicks left. He had a background in civil engineering and walked with a limp as the result of a hip injury when he fell from a bridge during a construction project.

Mr. Verne Dicks (Paul Limon, Coy Limon, Jack Riddle, John Piper)

John Piper's dad was hired by Verne Dicks in 1929, so Verne probably had the longest work history of any of the superintendents. According to Jack Riddle, Verne Dicks left the job at Chubbuck and went to Long Beach to the shipbuilding plants. However, Alex Bernal worked at Chubbuck for a few months in 1952 or 1953 and remembers that Mr. Dicks was the superintendent at that time.

Mr. Roy Lauer 1946-1948.

Mr. Lauer's niece = Clara or Clarice

Mr. Ramsey—there in 1954



Mr. Harold C. Reno, 1950

'Blackie' in 1951 (?)

- 13 Calif. Journal of Mines & Geology, 1943, v. 39, no. 4, p. 518-521.
- 14 Interview with Ruben Carlos, 22 November 2003. Ruben's father was Saturnino Carlos and the family lived in Chubbuck from about 1934 to 1942.
- 15 Paul Limon interview. Paul and I have become good friends and I have spent many hours at his home in Needles and on trips with him to Chubbuck and Milligan talking to him about growing up in the desert. On several occasions we have had impromptu reunions at Chubbuck with Paul, Eddie Garcia, Cenovia Martinez, and Louie Carlos.
- 16 Larry Vredenburg gave me one of the sacks he recovered from an abandoned house in Chubbuck in the early 1970s. The sack is now at the Mojave Desert Heritage and Cultural Association in Goffs for preservation.
- 17 Frickstad, Walter, N., *A Century of California Post Offices, 1848-1954*. The Chubbuck Post office was established May 10, 1938 and was in operation for 12 years; it was discontinued on August 31, 1950. Mr. George L. Carter was the first postmaster. He had worked in the quarry and was injured so they made him postmaster. The first letter postmarked from Chubbuck was written by Dixon Chubbuck to his wife on May 24, 1938. John Piper recalls that they received mail addressed to Chubbuck long before 1938, however. Ref: Salley, H.E., 1977, *History of California Post Offices 1849-1976*, Postal History Associates, Inc., (publ., 301 p.)
- 18 Interview with Raul Rodriguez, 1 July 2006 in Barstow, California.
- 19 Ibidem
- 20 The only other burial known to have occurred at Chubbuck happened long after the town had been abandoned. A man named William W. Oden wished to have his ashes buried there and his friends granted his wish. There is a well-hidden marker to the memory of William Oden (1925-1978) in Chubbuck. I would like to know more about this man.
- 21 Alex Bernal Interview, 5 August 2004. Alex was working in Chubbuck in 1952 and said he used to attend dances at the school and that they were still holding classes. School records only go to 1950.
- 22 Although the school building at Lanfair was demolished, some of the desks and furnishings may have been used to furnish the new school at Chubbuck.
- 23 There is some uncertainty about the new Chubbuck School. Jack Riddle, son of Willa Riddle, a schoolteacher at Chubbuck, seems to remember that the school furnishings and the entire Lanfair school building were moved to Chubbuck. However several former students of the Chubbuck School remember the new school being built on site from new timber. It is possible, however, that the desks and furnishings of the Lanfair School, including a piano, were moved to Chubbuck when the Lanfair school closed.

- 24 Interview with Ruben Carlos, 22 November 2003. Ruben's father was Saturnino Carlos and the family lived in Chubbuck from about 1934 to 1942.
- 25 Interview with Esther (Rodriguez) Lopez, 29 July 2006.
- 26 Interview with Richard Sommers, 6 December 2004. Much of this material is also taken from the transcript of several telephone conversations with Richard and from the text of his message to family and friends at Nellie's 100th birthday party. Richard lives in Houston, Texas, with his wife, Helga. His brother, Stanton, lives in Orange, California.
- 27 Needles School District records for Chubbuck School are from 1934 to 1950. Willa Riddle is known to have been at the Chubbuck School in the school year 1932–33 because she is on the graduation program when Chubbuck had their combined graduation at Lanfair with the Lanfair graduates and the Goffs School class. A student named Betty Jane Goodwin (AKA Betty Kousch) boarded with Willa Riddle in Chubbuck during part of the 1932–33 school year and was one of the two Chubbuck graduates that year (Jack Riddle interview, courtesy of Dennis Casebier).
- 28 Southern Pacific Company, 1964, *Minerals for Industry*, v. III, Southern California, p. 174.
- 29 Although I have made every effort to be accurate, the names of all of the families who lived in the houses are imprecise. All of my information is based on the accounts of people still living and who lived in Chubbuck as young children but in different years. Their information was not always in agreement. I have listed families where there was no disagreement, but eventually decided that it was unnecessarily time consuming to attempt to find where each family lived.
- 30 John Piper Jr., personal communication, April, 2007.
- 31 David. Montiel died in San Bernardino in August 2007 at age 102.

ADDITIONAL RESOURCES

- Durham, David L., 1998, *California's Geographic Names. A Gazetteer of Historic and Modern Names of the State*, Word Danur Press, 1676 p.
- Gudde, Erwin G., 1949, *California Place Names. The origins and Etymology of Current Geographical Names.*, Univ. of California Press, 416 p. [Author's note: There is a common misconception that Kilbeck and Chubbuck were the same place. Kilbeck was a siding about one mile north of Chubbuck].
- Keeling, P.J., (ed), 1976, *Once Upon A Desert*, Mojave River Valley Museum Publ., 261 p.
- True West Magazine and Frontier Times, P. O. Box 8008, Cave Creek, AZ 85327
- Vredenburg, L.M., Shumway, G.L., and Hartill, R.D., 1981, *Desert Fever, The Living West*, Publ. 323 p.
- Hensher, Alan, 1991, *Ghost Towns of the Mojave Desert, a Concise and Illustrated Guide*, California Classic Books, Los Angeles, California, 63 p.

EXHIBIT 2

The Mojave Desert Mining Community of Chubbuck

Larry M. Vredenburg

1981,
revised January 1996

Around every mining activity across the United States towns sprang up. Many of these became ghost towns after the mining operations became unprofitable. One of these is today the site of a little-known company town - Chubbuck, California.

Just prior to the 1906 earthquake and fire, Charles Inglis Chubbuck moved to San Francisco from Ottawa, Canada, and with a Mr. Harris founded a building materials business, "Chubbuck and Harris." Needless to say, with the demand for construction materials after the earthquake, business boomed. Due to tight money at this time, the pair would only take cash for a barrel of lime, one of their products, thus originating the term "cash on the barrel head."

In early 1908 the Ocean Shore Railroad reached Montara, eight miles north of Half Moon Bay and fifteen miles south of San Francisco on the coast of the Pacific Ocean. A few years later Chubbuck began to quarry sand on the beach there. He was forced to cease operations in 1916 or 1917 because of constant problems with waves washing away his equipment.

Just before 1920, Chubbuck entered into a relationship with Union Carbide Corporation that was to last three decades.

The Prestolite Division of Union Carbide had plants in South San Francisco and Los Angeles which produced acetylene gas. When water is added to calcium carbide, acetylene gas is generated. The calcium carbide was produced in electric furnaces at Niagara Falls and shipped by railroad west in steel barrels. At this time acetylene gas was primarily used in gas lights.

After the acetylene was produced a byproduct was produced which consisted of a lime slurry with bluish flakes of carbide. This slurry was drained into a settling pond adjacent to the plant where water could drain off. Chubbuck's men would load the thick slurry into steel barrels bought from Union Carbide and haul them to Chubbuck's plant. Here the material was fed into rotary drying kilns, the resulting pellets were ground in a ball-mill and packaged in multi-wall paper sacks, and sold as hydrated lime.

This arrangement proved profitable for Chubbuck's building material business, and also performed a service for Union Carbide.

However, the lime had a bluish tint - making it inferior in the marketplace. In order to secure a source of white limestone as a whitening agent for the slurry-based lime, in 1921 Chubbuck purchased the 1,600 acres of mining claims along the Parker branch of the Santa Fe Railroad. The limestone was also to be marketed as crushed limestone, and quick-lime - after it was calcined.

The mining claims had been located by Marcus Pluth and Tom Scofield. Pluth had been at Calico and is listed in the Calico Miners Directory for 1886-87. In the 1892 voter directory Pluth is listed as 38 years old, 5 feet 10 inches with dark complexion, brown eyes, black hair, a miner, born in Austria, a resident of Calico, naturalized March 9, 1883 in Lake County California, he was also listed as having a daughter.

Pluth and Scofield were grubstaked by an Irishman named Murphy, who ran a general store in Ludlow. Murphy showed no mercy if one of the several men he grubstaked failed to show good returns.

Pluth and Scofield had made some significant finds. Reportedly they discovered the Iron Age mine in

the Dale Mining District and the iron claims at Eagle Mountain.

They spent the hottest parts of the summer vacationing at Pismo Beach where they would spend most of their money. But they did manage to save enough to buy a horseless carriage to replace their worn-out mules.

In 1922 and 1923 there was considerable construction activity at Chubbuck siding. A mining railroad, town and processing facilities were built, however full scale production did not begin until 1925.

A one-mile long, 30-inch gage railroad connected the limestone quarries and the processing facilities. Motive power for the railroad operations came from two small gasoline "dinkies." One of the locomotives, a Milwaukee gasoline engine, and most of the ore cars and rail originally came from a winery at Cucamonga. These cars were all steel, V-shaped, side-dump cars. The other locomotive, a Plymouth gasoline engine, and a few side-dump cars were bought from the construction operations at the Panama Canal.

Later, Chubbuck had some wooden cars made with steel bottoms so the rocks would slide out easily. While these were cheaper to build than the steel cars, the wood could not hold up well to the beating.

The Plymouth locomotive transported the ore approximately 600 feet from the quarries to a crushing and screening plant just below the quarry, one mile from Chubbuck. The screening plant yielded five different-sized limestone products. The 5/16 inch and 1-1/2 inch products were taken by the Milwaukee engine to the lime kiln, and the 1/8 inch, 16 mesh and 40 mesh products were taken to the limestone products plant, both at the Chubbuck siding.

The lime kiln plant produced processed lime and pebble lime. The limestone products plant yielded 40 mesh limestone, 200 mesh for whiting, chicken grits and foundry rock in 1 - 1/2 to 2-1/2 inch sizes.

Most of Chubbuck's equipment for the production of lime and limestone, including the two vertical kilns, came from limestone quarries at Baxter, about 75 miles northwest of Chubbuck, on the Union Pacific Railroad.

The kilns were heated by oil stored in underground bunkers. Electricity for the town and operations was produced by a diesel-powered plant.

The horizontal rotary kiln was added when a Texas-based company adjacent to Chubbuck's vertical kilns and as a stock promotion built the kiln and gave it to Chubbuck. It was common knowledge to those in the limestone industry that this was too small a kiln to reach maximum efficiency.

The quicklime was always shipped in boxcars. If it was exposed to rain it could cause a fire - this happened once at the San Francisco plant. Limestone, however was loaded onto open Santa Fe gondolas by elevator.

The Santa Fe Railway tried to give Chubbuck rock-bottom rates for shipping his products. The rates to San Francisco were so low that it ended up by being almost as low as the rates to Los Angeles, yet was much further.

Chubbuck was a town in a true sense of the word. It consisted of a company store, post office, and school. There were perhaps as many as 30 to 40 buildings, including residences for the some 24 workers and their families, the limestone plants, and powder storage. Visitors would often land their planes on the road north of town.

A one-room school on the west side of town opened by 1932, housing grades one through eight. In fact the 1.8 acres the Needles School district was deeded for the school is still owned by them. Mrs.

Willa Riddle was the first teacher, and remained there until at least 1936. Mrs. Sibyl Poyner was teacher between 1940-41, and Mrs. Mabel P. Conner in 1949-1950. No records exist past 1950. The school's yearly enrollment ranged from 13 to 40 pupils.

A post office was established in May 1938, and was housed in the company store. The workers could buy large quantities of the popular Eastside Beer at the company store. The quantities were so large that sales of the beer at least equaled the total sales of all other supplies combined.

Water was brought in by the Santa Fe in tank cars, supplied from wells at Cadiz.

The workers were largely Mexican, earned 25 to 30 cents an hour, and were supplied with living quarters, water and electricity. Most of the workers traveled the one mile to the mine by truck or private car - they didn't take the railroad.

The superintendent's house was the highest building, on the west side of town. The superintendent had to be a real "jack of all trades" - if something didn't work he had to fix it; he couldn't wait for a repairman to come. The superintendent in 1943 was Vernon R. Dick.

At the mining operations, a four to six car train pulled by the Milwaukee engine was backed from Chubbuck into tunnels beneath the crushing plant, where the cars were loaded with sized limestone products. The fully-loaded train would then go downhill nearly a half-mile to the wash, then climb another half mile to town.

A switch directed the train to either the lime kiln or the limestone products plant. Another switch at Chubbuck enabled the cars to be backed into the limestone plant.

During heavy rains there were a few minor washouts and derailments at the point where the railroad went through the wash. The railroad had relatively minor problems compared with those of others in desert areas during the heavy rains of 1939; Chubbuck Lime Company made some modifications to channel the water, thus eliminating future washouts.

The Chubbuck Lime Company got involved in the building of the Colorado River Aqueduct in 1937-1938 by producing a white-reflecting lime coating.

Concrete was poured for the aqueduct, then covered with asphalt to seal in the moisture for better curing of the concrete, and then sprayed on a coating of Chubbuck's "Metropolitan White" to reflect the heat. Without this coating the concrete temperature would have risen nearly 40 degrees, making it much more difficult to properly cure the concrete.

After the contract with the Metropolitan Water District, Chubbuck thought his coating would be practical for those living in hot areas to reflect the heat off their roofs. He first marketed his product as "Metropolitan White," then changed the name to "Snow Coat."

Dixon Chubbuck, son of the Inglis, joined the U.S. Army in 1939, before the U.S. entered World War II. He returned after the war to form his own company to market the "Snow Coat." At one time nearly ninety percent of the houses in Palm Springs had roofs coated with their product. It was still being manufactured in the 1970s. When Inglis left his business, Dixon continued, eventually including his own son, Don.

They also purchased dried calcium-chloride from operations at Bristol Lake and made a product called "Cal" which was used to accelerated setting of cement. It was also used in the "Snow Coat" and in stucco.

The company had their own flat-bed truck that they used on occasion to ship slurry-lime from Los

Angeles in the Union Carbide drums. Many of these are still at Chubbuck.

In the late 1940s the Carson Lime Company of Virginia developed a autoclave method of hydration under high steam pressure. This process produced a slick, plastic lime. Plasterers liked this lime because it was comparatively easy to work.

The U.S. Lime Products, division of Flint Kote, was the only company on the West Coast to get the patent rights to the product, called "Miracle Lime." This hurt the Chubbuck company and other lime operators.

During this period Union Carbide stopped shipping its carbide west when they ceased their west coast operations.

These combined events eventually forced Chubbuck out of business. Production from the Chubbuck quarries continued continuously from 1925 through 1948, then intermittently until 1951.

At that time the total production of limestone was about 500,000 tons. Two-thirds of this was used to produce approximately 165,000 tons of lime products; the other third was used directly for limestone products.

The Harms Brothers Construction Company of Sacramento purchased the property, and equipment from the Reconstruction Finance Company (RFC) in 1951, since the Chubbuck Limestone Company had discontinued payments on a loan taken out with the RFC in the 1930s for \$100,000.

The Harms Brothers Company intended to mine the limestone and make lime, but too much silica was present in the limestone. Since silica is white like limestone, there is no way to avoid it in the mining operations. They also had hoped to sell limestone as ballast - but the market never materialized.

In its operations Harms Brothers did not use the railroad from the quarries to the crusher, but used trucks instead. About 50 feet of track was covered with as much as three feet of overburden to make a roadway. This rail existed until the 1970s is probably there to this day.

In 1950 the school post office and company store closed. After August of that year the mail was sent to nearby Cadiz. For a few years afterward the population consisted of a few workers employed by the Harms Brothers.

Representatives of several companies were present when the equipment was finally auctioned off by the Harms Brothers, who kept dozer for their own operations. This auction probably took place in 1954. The kilns were sold for scrap. It is not know the disposition of the rail equipment.

The 1955 U.S. Geological Survey map of the area does not show the railroad, although the air-photo used to make the map shows most of the buildings still standing.

The Chubbuck siding was removed when Santa Fe relaid the Parker Branch during the winter of 1975-1976.

In December 1975 someone had built a house, with an adjoining garage on the foundations of the lime products plant. In front was a small ore crusher operated by an automobile engine. By summer of 1977 nothing remained of the house except a heap of trash and the automobile engine.

The only structure that remained standing at that time is the explosives building, a concrete hexagon approximately six to eight feet in diameter.

The sites of the limestone products plant and the company have been bulldozed. Only a heap of

rubble remains.

The foundations of the other buildings are visible. Some even have the dying remains of trees that were originally planted around the buildings.

The scars of Chubbuck's mining railroad are still evident, and most of the ties are there. The crushed limestone roadbed is still prominent although slowly eroding.

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[HOME](#)

EXHIBIT 3

GROWING SPIRITUALLY

11 Tim. 4:5-8

LOOK FOR LOOSE ENDS

We come to the last step in growing in fidelity: Fifth, Fidelity will mean that I will carry through in God's instruments to me. I will keep faith until the end.

When I asked the leading members of a large church what the outstanding need of their church, they replied, "Fidelity." Fifty per cent of church members are hangers-on, getting a free ride, contributing nothing from purse or person; 25 per cent promise to do something and then after a few weeks at it drop out. They lack fidelity. The life of the church is carried on by the remaining 25 per cent.

A church had a weather van on the steeple, says George A. Buttrick, with the words, "Thy will be done" on it. A scuffer asked if that meant that our obedience is as variable as the wind. "No," came the reply: "It means that whatever the wind, or the weather, we must obey."

If we could get people who put their hand to the plow and never look back, who have inner compulsion and go on no matter the wind or the weather, we would have a growing people.

Go over your life, and see where there are loose ends, broken promises, half-filled tasks, and begin to complete the incomplete, fulfill the half-fulfilled, and gather up the loose ends; and when you do so, there will be a sense of well-being, a sense of being whole.

In a radio station there were a number of men who were in today. Put it off until tomorrow, and get stomach ulcers. Unfulfilled tasks, broken promises, faints at doing this, that, and the other, bring a sense of tension, a sense of the half-done hanging over you. Don't live under that haunting sense of the incomplete. Don't take up too much, but what you do take up, complete. Jesus said: "As for the seed in the good soil, that means those who hear and hold fast to the word in a good, sound heart, and so bear fruit steadfastly" (Luke 8:15, Moffatt). Note—"so bear fruit steadfastly"—only the steadfast are the finally fruitful.

O Father, I am good intentioned and weak-willed. Take my intentions, and turn them into doing convictions, Amen.

AFFIRMATION FOR THE DAY: My half-finished job shall all be finished today, for I don't want to be a half-finished person.

(From the book "General Principles" published by Atlantic Publishers Press of New York and London. Copyright, 1934, by S.A. Service.)

Operation Clean-Up Will Rid City of Substandard Dwellings

(Continued From City Page)

There was no man available for condemnation work. At the City Department, Eugene B. Pester, building inspector assigned to the office to check all plans filed to obtain permits for new construction.

Spencer claims that Operation Clean-Up will surpass Pasadena's Operation Clean-Up, which was planned not only to condemn the slum buildings but get all up and down the city and clean up poor sanitation, maintain and fire safety.

An inspector is already on the lookout and makes out reports to Spencer on substandard conditions. Spencer is in the line of regular duties.

Publicity has helped ferret out "hoodlums" building or building down without permits and the inspection which is just plain safety insurance, said Spencer.

Spencer is already on the lookout and makes out reports to Spencer on substandard conditions. Spencer is in the line of regular duties.

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RUNS FOR LIEUTENANT GOVERNOR

Democratic Candidate In S.B. Saturday

Edward R. Roybal, Democrat, candidate for lieutenant governor of California, will speak at 8 a.m. Saturday during a breakfast at the Riverside Junior High School. The meeting is sponsored by the San Bernardino County Democratic Club. Roybal will be presented prior to the breakfast.

Music by the Padua Hill Players will be presented prior to the breakfast.

In addition to Roybal, the Democratic nominees for assembly will be introduced: Eugene Nish, 72nd District, and Milton J. Bell, 73rd District.

Roybal, Los Angeles city councilman, was unopposed in his last city campaign. As a strong anti-communist, he has advocated the elimination of the various socialist cells such as inadequate housing, the recent, Alfred E. Washburn, D.C.; a sister, Mrs. Alice Rowland of England; five grand-children and 15 great-grandchildren.

Graveside services will be held at 11 a.m. Tuesday at Mountain View Cemetery under the direction of Stephens & Bobbitt Mortuary.

DEAN DEAN, Peabody, Millard Dean, 81, 28 E. Kingman St., San Bernardino, died Thursday at his home.

Dean, a resident of San Bernardino for 10 months, He was a retired engineer for the Southern Railway.

Survivors are his wife, Mrs. Lydia Dean; two daughters, Mrs. Mary Dean, and Mrs. Edith Dean, both of San Bernardino; a son, Harry Blackwell of Pocatello, Idaho; three granddaughters; and brothers and sisters in the East.

Funeral services are pending with Stephens & Bobbitt Mortuary.

SERVING GONZALES, Rosary for Servino Gonzales was recited Thursday at 8 p.m. at the funeral home with the Rev. J. R. Nunez officiating. Requiem mass was celebrated at 9 a.m. at St. Joseph's Catholic Church.

Altar boys were Frank Munk, Joseph Munk, and Joseph Munk.

Funeral services for Joaquin Flores, Jose L. Leyva, Marcelino S. Neri, Joseph A. Salazar, Epifanio Ayala, James P. Salazar, and Joseph A. Salazar, were held at 8 p.m. at the funeral home with the Rev. J. R. Nunez officiating. Requiem mass was celebrated at 9 a.m. at St. Joseph's Catholic Church.

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IN THE SHADOWS

JESSE R. WORSFOLD, 90, 3972 Lehigh St., San Bernardino, died Thursday at his home.

A native of England, he had been a resident of San Bernardino for five years. He was a retired engineer of combustion engines, and a member of the P.A.A. Society.

Mr. Worsfold was born in London, England, and was the son of Mr. and Mrs. Worsfold. He was married to Mrs. Worsfold, who died in 1934.

Survivors are his wife, Mrs. Worsfold, and two daughters, Mrs. Worsfold and Mrs. Worsfold.

Funeral services will be held at 11 a.m. Tuesday at Mountain View Cemetery under the direction of Stephens & Bobbitt Mortuary.

MINNIE LEE GRANT, 74, died at Grove Colonial Mortuary.

Funeral services for Minnie Lee Grant will be held at 10 a.m. Tuesday at the Stephens & Bobbitt Mortuary.

CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

NANNIE BELLE EVANS, 74, died at Grove Colonial Mortuary.

Funeral services for Nannie Belle Evans will be held at 10 a.m. Tuesday at the Stephens & Bobbitt Mortuary.

CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

ALEXANDER C. MACKINNON, 74, died at Grove Colonial Mortuary.

Funeral services for Alexander C. Mackinnon will be held at 10 a.m. Tuesday at the Stephens & Bobbitt Mortuary.

CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

RICHARD M. PORTER, 74, died at Grove Colonial Mortuary.

Funeral services for Richard M. Porter will be held at 10 a.m. Tuesday at the Stephens & Bobbitt Mortuary.

CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

NAOMI F. FERGUSON, 74, died at Grove Colonial Mortuary.

Funeral services for Naomi F. Ferguson will be held at 10 a.m. Tuesday at the Stephens & Bobbitt Mortuary.

CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

Services Are Held For Jack L. Cohen

Funeral services were held at 3:30 p.m. Friday for Jack L. Cohen, 38, who died Wednesday in the County Hospital following a lengthy illness.

Rabbi Norman Feldheim of Temple Emanuel E. conducted the services, held at Mark B. Shaw Memorial Chapel. Jewish American War Veterans in charge were Norman Weitzman, dept. commander; Ernest Tudor, bugler; Maxim Magid, color bearer; and Calvin Leidner, color bearer.

Palbearers were James J. De Nuccio, James Goldberg, Charles Kucera, and Leonard Kucera.

Funeral services for Ernest T. Kessel will be held at 2 p.m. Tuesday at the Stephens & Bobbitt Mortuary.

CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

Funeral services for Ernest T. Kessel will be held at 2 p.m. Tuesday at the Stephens & Bobbitt Mortuary.

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CHapel, graveside services will be held at 2:30 p.m. in Inglewood Park Cemetery in Inglewood.

TV-DIAL-O-LOGUE

T-DIAL-LOGUE					
MON-TU	W	TH	F	S	S
MON-TU	W	TH	F	S	S
10:30 Sports	7:45 Roundup	7:45	7:45	7:45	7:45
10:45 Football	7:45 The Who Knows	7:45	7:45	7:45	7:45
11:00 Jubilee	7:45 The Who Knows	7:45	7:45	7:45	7:45
12:00 Film	7:45 Better Living	7:45	7:45	7:45	7:45
12:30 Film	7:45 Action City	7:45	7:45	7:45	7:45
12:45 Air Theater	7:45 Big Picture	7:45	7:45	7:45	7:45
1:00 Film	7:45 Ed Connell	7:45	7:45	7:45	7:45
1:15 Western	7:45 The Who Knows	7:45	7:45	7:45	7:45
1:30 Film	7:45 The Who Knows	7:45	7:45	7:45	7:45
1:45 Sports	7:45 The Who Knows	7:45	7:45	7:45	7:45
2:00 Sunday's	7:45 The Who Knows	7:45	7:45	7:45	7:45
2:30 Capt. Jet	7:45 The Who Knows	7:45	7:45	7:45	7:45
3:00 Gardens	7:45 The Who Knows	7:45	7:45	7:45	7:45
3:30 Film	7:45 The Who Knows	7:45	7:45	7:45	7:45
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EXHIBIT 4

STATE OF COLORADO



OFFICE OF THE SECRETARY OF STATE

UNITED STATES OF AMERICA, } ss. **CERTIFICATE.**
STATE OF COLORADO.

*I, Chas. M. Armstrong, Secretary of
State of the State of Colorado, do hereby certify that*

the annexed is a full, true and complete copy of

CERTIFICATE OF INCORPORATION

-of-

CHUBBUCK LIME COMPANY

FILED

In the office of the Secretary of State
OF THE STATE OF CALIFORNIA

MAR 20 1930

FRANK C. JORDAN

SECRETARY OF STATE

By

Chas. M. Armstrong
DEPUTY

which was filed in this office on the Eighth day of July,

A. D. 1929, at 10:00 o'clock A. M. and admitted to record....



*IN TESTIMONY WHEREOF, I have hereunto
set my hand and affixed the Great
Seal of the State of Colorado, at the
City of Denver, this* TWENTY-SECOND
day of JULY AD. 1929

Chas. M. Armstrong
SECRETARY OF STATE
By *Alfred Suedeker*
DEPUTY

FRANK C. JORDAN
SECRETARY OF STATE
ROBERT V. JORDAN
ASSISTANT SECRETARY OF STATE

FRANK H. CORY
CHARLES J. HAGERTY
DEPUTIES

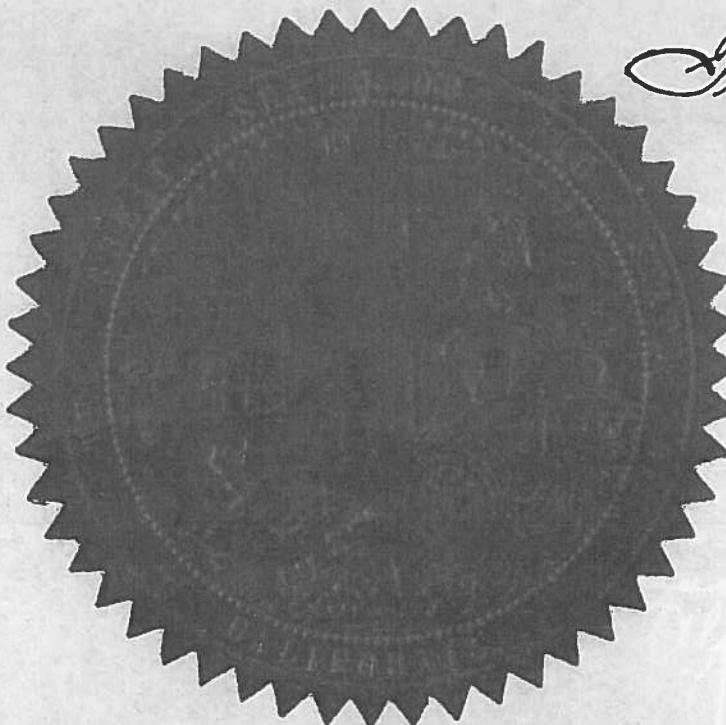


STATE OF CALIFORNIA
Department of State

I, FRANK C. JORDAN, *Secretary of State of the State of California*, do hereby certify that I have carefully compared the transcript, to which this certificate is attached, with the record on file in my office of which it purports to be a copy, and that the same is a full, true and correct copy thereof. I further certify that this authentication is in due form and by the proper officer.

IN WITNESS WHEREOF, I have hereunto set my hand and have caused the Great Seal of the State of California to be affixed hereto

this 21 st day of March, 1930.



Frank C. Jordan
Secretary of State

By *Frank H. Cory*
Deputy

KNOW ALL MEN BY THESE PRESENTS, That we, G. I. Chubbuck, A. S. Chubbuck
and T. C. Murphy, the undersigned

desiring to associate ourselves together as a corporation under the name and
style of CHUBBUCK LIME COMPANY for the purpose of becoming
a body corporate and politic under and by virtue of the laws of the State of Colorado, and in accordance with the
provisions of the laws of said State, we do hereby make, execute and acknowledge in
this certificate in writing of our intention so to become a body corporate, under and by virtue of said laws.

FIRST. The corporate name and style of our said corporation shall be
CHUBBUCK LIME COMPANY

SECOND. The object for which our said corporation is formed and incorporated is for the purpose of
mining, quarrying and preparing for market, limestone, and other stone, and such
minerals as may be incidentally developed, and to manufacture the same into the
various products thereof, and transport and sell the same in the crude and manu-
factured form, with the right, so far as the purposes of said corporation may be
necessary, to acquire, hold and sell real estate, to issue bonds, notes, debentures,
and other evidences of indebtedness, and to secure the payment of the same by
mortgage, deed of trust, or otherwise, to act as agent, trustee, or broker, and to
borrow and loan money.
The business or purpose of the corporation is, from time to time to do any one or
more of the acts and things herein set forth; and it may conduct its business in
other States and in Foreign Countries, in compliance with the laws thereof, and
may have one or more offices, and keep the books of the corporation out side the
State of Colorado, except it may be prevented by law; and may hold, purchase,
mortgage, and convey real and personal property in or out of the State of Colorado.
Without in any particular limiting any of the objects and powers of the corporation,
it is hereby expressly declared and provided that the corporation shall have the
power to issue bonds and other obligations in payment for property purchased or
acquired by it, or for any object in or about the business; to mortgage or pledge
any stock, bonds or other obligations or any property which may be acquired by it
to secure any bonds or contracts; to make and perform contracts of any kind and
description, in the furtherance of the plan and purpose of the corporation; and in
carrying on of this business, or for the purpose of attaining or furthering any of
its objects, to do and perform any and all acts and things and to exercise any and
all powers which a natural person or co-partnership could do and exercise, and which
now or hereafter may be authorized by law, as the Board of Directors may deem to
the advantage of the corporation.

THIRD. The capital stock of our said corporation is \$100,000 consisting of
10,000 shares of Preferred Stock of the par value of \$10 a share and 20,000 shares
of no par value common stock no cash value and said stock shall be non-assessable.

FOURTH. Our said corporation is to exist for the term of twenty years.

FIFTH. The affairs and management of our said corporation are to be under the control of
a board of directors consisting of three members, and
G. I. Chubbuck, A. S. Chubbuck and T. C. Murphy

are hereby selected to act as said directors and to manage the affairs and concerns of said
corporation for the first year of its existence or until their successors are elected
and qualified.

SIXTH. The principal business of our said corporation shall be carried on in the County Y of
San Bernardino state of California

and the principal place and
business office of said corporation shall be located in the city of Los Angeles
County of Los Angeles and State of California aforesaid.

SEVENTH. Clifford W. Mills whose post office is 529 Kittredge Bldg.
in the City of DENVER, State of Colorado, is hereby designated as the resident Agent
in charge of the principal office of said company in the State of Colorado for the service of process. A stock ledger and
other books of record required to be kept by Sections 869 and 870 R. S. 1908 shall be kept at
the office of Clifford W. Mills, 529 Kittredge Bldg. Denver Colo.

EIGHTH. The directors shall have power to make such prudential by-laws as they may deem proper for
the management of the affairs of this corporation according to the statute in such case made and provided.

NINTH. Cumulative voting shall be allowed.

IN TESTIMONY WHEREOF, We have hereunto set our hands and seals, on this 20th day of
June, A. D. 19 22

G. I. Chubbuck (SEAL)
A. S. Chubbuck (SEAL)
T. C. Murphy (SEAL)
(SEAL)
(SEAL)

CALIFORNIA
STATE OF CALIFORNIA

County of LOS ANGELES

I, Carrie D. Kenner, a Notary Public
in and for said County, in the State aforesaid, do hereby certify that C. I. CHURBUCK, A. S. CHURBUCK
AND T. C. MURPHY,

personally known to me to be the persons whose names are subscribed to the annexed and foregoing certificate of incorporation, appeared before me this day in person, and acknowledged that they signed, sealed and delivered the said instrument of writing as their free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and seal, this 25th day of

JUNE, A. D. 1929.

My commission expires DECEMBER 30th, 1929.

Carrie D. Kenner
Notary Public in and for the County
of Los Angeles, State of California.

My Commission Expires Dec. 30, 1929

This document has been inspected
and is hereby entered on the re-
cord of the Flat Tax Department.

7-11-2-26

Date July 15, 1929

M. S. H. H.

Clerk

90200

CERTIFICATE OF INCORPORATION

OF

Chubbuck

Leone Company

DOMESTIC

FILED in the office of the Secretary of
State, State of California, on the

25th day of July, A. D. 1929
at Los Angeles,
California.

By Staten Deputy

RECORDED BY

138511

EXHIBIT 5

EXHIBIT 6

MINERAL RESOURCES
OF THE
UNITED STATES
1929

PART II—NONMETALS

U. S. DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary

BUREAU OF MINES

SCOTT TURNER, Director

MINERAL RESOURCES

OF THE

UNITED STATES

1929

O. E. KIESSLING

Chief Economist, Division of Mineral Statistics

PART II—NONMETALS



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

Isard County: Ruddells—Batesville White Lime Co. (address, Batesville); high-calcium; 8 shaft kilns; 40 tons a day; quicklime (lump), construction, chemical; open quarry.

Searcy County: St. Joe—Arkansas Lime & Stone Co. (address, 120 East Third Street, Little Rock); high-calcium; 1 vertical kiln; 10 tons a day; wood; quicklime (lump), construction, chemical; hydrated, construction; Schaffer hydrator; open quarry.

Washington County: Johnson—Ozark White Lime Co. (address, Fayetteville); high-calcium; 6 vertical kilns; 75 tons a day; wood; quicklime (lump), construction, chemical; hydrated, construction, chemical; Kritzer hydrator; tunnel quarry.

CALIFORNIA

Eldorado County: Diamond Spring—Diamond Spring Lime Co.; high-calcium, low-magnesium; 2 rotary kilns; 250 tons a day; oil; quicklime (lump, ground), construction, agriculture; hydrated, construction; Schulthess hydrator; open quarry.

Kern County: Tehachapi—Union Lime Co. (Inc.) (address, 2135 Bay Street, Los Angeles); high-calcium; 8 shaft kilns; 75 tons a day; producer gas; quicklime (lump), construction; hydrated, construction, agriculture; Schulthess hydrator; open quarry.

San Bernardino County:

Colton—California Portland Cement Co. (address, Los Angeles); high-calcium; 3 rotary kilns; 60 tons a day; oil; quicklime, construction, chemical.

Ludlow (Amboy P. O.)—Chubbuck Lime Co. (address, 5000 Worth Street, Los Angeles); high-calcium; 2 vertical kilns; 16 tons a day; oil; quicklime (lump), construction; open quarry.

San Mateo County: South San Francisco—Kunze Lime & Materials Co.; high-calcium; 2 vertical kilns; 14 tons a day; oil; quicklime (lump), construction, chemical. This company burns its lime from stone obtained from the Eldorado Lime & Minerals Co., Shingle Springs, Eldorado County. Idle in 1929.

Santa Cruz County:

Felton—Holmes Lime & Cement Co. (address, Division and DeHaro Streets, San Francisco); high-calcium; 4 pot kilns, 2 shaft kilns; 30 tons a day; oil; quicklime (lump), construction; hydrated, construction, agriculture; Clyde hydrator; open quarry; ready mixed mortar, wet and sanded.

Rincon—Henry Cowell Lime & Cement Co. (address, 2 Market Street, San Francisco); high-calcium; 3 pot kilns; 28 tons a day; oil; quicklime (lump), construction, chemical, agriculture; open quarry.

Tulare County: Lindsay—Abramson Bode Corporation (Universal Silicate Stucco & Lime Products Corporation) (address, 406 South Main Street, Los Angeles); high-calcium; 2 shaft kilns; 22 tons a day; oil; quicklime (lump), construction, chemical, agriculture; hydrated, construction, chemical, agriculture; home-made batch hydrator; open quarry. Idle in 1929.

Tuolumne County: Sonora—United States Lime Products Corporation (address, 58 Sutter Street, San Francisco); high-calcium; 12 shaft kilns; 100 tons a day; oil; quicklime (lump, ground), construction, chemical, agriculture; hydrated, construction, chemical, agriculture; Clyde hydrator; tunnel and open quarry.

COLORADO

El Paso County: Manitou—The Western Lime Co. (address, Equitable Building, Denver); high-calcium; 4 shaft kilns; 30 tons a day; producer gas; quicklime (lump), construction, chemical; hydrated, mason's, chemical; Clyde hydrator; open quarry.

Fremont County: Calcite—Crystal Lime Co. (address, Continental Oil Building, Denver); low-magnesium; 1 shaft kiln; 6 tons a day; bituminous coal; quicklime (lump), construction, chemical.

La Plata County: Durango—Farmers Supply Co.; 1 pot kiln; 4 tons a day; bituminous coal; quicklime (lump), construction, chemical; hydrated, construction, chemical; open quarry.

EXHIBIT 7

WAR DEPARTMENT
CORPS OF ENGINEERS, U. S. ARMY
OFFICE OF THE DIVISION ENGINEER
NORTH PACIFIC DIVISION
PORTLAND, OREGON

Market for Columbia River Hydroelectric Power Using Northwest Minerals

Section III—Northwest Limestones

In Two Volumes

by

Edwin T. Hodge, *Consulting Geologist*

§§§

Volume II

PART II—Other Limestone Occurrences Available to or Competitive
with the Lower Columbia River Area

PART III—Uses, Technology, and Market of Limestone and Lime

Portland, Oregon
January 1938

SAN BERNARDINO COUNTY

Limestone and marble have been quarried at numerous localities in this county.

Prior to 1930 quarries were in operation in pre-Cambrian marbles that crop out in low hills half a mile north of Baxter, on a spur of the Union Pacific Railroad. The rock is folded and intruded by serpentized basic dikes; the limestone forms a belt 400 to 800 feet in width and approximately one mile long. The peak of production, for the beet sugar industry, was reached prior to 1920.

Limestone and lime are produced by the California Portland Cement Company from a calcite marble in quarries half a mile south of Colton. This deposit is reported to be an isolated knoll about 500 feet high and reportedly contains 98.5 to 99 per cent calcium carbonate.

At Chubbuck (Archer) coarsely crystalline white limestone or marble occurs as roof pendants in granitic rocks. The quarries are located one mile south of Chubbuck on the Santa Fe Railway. The rock is quarried and ground in a mill at the quarry. Kilns at the railroad have a daily capacity of about 15 tons of quicklime. Both lime and various types of crushed limestone are shipped.

Communication with Mr. Dixon Chubbuck (as of August 31, 1935) of the Chubbuck Lime Company, the operator of these deposits, gives the following facts:

Location: 210 miles east of Los Angeles and one mile off the Santa Fe Railway Branch (Cadiz, California, to Phoenix, Arizona).

Reserves: 60,000,000 tons of high-calcium limestone; 40,000,000 tons of dolomitic limestone.

Analyses:	<u>High-calcium limestone</u>	<u>Dolomitic limestone</u>
Calcium carbonate -----	98.43 -----	55.32 -----
Magnesium carbonate ----	0.27 -----	43.28 -----
Iron and alumina oxides-	0.13 -----	0.24 -----
Inert ingredients -----	1.17 -----	1.16 -----
	<u>100.00</u>	<u>100.00</u>

Production: Approximately 100 tons daily of high calcium limestone.

Production Costs: Approximately \$1.25 per ton.

Freight Rates: To Los Angeles area \$1.60 per ton.
To San Francisco area \$4.00 per ton in carloads of 30 tons or over.

EXHIBIT 8

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF MINES
FERRY BUILDING, SAN FRANCISCO

WALTER W. BRADLEY

State Mineralogist

Vol. 39

JANUARY 1943

No. 1

CALIFORNIA JOURNAL
OF
MINES AND GEOLOGY



QUARTERLY CHAPTER
OF
STATE MINERALOGIST'S REPORT XXXIX

STATE DIVISION OF MINES
FERRY BUILDING, SAN FRANCISCO
CALIFORNIA

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The deposit of dolomite occurs as a series of low hills that rise above the floor of the desert plain from 100 to 400 feet in height. Estimated tonnage is 1,000,000 tons of commercial dolomite.

Analysis by Smith-Emery Company, Los Angeles

Acid insol. -----	1.00%
Alumina (Al_2O_3) -----	0.36%
Iron (Fe_2O_3) -----	0.20%
Calcium oxide (CaO) -----	33.68%
Magnesium oxide -----	18.23%
Loss in ignition -----	46.50%
Calcium carbonate -----	60.10%
Magnesium carbonate -----	38.12%

Chubbuck limestone and dolomite deposits are in sec. 17, T. 6 N., R. 14 E. and secs. 20 and 21, T. 6 N., R. 14 E., respectively. The deposits are on the south slope of the Marble Mountains about 6 miles northwest of Cadiz, a station on the Santa Fe Railroad and some 4 miles north of Highway 66; owner, Chubbuck Lime Company, C. I. Chubbuck, president, 5000 Worth Street, Los Angeles; under lease and option to the Kaiser Company, Inc., Fontana, California.

The deposit strikes east. Its outcrop is 4000 feet long. On its east end it is 250 feet wide and is reported to be 200 feet wide at its west end and is 750 feet thick. On its north and west sides it is in contact with rhyolite while on the south it is against the dolomite. It is a fine-grained, compact, white limestone.

Analyses of samples from southwest face gave:

	<i>Sample A</i>	<i>Sample B</i>
Lime (CaO) -----	54.8%	55.5%
Silica (SiO_2) -----	1.7%	0.5%
Magnesia (MgO) -----	0.4%	0.08%
Iron (Fe) -----	0.15%	-----
Alumina (Al_2O_3) -----	-----	0.28%
Iron (Fe_2O_3) -----	-----	0.02%
Ignition loss -----	-----	43.61%

Tonnage of commercial limestone in the deposit has been estimated at 100,000,000.

The dolomite parallels the limestone forming its south boundary.

Analyses of samples from the deposit gave:

	<i>Sample No. 1</i>	<i>Sample No. 2</i>
Lime (CaO) -----	31.04%	31.00%
Magnesia (MgO) -----	20.20%	21.10%
Silica (SiO_2) -----	0.60%	0.40%
Iron and alumina -----	0.45%	0.50%

The Kaiser Company, Inc., has opened a quarry in this material which is now 50 feet long 25 feet wide and 50 feet high. The dolomite is shipped to their steel plant for test purposes to determine if it is suitable for use in open hearth furnaces.

The material is hauled by truck 7 miles to Cadiz for rail shipment. Six men are employed on this operation.

Chubbuck Lime Company's Limestone Deposits. The property comprises 3 patented placer mining claims known as Lime Quarry No. 1, Lime Quarry No. 2 and Lime Quarry No. 3, each claim containing 160 acres, in secs. 10, 11, 15 and 22, T. 3 N., R. 16 E., S. B., and 480 acres in

sec. 16 and all of sec. 21, T. 3 N., R. 16 E., S. B., situated on the north end of Iron Mountains at Chubbuck, a station on the Santa Fe Railroad. Total holdings are 1600 acres. Elevation is 1000 to 1500 feet; owner, Chubbuck Lime Company, C. I. Chubbuck, president and manager; Lt. Col. Dixon Chubbuck, vice president; Mrs. A. S. Chubbuck, secretary; E. L. Anderson, treasurer; E. H. McEwen, supervising engineer; Oscar B. Myers, sales manager, San Francisco; Vernon R. Dick, superintendent, Chubbuck, California. Offices are located at 5000 Worth Street, Los Angeles.

The property has been under production since 1925. The limestone is being quarried from High Lime Ridge located on Lime Quarry No. 2 placer mining claim. The High Limestone Ridge has a general north-east course. The beds of limestone strike N. 30° W., dip 30° to 40° SW. The ridge is 1½ miles in length and about a mile wide, and rises above the floor of the desert plain to an altitude of 500 feet. There are also three limestone ridges roughly parallel to High Limestone Ridge which have the same general strike and are about a quarter of a mile wide. Southwest of these limestone ridges is a ridge of dolomite which is 1 mile in length and half a mile wide and about 400 feet in elevation above the floor of the desert plain. These deposits are in sec. 16. The main quarry is on High Lime Ridge and is in the S½ sec. 15. Limestone has been quarried from four quarries known as No. 1, No. 2, No. 3, and No. 4. No. 4 quarry is 500 feet in length by 200 feet in width by 30 feet high; No. 3 quarry is 600 feet in length by 150 feet in width and 30 feet high; No. 2 quarry is 500 feet long by 150 feet wide by 30 feet high.

The limestone is being quarried from No. 4 quarry. The broken material is loaded by gas-driven shovel ¾-yard bucket, into 5-ton dump truck and hauled to ore bin with a capacity of 150 tons. Material is dumped onto railroad iron grizzly spaced to 8 inches; rock from bin loaded into side-dump cars, capacity 2½ tons per car; hauled in train of 5 cars by Plymouth gas-driven motor to crushing plant where dumped into ore bin; from bin to Kennedy gyratory crusher, crushed to 1½-inch size; crushed rock elevated by bucket elevator to top of screening plant equipped with 5 Cottrell shaking screens, making the following products: 1½-inch, 5/16-inch, ¾-inch, 16 mesh and 40 mesh. These products go to separate bins, above concrete tunnel, there being 4 bins on one side and 2 bins on the other side. The sized products from bins are loaded into steel side-dump cars and hauled over narrow gauge railroad in trains of 4 to 6 cars, capacity 2½ tons of rock per car, by Milwaukee gas-driven locomotive to plant at Chubbuck, a distance of 1 mile. The 5/16-inch to 1½-inch product to lime kiln plant. The other sizes are hauled by train to trestle to elevator and shipped.

The ⅝-inch to ¾-inch products are ground in pebble mill, then to air separator and the 80 mesh and 200 mesh products are sacked for shipment to Los Angeles and San Francisco.

The crushing and screening plant is driven by one 1-cylinder, 50-horsepower Fairbanks-Morse semi-diesel engine and one 35-horsepower semi-diesel Fairbanks-Morse engine drives Sullivan compressor for operation of air drills at quarries. The crushing and screening plant has a capacity of 20 tons per 8-hour shift.

Lime kiln plant: The ⅝-inch to 1½-inch product from screening plant is hauled by ore train over narrow gauge railroad to hopper to 24-inch belt conveyor to 50-ton storage bin. From bin it is elevated

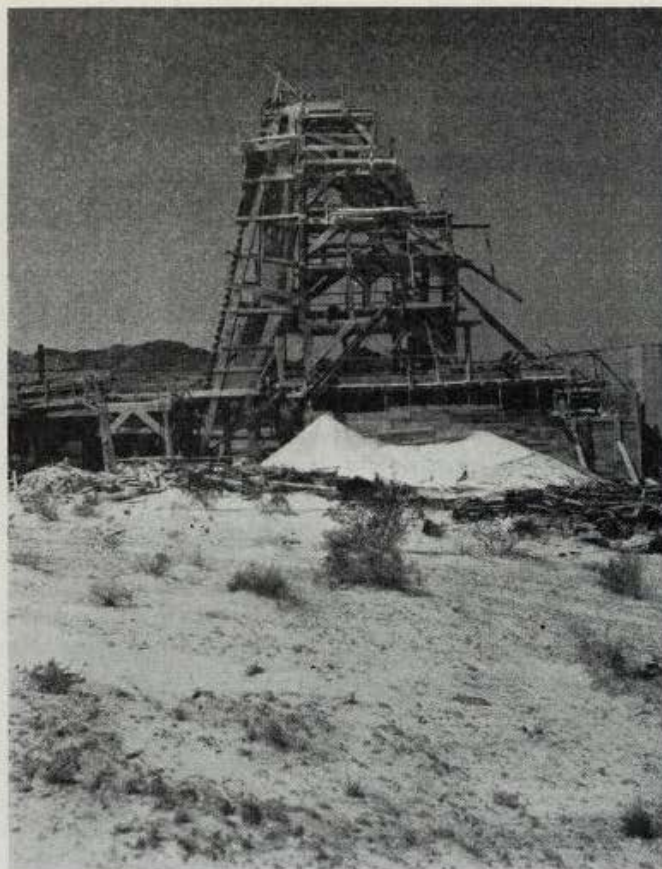


FIG. 16. Chubbuck Lime Company's crushing and screening plant, Chubbuck.

by bucket elevator to circular steel storage bin, capacity 50 tons. From steel storage bin, material is fed by automatic feeder to rotary kiln (50 feet in length by 5 feet in diameter); heated to 2000° F.; the calcined lime from kiln to steel hopper; elevated by bucket elevator to revolving screen and screened to $\frac{1}{4}$ -inch size. The minus $\frac{1}{4}$ -inch size produced to circular steel bin, capacity 40 tons; the plus $\frac{1}{4}$ -inch material to 3 circular steel ore bins, each having a capacity of 40 tons. From the three bins, the lime is drawn by screw conveyor to 20-ton capacity bin, then by automatic feeder to 14-foot by 5-foot pebble mill, driven by 75-horsepower motor. The product from pebble mill then goes to elevator to separator; the oversize returned to pebble mill. The calcined lime is ground to minus 200 mesh for processed lime. The 200 mesh product is elevated to storage bin from which it goes to bag packing machines and is sacked for shipment. The oversize lime products are fines and pebble lime.

Limestone products plant: The $\frac{5}{16}$ -inch and $\frac{1}{8}$ -inch product to 5 feet in diameter by 14 feet long pebble mill, driven by 60 horsepower motor; the ground product from pebble mill to separator; two products produced are 80 mesh and minus 200 mesh; the oversize from separator returned to ball mill.

Power plant at Chubbuck for operating kiln and pebble mills consists of one 120-horsepower, 4-cylinder, Fairbanks-Morse full diesel engine, direct connected with 75 K.V.A. generator and one 110-horsepower Fairbanks-Morse, 2-cylinder, diesel engine, direct connected with 75-horsepower K.V.A. generator and one 60-horsepower horizontal Fairbanks-Morse full diesel engine. The 110-horsepower diesel engine operates kiln, screen, and pebble mill. When both pebble mills are under operation, the 120-horsepower diesel engine is operated. Water for camp and plant is secured in tank cars from the Santa Fe Railroad Company's wells at Cadiz.

The lime products produced are processed lime and pebble lime. Limestone products are 40 mesh limestone, 80 mesh limestone, 200 mesh for whiting, chicken grits and foundry rock 1½-inch to 2½-inch sizes.

Analysis of crude limestone

Silica (SiO ₂)	0.20%
Alumina (Al ₂ O ₃)	0.30%
Calcium oxide (CaO)	56.00%
Magnesium oxide (MgO)	none
Loss in ignition	43.30%
Calcium carbonate	99.80%

Twenty-four men are employed at quarry and plant.

Cima Limestone Deposit. It is situated in secs. 12, 13, and 24, T. 15 N., R. 13 E. and in sec. 7, T. 15 N., R. 14 E., S. B., about 10 miles northeast of Cima, a station on the Union Pacific Railroad. The holdings comprise 1400 acres; elevation 4900 to 5900 feet. Owners are James Vernon, Arlington, California, R. F. Slaughter, Riverside, California, and associates.

The deposit constitutes the main portion of the westerly spur of Ivanpah Mountains. Analysis of samples taken reported 97.20 percent CaCO₃, 0.45 percent MgO, and 1.09 percent SiO₂. Idle.

Bibl.: State Mineralogist's Report XXVII, pp. 384-385.

Devils Canyon Limestone Deposit. It comprises 320 acres situated in Devils Canyon in the San Bernardino Mountains in the N½ sec. 5, T. 1 N., R. 4 W., S. B., 6½ miles north of San Bernardino; elevation 1500 feet; owner, San Bernardino Limestone Company, Inc., Julian Bailey, president and manager; Cresti Waldenfelds, secretary, 1709 West Eighth Street, Los Angeles.

A wide belt of white, crystalline limestone 98.8 percent CaCO₃ occurs on this property. The material is quarried and then goes to crushing and screening plant with a capacity of 40 tons per day. The screened material is shipped to Western Milling & Manufacturing Company of Los Angeles for use in defense housing projects. Six men are employed.

Hesperia Dolomite Deposit. It comprises five 160-acre placer claims, located on the north slope of Ord Mountain in secs. 27, 28, 33, T. 4 N., R. 3 W., S. B., 7 miles east of Hesperia, a station on the Santa Fe Railroad; elevation 3500 to 4200 feet; owners, S. D. Greenwood, Clinton Ray and Claire Dunton, Glendale, California.

The deposit of dolomite is 700 feet thick by half a mile in width and 1½ miles in length. The dolomite is white to brown in color.

EXHIBIT 9

In the Services

Col. Chubbuck Wins Award

Col. Charles D. Chubbuck, vice president of the Chubbuck Lime company in South San Francisco, and former Burlingame resident, now in the quartermasters corps of the U. S. army was today officially reported awarded the legion of merit for outstanding service in the Alaskan theatre of war.

According to reports, the honor was bestowed upon him for his maintenance of supplies to hard-pressed troops in Alaska, delivering the goods despite numerous hardships and difficulties. He is in charge of the supplies division.

Col. Chubbuck, who is the son of C. I. Chubbuck, founder of the largest lime manufacturing plant in the United States, formerly resided at 778 Willborough road, Burlingame, and was well-known throughout California.

Together with his wife and small son, Donald, and daughter, Mary Helen, he is now making his home in Seattle where he is stationed.

Col. Chubbuck, a graduate and honor student of Stanford university, plans to resume his residence locally and return to his post with the lime company at the conclusion of the war.

The family home is in Pasadena where his father resides. Chubbuck went into the service as a lieutenant in February 1, 1940. He was a member of the U. S. army reserve.

After having participated in at least 10 naval battles in the Pacific in the last 18 months, John Loris Cady, 21, of 134 North Claremont, is reported back in San Diego, where he has been named plane captain at the naval air station. He is also displaying a unit citation from President Roosevelt.

Cady, a student at the San Mateo high school, enlisted in the navy soon after Pearl Harbor, and, after training, was assigned to a carrier in the Pacific as an airplane mechanic.

The citation presented to his unit by Admiral Sherman had been signed by the late secretary of the navy, Frank Knox, and was for "outstanding performance and distinguished achievement during repeated action against enemy Japanese forces in the Pacific war area."

Cady is the son of Mrs. Loretta Gaub and a grandson of Mr. and Mrs. Jack Pease.

EXHIBIT 10

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
WARREN T. HANNUM, Director

DIVISION OF MINES
FERRY BUILDING SAN FRANCISCO
OLAF P. JENKINS, Chief

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No. 1

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	Percent
Acid insoluble -----	1.00
Alumina (Al_2O_3) -----	0.36
Iron oxide (Fe_2O_3) -----	0.20
Calcium oxide (CaO) -----	33.68
Magnesium oxide (MgO) -----	18.23
Loss on ignition -----	46.50
	<hr/> 99.97

Chubbuck limestone and dolomite deposits are in two extensive holdings, described below for convenience under two titles, Chubbuck Lime Company deposits and Chubbuck reserve deposits. The former have been in production for many years. The Chubbuck reserve deposits have been the subject of both geological and engineering investigations that have yielded much interesting information, but so far have been worked only for test purposes.

Chubbuck Lime Company deposits were first worked from 1925-30 by Charles I. Chubbuck, and since then by Chubbuck Lime Company with Charles I. Chubbuck, president and general manager and Mrs. A. S. Chubbuck, secretary. The main office is at 5000 Worth Street, Los Angeles. The land holdings include three patented association placer claims of 160 acres each in secs. 10, 11, 15, 22, T. 3 N., R. 16 E., S. B.; the $E\frac{1}{2}$ and $SW\frac{1}{4}$ sec. 16, and all of sec. 21, T. 3 N., R. 16 E., S. B. The land in section 16 was patented in March 1947 to Chas. I. Chubbuck by the State of California. The deposits are 1 to 2 miles southwest of Chubbuck, a station on the Parker-Phoenix branch of the Atchison Topeka and Santa Fe Railway about 16 miles southeast of Cadiz.

The deposits are roof pendants of high-calcium coarsely crystalline limestone on a series of parallel ridges striking north-northwest with one ridge lying southwest of the others having a deposit of dolomite. Four quarries have been operated. Work has been principally on High Lime Ridge which is about $1\frac{1}{2}$ miles long by 1 mile wide rising to an elevation of 1500 feet, about 500 feet above the surrounding desert. The deposits are at the north end of the Iron Mountains.

The limestone and dolomite here are in the Essex series of metamorphosed sediments with minor amounts of altered igneous material. The Essex series is said to be the oldest unit of the Archean complex, and includes: (1) a basal quartz-feldspar-biotite gneiss about 1500 feet thick; (2) the Chubbuck marble member, 500 to 600 feet thick, consisting of marble, quartzite, and schist; and (3), a thick upper unit of quartz-feldspar-biotite gneiss (Hazzard, J. C. 37).

In the quarries opened by 1943, limestone had been worked to a depth of 30 feet, widths of 150 to 200 feet and lengths of 500 to 600 feet. Tucker and Sampson (43, pp. 519-521) described the operations as follows:

The limestone is being quarried from No. 4 quarry. The broken material is loaded by gas-driven shovel $\frac{3}{4}$ -yard bucket, into 5-ton dump truck and hauled to ore bin with a capacity of 150 tons. Material is dumped onto railroad iron grizzly spaced to 8 inches; rock from bin loaded into side-dump cars, capacity $2\frac{1}{2}$ tons per car; hauled in train of 5 cars by Plymouth gas-driven motor to crushing plant where dumped into ore bin; from bin to Kennedy gyratory crusher, crushed to $1\frac{1}{2}$ -inch size; crushed rock elevated by bucket elevator to top of screening plant equipped with 5 Cottrell shaking screens, making the following products: $1\frac{1}{2}$ -inch, $\frac{5}{8}$ -inch, $\frac{1}{4}$ -inch, 16-mesh and 40-mesh. These products go to separate bins, above concrete

tunnel, there being 4 bins on one side and 2 bins on the other side. The sized products from bins are loaded into steel side-dump cars and hauled over narrow gauge railroad in trains of 4 to 6 cars, capacity $2\frac{1}{2}$ tons of rock per car, by Milwaukee gas-driven locomotive to plant at Chubbuck, a distance of 1 mile. The $\frac{5}{16}$ -inch to $1\frac{1}{2}$ -inch product to lime kiln plant. The other sizes are hauled by train to trestle to elevator and shipped.

The $\frac{5}{16}$ -inch to $\frac{1}{2}$ -inch products are ground in pebble mill, then to air separator and the 80 mesh and 200 mesh products are sacked for shipment to Los Angeles and San Francisco.

The crushing and screening plant is driven by one 1-cylinder, 50-horsepower Fairbanks-Morse semi-diesel engine and one 35-horsepower semi-diesel Fairbanks-Morse engine drives Sullivan compressor for operation of air drills at quarries. The crushing and screening plant has a capacity of 20 tons per 8-hour shift.

Lime kiln plant: The $\frac{5}{16}$ -inch to $1\frac{1}{2}$ -inch product from screening plant is hauled by ore train over narrow gauge railroad to hopper to 24-inch belt conveyor to 50-ton storage bin. From bin it is elevated by bucket elevator to circular steel storage bin, capacity 50 tons. From steel storage bin, material is fed by automatic feeder to rotary kiln (50 feet in length by 5 feet in diameter); heated to 2000° F.; the calcined lime from kiln to steel hopper; elevated by bucket elevator to revolving screen and screened to $\frac{1}{2}$ -inch size. The minus $\frac{1}{2}$ -inch size produced to circular steel bin, capacity 40 tons; the plus $\frac{1}{2}$ -inch material to 3 circular steel ore bins, each having a capacity of 40 tons. From the three bins, the lime is drawn by screw conveyor to 20-ton capacity bin, then by automatic feeder to 14-foot by 5-foot pebble mill, driven by 75-horsepower motor. The product from pebble mill then goes to elevator to separator; the oversize returned to pebble mill. The calcined lime is ground to minus 200 mesh for processed lime. The 200 mesh product is elevated to storage bin from which it goes to bag packing machines and is sacked for shipment. The oversize lime products are fines and pebble lime.

Limestone products plant: The $\frac{5}{16}$ -inch and $\frac{1}{2}$ -inch product to 5 feet in diameter by 14 feet long pebble mill, driven by 60-horsepower motor; the ground product from pebble mill to separator; two products produced are 80 mesh and minus 200 mesh; the oversize from separator returned to ball mill.

Power plant at Chubbuck for operating kiln and pebble mills consists of one 120-horsepower, 4-cylinder, Fairbanks-Morse full diesel engine, direct connected with 75 K.V.A. generator and one 110-horsepower Fairbanks-Morse 2-cylinder, diesel engine, direct connected with 75-horsepower K.V.A. generator and one 60-horsepower horizontal Fairbanks-Morse full diesel engine. The 110-horsepower diesel engine operates kiln, screen, and pebble mill. When both pebble mills are under operation, the 120-horsepower diesel engine is operated. Water for camp and plant is secured in tank cars from the Santa Fe Railroad Company's wells at Cadiz.

The lime products produced are processed lime and pebble lime. Limestone products are 40 mesh limestone, 80 mesh limestone, 200 mesh for whiting, chicken grits and foundry rock $1\frac{1}{2}$ -inch to $2\frac{1}{2}$ -inch sizes.

Analysis of crude limestone

	Percent
Silica (SiO_2)	0.20
Alumina (Al_2O_3)	0.30
Calcium oxide (CaO)	56.00
Magnesium oxide (MgO)	None
Loss in ignition	43.30

Twenty-four men are employed at quarry and plant.

Chubbuck reserve limestone and dolomite deposits are in $\text{N}\frac{1}{2}$ sec. 20, $\text{NW}\frac{1}{4}$ sec. 21, $\text{SE}\frac{1}{4}$ and $\text{E}\frac{1}{2}\text{SW}\frac{1}{4}$ sec. 17, T. 6 N., R. 14 E., S.B., in the Marble Mountains $7\frac{1}{2}$ miles west of north of Cadiz, a station on the Atchison, Topeka and Santa Fe Railroad. The deposits are controlled by Chubbuck Lime Company, Charles I. Chubbuck, president and general manager and Mrs. A. S. Chubbuck, secretary, with the main office at 5000 Worth Street, Los Angeles. The Kaiser Company, Incorporated, did some work on the property in 1943 and 1944, but it is idle at present.

C. W. Clark (21) has mentioned Carboniferous limestone of an estimated thickness of 635 feet as occurring in the Bristol Mountains "5 miles due north of Cadiz." This note probably refers to the above

deposit but the name Bristol Mountains is in error, as that name is usually applied to a range farther west, lying north of Amboy. He made no reference to the dolomite.

In a private report made in 1943, Charles Severy has described the deposits in detail. The following quotation is from his report:

Structurally the area is composed of a metamorphosed sedimentary section which has been folded into an overturned anticline and this in turn thrust over a meta-diorite by a reverse fault which dips approximately 50° to the north. This fault can be traced for several miles along the front of the mountains. To the west is another fault which strikes approximately N. 40° E. and separates the sedimentaries and the meta-diorite from an acid igneous rock, probably a granite. This fault dips from the vertical to 65° to the east, and to the north near the top of the limestone it assumes a 25° dip to the east. Minor zones of movement are present in the limestones.

There are three metamorphosed sedimentary formations in the area: a white limestone which constitutes the main mass of the deposit, a blue limestone which occurs in two lenticular beds separated by a bed of dolomite and the main dolomite formation.

The white limestone forms a ridge some 700 feet high with precipitous slopes commonly in excess of 60° . The bedding of the limestone is massive and usually obscure, but the ridge is apparently part of the leading edge of an overturned anticline whose axial plane is inclined to the north approximately 25° . Near the base of the limestone ridge to the east, the strike of the beds is approximately N. 65° E. and the dip is from vertical to 85° N., while higher on the same portion of the ridge the strike is similar, but the dip has changed to approximately 45° southerly. There are numerous zones of movement in the limestone, but as the bedding is obscure, an accurate measurement of the displacement along these faults cannot be made, however, it is believed that the displacement in all cases is small.

The material is a finely crystalline rock that has local variations from a cryptocrystalline texture to a medium crystalline one. The individual grains show well developed cleavage faces and are interlocked. The color of the limestone varies from a pure milk white to a dark brown and includes clear, translucent varieties as well as mottled red, yellow and brown types. On weathered surfaces the limestone is commonly a medium grey or buff color, and occasionally has a sugary, friable texture. Often minute subhedral to euhedral crystals of magnetite are present in the limestone.

In some beds of the white limestone free silica is found in the form of small nodules and lenses, usually around two to three inches in size, but occasionally extending up to three feet or so in length and one foot in thickness. These lenses and nodules of silica weather a dark brown and are secondary in origin.

Small basic dikes having approximately the composition of a hornblende andesite occur through both the limestone and the dolomite. They are dark green to black in color, aphanitic in texture, and can be traced on the surface for distances ranging up to 75 feet. Their width is from 18 inches to three feet, and in general they appear to be regular in both strike and dip. They are not common enough as seen on the surface, to constitute a serious waste ratio in the limestone as they are scarce and can easily be sorted.

The blue limestones are found in two beds paralleling the face of the white limestone, apparently conformable with it, and separated from each other by an intermediate bed of dolomite. Both beds vary in width along the strike, pinching and swelling and occasionally disappearing entirely, which lends a lenticular aspect to the beds. The southerly blue limestone bed is the thicker and more persistent of the two beds, being from 10 to 50 feet wide, while the northern bed is seldom more than 15 feet in thickness and, toward the west, is commonly discontinuous while the southern bed merely thins rapidly. Both beds are composed of a fine crystalline rock having a blue-grey color probably due to minute amounts of carbonaceous material now metamorphosed to graphite. The chemical composition is similar to that of the white limestone (see analyses). A few basic dikes are present and some free silica is visible as small lenses.

The intermediate dolomite bed lies between the two blue limestone beds and has a varying thickness from approximately 30 feet to 110 feet, pinching and swelling to some extent, but in general thickening steadily toward the west until it is separated from the main dolomite only by a narrow five to ten foot thickness of blue limestone and from the white limestone by occasional narrow lenses of the northern blue limestone.

This dolomite is finely crystalline and for the most part is a milky white in color on a fresh surface, weathering to a characteristic reddish brown which makes the dolomite in this area readily distinguishable in the field from the adjacent formations.

On the west, the contact between the middle dolomite and the limestone would appear to be a gradational one as the rock has the analysis of a magnesium limestone (10% MgO).

The main dolomite formation, which lies to the south of the southern blue limestone, occupies three ridges forming salients from the main mass of the mountains. There is no visible bedding in the dolomite, but it is assumed to be conformable with the blue limestones as there are no indications to the contrary where the contact is exposed.

The dolomite varies from a cryptocrystalline, dense type in which no individual grains are megascopically visible to a finely crystalline variety. Both are white in color with occasional brownish mottling. A few euhedral crystals of hematite, pseudomorphs after magnetite, are found. The bed becomes narrower near the center of the deposit due to the folding of the strata combined with the position of the underlying fault.

The dolomite rests on what has been termed in the field as a meta-diorite, and is separated from it by a reverse or thrust fault dipping approximately 50° toward the north. Along the contact there has been hydrothermal action as shown by the presence of abundant epidote and some garnet. Locally along the contact the diorite contains a large percentage of biotite, lending a schistose structure to the rock. There are acidic phases in the diorite having the composition of a granite and occasionally of an alaskite, but they are comparatively minor.

On the west side the meta-sediments are terminated by a fault which brings an acid intrusive having the composition of a granite or a quartz monzonite against them. Along this contact there are local areas of abundant epidote and small deposits of iron, replacements of the limestone, while some 1500 feet further west and to the south lies the Iron Hat ore deposit.

Chemical Composition

Following are the average analyses of the various types of limestones and dolomites found on the deposit:

	SiO ₂	CaO	MgO	Al ₂ O ₃	Fe
White limestone	1.58	53.54	.31	.39	.18
Blue limestone	2.31	52.32	.82	--	.17
Main dolomite	1.56	31.22	20.23	.73	.66
Intermediate dolomite	2.26	31.99	20.03	--	--

The decrepitation tests show a wide variation, from 2 to 68.8. It is possible that this high decrepitation index was due to the weathered condition of the sample. An estimated average decrepitation for the limestone is between 15 and 20. The individual analyses will be found at the end of the report.

The Kaiser Company, Inc. prospected both the dolomite and limestone. A quarry bench was opened in the dolomite on the toe of the east ridge and dolomite was hauled in 5-ton trucks a distance of 7 miles to a railroad spur a quarter of a mile west of Cadiz for shipment to the company's steel plant at Fontana. The average analysis of dolomite resulting from averaging the figures quoted for a number of carloads, indicated 1.65 percent SiO₂, 30.9 percent CaO and 19.8 percent MgO.

The limestone prospecting consisted of an adit in white limestone, but the extent of work done was so small in comparison with the extent of deposit that no conclusion could be drawn from it, as it was started in a bed which may be a comparatively narrow stratum of Cambrian limestone or dolomite and not the main limestone member.

The property is 1½ miles long from east to west and 1 mile from north to south, and the tonnages of both limestone and dolomite in it are very large. The mining of the white limestone would be limited to certain methods because of the steep slope. R. E. Tally Jr., after an inspection, suggested the use of tunnel shots using 3- by 5-foot tunnels to be driven

70 feet into the face, then forked 150 feet each way, east and west, loaded with explosive, back-filled, and fired. He estimated that 3 such shots, 167 feet apart on the steep limestone face, would break 1,175,000 tons.

Severy estimated that the block of limestone under investigation, which is only a part of the Chubbuck holdings would yield 13,100,000 tons of white limestone and 34,800,000 tons of dolomite, not counting the two beds of blue limestone and the "intermediate dolomite" bed, as these would be wasted in the mining method proposed. As the Chubbuck property extends 4000 feet east and 800 feet or more north of the area covered by Severy's estimates, and is occupied largely by the white limestone, the estimate of 100,000,000 tons of limestone quoted by Tucker and Sampson (43) need not be considered excessive.

Water is obtainable in small quantity from wells at the old and new Chambless Service Stations, 2.4 miles and 3.2 miles distant respectively, and might be had in larger amount from well at Cadiz; or possibly other wells might be drilled. No electric power is available.

Cima limestone deposit is in secs. 12, 13, and 24, T. 15 N., R. 13 E., and sec. 7, T. 15 N., R. 14 E., 10 to 12 miles by road nearly north from Cima on the Union Pacific Railroad. Owners are James Vernon and W. R. Fory, Arlington; C. B. Worcester, Riverside; and R. F. Slaughter, San Clemente. The total area is 1380 acres in 10 placer claims at elevations ranging from 4900 to 5900 feet on a western spur at the Ivanpah Mountains. It is mapped as undifferentiated Carboniferous.

The limestone makes up a large part of the mountain, which is about 2 miles long and has a maximum width of about 1 mile. The strata of limestone range in thickness up to 300 feet. The texture varies from fine grained and compact to coarse crystalline and the color from dark slate to white. A random sample said to have been taken "from entire deposit" and analyzed by Smith Emery & Co. July 21, 1943 gave the following (Laboratory No. 237,245):

	Percent
Calcium carbonate (CaCO_3)	97.20
Magnesium oxide (MgO)	0.45
Calcium carbonate (CaCO_3)	97.20

The writer has not visited the property, but it has been mentioned by W. B. Tucker and R. J. Sampson (43, p. 521). The owners claim that estimates indicate more than 220,000,000 tons of limestone above the base or surrounding desert level. There has been no reported production, the only work being prospecting pits.

Grades on the road from the deposit to the railroad are almost entirely in favor of loaded traffic, Cima being at 4204 feet elevation, or 700 to 800 feet below the base of the deposit. There is ample space available for any plant desired, and as the country is almost uninhabited desert, no trouble would arise from dust or fumes. It should be possible to run a railroad spur track to the deposit at moderate cost. Cima is 250 miles by rail from Los Angeles.

Mescal Spring 6 miles north, and Roseberry Spring and Mexican Well 7 miles north of the deposit, as well as others toward Cima, might supply sufficient water for domestic use if a supply could not be developed near the property. The railroad also has a well at Chase, 4 miles south of Cima.

EXHIBIT 11

STATE OF CALIFORNIA
EARL WARREN, Governor
DEPARTMENT OF NATURAL RESOURCES
WARREN T. HANNUM, Director

DIVISION OF MINES
FERRY BUILDING, SAN FRANCISCO 11
OLAF P. JENKINS, Chief

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was hindered by uncertain metal prices and high operating costs. Lead, zinc, and tungsten were mined in the greatest quantity; but silver, copper, gold, and iron ore were produced also.

Mineral Fuels. During 1949, five dry holes totaling 14,506 feet were drilled in the Barstow, Cajon Pass, Chino Hills, and Victorville areas. Oil has been sought in San Bernardino County for many years, but with the exception of an area of small production near Chino, the exploration has been unsuccessful.

Nonmetallic Industrial Materials. The county's three portland cement plants, the California Portland Cement Company at Colton, the Southwestern Portland Cement Company at Victorville, and the Riverside Portland Cement Company at Oro Grande continued production at a high level.

By far the most important saline producing area is the Searles Lake district where the American Potash and Chemical Company at Trona continued to produce borax, boric acid, potassium sulfate, potassium chloride, sodium sulfate, soda ash, lithium salts, bromine sales, and bromine from the Searles Lake brine. The West End Chemical Company, also at Searles Lake, continued production of borax and soda ash from the same brines.

Common salt and calcium chloride were produced at Bristol Lake. The California Salt Company worked a 5-foot bed of rock salt that lay beneath 6 to 7 feet of overburden. After a dragline had removed the overburden, the salt was drilled with wagon drills, blasted, and loaded into small cars by draglines. At the mill at Saltus, 4 miles from the deposit, the salt was crushed to 2 inches, washed on conveyors, crushed again to minus three-fourths inch, and rewashed on a set of spiral conveyors that discharged directly into gondolas. Approximately half of the output was consumed by the Los Angeles Metropolitan Water District and the remainder by the Stauffer Chemical Company at Henderson, Nevada. Capacity of the plant was 50 to 60 tons per hour. The Hill Brothers Chemical Company produced flake calcium chloride at Saltus from brine obtained from the California Salt Company. M. M. Stevens of Amboy also produced calcium chloride. Lake brine that seeped into a collecting ditch was pumped into evaporation ponds where it was concentrated to a gravity of over 40° Baumé (over 50 percent evaporation). At this density sodium chloride precipitated, with calcium chloride remaining in solution. The calcium chloride brine was pumped into storage tanks and shipped in tank trucks. A flaking plant owned by Mr. Stevens has been inactive since 1948. The sodium sulfate plant of the Dale Chemical Industries, Incorporated, at Dale Lake was shut down in February 1949, and no shipments were made.

The Victorville Lime Rock Company produced a wide range of sizes of ground limestone at Victorville. Two grades of rock were produced from the same quarry 4 miles north of the plant. One, a very white material selected by hand picking, was used in paint and putty, while the other, which is slightly off-color, was used in ceramics, stucco, plaster, stock feed, for roofing granules, and in the ceramic, rubber, and foundry industries. The mill, which employed a process of dry crushing and air classification, ran 24 hours a day throughout the year. The Chubbuck Lime Company opened a new quarry late in 1949 half a mile from Chubbuck. Crushed limestone was produced.

EXHIBIT 12

STATE OF CALIFORNIA
EARL WARREN, Governor
DEPARTMENT OF NATURAL RESOURCES
WARREN T. HANNUM, Director

DIVISION OF MINES
FERRY BUILDING, SAN FRANCISCO 11
OLAF P. JENKINS, Chief

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two carbonate rocks are intimately associated and show planar, interfingering, or irregular contacts. The carbonate-bearing units commonly also contain quartzite and mica schist and are complexly folded and faulted. Many of the deposits are intruded by granitic bodies of various sizes. In the southwestern part of the county most of the carbonate rocks are Upper Paleozoic in age. Elsewhere, the largest of the relatively undeveloped reserves exist in Algonkian and Cambrian formations.

The chief limestone-producing districts are at Colton, Victorville, Oro Grande and Chubbuck. Small tonnages are also produced at Wrightwood in the San Bernardino Mountains. In the past, deposits near Basin (Baxter), between Barstow and Baker, were rather extensively mined. From time to time small limestone quarries in the northeastern part of the San Bernardino Mountains, in the Lucerne Valley area, and in the New York Mountains, also have been worked. Dolomite, used in white and yellow roofing granules, is quarried in the northeastern part of the Shadow Mountains between Adelanto and Kramer. Small tonnages of dolomite have been mined in the Chubbuck and Hinkley areas for use in the Kaiser Steel Corporation's plant at Fontana.

In the Victorville-Oro Grande district, where most of the limestone is now obtained, carbonate bodies occur in the Oro Grande series, which is predominantly Carboniferous, and in the Permian Fairview Valley formation. The carbonate units are commonly several hundred feet thick and several thousand feet in exposed length. They exist as resistant rocks forming prominent ridges. In the Oro Grande series crystalline limestone members are interbedded with thick members of quartzite and mica schist which, in some areas, comprise an overburden and handicap quarrying operations. Crystalline limestones of the Oro Grande series are medium- to coarse-grained and vary from white to dark blue-gray. The principal industrial limestone in the Fairview Valley formation is found in the upper part of the section. It is a blue-gray, coarse, well-cemented conglomerate in which all but a small percentage of the matrix, cobbles and boulders, which comprise the rock, is limestone. There is little or no overburden on the Fairview Valley limestone conglomerate, but it crops out on very rugged topography.

The limestone deposits closest to the Los Angeles industrial area are those of the eastern Jurupa Mountains in the Riverside-Colton district. They support one cement plant at Colton, San Bernardino County, and one at Crestmore, Riverside County. The limestone, as exposed in a group of hills, occurs as roof pendants in granitic rock and, at some localities, is interbedded with dolomite and mica schist. The limestone appears unfossiliferous, but has been tentatively classified as of Paleozoic or Triassic age.¹⁶¹ It is mostly coarse-grained. Although locally silicated, it is ordinarily quite pure. Much of the rock quarried at Slover Mountain (Colton) and Crestmore contains more than 99 percent CaCO_3 . The rock ranges in color from white to bluish gray.

The limestone deposits west of Chubbuck in the eastern part of the county have been quarried intermittently for many years. They are

¹⁶¹ Woodford, A. O., Crestmore minerals: California Div. Mines Rept. 39, pp. 333-365, 1943.

MacKevett, E. M., Geology of the Jurupa Mountains, Riverside and San Bernardino

Counties, California : California Div. Mines Special Rept. 5, 1951.

part of the Essex series of probable pre-Cambrian age,¹⁶² are highly contorted, and are interbedded with quartzite and quartz-mica schist. The limestone ranges from coarse- to fine-grained and is white to cream in color. Selected material averages more than 99 percent CaCO_3 , but care in mining is necessary to assure such purity. Most of the limestone masses dip steeply and have little or no overburden.

In recent years Carboniferous dolomite and limestone in the Marble and Bristol Mountains north of Cadiz and Chambless have been quarried. The limestone and dolomite in this area are interbedded and are white to blue-gray and medium- to coarse-grained. They are extensively exposed, and strongly folded. Much of the limestone averages 97.5 percent CaCO_3 . Much of the dolomite contains 97 percent calcium and magnesium carbonates and averages about 20 percent MgO and 31 percent CaO .

Small tonnages of limestone are mined in an area between Wrightwood and Cajon Pass in the eastern San Gabriel Mountains. Here the limestone occurs as a series of roof pendants in granitic rock. The pendants lie along a west-trending belt about half a mile wide and 12 miles long. Some of the masses are highly fractured, and most are intruded by numerous granitic dikes. Most of the limestone is milky white and well suited for white roofing granule material. Chemical analyses show a calcium carbonate content of 91 to 97 percent; silica from 1 to 5 percent; the magnesia from 2.1 to 3.2; and iron and aluminum oxides from 0.2 to 1.6 percent.

Very large reserves of limestone suitable as industrial material exist in the Cushenbury Canyon area in the northeastern San Bernardino Mountains. These are only a few miles farther from Los Angeles marketing centers than deposits in the Victorville-Oro Grande district, but are 25 to 30 miles east of the Santa Fe Railroad. Rock has been mined intermittently in the past for use in sugar refining. Much of the rock is a tectonic breccia occurring in fault blocks, but there are large areas of relatively unbroken massive limestone and dolomite. The limestone crops out on very rugged topography and there is usually no overburden. The geology of the area has been discussed by Woodford and Harris,¹⁶³ by Vaughan,¹⁶⁴ and by Guillou.¹⁶⁵ The rock is medium-grained, commonly sugary and blue-gray to white. The chemical composition of much of the limestone in Cushenbury Canyon falls within the following limits:

CaCO_3	91.4-98.7%
MgCO_38- 1.9%
Insoluble4- 6.8%
$(\text{Fe,Al})_2\text{O}_3$	1.0%

Large areas covered by carbonate formations are also known in the Ivanpah Mountains north of Cima, in the Clark Mountains east of

¹⁶² Hazzard, J. C., and Dosch, E. F., Archean rocks in the Piute and Old Woman Mountains, San Bernardino County, Calif. (abs.): Geol. Soc. America Proc., 1936, pp. 308-309, 1937.

¹⁶³ Woodford, A. O., and Harris, T. A., Geology of Blackhawk Canyon, San Bernardino Mountains, California: Univ. California Dept. Geol. Sci. Bull., vol. 17, pp. 265-304, 1928.

¹⁶⁴ Vaughan, F. E., Geology of San Bernardino Mountains north of San Geronio Pass: Univ. California, Dept. Geol. Sci. Bull., vol. 13, pp. 319-411, 1922.

¹⁶⁵ Guillou, Robert, Geology of the Johnston Grade area, San Bernardino Mountains, California: Univ. California at Los Angeles, Masters thesis, unpublished.

feet wide. The sugar rock was mined selectively from open cuts and loaded on railway cars at a spur extending from Basin.

Chubbuck (Chubbuck Lime Company, White Mountain Lime Company) Deposits. Location: secs. 10, 11, 15, 16, 21 and 22, T. 3 N., R. 16 E., S.B.M., extending two miles southwestward from Chubbuck, on a series of low parallel ridges at the north end of the Iron Mountains. Owner: Reconstruction Finance Corporation owns 1600 acres being purchased (1951) by the White Mountain Lime Company, Harms Brothers, 5261 Stockton Boulevard, Sacramento, California.

The Chubbuck limestone deposits were worked nearly continuously from 1925 through 1948 and intermittently from 1949-51. The total production of limestone has been about 500,000 tons. Two-thirds of this was used to produce approximately 165,000 tons of lime products; the other third was used directly for limestone products. The White Mountain Lime Company operated for a short time in 1951 and plans to continue.

Pendants of fine- to coarse-grained limestone are exposed on several low parallel ridges which trend north-northwest; dolomite is exposed on a ridge which is southwest of the other. The limestone and dolomite are part of the Chubbuck marble member of the Essex series (Archean) of metamorphosed sediments and minor amounts of altered igneous material.¹⁶⁹

Four quarries, the largest of which were from 150 to 200 feet wide, 500 to 600 feet long and 30 feet in maximum depth, have been opened on the deposits. Only two quarries were operated by the White Mountain Lime Company. Trucks hauled the quarried limestone to a 120-ton crushing and screening plant which provided raw limestone for the lime products plant or produced crushed limestone in several commercial sizes.

Two sizes of crushed limestone, minus 1-inch plus $\frac{3}{8}$ -inch and minus $\frac{3}{8}$ -inch plus $\frac{1}{8}$ -inch, were used as feed for the two kilns in the lime products plant. The capacity of these two 5- by 60-foot rotary kilns is 50 to 60 tons of lime per day. The kiln products were screened, and all minus 8-mesh material was further ground to minus 200-mesh.

Facilities were provided for sacking the lime products and some of the finer limestone products as well as for bulk loading into railroad cars.

Chubbuck Reserve (Chubbuck Limestone and Dolomite) Deposits. Location: secs. 17, 20 and 21, T. 6 N., R. 14 E., S.B.M., on the southwest slope of the Marble Mountains about 6 airline miles northward from Cadiz. Owner: Reconstruction Finance Corporation owns 1,120 acres being purchased (1951) by White Mountain Lime Company, Harms Brothers, 5621 Stockton Boulevard, Sacramento, California.

The Chubbuck Reserve limestone and dolomite deposits have been prospected and small amounts of rock mined for test purposes. An estimate of the limestone reserves as quoted by Tucker¹⁷⁰ is 100,000,000 tons. Logan¹⁷¹ cites a private report in which a portion of these deposits

¹⁶⁹ Hazzard, J. C., and Dosch, E. F., Archean rocks in the Piute and Old Woman Mountains, San Bernardino County, California (abs.): Geol. Soc. America Proc. 1936, pp. 308-309, 1937.

¹⁷⁰ Tucker, W. B., op. cit., p. 518, 1943.

¹⁷¹ Logan, Clarence A., Limestone in California: California Jour. Mines and Geol., vol. 43, pp. 284-287, 1947.

EXHIBIT 13



ZONING ORDINANCE

678

COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA

ADOPTED BY THE BOARD OF SUPERVISORS
JULY 9, 1951 MADE EFFECTIVE AUGUST 8, 1951

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ORDINANCE NO. 678

AN ORDINANCE PROVIDING REGULATIONS FOR THE ESTABLISHMENT OF ELEVEN ZONE DISTRICTS PRESCRIBING USE, AREA AND HEIGHT REQUIREMENTS IN THE UNINCORPORATED AREA OF SAN BERNARDINO COUNTY, STATE OF CALIFORNIA, AND REPEALING ORDINANCES NO. 457, 458, 475, 562, 563, 587, 590, 591, 601, 602, 631, 639, 647, 659, 662, 664, 669 and 670.

The Board of Supervisors of the County of San Bernardino, State of California, does ordain as follows:

SECTION 1. GENERAL PURPOSE OF OFFICIAL ZONING PLAN AND AUTHORITY AND RESPONSIBILITY OF THE PLANNING COMMISSION:

An official zoning plan for the unincorporated area of the County of San Bernardino, State of California, is hereby adopted and established as is hereinafter set forth in this ordinance, to promote, protect and secure the public health, safety and general welfare, to provide the social and economic advantages resulting from an orderly, planned use of land resources, and to encourage, guide and provide a definite plan for the future growth and development of the said County.

It is recognized that the official zoning plan referred to herein is not complete and the said Board of Supervisors in conformity with the California State Conservation and Planning Act, Chapter 807, Statutes 1947, as amended, and the provisions of this ordinance, hereby delegates to the Planning Commission of said San Bernardino County, hereafter referred to as the County Planning Commission, the responsibility for conducting necessary studies, surveys and preparing of maps in order to develop detailed zoning plans and process changes of zoning districts for adoption by the said Board of Supervisors for the various portions of the unincorporated territory of San Bernardino County as it becomes desirable, practical and practicable so that the result shall be a comprehensive zoning plan for the County.

SECTION 2. DEFINITIONS:

2.1 **ACCESSORY BUILDING:** A subordinate building the use of which is incidental to that of the main building or main

use of the land on the same lot.

2.2 **ACCESSORY LIVING QUARTERS:** Living quarters within an accessory building for the sole use of persons employed on the premises, having no kitchen or cooking facilities and not rented or otherwise used as a separate dwelling.

2.3 **ACCESSORY USE:** A use incidental and subordinate to the principle use of a lot or building located upon the same lot as the accessory use.

2.4 **ADVERTISING STRUCTURE:** Any structure of any kind or character erected or maintained for advertising purposes, upon which any advertising sign may be placed including advertising statutory.

2.5 **AGRICULTURE:** The tilling of soil, the raising of crops, horticulture, small live-stock farming, dairying or animal husbandry, including all uses customarily incidental thereto but not including slaughter houses, feed yards, hog farms, fertilizer works, bone yards or plants for the reduction of animal matter or any other industrial or agricultural use which is determined by the County Planning Commission to be similarly objectionable because of noise, odor, smoke, dust or fumes.

2.6 **ALLEY:** A public thoroughfare, not exceeding thirty (30) feet in width for the use of pedestrians and/or vehicles, which affords only a secondary means of access to the abutting property.

2.7 **APARTMENT:** A room, or suite of rooms in a multiple dwelling, designed for, intended for, suitable as a residence for, and/or occupied by one family.

2.8 **APARTMENT HOTEL:** A building or any portion thereof, designed for, or containing both individual guest rooms or suites of rooms and dwelling units.

2.9 **APARTMENT HOUSE:** See Dwelling, Multiple-Family.

2.10 **AUTOMOBILE AND TRAILER SALES AREA:** An open area used for the display, sale or rental of new or used automobiles or trailers, and where repair work is limited to minor incidental repair of automobiles or trailers to be displayed, rented or sold on premises.

2.11 **AUTOMOBILE WRECKING:** The dismantling or wrecking of used motor vehicles or trailers, or the

storage, sale, or dumping of dismantled or partially dismantled, obsolete or wrecked vehicles or their parts

2.12 **BASEMENT OR CELLAR:** A story partly or wholly underground and having more than one-half of its height below the average level of the adjoining ground. A basement, when designed for, or occupied by dwellings, business or manufacturing, shall be considered a story.

2.13 **BLOCK:** That property abutting on one side of a street between two nearest intersecting streets, railroad right-of-way or other natural barrier, provided, however, that where a street curves so that any two chords thereof form an angle of one hundred twenty (120) degrees or less measured on the lot side, each curve shall be construed as an intersecting street.

2.14 **BOARDING HOUSE:** A dwelling with not more than six (6) guest rooms where lodging and meals are provided for compensation.

2.15 **BUILDING:** Any structure built for the support, shelter or enclosure of persons, animals, fowls, chattels or property of any kind.

2.16 **BUILDING HEIGHT:** The vertical distance from the average finished ground level of the site to the highest point of the structure.

2.17 **BUILDING SITE:** The ground area occupied or to be occupied by a building or unit group of buildings together with all open spaces as required by this Ordinance.

2.18 **CAMP, PUBLIC:** Land or premises used or intended to be used, let or rented for camping purposes by two or more camping parties, trailers, tents or movable or temporary dwellings.

2.19 **CARPORT:** A permanent roofed structure with no more than two enclosed sides used or intended to be used for automobile shelter and storage.

2.20 **CEMETERY:** Land used or intended to be used for the burial of the dead and dedicated for cemetery purposes, including columbariums, crematoriums, mausoleums and mortuaries when operated in conjunction with and within the boundary of such cemetery.

2.21 **CENTER-LINE:** The cen-

- ter-line of a street as referred to in this Ordinance shall mean the right-of-way center-line as established by the County Surveyor of the County, by the City Engineer of any city within the County, by the State Division of Highways of the State of California, or if no such center-line has been established and in any case in which foregoing definition is not applicable, the planning Commission shall designate the center-line.
- 2.22 **CLUB:** An association of persons, whether incorporated or unincorporated, organized for some common non-profit purpose, but not including a group organized solely or primarily to render a service customarily carried on as a business.
- 2.23 **COURT:** An open, unoccupied space, other than a yard, on the same lot with a building or buildings and which is bounded on two or more sides by such building or buildings.
- 2.24 **DAIRY:** Any premises where mil is produced for sale or distribution and where three or more cows or goats are in lactation.
- 2.25 **DWELLING, MULTIPLE-FAMILY:** A building or portion thereof used and/or designed as a residence for three or more families living independently of each other.
- 2.26 **DWELLING, ONE-FAMILY:** A detached building designed and/or used to house not more than one family including all domestic employees of such family.
- 2.27 **DWELLING, TWO-FAMILY:** A building designed and/or used to house not more than two families living independently of each other.
- 2.28 **DWELLING UNIT:** A building or portion thereof used and/or designed for occupancy by one family for living or sleeping purposes and having one kitchen.
- 2.29 **EDUCATIONAL INSTITUTIONS:** Colleges or universities supported wholly or in part by public funds and other colleges and universities giving general academic instruction as prescribed by the California State Board of Education.
- 2.30 **FAMILY:** One or more persons related by blood or marriage, or a group of not more than five (5) persons (excluding servants) not related by blood or marriage, living together as a single non-profit housekeeping unit in a dwelling unit.
- 2.31 **FRONT WALL:** The nearest wall of a building or other structure to the street upon which the building faces, but excluding cornices, canopies, eaves or any other architectural embellishments that may extend beyond said front wall, not to exceed a distance of two (2) feet six (6) inches.
- 2.32 **GARAGE, PRIVATE:** An accessory building or an accessory portion of the main building designed and/or used for the shelter or storage of vehicles of the occupants of the main building.
- 2.33 **GARAGE, PUBLIC:** Any building, other than a private or storage garage, used for the storage, care or repair of motor vehicles and where any such vehicles are equipped for operation or kept for hire or sale.
- 2.34 **GARAGE, STORAGE:** Any building other than a public or private garage used exclusively for the storage of motor vehicles.
- 2.35 **GUEST HOUSE:** Living quarters within a detached accessory building located on the same premises with the main building for use by temporary guests of the occupants of the premises, such quarters having no kitchen facilities and not rented or otherwise used as a separate dwelling.
- 2.36 **GUEST RANCH:** A building or buildings having not more than two and one-half stories used as a hotel, and having a building site of not less than five acres.
- 2.37 **GUEST ROOM:** A room which is designed and/or used by one or more guests for sleeping purposes, but in which no provision is made for cooking.
- 2.38 **HOG RAISING:** Any premises used for the raising or keeping of more than six (6) weaned hogs.
- 2.39 **HOME OCCUPATION:** Any occupation customarily conducted entirely within a dwelling by its inhabitants, the use being accessory to the use of the dwelling for dwelling purposes and provided that no article is sold or offered for sale except that produced by said inhabitants.
- 2.40 **HOSPITAL, REST HOME OR SANITARIUM:** A building or any portion thereof used and/or designed for the housing of sick, demented, injured, convalescent or infirm persons, provided that this definition shall not include rooms in any single or multiple dwelling, hotel, apartment hotel not ordinarily intended to be occupied by said persons.
- 2.41 **HOTEL:** Any building or portion thereof containing six (6) or more guest rooms designed for and/or used by more than six (6) guests, for compensation and with no provision for cooking in any individual room or suite, but excluding hospitals and buildings where human beings are housed and detained under legal restraint.
- 2.42 **JUNK YARD:** Primary or accessory use of a parcel of land for the storage, dismantling or selling of cast-off or salvage material of any sort in other than the original form in which it was manufactured and/or assembled and not including reconditioned second-hand furniture or fixtures sold from within a walled building.
- 2.43 **KENNEL:** Any lot or premises on which five or more dogs over four months old are kept for boarding breeding, training or marketing.
- 2.44 **KITCHEN:** Any room, all or any part of which is designed and/or used for cooking and the preparation of food.
- 2.45 **LABOR CAMP:** Premises used for residential purposes for temporary or seasonal periods by five or more unrelated persons or families employed to perform agricultural or industrial labor.
- 2.46 **LOADING SPACE:** An off-street space or berth on the same lot with a building or contiguous to a group of buildings for the temporary parking of a commercial vehicle while loading or unloading merchandise or materials, and which abuts upon a street, alley or other appropriate means of access.
- 2.47 **LODGING OR ROOMING HOUSE:** A building having no more than six (6) guest rooms with two persons per room where lodging is provided for compensation.
- 2.48 **LOT:** Land occupied or to be occupied by a use, building or a unit group of buildings and accessory buildings and uses, together with such yards, open spaces and lot width and area as are required by this Ordinance and having frontage upon a street; or an area or parcel shown as an entire lot on a subdivision map recorded

- with the County Recorder.
- 2.49 **LOT AREA:** The total horizontal area included within lot lines of a lot.
- 2.50 **LOT, CORNER:** A lot situated at the intersection of two or more streets, or bounded on two or more adjacent sides by street lines, provided that the angle of intersection does not exceed one hundred thirty-five (135) degrees.
- 2.51 **LOT DEPTH:** The horizontal distance between the front and rear lot lines measured in the mean direction of the side lot lines.
- 2.52 **LOT, FRONTAGE:** The dimension of a lot or portion of a lot abutting on a street, except the side of a corner lot.
- 2.53 **LOT, INTERIOR:** A lot other than a corner lot.
- 5.54 **LOT, KEY:** The first interior lot to the rear of a reversed corner lot, the front line of which is a continuation of the side line of the reversed corner lot, exclusive of the width of any alley, and fronting on the street which intersects or intercepts the street upon which the corner lot fronts.
- 2.55 **LOT WIDTH:** The average horizontal distance between side lot lines measured at right angles to the lot depth.
- 2.56 **LOT LINE, FRONT:** In the case of an inferior lot, a line separating the lot from a street or place; and in the case of a corner lot, a line separating the narrowest street frontage of the lot from the street, except in those cases where the latest tract deed restrictions or the recorded map specify another line as the front lot line.
- 2.57 **LOT LINE, REAR:** A line which is opposite and most distant from the front lot line, and, in the case of an irregular, triangular or gore-shaped lot, a line within the lot (10) feet in length, parallel to and at the maximum distance from the front lot line.
- 2.58 **LOT LINE, SIDE:** Any lot other than the front or rear lot lines.
- 2.59 **LOT, REVERSED CORNER:** A corner lot which rear upon the side of another lot, whether or not across an alley.
- 2.60 **LOT, THROUGH:** A lot having frontage on two parallel or approximately parallel streets.
- 2.61 **MOTEL:** A building or group of two or more detached, semi-detached or attached buildings containing guest rooms or dwelling units with automobile storage space provided in connection therewith, which building or group is designed, intended or used primarily for the accommodation of automobile travelers; including groups designated as auto cabins, motor courts, motels and similar designation.
- 2.62 **NON-CONFORMING:** A building, structure or portion thereof, or use of building or land which does not conform to the regulations of this Ordinance and which lawfully existed at the time the regulations with which it does not conform became effective.
- 2.63 **PARKING AREA, PUBLIC:** An open area, other than a street, used for the temporary parking of more than four automobiles and available for public use, whether free, for compensation or as an accommodation for clients, customers or employees.
- 2.64 **PARKING SPACE, AUTOMOBILE:** Space within a public or private parking area or a building for the temporary parking or storage of one (1) automobile.
- 2.65 **RUMPUS OR RECREATION ROOM:** A single room in a main building or in an accessory building, designed and/or used exclusively for recreational purposes by the occupants or guests of the premises; the floor area of such room shall be limited to thirty percent (30%) of the floor area of the main building but such floor area need not be less than three hundred (300) square feet.
- 2.66 **SCHOOLS, ELEMENTARY AND HIGH:** An institution of learning which offers instruction in the several branches of learning and study required to be taught in the public schools by the Education Code of the State of California. High schools include Junior and Senior.
- 2.67 **SERVICE STATION:** Any building, structure, premise or other place used primarily for the retail sale and dispensing of motor fuels or oils, the retail sale of lubricants, tires, batteries and other automobile accessories and the installation and servicing of such lubricants, tires, batteries and other automobile accessories.
- 2.68 **SETBACK:** The minimum horizontal distance from the structure to the property line.
- 2.69 **SIGN:** Any words, letters, figures, numerals, emblems, designs or other marks shown on any card, cloth, paper, metal, painted, glass, wooden, plaster, stone or other sign or device of any kind or character by which anything is made known and used to attract attention.
- 2.70 **SMALL LIVE STOCK FARMING:** The raising or keeping of more than twenty-five (25) rabbits or twenty-five (25) similar animals, or more than two (2) goats, sheep and/or similar livestock; the term "small livestock farming" shall not include hog raising, dairying or the raising or keeping for commercial purposes of cats, dogs, horses, mules or similar livestock as determined by the Planning Commission.
- 2.71 **STABLE, PRIVATE:** A detached accessory building for the keeping of horses, burros, or mules owned by the occupants of the premises and not for remuneration, hire or sale.
- 2.72 **STABLE, PUBLIC:** A stable other than a private stable for keeping of horses.
- 2.73 **STORY:** That portion of a building included between the surface of any floor and the surface of any floor next above it, or if there be no floor above it, then the space between such floor and ceiling next above it.
- 2.74 **STORY, HALF:** A story with at least two of its opposite sides meeting a sloping roof, not more than two feet above the floor of such story.
- 2.75 **STREET:** Any public or private thoroughfare with a width of twenty (20) feet or more, which affords a primary means of access to abutting property.
- 2.76 **STREET LINE:** The boundary line between a street and abutting property.
- 2.77 **STRUCTURE:** Anything constructed or built, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.
- 2.78 **STRUCTURAL ALTERATIONS:** Any change in the supporting members of a structure such as the bearing walls or partitions, columns, beams or girders.
- 2.79 **TRAILER, AUTOMOBILE:** A vehicle designed to be drawn by a motor vehicle

and to be used for human habitation or for carrying persons or property including a trailer coach, house trailer, and for this Ordinance including self-propelled vehicles used for human habitation.

2.80 TRAILER CAMP OR PARK: Any area or premises where space for house trailers is rented, held for rent or on which free occupancy or camping is permitted to house trailer owners or users of the purpose of securing their trade, but not including automobile or trailer sales lots, on which unoccupied house trailers are parked for inspection and sales.

2.81 USE The purpose for which land or a building is arranged, designed or intended, or for which either land or a building is or may be occupied or maintained.

2.82 YARD: An open space other than a court, on the same lot with a building, unoccupied and unobstructed from the ground upward except as otherwise provided herein.

2.83 YARD, FRONT: An area extending across the front of the lot between the main building and the front lot line; depth of the required front yard to be measured horizontally from the nearest part of a main building toward the nearest point of the front lot line.

2.84 YARD, REAR: An area extending across the full width of the lot between the main building and the rear lot line; depth of the required rear yard to be measured horizontally from the nearest part of a main building toward the nearest point of the rear lot line.

2.85 YARD SIDE: An area between a main building and the side lot line, extending from the front yard, or front lot line to the rear yard; width of the required side yard to be measured horizontally from the nearest point of the side lot line toward the nearest part of the main building.

SECTION 3. ESTABLISHING DISTRICTS AND CLARIFICATION OF DISTRICT BOUNDARIES:

3.1 ESTABLISHMENT OF LAND USE DISTRICTS: In order to carry out the purpose and provisions of this Ordinance, eleven (11) Dis-

tricts are established to be known as follows:

R-1 Single-Family Residence District

R-2 Two-Family Residence District

R-3 Multiple-Family Residence District

R-4 Rural Residential District

A-1 Limited Agricultural District

A-2 General Agricultural District

C-1 Neighborhood Business District

C-2 General Business District

M-1 Limited Manufacturing District

M-2 General Manufacturing District

I Interim District

3.2 DISTRICT BOUNDARIES ON LAND USE MAP: The boundaries of established districts are shown and delineated on the Land Use District Maps entitled "Official Land Use Plan" as recorded in Book 1, Pages 32 to 56 inclusive of Miscellaneous Maps, Official Records of the office of the County Recorder of the County of San Bernardino, State of California, which are hereby adopted as the Official Land Use Maps of San Bernardino County. Changes of and additions and amendments to the Official Land Use Plan shall be determined and defined from time to time by ordinance adopting sectional Land Use District Maps covering portions of San Bernardino County, each of which shall become upon final adoption a part of the Official Land Use Plan for the County when recorded in the office of the County Recorder of County of San Bernardino, State of California.

3.3 LAND USE MAPS PART OF ORDINANCE: The Land Use District Maps showing the Official Land Use Plan, classifications and boundaries of Land Use District and all notations, references and other information shown thereon, after final adoption in the manner required by law, shall thereafter be as much a part of this Ordinance as if all the matters and information set forth by said maps were fully described herein.

3.4 DISTRICT BOUNDARY UNCERTAINTIES: Where uncertainty exists as to the boundaries of any districts shown on the Land Use District Maps, the following rules shall apply:

a. Where such boundaries are indicated as approximately following street and alley lines or lot lines, such lines shall be construed to be such boundaries.

b. In unsubdivided property and where a district boundary divides a lot, the locations of such boundaries, unless indicated by dimensions, shall be determined by use of the scale appearing on the map.

c. Where any uncertainty exists, the Planning Commission shall determine the location of boundaries.

d. Where a public street or alley is officially vacated or abandoned, the regulations applicable to the property to which it reverts shall apply to such vacated or abandoned street or alley.

3.5 DISTRICTS ADOPTED WITH ORDINANCE: The boundaries of such districts as shown on any sectional Land Use District Map adopted by this Ordinance or amendment thereto are hereby adopted and approved and the regulations of this Ordinance governing the uses of this land, buildings, structures, the height of buildings and structures, the sizes of yards about buildings and structures and other matters as hereinafter set forth are hereby established and declared to be in effect upon all land included within the boundaries of each and every district shown upon the Land Use Map.

SECTION 4. R-1 DISTRICT:

The following regulations shall apply in R-1 Single-family Residence Districts:

4.1 GENERAL USES PERMITTED:

a. One-family dwelling on each lot

b. Truck gardening, tree farming, nurseries and greenhouses used only for the propagating and cultivating of plants, provided that:

(1) Retail sale from the premises of such products or commodities raised on the property and use of a sign not exceeding two (2) square feet, shall be permitted only on lots having an area of at least twenty thousand (20,000) square feet.

c. Small livestock, cows, goats and fowl may be

kept on areas of five (5) acres or more prior to residential use, subject to the following limitations:

- (1) One (1) cow or two (2) goats for each one acre in area of the parcel of land on which the same are kept, or one hundred (100) fowl for each one-quarter ($\frac{1}{4}$) acre in area of the parcel of land on which the same are kept; and further, that such animals or fowls be kept at least fifty (50) feet from front property line, forty (40) feet from a dwelling on the property and one hundred (100) feet from any other place used for human habitation, public park or school.
- d. Cats and dogs, not to exceed the keeping of two (2) cats and/or two (2) dogs.
- e. Public and private uses as follows shall be permitted if the location and development plan is approved by the County Planning Commission, as provided in Section 15.6:
 - (1) Civic or community clubs
 - (2) Country clubs and golf courses, excepting miniature courses and similar commercial enterprises
 - (3) Fire and police stations
 - (4) Schools, excluding colleges or universities
 - (5) Churches, excluding rescue missions and temporary revival
 - (6) Cemeteries
 - (7) Museums, not operated for profit
 - (8) Parks and playgrounds
 - (9) Electrical substations
 - (10) Childrens' nurseries
 - (11) Rest homes

4.2 ACCESSORY USES PERMITTED:

- a. Guest house
- b. Private garage with space for maximum of three cars
- c. Home occupations of professional or business nature including the office of a physician, dentist, minister of religion or other persons authorized by law to practice medicine or healing, if used only for consultation and emergency treatment as an adjunct to a principal office and not for general practice, and without external evidence thereof, excepting a name plate not more than one (1) square foot in size, having no colored illumination
- d. Board and room, not to

exceed two persons, without kitchen privileges

- e. Stable, private, located at least fifty (50) feet from front property line on lots twenty-thousand (20,000) square feet and over in area, the number of horses permitted on any parcel limited to one horse for each ten thousand (10,000) square feet of lot area up to a total of six horses.
 - (1) Such animals shall be kept at least forty (40) feet from a dwelling on the property and one hundred (100) feet from other places used for human habitation, public parks or schools.
- f. Chickens, rabbits or other similar fowls or small animals not to exceed a total of more than twenty-five (25) in number and comply with County health requirements.

4.3 TRANSITIONAL USES PERMITTED: Transitional uses shall be permitted where the side of a lot abuts a lot in a less restrictive district, provided such transitional use does not extend more than sixty-five (65) feet from the boundary of the less restricted district which it adjoins as follows:

- a. Two-family dwelling with the same area requirements as in the "R-2" District.
- b. Public parking area when located and developed as required in Section 15.2.

4.4 SIGN REQUIREMENTS: Signs not exceeding six (6) square feet in area pertaining only to the sale, lease or hire of only the particular building, property or premises upon which displayed.

4.5 PARKING REQUIREMENTS: Automobile parking requirements as provided in Section 15.2.

4.6 HEIGHT LIMITATIONS: Buildings or structures and the enlargement of any buildings or structures shall be hereafter erected or maintained not to exceed two and one-half ($2\frac{1}{2}$) stories or thirty-five (35) feet in height.

4.7 MINIMUM LOT AREA REQUIRED: The lot for each one-family dwelling, together with its accessory buildings hereafter erected, shall have an average width of not less than sixty (60) feet, and an area of not less than seventy-two hundred (7,200) square feet, unless the parcel is shown as a lot on a subdivision map becoming of record subsequent to the effective date of this Ordinance. All buildings together with

their accessory buildings shall occupy not more than forty (40) percent of the area of the lot.

- a. Where a minimum area requirement greater than the seventy-two hundred (7,200) square feet required is requested and established in the district, it shall be designated by a number following the district designation symbol, numbers less than one hundred (100) indicating acres, and numbers more than one hundred (100) indicating minimum square feet of area required per lot.

- b. Where a lot has less area than herein required and was of record at the time this Ordinance became effective, said lot may be occupied by one family and all buildings shall occupy not more than sixty (60) percent of the area of the lot.

4.8 FRONT YARD REQUIRED: The front yard for each lot shall be at least twenty-five (25) feet in depth in valley and desert areas, and fifteen (15) feet in mountain areas.

4.9 SIDE YARD REQUIRED: Side Yards on each side of each lot shall be not less than ten (10) percent of the width of the lot, provided that such side yard shall be not less than three (3) feet and need not exceed five (5) feet in width.

- a. On corner lots with a side yard facing the street the subdivision setback line shall be conformed to, but if such line is not established, said side yard shall extend at least ten (10) feet from the property line.

4.10 REAR YARD REQUIRED: Rear yards on each lot shall be equal to at least twenty-five (25) percent of the depth of the lot, but need not exceed twenty-five (25) feet.

SECTION 5. R-2 DISTRICT:

The following regulations shall apply in R-2 Two-family Residence Districts:

5.1 GENERAL USES PERMITTED:

- a. Same as R-1 District.
- b. Two-family dwellings or two one-family dwellings of a permanent nature on each lot.

5.2 ACCESSORY USES PERMITTED: Same as R-1 District.

5.3 TRANSITIONAL USES PERMITTED:

- a. Same as R-1 District.
- b. Four-family dwelling with the same area requirements as in R-3 District shall be permitted.
- 5.4 SIGNS AND PARKING REQUIREMENTS: Same as R-1.
- 5.5 HEIGHT LIMITATIONS: Same as R-1.
- 5.6 MINIMUM LOT AREA REQUIRED: Each lot shall be at least sixty (60) feet in width and seventy-two hundred (7,200) square feet in area for any use allowed in this district unless the parcel is shown as a lot on a subdivision map becoming of record subsequent to the effective date of this Ordinance. The buildings, including accessory buildings, of any lot, shall occupy not more than sixty percent (60%) of the area of such lot.
- a. Where a minimum area requirement greater than the seventy-two hundred (7,200) square feet required is requested and established in this district, it shall be designated by a number following the district designation symbol, numbers less than one hundred (100) indicating acres, and numbers more than one hundred (100) indicating minimum square feet of area required.
- b. Where a lot has less than forty-five hundred (4,500) square feet of area and was of record at the time this Ordinance became effective, said lot may be occupied by a one-family dwelling and accessory buildings only.
- 5.7 FRONT, SIDE AND REAR YARD REQUIREMENTS: Same as R-1.
- 5.8 DISTANCE REQUIRED BETWEEN MAIN BUILDINGS: On same lot, the distance between main buildings shall be at least ten (10) feet.

SECTION 6. R-3 DISTRICT:

The following regulations shall apply in R-3 Multiple-family Residence Districts:

- 6.1 GENERAL USES PERMITTED:
 - a. Same as R-2 District.
 - b. Multiple dwellings, or three one-family dwellings of a permanent nature on each lot.
 - c. Boarding and lodging houses.
 - d. Public and private uses as follows shall be permitted if the location and development plan is approved by the County Planning Commission, as provided in Section 15.6:

- (1) Colleges and universities
- (2) Private Schools
- (3) Fraternity and sorority houses, lodges and private clubs, except those whose chief activity is a service customarily carried on as a business
- (4) Hospitals, rest homes, sanitariums, clinics and other buildings used for such purposes
- (5) Philanthropic and charitable institutions
- (6) Motels and trailer parks
- (7) Hotels, in which incidental business may be conducted for the convenience of the residents of the buildings, provided there is no entrance to such place of business except from the inside of the building, and no sign visible from the outside advertising such business.
- 6.2 ACCESSORY USES PERMITTED: Same as R-2 District.
- 6.3 TRANSITIONAL USES PERMITTED:
 - a. Same as R-2 District.
 - b. Principal office of a physician, dentist, or other professional occupation.
- 6.4 SIGN REQUIREMENTS: Name plates not exceeding two (2) square feet in area containing the name and occupation of the occupant of the premises, identification signs not exceeding twenty (20) square feet in area for hotels, clubs, lodges, hospitals, institutions, and other similar permitted uses, and signs not exceeding six (6) square feet in area appertaining to the sale or rental of the property on which they are located.
- 6.5 PARKING REQUIREMENTS: See Section 15.2.
- 6.6 LOADING SPACE REQUIREMENTS: Loading space to be provided in accordance with Section 15.3.
- 6.7 HEIGHT LIMITATIONS: Same as R-2.
- 6.8 MINIMUM LOT AREA REQUIRED: Each lot shall be at least sixty (60) feet in width and seventy-two hundred (7,200) square feet in area for any use allowed in this district, unless the parcel is shown as a lot on a subdivision map becoming of record subsequent to the effective date of this Ordinance.
- a. Where a minimum area requirement greater than the seventy-two hundred (7,200) square feet required is requested and established in the district, it shall be designated by a number following the district designation symbol, numbers less than one hun-

dred (100) indicating acres and numbers more than one hundred (100) indicating minimum square feet of area required.

- b. Where a lot has less than forty-five hundred (4,500) square feet of area and was of record at the time this Ordinance became effective, said lot may be occupied by no more than two families.
- 6.9 FRONT YARD REQUIRED: Same as R-2.
- 6.10 SIDE YARDS REQUIRED: Side yards on each lot shall be not less than ten (10) percent of the width of the lot, provided that such side yard shall be not less than three (3) feet and need not exceed five (5) feet in width.
- 6.11 REAR YARD REQUIRED: Rear yards shall be at least ten (10) feet in depth.
- 6.12 DISTANCE REQUIRED BETWEEN MAIN BUILDINGS: Same as R-2.

SECTION 7. R-4 DISTRICT:

The following regulations shall apply in R-4 Rural Residence Districts:

- 7.1 GENERAL USES PERMITTED:
 - a. Same as R-3 District excluding Section 6.1 b.
 - b. Three dwelling units of a permanent nature on each lot or parcel.
- 7.2 AGRICULTURAL USES PERMITTED:
 - a. Small livestock farming with the following maximum numerical limitations per ten thousand (10,000) square feet of area per parcel:
 - (1) Five hundred (500) chickens or rabbits or similar fowls or animals.
 - (2) Two (2) goats or sheep or similar animals.
 - b. Nurseries, greenhouses, commercial flower or vegetable gardens, mushroom farms.
 - c. Field crops, orchards, tree crops, berry or bush crops.
 - d. One (1) cow on parcels twenty thousand (20,000) square feet and over in area.
 - e. Buildings and enclosures for fowl or livestock, small or large, placed on any given parcel of land, shall be kept at least fifty (50) feet from front property line, forty (40) feet from dwellings on the property and a minimum of one-hundred (100) feet from any place used for human habitation, public park, school, or "R" District.

7.3 ACCESSORY BUILDINGS AND USES PERMITTED:

- a. Same as R-1.
- b. Greenhouse and/or lath house.
- c. Stable, corral, pen or coop.
- d. Accessory buildings listed above excluding R-1 accessory buildings shall be located at least fifty (50) feet from the front lot line.

7.4 SIGNS: Same as R-3.

7.5 PARKING REQUIREMENTS: See Section 15.2.

7.6 HEIGHT LIMITATIONS: Same as R-1.

7.7 MINIMUM LOT AREA REQUIRED: Same as R-3.

7.8 FRONT, SIDE AND REAR YARDS: Same as R-1.

SECTION 8. A-1 DISTRICT:

The following regulations shall apply in A-1, Limited Agricultural Districts:

8.1 GENERAL USES PERMITTED:

- a. Same as R-1 District
- b. Dwelling units of a permanent nature not exceeding one per acre and no more than three (3) on each parcel
 - (1) Dwelling units placed on any parcel of land shall be located at least one hundred (100) feet from any existing enclosure occupied by fowl and/or livestock.
- c. Public and private uses as follows shall be permitted if the location and development plan is approved by the County Planning Commission as provided in Section 15.6:
 - (1) Fruit and vegetable packing plants
 - (2) Poultry or rabbit killing and dressing house
 - (3) Educational institution
 - (4) Rest home
 - (5) Labor camp
 - (6) Storage tank or reservoir over 10,000 gallon capacity
 - (7) Electrical substation, power booster, or conversion plant
 - (8) Airports and heliports
 - (9) Wineries and breweries

8.2 AGRICULTURAL USES PERMITTED:

- a. Small livestock farming with the number of goats, sheep and similar animals limited to twenty-five (25) per acre
- b. Nurseries, greenhouses, commercial flower or vegetable gardens, mushroom farms
- c. Aviaries, apiaries
- d. Field crops, orchards, tree crops, berry or bush crops
- e. Cattle and/or horses kept for pasture, with a maxi-

mum number of two (2) animals per acre permitted

f. Hogs (none garbage fed), with a maximum number of two (2) per acre, the total number of such animals not to exceed five (5).

g. Farms or establishments for the selective or experimental breeding of cattle or horses and/or the raising of or training of horses or show cattle, with a maximum number of two (2) such animals per acre permitted

h. Buildings and enclosures for fowl or livestock, small or large, placed on any given parcel of land, shall be kept at least forty (40) feet from dwellings on the property and a minimum of one hundred (100) feet from any other place used for human habitation, public park, school or "R" District.

i. One stand for display and sale of products produced on the same premises, and the floor area of the stand shall not exceed two hundred (200) square feet.

j. Water storage not exceeding ten thousand (10,000) gallons capacity

8.3 ACCESSORY BUILDINGS AND USES PERMITTED:

- a. Same as R-1
- b. Greenhouse and/or lath house
- c. Barn, corral, pen or coop
- d. Building or room for packing products raised on the premises
- e. Other similar structures customarily used for light agricultural purposes
- f. Accessory buildings listed above excluding R-1 accessory buildings, shall be located at least fifty (50) feet from the front lot line.

8.4 SIGNS: One unlighted single- or double-faced sign, which does not exceed twelve (12) square feet in area per face, and pertains only to the sale, lease or hire of the premises or of the products produced upon the premises.

8.5 PARKING REQUIREMENTS: See Section 15.2.

8.6 HEIGHT LIMITATIONS: Residential buildings and structures and the enlargement of any residential building or structure hereafter erected or maintained shall not exceed two and one-half (2½) stories or thirty-five (35) feet in height.

8.7 MINIMUM LOT AREA REQUIRED: Each lot or parcel shall be at least one hundred and fifty (150) feet in width and one (1) acre (43,560 square feet) in area for uses allowed in this district, unless

the parcel is shown as a lot on a subdivision map being of record at the effective date of this Ordinance.

a. Where a minimum area requirement greater than the one (1) acre required is requested and established in the district, it shall be designated by a number following the district designation symbol, numbers less than one hundred (100) indicating acres.

8.8 FRONT YARDS REQUIRED: Same as R-1.

8.9 SIDE YARDS REQUIRED: Side yards on each side of each lot shall be not less than ten (10) percent of the width of the lot, but such side yard need not exceed fifteen (15) feet and shall be not less than six (6) feet in width.

8.10 REAR YARDS REQUIRED: Same as R-1.

SECTION 9. A-2 DISTRICT:

The following regulations shall apply in A-2, General Agricultural Districts:

9.1 GENERAL USES PERMITTED: Same as A-1 Districts.

9.2 AGRICULTURAL USES PERMITTED:

- a. Farms for grazing, breeding, raising or training horses, cattle and similar animals
- b. Sheep and goat raising
- c. Public stables or riding academies
- d. Non-garbage fed hog ranches
- e. Menageries, aquariums, alligator or ostrich farms
- f. Animal hospitals
- g. Commercial dog kennels and dog breeding establishments
- h. Goat or cattle dairies
- i. All animals and fowls shall be kept at least forty (40) feet from any residence or dwelling or other building used for human habitation.

9.3 THE FOLLOWING USES SHALL BE PERMITTED if the location is approved by the County Planning Commission, as provided in Section 15.6:

- a. Cattle feed and sales yards
- b. Other agricultural uses not specifically listed

9.4 PARKING REQUIREMENTS: See Section 15.2.

9.5 HEIGHT LIMITATIONS: Same as A-1.

9.6 AREA REQUIREMENTS: Same as A-1 except that each lot or parcel shall be at least three hundred (300) feet in width and five (5) acres (217,800 square feet) in area for uses allowed in this district, unless the parcel is shown as a lot on a subdivi-

sion map being of record at the effective date of this Ordinance.

- a. Where a minimum area requirement greater than five (5) acres required is requested and established in the district, it shall be designated by a number following the district designation symbol, such numbers indicating acres.

SECTION 10. C-1 DISTRICT:

The following regulations shall apply in C-1, Neighborhood Business Districts:

The primary purpose and application of this district shall be for small limited shopping centers planned and designed in cooperation with the County Planning Commission to meet neighborhood shopping needs.

10.1 GENERAL USES PERMITTED:

- a. Residential:
 - (1) Same as R-3
 - (2) Motel

10.2 BUSINESS USES PERMITTED:

- a. Retail stores:
 - (1) Bakery
 - (2) Book or stationery store
 - (3) Confectionery store
 - (4) Drug store
 - (5) Dry goods or notions store
 - (6) Florist or gift shop
 - (7) Grocery, fruit or vegetable store
 - (8) Hardware or electrical appliance store
 - (9) Jewelry store
 - (10) Meat market or delicatessen store
- b. Office or ground space:
 - (1) Automobile parking lot
 - (2) Offices, business or professional
- c. Services:
 - (1) Automobile service station, provided that any major tire repairing, battery charging and storage of merchandise and supplies, lubrication and washing, are conducted wholly within a building
 - (2) Bank
 - (3) Barber shop and beauty parlor
 - (4) Cafe or restaurant (excluding dancing or entertainment)
 - (5) Church
 - (6) Clothes cleaning agency and/or pressing establishment
 - (7) Club or lodge (non-profit), fraternal or religious association
 - (8) Community center
 - (9) Dressmaker or millinery shop
 - (10) Hospital, sanatorium, or clinic (except hospitals or sanitarium for contagious,

mental, drug or liquor addict cases)

- (11) Laundry agency
- (12) Library
- (13) Photographer
- (14) Post office
- (15) Shoe store and repair
- (16) Tailor

- d. Other uses similar to above if approved by the County Planning Commission

10.3 CONDITION OF USES:

- a. All stores, shops or businesses shall be operated wholly within an enclosed building.
- b. All products produced, whether primary or incidental, shall be sold at retail on the premises and no more than two (2) persons shall be engaged in such production or in the servicing of materials.
- c. Any exterior sign displayed shall pertain only to a use conducted within the building and shall be attached flat against a wall of the building and parallel with its horizontal dimension. A sign shall not project above the roof line.
- d. The architectural and general appearance of all such commercial buildings and grounds shall be in keeping with the character of the neighborhood and such as not to be detrimental to the public health, safety and general welfare of the community in which such use or uses are located.
- e. Enterprises which produce or cause any dust, gas, smoke, noise, fumes, odors, or vibrations that in the opinion of the County Planning Commission are detrimental to other property in the neighborhood or to the welfare of the occupants thereof are not permitted.

10.4 ACCESSORY USES PERMITTED: Uses (not involving open storage) customarily incidental to any of the above uses and accessory buildings, when located on the same lot, including a storage garage for the exclusive use of the patrons of the above stores and businesses.

10.5 PARKING AND LOADING REQUIREMENTS: See Section 15.2, 15.3.

10.6 HEIGHT LIMITATIONS: Same as R-3.

10.7 MINIMUM LOT AREA REQUIRED: Lot area requirements of the R-3 Zone shall apply to buildings erected and used exclusively for dwelling purposes.

10.8 FRONT YARD REQUIRED: Where all the frontage in one block is located in the C Zone, no front yard shall be required.

ed. Where the frontage in one block is located partly in the C Zone and an A or R Zone, the front yard requirements of the A or R Zone shall apply in the C Zone.

10.9 SIDE YARDS REQUIRED: Where the side of a lot in the C Zone abuts upon the side of a lot in an A or R Zone, there shall be a side yard of not less than ten (10) percent of the width of the lot, but such side yard need not exceed five (5) feet and shall not be less than three (3) feet in width.

10.10 REAR YARD REQUIRED: There shall be a rear yard of not less than twenty-five (25) percent of the depth of the lot, but such rear yard need not exceed twenty (20) feet.

SECTION 11. C-2 DISTRICT:

The following regulations shall apply in C-2 General Business Districts:

11.1 GENERAL USES PERMITTED:

- a. Any use permitted in the C-1 District
- b. Residential: Hotels

11.2 BUSINESS USES PERMITTED:

- a. Retail stores
 - (1) Amusement enterprises
 - (2) Antiques
 - (3) Automobile and trailer sales provided that repair work be conducted and confined wholly within a building
 - (4) Feed store
 - (5) Furniture
 - (6) Furrier shop
 - (7) Pet shop or taxidermist
 - (8) Plumbing supplies
 - (9) Second-hand store, if conducted wholly within a completely enclosed building
- b. Office, ground, or storage space:
 - (1) Advertising signs and structures
 - (2) Business school, or private school operated as a commercial enterprise
 - (3) Distributors of petroleum products if location is approved by the County Planning Commission
 - (4) Furniture warehouse, for storing personal household goods, provided the ground floor front is devoted to stores
 - (5) Ice storage house of not more than five (5) ton capacity
 - (6) Trade school, if location is approved by the County Planning Commission
 - (7) Stadium and commercial recreation enterprise
- c. Services:
 - (1) Blueprinting or photostating

- (2) Cleaning and pressing establishment
 - (3) Carpenter shop, if conducted wholly within a completely enclosed building and no more than five (5) persons are employed on the premises
 - (4) Conservatory of music
 - (5) Drive-in business
 - (6) Fortune telling, clairvoyance or astrology
 - (7) Frozen food locker plants (excluding wholesale processing or cold storage)
 - (8) Interior decorating store
 - (9) Laundry
 - (10) Locksmith shop
 - (11) Massage parlor
 - (12) Medical and dental laboratories
 - (13) Mortuary
 - (14) Newspaper plants
 - (15) Plumbing shop
 - (16) Printing, lithographing, publishing or reproducing
 - (17) Public garage, including automobile repairing, and incidental body work, painting or upholstering, if all operations are conducted wholly within a completely enclosed building. Provided, however, that where a public garage is located on a lot which does not abut an alley and is within sixty-five (65) feet of a lot in any R District, the garage wall which parallels the nearest line of such district shall have no opening other than stationary windows.
 - (18) Public services, including electric distributing substation, fire or police station, telephone exchange, and similar uses
 - (19) Theater
 - (20) Wedding Chapel
 - d. Other uses similar to above if approved by the County Planning Commission
- 11.3 ACCESSORY USES PERMITTED:**
- a. Uses customarily incident to any of the above uses and accessory buildings when located on the same lot, provided that:
 - (1) There shall be no manufacture, compounding, processing or treatment of products other than that which is clearly incidental and essential to a retail store or business and where all such products are sold at retail on the premises.
 - (2) There shall not be more than five (5) persons engaged in manufacturing, cleaning, laundering, plumbing, upholstering and the like.
 - (3) Such uses, operations or productions in the opinion of the County Planning Commission are not objectionable due to odor, dust, smoke, noise, vibration or other similar causes.
 - (4) All exterior walls of a building hereafter erected, extended or structurally altered, which face property located in an A or R District, shall be designed, treated and finished in a uniform and satisfactory manner approved by the Department of Building and Safety.
- 11.4 PARKING AND LOADING REQUIREMENTS:** See Section 15.2, 15.3.
- 11.5 HEIGHT AND AREA REQUIREMENTS:** Same as C-1.
- SECTION 12. M-1 DISTRICT:**
- The following regulations shall apply in M-1 Limited Manufacturing Districts:
- 12.1 GENERAL USES PERMITTED:** Any use permitted in the C-2 or A-1 Districts.
- 12.2 MANUFACTURING USES PERMITTED:** The following manufacturing uses as described in detail in the Standard Industrial Classification Manual, Vol. 1—Manufacturing Industries, Part 1—Titles and Descriptions of Industries, November 1945.
- a. Ordinance and accessories:
 - (1) Sighting and fire control equipment
 - b. Food and kindred products:
 - (1) Meat products:
 - (a) Sausages & other prepared meat products
 - (b) Sausage casings
 - (c) Poultry & small game dressing & packing, wholesale
 - (2) Dairy products
 - (3) Canning & Preserving fruits & vegetables:
 - (a) Canned fruits, vegetables & soups, preserves, jam & jellies
 - (b) Dried & dehydrated fruits & vegetables
 - (c) Pickled fruits & vegetables; vegetable sauces & seasonings; salad dressings
 - (d) Frozen fruits, vegetables & sea foods
 - (4) Grain-mill products
 - (5) Bakery products
 - (6) Confectionery & related products
 - (7) Beverage industries:
 - (a) Bottled soft drinks & carbonated waters
 - (8) Miscellaneous food preparations & kindred products:
 - (a) Baking powder, yeast & other leavening compounds
 - (b) Flavoring extracts and sirups
 - (3) Vinegar & cider
 - (d) Manufactured ice
 - (e) Macaroni, spaghetti, vermicelli & noodles
 - c. Tobacco manufactures: All uses listed
 - d. Textile mill products:
 - (1) Yarn & thread mills
 - (2) Broad-woven fabric mills
 - (3) Narrow fabrics & other smallwares mills
 - (4) Knitting mills
 - (5) Hats (except cloth & millinery)
 - (6) Miscellaneous textile goods:
 - (a) Lace goods
 - (b) Paddings & upholstery filling
 - e. Apparel & other finished products made from fabrics & similar materials: All uses listed
 - f. Lumber & wood products (except furniture)
 - (1) Lumber yards
 - (2) Wooden containers
 - (3) Miscellaneous wood products:
 - (a) Lasts & related products
 - (b) Minor frames & picture frames
 - g. Furniture & fixtures (operations all to be conducted within enclosed building): All uses listed
 - h. Paper & allied products:
 - (1) Paper coating & glazing
 - (2) Envelopes
 - (3) Paper bags
 - (4) Paperboard containers & boxes
 - (5) Wallpaper
 - i. Printing, publishing & allied industry: All uses listed
 - j. Leather & leather products:
 - (1) Footwear (except rubber)
 - (2) Leather gloves & mittens
 - (3) Luggage
 - (4) Handbags & small leather goods
 - (5) Miscellaneous leather goods
 - k. Machinery (except electrical)
 - (1) Miscellaneous machinery parts
 - (a) Machine shops
 - l. Electrical machinery, equipment & supplies:
 - (1) Instruments for indicating, measuring & recording electrical quantities & characteristics
 - (2) Communication equipment
 - m. Transportation equipment:
 - (1) Motor vehicles—assembly
 - (2) Boat building & repairing
 - (3) Motorcycles, bicycles—assembly
 - n. Professional, scientific & controlling instruments, photographic & optical goods, watches & clocks. All uses listed
 - o. Miscellaneous manufactur-

ing industries:

- (1) Jewelry, silverware & plated ware
- (2) Musical instruments & parts
- (3) Toys, sporting & athletic goods
- (4) Pens, pencils & other office & artists' materials
- (5) Costume jewelry, novelties, buttons & miscellaneous notions
- (6) Fabricated plastic products
- (7) Miscellaneous:
 - (a) Brooms and brushes
 - (b) Cork products
 - (c) Jewelry and instrument cases
 - (d) Lamp shades
 - (e) Signs and advertising display
 - (f) Hair work
 - (g) Umbrellas, parasols, canes
 - (h) Tobacco pipes and cigarette holders
 - (i) Models and patterns
 - (j) Miscellaneous fabricated products

12.3 ADDITIONAL USES AS FOLLOWS:

- a. Distribution plants, parcel delivery, ice and cold storage plant, bottling plant, and food commissary or catering establishments
- b. Wholesale business, storage buildings and warehouses
- c. Laboratories; experimental, photo or motion picture, film or testing
- d. Motion picture studio
- e. Building material sales yard, including the sale of rock, sand, gravel and the like as an incidental part of the main business, but excluding concrete mixing
- f. Contractor's equipment storage yard or plant, or rental of equipment commonly used by contractors
- g. Feed and fuel storage yard
- h. Drying, freighting or trucking yard or terminal
- i. Public utility service yard or electrical receiving or transforming station

12.4 ACCESSORY BUILDINGS customarily incidental to any of the above uses when located on the same lot.

12.5 SIMILAR USES to those list-above if use, location and development plan is approved by the County Planning Commission as provided in Section 15.6.

12.6 USES IN THE M-1 DISTRICT shall be planned, developed, conducted and operated so that smoke, fumes, dust odors, liquids and other waste of any kind is confined and/or purified to control pollution of air, soil or water to meet the standards and requirements of the County

Planning Commission and in such manner as to provide no threat to public health and welfare.

12.7 PARKING AND LOADING REQUIREMENTS: See Section 15.2, 15.3.

12.8 HEIGHT LIMITATIONS: Buildings or structures and the enlargement or any buildings or structures shall hereafter be erected or maintained not to exceed four (4) stories or forty-five (45) feet.

12.9 AREA REQUIREMENTS:

- a. Lot area requirements shall be the same as those in R-3 Districts where buildings are used wholly or partly for dwelling purposes.
- b. Side yard and rear yard requirements shall be the same as those in R-3 Districts where the M-1 District abuts an R or A District.

SECTION 13. M-2 DISTRICT:

The following regulations shall apply in M-2 General Manufacturing Districts:

13.1 GENERAL USES PERMITTED: Any use permitted in the M-1 District.

13.2 MANUFACTURING USES PERMITTED: The following manufacturing uses as described in detail in the Standard Industrial Classification Manual, Vol. 1, Manufacturing Industries, Part 1—Titles and Descriptions of Industries, November 1945.

- a. Ordnance and accessories:
 - (1) Guns, howitzers, mortars and related equipment
 - (2) Tank and tank components
 - (3) Small arms
 - (4) Ordnance and accessories
- b. Food and kindred products:
 - (1) Sugar
 - (2) Beverage industries
 - (3) Miscellaneous food preparations and kindred products:
 - (a) Oleomargarine
 - (b) Corn sirup, sugar, oil, starch
 - (c) Preparations not elsewhere classified
- c. Textile mill products:
 - (1) Scouring and combing plants.
 - (2) Carpets, rugs and other floor coverings
 - (3) Miscellaneous textile goods:
 - (a) Felt goods
 - (b) Processed waste
 - (c) Linen goods
 - (d) Jute goods
 - (e) Cordage and twine
- d. Lumber and wood products:
 - (1) Logging camps and log-

ging contractors

- (2) Sawmills and planing mills
- (3) Millwork, plywood and prefabricated structural wood products
- (4) Miscellaneous wood products
- e. Chemicals and allied products:
 - (1) Drugs and medicines
- f. Products of petroleum and coal:
 - (1) Coke and by-products
 - (2) Paving and roofing materials
 - (3) Miscellaneous petroleum and coal products
- g. Rubber products: All uses listed
- h. Leather and leather products:
 - (1) Industrial leather belting and packing
 - (2) Boot and shoe cut stock and findings
- i. Stone, clay and glass products: All uses listed
- j. Primary metal industries: All uses listed
- k. Fabricated metal products: All uses listed
- l. Machinery and electrical machinery: All uses listed
- m. Transportation equipment: All uses listed
- n. Miscellaneous manufacturing industries:
 - (1) Candles
 - (2) Mortician's goods
 - (2) Beauty and barber shop equipment
 - (4) Furs, dressed and dyed
- o. The following manufacturing and industrial uses shall be permitted if the location and development plan is approved by the County Planning Commission as provided in Section 15.6:
 - (1) Ammunition
 - (2) Meat packing and slaughtering
 - (3) Canning and curing of sea food
 - (4) Dyeing and finishing textiles
 - (5) Pulp, paper and paper-board mills
 - (6) Pulp goods and misc. converted paper products
 - (7) Chemicals and allied products (all uses listed)
 - (8) Petroleum refining
 - (9) Leather — tanned, curried and finished
 - (10) Matches
 - (11) Fireworks and pyrotechnics
- 13.3 ADDITIONAL USES** as follows:
 - a. Auto wrecking, salvage or junk yard if completely fenced with neat, painted, solid, eight (8) foot fence.
 - b. Mining
 - c. Oil well drilling
 - d. Steam electric generating station

- e. Railroad yards
- 13.4 **ACCESSORY BUILDINGS** customarily incident to any of the above uses when located on the same lot.
- 13.5 **SIMILAR USES TO THOSE LISTED ABOVE** if use, location and development plan is approved by the County Planning Commission, as provided in Section 15.6.
- 13.6 **USES IN THE M-2 DISTRICT** shall be planned, developed, conducted and operated so that smoke, fumes, dust, odors, liquids and other waste of any kind is confined and/or purified to control pollution of air, soil or water to meet the standards and requirements of the County Planning Commission and in such manner as to provide no threat to public health and welfare.
- 13.7 **PARKING AND LOADING:** See Section 15.2, 15.3.
- 13.8 **HEIGHT LIMITATIONS:** Buildings and structures shall not exceed twelve (12) stories and/or one hundred and fifty (150) feet in height and shall maintain a setback of at least one (1) additional foot from front, side and rear property lines for every two (2) feet above one hundred (100) feet in height.
- 13.9 **AREA REQUIREMENTS:** Same as M-1.

SECTION 14. I (INTERIM) DISTRICT:

For the public safety and interest, health, convenience and the public welfare and because of imminent development and the need for immediate regulations to insure a well-ordered growth, there is hereby created an interim land-use classification to be known as the "I" District, which shall have the following regulations:

- 14.1 **SCOPE OF INTERIM DISTRICT:** The "I" or Interim District classification may be combined with one or more of the other land use classifications set forth in Section 3 in order to impose all the regulations of both the "I" and such other classification with which it may be combined. (For example, I-A-1 District would mean that all the regulations in the A-1 District would apply to the area so designated.)
- 14.2 **INITIATION OF PROCEEDINGS:** Upon the receipt of a verified petition of a substantial number of representative property owners and residents of any unincorporated County territory or district, filed with the Commission, setting forth the approximate boundaries of the proposed zone, togeth-

er with the general type of regulations desired, the County Planning Commission shall make such investigation of facts as will enable it to recommend an interim plan to the Board of Supervisors, which, in the opinion of the County Planning Commission, will reasonably preserve and maintain the character of said district until necessary studies, meetings and hearings can be held, pursuant to effecting a comprehensive plan in accordance with the State Conservation and Planning Act.

- 14.3 **DURATION OF INTERIM DISTRICTING:** An interim districting plan may be enacted for a period of not to exceed two (2) years.
- 14.4 **PERMITS FOR NON-CONFORMING USES:** Any property owner or owners may file with the County Planning Commission, on forms provided by the County for this purpose, an application for variance to erect a building or use the property in a manner that does not conform to the regulations of the Interim District. The County Planning Commission may act on such application with or without holding a public hearing. Before approving or denying any such application, the Commission shall cause to be made such investigations of fact as will assure the carrying out of the intent and purposes of the Interim Districting and shall include in its action a report of its reasons therefor.
- 14.5 **PREPARATION OF COMPREHENSIVE ZONING PLAN:** Upon receipt of a petition as set forth in Section 14.2, the Commission shall proceed immediately to prepare a tentative comprehensive zoning plan for the district described in the petition, together with such adjoining areas as it may deem necessary for the purpose of study. Such tentative plans shall be submitted to the property owners in the district at public meetings and otherwise for their suggestions and scrutiny. Changes may be made in such plan by the County Planning Commission from time to time and such plan shall be used as the basis for consideration of application for permits as set forth in Section 14.4.
- 14.6 **OFFICIAL ACTION ON PROPOSED ZONING PLAN:** At the earliest practicable time following receipt of a petition as set forth in Section 14.2, the Commission shall hold public hearings on a pro-

posed comprehensive zoning plan pursuant to the provisions of the State Conservation & Planning Act. It shall thereafter make its recommendations to the Board of Supervisors who shall take appropriate action.

SECTION 15. GENERAL PROVISIONS AND EXCEPTIONS:

15.1 GENERAL USE PROVISIONS:

- a. Except as hereinafter provided, buildings or structures shall be erected, reconstructed, structurally altered, enlarged, moved or maintained, and buildings, structures or land shall be used or designed to be used only for uses permitted in the zone in which such building, structure or land is located and then only after applying for and securing all permits and licenses required by all laws and ordinances.
- b. Where the term "other uses similar to the above" is mentioned, it shall be deemed to mean other uses which, in the judgment of the County Planning Commission as evidenced by a written decision, are similar to and not more objectionable to the general welfare, than the uses listed in the same subsection. Any "other use" so determined by the County Planning Commission shall be regarded as permanently listed uses. In no instance, however, shall the County Planning Commission determine, nor shall these regulations be so interpreted, that a use shall be permitted in a zone when such use is specifically listed as first permissible in a less restricted zone.
- c. The provisions of this Ordinance shall not be construed to limit or interfere with the installation, maintenance and the operation of public utility pipe lines and electrical transmission lines and pipe lines to serve a public utility, when located within a right-of-way or hereafter established by easement, franchise or ownership by a public utility.

15.2 PARKING SPACE REQUIREMENTS: Every main building hereafter erected or structurally altered shall be provided with minimum off-street parking accommodations as follows:

- a. For dwellings there shall be at least one parking space on the same site with

the main building for each dwelling unit. Such parking space shall be located to the rear of the front setback line except in mountain areas where the parking space may be within the setback area, and not less than eight (8) feet wide by eighteen (18) feet long, with adequate provision for ingress and egress. In case of practical difficulty or hardship, a variance may be requested in accordance with the provisions of Section 16.

- b. For buildings or structures other than dwellings and for uses involving large concentrations of people, there shall be at least one parking space of two hundred and fifty (250) square feet on the same lot with the main building or use, on lot or lots contiguous thereto or in a location and developed in accordance with a plan approved by the County Planning Commission as follows:

- (1) For churches, high schools, college and university auditoriums and other places of occasional assembly, at least one (1) parking space for every ten (10) seats provided in said buildings, or in the case of a use without buildings, one (1) parking space for each eight (8) persons normally using the facilities
- (2) For hospitals and institutions, at least one (1) parking space for every two (2) beds provided in said building
- (3) For hotels and clubs, at least one (1) parking space for every three (3) guest rooms provided in said building
- (4) For theaters, auditoriums and other similar places of assembly, at least one (1) parking space for every eight (8) seats provided in said building, or in the case of a use without a building, one (1) parking space for each six (6) persons normally attending or using the facilities
- (5) For tourist courts, at least one (1) parking space for each individual sleeping or living unit
- (6) For business, commercial or industrial buildings or structures having a floor area of one thousand (1,000) square feet or more at least two (2) parking spaces for every one thousand (1,000) square feet of gross floor area in said building or structures, excluding automobile parking

space in the building or structure

- 15.3 **LOADING SPACE REQUIREMENTS:** Every hospital, institution, hotel, commercial or industrial building hereafter erected or established on land which abuts upon an alley or street, shall have one (1) permanently maintained loading space of not less than ten (10) feet in width, twenty (20) feet in length and fourteen (14) feet in height, for each three thousand (3,000) square feet of lot area upon which said building is located; provided, however, that not more than two (2) such spaces shall be required, unless the building on such lot has a gross floor area of more than forty thousand (40,000) square feet, in which case there shall be one (1) additional loading space for each additional forty thousand (40,000) square feet or fraction thereof above ten thousand (10,000) square feet.

- 15.4 **PARKING AREA REQUIREMENTS:** Every parcel of land hereafter used for public or private parking areas, and used car and trailer sales areas shall be improved as follows:

- a. All such areas shall be paved, turfed or otherwise surfaced so as to minimize dust, and where such parking areas abut property classified for "R" uses, they shall be separated therefrom by a solid fence or wall six (6) feet in height, provided said fence, from the front property line to a depth equal to the required front yard on the abutting "R" classified property, shall be three and one-half (3½) feet and provided, where no fence is erected along any boundary of such parking area abutting upon a street, a suitable concrete curb or timber barrier not less than six (6) inches in height shall be securely installed and maintained.
- b. Any lights provided to illuminate such parking areas shall be so arranged as to reflect the light away from adjoining residential premises.

- 15.5 **NON-CONFORMING BUILDINGS AND USES:** The following regulations shall apply to all non-conforming buildings and uses existing on the effective date of this Ordinance:

- a. Uses existing under valid land use permits issued in conformance with the provisions of County Ordinance 602 shall be consid-

ered conforming uses, except that this shall not preclude their becoming non-conforming due to reclassification of zones under this Ordinance.

- b. Any non-conforming building may be continued and maintained provided there are no structural alterations, except as provided below in sub-section "e" and "f".
 - c. Any non-conforming use may be continued provided there is no increase of the space devoted to such use.
 - d. Any part of a building or land occupied by a non-conforming use which is changed to or replaced by a use conforming to the provisions of this Ordinance as they apply to the particular zone, shall thereafter be used or occupied only by a conforming use.
 - e. Any part of a building or land occupied by a non-conforming use, which use is discontinued for one hundred and eighty (180) days or more, shall thereafter be used in conformity with the provisions of this Ordinance. The provisions of this Ordinance shall not prevent the reconstruction, repairing or rebuilding and continued use of any non-conforming building or buildings damaged by fire, explosion, or acts of God or the enemy subsequent to the effective date of this Ordinance, wherein the cost of such reconstruction, repairing or rebuilding does not exceed seventy-five (75) percent of the reasonable value of such building or buildings constituting a single enterprise at the time such damage occurred.
 - f. In all "R" Zones every non-conforming building which was designated or intended for use not permitted in such zone shall be completely removed or altered to structurally conform to the uses permitted in such zone within a time fixed by the County Planning Commission and approved by the Board of Supervisors. Such time for removal or alteration may not be fixed for a date before the expiration of the normal life of such building as found by said Commission and Board.
- In no event may the normal life of such building be fixed at less than forty (40) years from its original construction, or in the case of a building to which additions have been

made, less than forty (40) years from construction of the major portion of the building. Such finding of the normal life of a non-conforming building and the fixing of time for its removal or alteration may only be had after notice to the owner and a hearing had thereon in the manner provided for the consideration of variances. An order for removal or alteration shall require such action on a date no less than five (5) years from the time such order is made. When such an order is made, it shall be the duty of the County Planning Commission to give the owner of the building affected written notice thereof immediately upon the order's becoming final and again not less than sixty (60) or more than ninety (90) days prior to the date such removal or alteration is required to be completed.

g. The non-conforming use of land where no structure thereon is employed therefor, existing at the time this Ordinance became effective may continue for a period of not more than ten (10) years therefrom, provided:

(1) Non-conforming use of land not in any way be expanded or extended either on the same or adjoining property.

(2) Non-conforming use of land existing at the time this Ordinance became effective, if thereafter discontinued or changed, may not be re-established; any future use of such land shall be in conformity with the provisions of this Ordinance.

h. Any non-conforming commercial signs and billboards existing at the time this Ordinance became effective may be continued, although such use does not conform with the provisions hereof; provided, however, that all such non-conforming signs and billboards and their supporting members shall be completely removed by their owners not later than five (5) years from the effective date of this Ordinance.

i. The foregoing provisions shall also apply to buildings, land and uses which hereafter become non-conforming due to any reclassification of zones under this Ordinance.

15.6 LOCATION OF PERMITTED USES: Wherever it is

stated in this Ordinance that uses may be permitted in a zone if the location and development plan is approved by the County Planning Commission, as provided in Section 15.6, said uses are deemed to be a part of the development of the Master Plan or its objectives and shall conform thereto. Before the said Commission makes its final determination, the County Planning Commission may at its option hold a public hearing.

a. Additional uses permitted: The County Planning Commission, after public hearing, may permit the following uses in zones from which they are prohibited by this Article where such uses are deemed essential or desirable to the public convenience or welfare, and are in harmony with the various elements or objectives of the Master Plan:

(1) Airports or aircraft landing fields

(2) Camps, public and trailer

(3) Cemeteries

(4) Development of natural resources together with the necessary buildings, apparatus or appurtenances incident thereto

(5) Public and private dumps

(6) Educational institutions

(7) Governmental enterprises (federal, state and local)

(8) Libraries

(9) Public utilities and public service uses or structures

(10) Sewer plants and disposal areas

(11) Rifle, pistol, skeet ranges

(12) Large scale neighborhood housing projects, provided they comply with all yard requirements on the boundary of the property and with the height and lot area regulations of the zone in which they are located, and in no case cover more than forty (40) percent of the buildable area of the site (excluding accessory buildings)

(13) In the A-1 or A-2 Zones, new self-contained communities with town lot subdivision, provided adequate open spaces and municipal facilities, utilities and services are made available in a manner satisfactory to the County Planning Commission. Upon the approval of the location and design of any such self-contained community, the said Commission shall initiate any rezoning of the affected

area which, in its judgment, is necessary or desirable. Any of the above uses existing at the time this Section became effective, shall be deemed to have been approved by the County Planning Commission and nothing in this Section shall be construed to prevent the enlargement of existing buildings for such uses if all other regulations of this Article are complied with, including the conditions of any special district ordinance, exception or variance heretofore granted authorizing such use.

b. Procedure:

Written applications for the approval of the uses referred to in this Section shall be filed in the public office of the County Planning Commission upon forms prescribed for that purpose by the County Planning Commission. The County Planning Commission shall make its findings and determination in writing within forty (40) days from the date of filing of an application and shall forthwith transmit a copy thereof to the applicant. The decision of the County Planning Commission under this Section shall become effective after an elapsed period of ten (10) days from the date the written determination is made, during which time the applicant, or any other person aggrieved, may appeal therefrom to the Board of Supervisors as provided in Section 18.

15.7 STRUCTURAL HEIGHT REQUIREMENTS:

a. General: Buildings or structures and the enlargement of any building or structure shall be hereafter erected, reconstructed or maintained only in conformance with the height limit established for the zone wherein such building or structure is located, except as hereinafter provided.

b. Exceptions:

(1) One-family dwellings in thirty-five (35) foot height zones may be increased in height by not more than ten (10) feet when two (2) side yards of not less than fifteen (15) feet each are provided. Such dwellings, however, shall not exceed three (3) stories in height.

(2) In the thirty-five (35) foot height zones, public or semi-public buildings, schools, hospitals, or institutions may be erected to a

height not exceeding four (4) stories or sixty (60) feet when the required front, side and rear yards are increased an additional one (1) foot for each four (4) feet in height of such buildings exceeding thirty-five (35) feet.

(3) Penthouses or roof structures for the housing of elevators, stairways, tanks, ventilating fans or similar equipment required to operate and maintain the buildings, and fire or parapet walls, skyights, towers, roof signs, flagpoles, chimneys, smokestacks, wireless masts or similar structures may be erected above the height limits herein prescribed, but no penthouse or roof structures, or any space above the height limit shall be allowed for the purpose of providing additional floor space.

15.8 AREA REQUIREMENTS:

a. General: Buildings, structures or the enlargement of buildings or structures hereafter erected, located or maintained on a lot shall conform with the area regulations of the zone in which the lot is located except as hereinafter provided.

(1) Group dwellings, court apartments, row dwellings, and a unit group of dwellings as referred to in Paragraph (2) of this Subsection, may be considered as one (1) main residential building.

(2) Dwellings may be arranged to rear upon side yards or have their service entrances opening thereon, provided the following regulations are complied with:

(a) In the case of group dwellings or court apartments, the required side yards shall be increased by one (1) foot for each dwelling unit or portion thereof abutting such side yard, but said side yard need not exceed seven (7) feet.

(b) In the case of row dwellings or a unit group of dwellings (including one-family, two-family or multiple dwellings not more than two and one-half (2½) stories in height) arranged so as to rear upon one side yard and front upon the other, the side yard upon which the dwellings rear shall be increased by one (1) foot for each dwelling unit or portion thereof abutting such side yard,

but said side yard need not exceed ten (10) feet. The average width of the side yard upon which the dwellings front shall not be less than one and one-half (1½) times the width of the other side yard, as required above.

(c) Yards for institutions, churches, etc. — in the "R" Zones.

1. An institution, hospital or other similar use permitted under the use regulations of this Ordinance shall be located at least twenty-five (25) feet from the lot or boundary line of adjoining property in any "R" Zone, and no required front or side yard is to be used for the parking of automobiles. Provided, however, that where a lot has a width of less than one hundred and twenty-five (125) feet and was held under separate ownership or was of record at the time this Ordinance became effective, the above yard requirement on each side of such buildings may be reduced to twenty (20) percent of the width of the lot, but in no case less than ten (10) feet.

2. A church, library or museum shall be located at least ten (10) feet from the side lot lines and the total combined width of the two side yards shall equal forty (40) percent or more of the width of the lot but such combined side yard width need not exceed fifty (50) feet.

3. In the case of a church, library or museum, the parking of automobiles shall be permitted in the side and rear yards, provided such parking is located at least five (5) feet from the side lot line of an interior lot, on the street side of a reversed corner lot, and beyond the front line of the main building. Automobile parking areas and driveways shall be paved with an asphaltic or concrete surfacing and shall have appropriate bumper guards where needed.

(d) A motel, wherever permitted under the regulations of this Ordinance, shall have a lot area of eight hundred (800)

square feet or more for each additional sleeping or living unit.

(3) Parcels of land held under separate ownership at the time this Ordinance became effective, shall not be reduced in any manner below the minimum lot area, size or dimensions required by this Ordinance.

(4) Lot area shall not be so reduced, diminished and maintained that the yards, other than open spaces or total lot area, shall be smaller than prescribed by this Ordinance, nor shall the density of population be increased in any manner except in conformity with the regulations herein established.

(5) Yards or other open spaces required around an existing building or which is hereafter provided around any building for the purpose of complying with the provisions of this Ordinance, shall not be considered as providing a yard or open space for any other building; nor shall any yard or other required open space on an adjoining lot be considered as providing a yard or open space on a lot whereon a building is to be erected.

b. Exceptions:

(1) Where the yard regulations cannot reasonably be complied with or their application determined on lots of peculiar shape or location or on hillside lots, such regulations may be modified or determined by the County Planning Commission as provided in Section 16.

(2) The front and side yards shall be waived for dwellings, hotels and boarding or lodging houses, erected above the ground floor of a building when said ground floor is designed exclusively for commercial or industrial purposes.

(3) For the purpose of side yard regulations, the following dwellings with common party walls shall be considered as one (1) building occupying one (1) lot: Semi-detached two and four family dwellings, row dwellings group dwellings and court apartments.

(4) In computing the depth of a rear yard where such yard opens onto an alley, one-half (½) the width of such alley may be assumed to be a portion of the required rear yard.

(5) Loading space provided in accordance with this Or-

dinance may occupy a required open rear yard.

- (6) An accessory building, not exceeding one (1) story nor fourteen (14) feet in height, may occupy not more than twenty-five (25) percent of the area of a required rear yard, provided that such accessory building shall be at least fifteen (15) feet from the nearest point of a main building; in no case, however, shall a two (2) story accessory building occupy any part of a required rear yard nor be located nearer than five (5) feet from both the main building and the side lot line.
- (7) In computing the lot area of a lot which abuts upon one or more alleys, one-half ($\frac{1}{2}$) the width of such alley or alleys may be assumed to be a portion of the lot.
- (8) Where a through lot has depth of less than one hundred fifty (150) feet, an accessory building, not exceeding one (1) story nor fourteen (14) feet in height, may be located in one of the required front yards, if such building is set back from the front lot line a distance of not less than ten (10) percent of the depth of the lot and at least five (5) feet from any side lot line. Such accessory building shall not project beyond the front yard line of an existing main building along the frontage, except that such building need not be located more than twenty-five (25) feet from the street line.
- (9) Where a through lot has a depth of one hundred eighty (180) feet or more, said lot may be assumed to be two lots with the rear line of each approximately equidistant from the front lot lines, provided all area requirements are complied with. An accessory building shall not project beyond the front yard line of an existing main building along the frontage, except that such building need not be located more than twenty-five (25) feet from the street line.
- (10) A carport may be placed in the required side yard, provided such structure is unenclosed on at least three (3) sides except for the necessary supporting columns.
- (11) Cornices, eaves, belt courses, sills, buttresses or other similar architectural features may extend or project into a side yard not more than four (4) inches

for each one (1) foot of width of such side yard and may extend or project into a front or rear yard not more than thirty (30) inches.

- (12) Fire escapes may extend or project into any front, side or rear yard not more than four (4) feet.
- (13) Open, unenclosed stairways, or balconies not covered by a roof or canopy, may extend or project into a required rear yard not more than four (4) feet and such balconies and canopies may extend into a required front yard not more than thirty (30) inches.
- (14) Uncovered porches, platforms or landing places which do not extend above the level of the first floor of the building may extend into any front, side or rear yard not more than six (6) feet; however, that any open work railing, not more than thirty (30) inches in height may be installed or constructed on any such porch, platform or landing place.
- (15) Open work fences, hedges, landscape architectural features or guard railings for safety protection around depressed ramps, not more than three and one-half ($3\frac{1}{2}$) feet in height, may be located in any front, side or rear yard.
- (16) In "R" Zones, a fence or wall not more than seven (7) feet in height, or a hedge maintained so as not to exceed seven (7) feet in height, may be located along the side or rear lot lines, provided such fence, wall or hedge does not extend into the required front yard and further, that the provision shall not be so interpreted as to prohibit the erection of a fence enclosing an elementary or high school site.

SECTION 16. VARIANCES:

- 16.1 PURPOSE AND PRINCIPLE: When practical difficulties, unnecessary hardships or results inconsistent with the general purpose of this Ordinance result through the strict interpretation and enforcement of the provisions thereof, the County Planning Commission, upon receipt of a verified application from the owner or lessee of the property affected, stating fully the grounds for the application and the facts relied upon, or upon the motion of the said Commission, shall have au-

thority, subject to the provisions of this Section to grant, upon such conditions and safeguards as it may determine, such variances from the provisions of this Ordinance as may be in harmony with its general purpose and intent, so that the spirit of this Ordinance shall be observed, public safety and welfare secured and substantial justice done.

16.2 NECESSARY CONDITIONS: Before any variance may be granted, it shall be shown:

- That there are exceptional or extraordinary circumstances or conditions applicable to the property involved, or to the intended use of the property, that do not apply generally to the property or class of use in the same vicinity or district.
- That such variance is necessary for the preservation and enjoyment of a substantial property right of the applicant as possessed by other property owners in the same vicinity and district.
- That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in such vicinity and district in which the property is located; and,
- That the granting of such variance will not adversely affect the Comprehensive General Plan.

- 16.3 FILING OF APPLICATIONS: Applications for variances shall be made to the County Planning Commission in writing on forms provided by the County for this purpose and shall set forth in detail such information as may be required by the said Commission and as may relate to the conditions specified in Section 16.2. The uniform fee of Fifteen Dollars (\$15.00) shall be paid to the County upon the filing of each application for the purpose of defraying expenses incidental to the proceedings. The County Planning Commission shall cause to be made such investigation of facts bearing on the application for variance as will provide necessary information to assure that the action on each such application is consistent with the intent and purpose of this Ordinance.

- 16.4 HEARINGS ON VARIANCE APPLICATION: Upon receipt of an application for variance, the County Planning Commission shall fix a time and place of public hearing thereon, not less than ten (10)

days nor more than forty (40) days thereafter. No less than ten (10) days before the date of such public hearing, notice shall be given of such hearing in the following manner:

a. One (1) publication in a newspaper of general circulation in the County. Such notice shall state the name of the applicant, nature of request, location of property, and time and place of the hearing.

b. Posting of notices in front of the property under consideration and in at least three other places on each side of the street upon which said property fronts, the notices to contain the same information mentioned in Subsection "a" above.

16.5 ADMINISTRATION OF OATHS: The chairman or the acting chairman of the Commission may administer oaths and compel attendance of witnesses.

16.6 FINDINGS OF THE COMMISSION: Within forty (40) days from the conclusion of the public hearing, the County Planning Commission shall render its decision. If, in the opinion of the said Commission, the necessary facts and conditions set forth in Section 16.2 apply in fact to the property referred to in the application for variance, the County Planning Commission may grant the variance. If such facts and conditions do not apply, the County Planning Commission may deny the application.

16.7 CONDITIONS: The County Planning Commission in granting a variance may establish conditions under which a lot or parcel of land may be used or a building erected and altered, or make requirements as to architecture, height of building, open spaces, parking areas, and conditions of operation of any enterprise, or make any requirements that the said Commission may consider necessary to prevent damage or prejudice to adjacent properties, or detrimental to the welfare of the community.

16.8 NOTICE OF DECISION: A written report of the decision of the County Planning Commission shall be filed with the Board of Supervisors not later than ten (10) days after the said Commission has reached a decision, and a notice of such decision shall be sent by registered mail to the applicant for variance, not more than three (3) days after such report is filed with the Board of Supervisors. The

failure of the County Planning Commission to notify the Board of Supervisors within forty (40) days after the conclusion of the public hearings shall be deemed to constitute a denial, unless such time limit be extended by common consent and agreement signed by both the applicant and the Chairman of the County Planning Commission and/or his duly authorized representative, and made a part of said records of said Commission.

16.9 ENFORCEMENT OF CONDITIONS: Any restrictions or conditions required by the County Planning Commission and the Board of Supervisors in the granting of a variance or permit under the provisions of this Ordinance must be complied with. Violation of such conditions or requirements, shall result in the revocation of the permit granted to so use the property and further use of the property or maintenance of any building constructed thereon, by authority of such variance or permit shall constitute a violation of this Ordinance and shall be punishable in the manner set forth herein.

16.10 VOIDING OF VARIANCES: Each variance granted under the provisions of this Article shall become null and void unless:

a. The construction authorized by such variance or permit has been commenced within one hundred eighty (180) days after the granting of such variance and pursued diligently to completion; or

b. The occupancy of land or buildings authorized by such variance has taken place within one hundred eighty (180) days after the granting of such variance.

16.11 APPEAL TO BOARD OF SUPERVISORS: See Section 18.

16.12 VARIANCES GRANTED WITHOUT HEARING: Notwithstanding any other provisions of this Section, the County Planning Commission may, if it so elects, act on the following without a public hearing as required in this Section, in which case no filing fee shall be required.

a. Allow a reduction of lot-area requirements and front, side and rear yard regulations and variance in minimum height requirements where, in its judgment, the shape of the building site, topography the location of existing buildings or other conditions makes a strict compliance with said regula-

tions impossible without practical difficulty or hardship.

b. Allow the extension of a zone where the boundary line thereof divides a lot in one ownership at the time of passage of this Ordinance.

c. Permit the reconstruction or remodeling of a non-conforming building, where, in its judgment, such reconstruction or remodeling will bring such building and its subsequent use into fairer conformity with its surroundings.

d. Allow the construction of commercial buildings with side walks, arcades and similar architectural plans applicable to the entire frontage of the block.

16.13 (Ord 838)
SECTION 17. AMENDMENT AND CHANGES OF DISTRICTS:

17.1 INITIATION OF PROCEEDINGS BY COMMISSION AND BOARD OF SUPERVISORS: The Board of Supervisors may from time to time amend, supplement or change this Ordinance and the regulations and maps appertaining thereto by proceedings in conformity with the State Conservation and Planning Act, Chapter 807, Statutes 1947, as amended, or any Statutes superseding the said Act. An amendment, supplement or change may be initiated by the Board of Supervisors or the County Planning Commission.

17.2 CHANGE OF CLASSIFICATION BY PROPERTY OWNER: Whenever the owner of any land or building desires a reclassification of his property or a change in the regulations applicable thereto, he may file with the County Planning Commission on forms provided by the County for this purpose, a petition duly signed and verified by him requesting such amendment, supplement or change of regulation prescribed for such property.

17.3 FILING FEE: A uniform fee of Twenty-five Dollars (\$25.00) shall be paid to the County upon the filing of each such petition, to cover the cost of making maps, posting notices and other expenses involved.

17.4 HEARINGS ON PETITION FOR CHANGE OF CLASSIFICATION BY COMMISSION: The County Planning Commission shall hold public hearings upon the matters referred to in such petitions as required by said State

Conservation and Planning Act, or any Statute superseding said Act, and thereupon make reports and recommendations to the Board of Supervisors as therein provided.

- 17.5 **HEARING BY BOARD OF SUPERVISORS ON PETITION FOR CHANGE OF CLASSIFICATION:** The Board of Supervisors after receipt of the report and recommendations of the County Planning Commission shall hold a final public hearing upon said matters in accordance with the said State Conservation and Planning Act or any Statutes superseding the said Act and thereupon take appropriate action.

SECTION 18. APPEALS:

- 18.1 **RIGHT OF APPEAL:** Any order, requirement, decision, determination, interpretation or ruling made by the County Planning Commission in the administration or enforcement of the provisions of this Ordinance, may be appealed therefrom to the Board of Supervisors by any person aggrieved, or by an officer, board, department or bureau of the County. The taking of an appeal stays proceedings in the matter appealed from until the determination of the appeal.
- 18.2 **NOTICE OF APPEAL — FORM & CONTENTS:** The notice of appeal shall be in writing and shall be filed in duplicate, in the office of the Clerk of the Board of Supervisors, upon forms provided. An appeal from any order, requirement, decision, determination or interpretation by the County Planning Commission in the administration or enforcement of the provisions of this Ordinance, must set forth specifically wherein there was error or abuse of discretion. An appeal from the rulings, decisions and determinations by the County Planning Commission denying or granting a variance, must set forth the particulars wherein the application for variance did meet or did fail to meet, as the case may be, those qualifications or standards set forth in Section 16.2, as being prerequisite to the granting of any variance.
- 18.3 **TIME FOR FILING:** Any appeal shall be filed within ten (10) days after the rendition, in writing, of the decision appealed from or it shall be dismissed by the Board of Supervisors.

- 18.4 **HEARING DATE-NOTICE:** Upon receipt of the notice of appeal, the Board of Supervisors shall set the matter for hearing and give notice of the date, time and place thereof to the appellant, to the County Planning Commission and to any other party at interest who has requested in writing to be so notified, and no other notice thereof need be given, except in those cases herein-after mentioned.

- 18.5 **AUTHORITY OF BOARD:** Upon hearing the appeal, the Board of Supervisors shall consider the record and such additional evidence as may be offered and may affirm, reverse or modify, in whole or in part, the order, requirement, decision, determination, interpretation or ruling appealed from, or make and substitute such other or additional decision or determination as it may find warranted under the provisions of this Ordinance. The Board of Supervisors shall forthwith transmit a copy of the decision to the applicant, appellant and County Planning Commission.

SECTION 19. INTERPRETATION, LEGAL PROCEDURE & PENALTY:

- 19.1 **INTERPRETATION:** In interpreting and applying the provisions of this Ordinance they shall be held to be the minimum requirements for the promotion of the public health, safety, comfort, convenience and general welfare. It is not intended by this Ordinance to interfere with or abrogate or annul any easement, covenant or other agreement between parties. Where this Ordinance imposes a greater restriction upon the use of building or land, or upon the height of buildings, or requires larger open spaces than are imposed or required by other ordinances, rules, regulations or by easements, covenants or agreements, the provisions of this Ordinance shall control.
- 19.2 **Permits - Licenses:** All departments, officials or public employees vested with the duty or authority to issue permits or licenses where required by law, shall conform to the provisions of this Ordinance. Licenses or permits for uses, buildings or purposes where the same would be in conflict with the provisions of this Ordinance shall not be issued. Any such license or permit, if issued in conflict

with the provisions hereof, shall be null and void.

Premises shall not be occupied or used and buildings hereafter erected or altered shall not be occupied or used until a certificate of compliance shall have been issued by the secretary of the County Planning Commission. Such certification of compliance shall be required only when no building permit or business license or other evidence of authority shall have been required and issued, as provided in this Section.

- 19.3 **Penalties:** Any building or structure erected or maintained, or any use of property, contrary to the provisions of this Ordinance shall be and the same is hereby declared to be unlawful and a public nuisance and the District Attorney shall, upon order of the County Planning Commission immediately commence action or actions, proceeding or proceedings for the abatement, removal and enjoinder thereof, in the manner provided by law; and shall take such other steps, and shall apply to such court or courts as may have jurisdiction to grant such relief as will abate or remove such building, structure or use and restrain and enjoin any person from setting up, erecting or maintaining such building or structure, or using any property contrary to the provisions of this Ordinance. It shall be the right and duty of every citizen to participate and assist the County Officials in the enforcement of the provisions of this Ordinance.
- a. All remedies provided for herein shall be cumulative and not exclusive. The conviction and punishment of any person hereunder shall not relieve such person from the responsibility of correcting prohibited conditions or removing prohibited buildings, structures or improvements, nor prevent the enforced correction or removal thereof.
- b. Any person, firm or corporation violating any of the provisions of this Ordinance or of any permit or exception granted hereunder shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be punishable by a fine of not to exceed five hundred dollars (\$500.00) or by imprisonment in the County Jail for not to exceed six (6) months, or by both such fine and imprison-

ment. Each separate day or any portion thereof during which any violation of this Ordinance occurs or continues shall be deemed to constitute a separate offense and upon conviction therefor shall be punishable as herein provided.

SECTION 20. VALIDITY:

This Ordinance and the various parts, sections and clauses thereof are hereby declared to be severable. If any part, sentence, paragraph, section or clause is adjudged unconstitutional or invalid, the remainder of this Ordinance shall not be affected thereby. The County Board of Supervisors hereby declares that it would have passed this Ordinance and each part thereof, regardless of the fact that one or more parts thereof be declared unconstitutional or invalid.

SECTION 21. REPEAL OF CONFLICTING ORDINANCES:

Ordinances number 457, 458, 475, 562, 563, 587, 590, 591, 601, 602,

631, 639, 647, 659, 662, 664, 665, and 670 of Said County of San Bernardino are hereby repealed.

SECTION 22. ADOPTION:

This Ordinance shall take effect and be in force at the expiration of thirty (30) days from and after its passage, and before the expiration of fifteen (15) days the same shall be published with the names of the members voting for and against the same, for at least one time in the Fontana Herald and News, a newspaper of general circulation published in the County of San Bernardino, State of California.

FRANK H. MOGLE
Chairman of the Board.

Attest: HARRY L. ALLISON
Clerk of the Board.

By: Wilfrid O. Brown
Deputy

STATE OF CALIFORNIA,)
County of San Bernardino)ss

I, HARRY L. ALLISON, County Clerk and ex-officio clerk of the Board of Supervisors of the County of San Bernardino, State of California, hereby certify that at

a regular meeting of the Board of Supervisors of said County and State, held on July 9, 1951, at which Meeting there were present Supervisors: Frank Mogle, Chairman; H. George Cunningham, Will R. Mason, Howard L. Holcomb and S. Wesley Break, and the Clerk, the foregoing Ordinance, consisting of twenty-two sections, was first considered section by section, and each section separately adopted, and that the said Ordinance was then passed and adopted as a whole by the following vote, to-wit:

AYES: Supervisors: Mason, Break, Holcomb, Mogle.

NOES: Supervisors: Cunningham.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Board of Supervisors this July 9, 1951.

HARRY L. ALLISON
County Clerk and ex-officio Clerk of the Board of Supervisors of the County of San Bernardino, State of California

By: Wilfrid O. Brown, Deputy

EXHIBIT 14

STATE OF CALIFORNIA
EARL WARREN, Governor
DEPARTMENT OF NATURAL RESOURCES
WARREN T. HANNUM, Director

DIVISION OF MINES
FERRY BUILDING, SAN FRANCISCO 11
OLAF P. JENKINS, Chief

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JANUARY 1952

No. 1

CALIFORNIA JOURNAL
OF
MINES AND GEOLOGY



10 feet long, 8 feet in maximum width, and extending about 5 feet beneath the surface. By late in 1950 this lens had been removed.

Limestone and Dolomite

Limestone and the many lime products derived from it are basic materials upon which a great many industries important to national defense depend. Lime ranks high among industry's most versatile chemicals and it is fortunate that neither the United States nor California is in short supply. There is, however, a shortage in California of proved reserves of limestone and dolomite that will meet the rigid chemical and sometimes physical requirements of such industries as glass making, magnesia manufacturing, and sugar refining. Much work remains to be done by private or government agencies if large reserves of rock of high purity are to be proved.

Either lime or limestone is necessary in steel and most nonferrous smelting processes, as well as in numerous chemical industries not so obviously related to national defense or any war effort. Manufacture of portland cement and certain other vital construction materials would be impossible without lime or limestone. Calcined dolomite has become the basic ingredient upon which the entire multi-million dollar California magnesia chemical-magnesia refractory business depends. Manufacture of magnesia by interaction of brines with lime has ceased and calcined dolomite is now used exclusively.

Harms Brothers Construction Company acquired the holdings of the former Chubbuck Lime Company, reopened the quarries and kiln at Chubbuck, San Bernardino County, and is planning to open extensive virgin deposits at Cadiz, San Bernardino County. Harms' present production of industrial lime will probably be expanded to include products of other sorts.

Increased demand for granules for built-up roofs has created a very competitive market which several new operators have entered, and to which more established operators are turning their attention. Most of the activity is in white limestone and dolomite, but there is an increasing demand for colored granules, particularly green.

Several current California producers of limestone for sugar refining have been trying to locate suitable deposits as far afield as the McCloud limestone on the Pit river, Shasta County. Several new operators have entered the sugar-rock business. Demand for agricultural limestone, sugar rock, etc., in Oregon has led to new interest in the Kennett (?) limestone at Gazelle, Siskiyou County.

The only new use of lime in California that might contribute materially to limestone consumption is the use of hydrated lime in stabilization of road-base materials. Lime acts as a mild cement and as a clay flocculator in base materials having a substantial clay increment. Portland cement is sometimes used for the same purpose, but is more expensive. Most of the lime used so far has been low-cost, off-color material, obtained from Diamond Springs Lime Company by the State Division of Highways. Use of lime for this purpose will depend on the availability of low-cost limes.

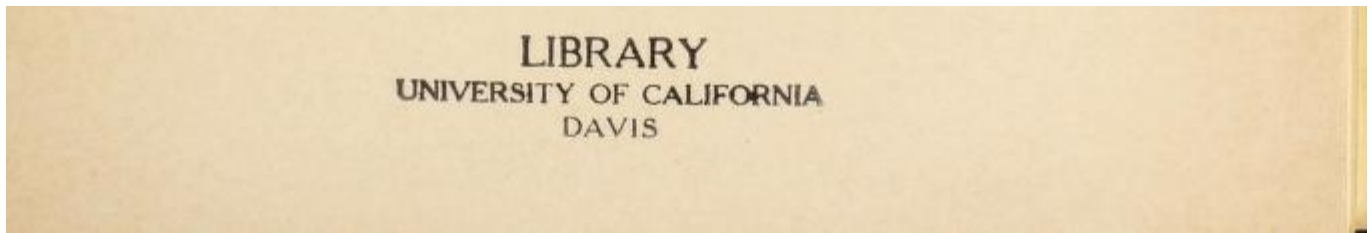


EXHIBIT 15

In August he was ready to ship another 20 tons of ore, yet in November, 1911, Parks and his wife left the Black Metal. She was probably suffering from a bad case of cabin fever and he, looking for a better return for his time and money, went into general contracting, leaving mining to others.²¹⁵

The Grass Roots Mine, adjacent to the Black Metal, was discovered about 1889 by Scott Price. He sank a small shaft and took out some high grade ore, but seeing he would be unable to work the mine because of the distance to transportation, he filled up the shaft. After the Parker branch of the Santa Fe was built, Price, in partnership with Bert Day, began working the mine. In March, 1911, the shaft was down to 60 feet, and Day went into Parker to secure a team to haul supplies between Milligan and the mine camp. In April, twenty tons of ore were shipped. In June the Garner brothers of San Bernardino purchased the interest of Day. Sinking of the shaft was resumed that August, but was halted when tragedy struck in October. Harry Nelson, employed sinking a 25 foot shaft, was killed when it caved in on him. Two men set to work to remove the tons of rock on Nelson, but when they found him, he was dead. Apparently operations stopped until September, 1912, when, with Fred Schmickle, Scott Price resumed operations. There was plenty of water nearby and they expected, in February, 1913, to put in a large mill, but nothing further is heard about the mine.²¹⁶

The Warwick Mine, owned by Mr. A. W. Warwick of Martinez, Arizona was also active nearby in late 1898. By January, 1900, he had completed a ten-stamp mill at the mine. The Stemwinder Mine was "doing well" in January, 1900, but it was not until 1905 that this mine, located 20 miles south of Danby (perhaps in Carbonate Gulch), began to draw attention. During that year, the Stemwinder Mining and Development Company, capitalized for a quarter of a million dollars, was developing the mine. In September, 1911, a brief note indicated that the owners were waiting for cooler weather before mining. Poker Flat is a locality in the Old Woman Mountains, whose identity has been lost to time. In 1911 some mining was being carried on there, and in February, 1911, Sam Houston was overhauling his stamp mill. On the Consolidated Mining Company claims at Poker Flat, owned by Walter G. Hopkins, a new strike was made in March, 1911.²¹⁷

Elsewhere in 1911, the Lucky Jim Mine, on the southeast side of the range, was located by P. W. Daton. The property was purchased by the Maricopa-Queen Oil Company, and by June, 1913, a camp known from old maps as Wilhelm was established here, with water piped from a natural tank about 3 miles southwest. In 1914, the camp consisted of bunkhouses, a boarding house, and a barn. In 1930 there were 3 men employed working the mine, and the camp was reported to have consisted of 3 cabins and a blacksmith shop. Between 1911 and 1930, some \$53,000 worth of silver was produced from here, probably the bulk of that in the teens.²¹⁸

During World War II, two tungsten mines on the west side of the range, the Hidden Value and the Howe, were active. At the Howe, a small mill was erected in 1952.²¹⁹

CHUBBUCK

The history of Chubbuck begins with the immigration of Charles Ingles Chubbuck

from Ottawa, Canada to San Francisco in 1906. Chubbuck opened a building supply business here just prior to the great earthquake and fire and cashed in on the demand afterward. In the late teens, Chubbuck found a somewhat unusual source of lime for cement at his own back door. Union Carbide Company shipped calcium carbide from its plant at Niagara Falls to other plants in South San Francisco and Los Angeles where it was converted to acetylene gas. Lime was produced as a by-product. But lime is also the principal constituent of cement. So Chubbuck made an arrangement to remove the lime from the Union Carbide plant and he sold it as cement. However, the lime still had bluish flecks of carbide in it, a drawback that made it less desirable for marketing.

Thus, in 1921, Mr. Chubbuck purchased the claims to 1,600 acres of limestone along the Parker branch of the Santa Fe railroad to obtain a whiting agent for his cement. These claims were purchased from Marcus Pluth and Tom Scofield, two well-known prospectors. From 1922 to 1925 a town was built, and a narrow-gauge railroad 1 mile to the quarry was also constructed. Full scale production began in 1925 with rock being shuttled from the crusher near the quarries to a kiln at the town of Chubbuck. Crushed limestone was also produced at the Chubbuck operations in a plant near the Santa Fe.

Chubbuck was truly a town. It had a company store, post office, and a school. There were perhaps as many as 40 buildings, including residences for the some 24 predominantly Mexican workers and their families. The school was opened by 1932, housing grades one through eight. The post office was established in May, 1938, and was housed in the company store.

During the construction of the Colorado River Aqueduct in the late 1930s, Chubbuck supplied lime products. The open aqueduct was lined with a coating of highly reflectant "metropolitan white" that aided in the proper curing of the concrete. While for years Chubbuck had a stability rare among mining towns, by the late 1940s, it too belonged to the desert, as the processing of lime products from the Chubbuck mines had ceased. One of the reasons for the abandonment of operations included the fact that Union Carbide stopped shipping calcium carbide to the West Coast. Also, a new process of producing plaster was developed, and the company did not receive patent rights for this process.

In 1950 the school and post office were closed. In 1951 the Harms Brothers Construction Company of Sacramento acquired the property with the equipment intact. The Harms brothers probably intended to make concrete for roadways, but there was simply too much silica in the limestone. The Harms brothers trucked the rock to the crusher near the quarries instead of using the narrow gauge that had been constructed for that purpose. However, another narrow gauge running from the crusher to Chubbuck was utilized. For a short time, a few workers employed by the Harms brothers lived at Chubbuck, but operations ceased and the equipment was auctioned off, about 1954.

In the winter of 1975-76, the Santa Fe relaid the entire track of the Parker Branch in California and removed the siding at Chubbuck. At that time, someone had built a house and garage on one of the mammoth foundations. A small ore crusher operated by an automobile engine, probably used to sample gold ore, sat in front of the house.

EXHIBIT 16

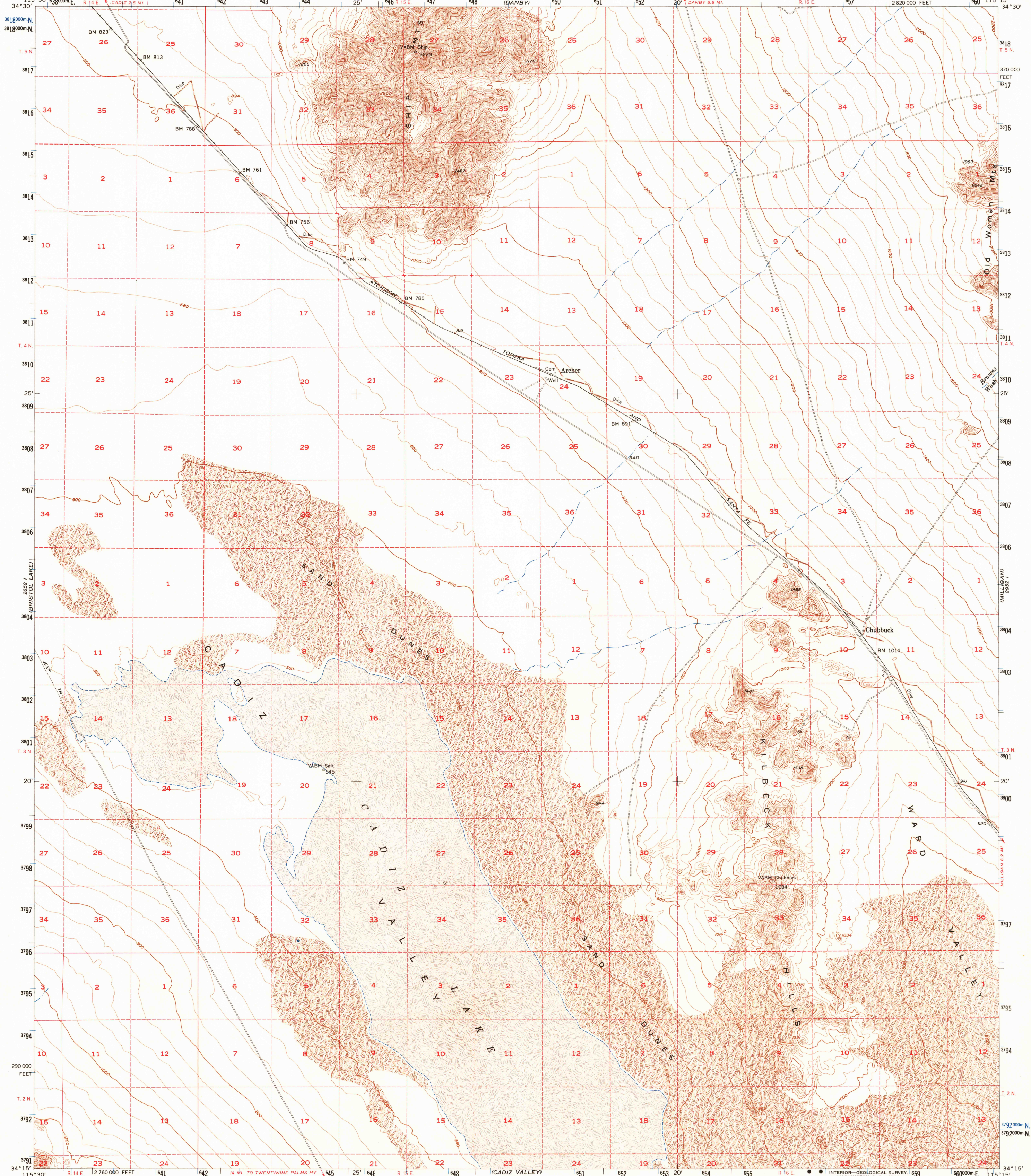


EXHIBIT 17

EXHIBIT 17.1

MINERAL INFORMATION SERVICE

STATE OF CALIFORNIA

DIVISION OF MINES AND GEOLOGY

VOLUME 15 NUMBER 7
JULY 1962

The Portland Cement Industry in California--1962

PART I

BY OLIVER E. BOWEN AND CLIFFTON H. GRAY, JR.

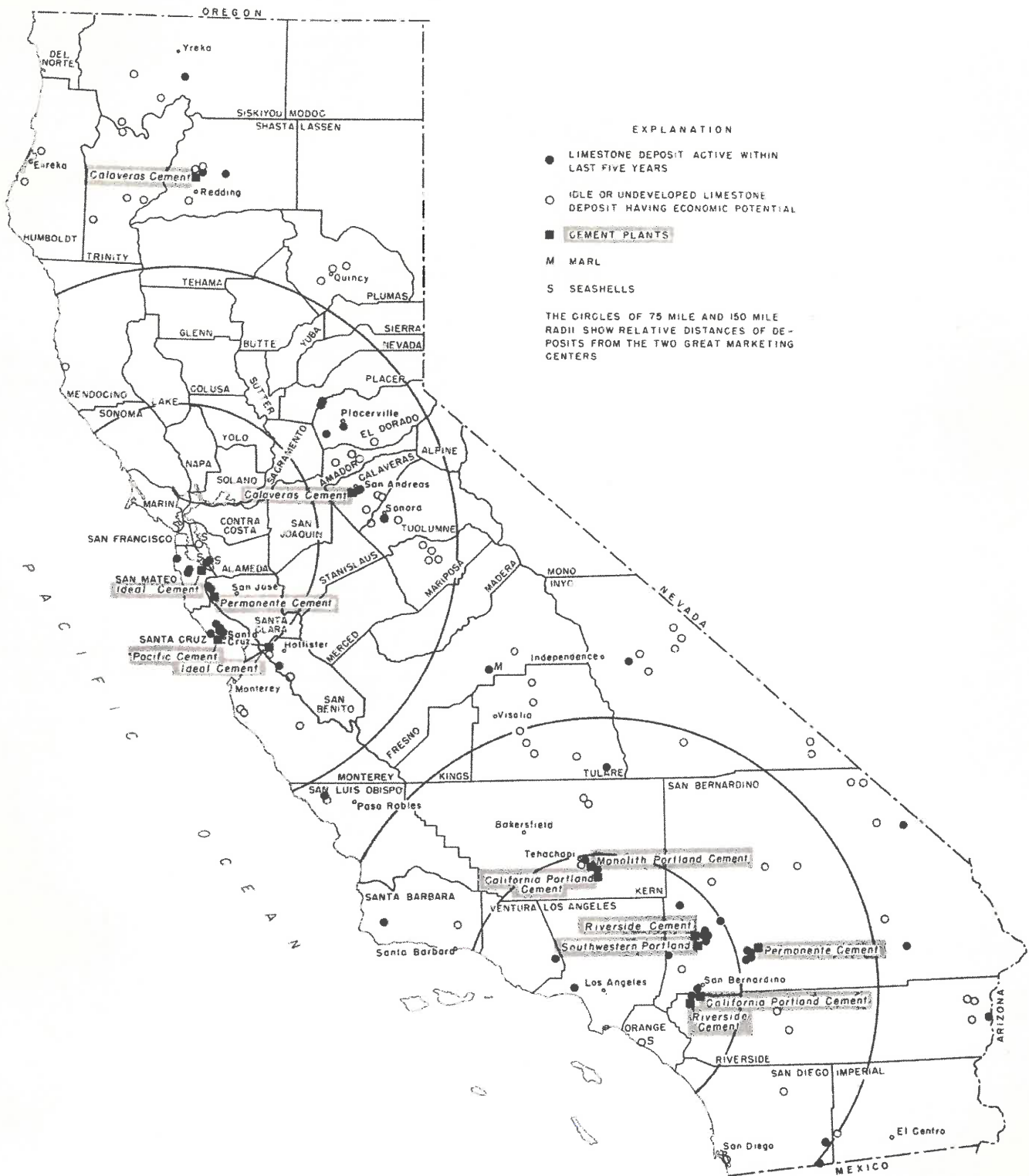
California leads the nation in production of portland cement. Its 13 mills produced 41,207,000 barrels of cement during 1961 (preliminary U. S. Bureau of Mines figures) valued at more than \$130,000,000 at the mill. Among California mineral products portland cement ranks in value per annum just behind products of the petroleum industry—petroleum, natural gas

liquids and natural gas. The industry provides direct employment for over 4,000 people and many others indirectly.

After nearly 4 years of fluctuating and at times markedly depressed demand, the industry once more is experiencing a steady increase in cement consumption. Nearly all firms are expressing optimism for the



California Portland Cement Company's plant and quarries at Creal siding, 9 miles west of Mojave in Kern County. This is a dry process plant having an annual rated capacity of 6,000,000 barrels. Initially constructed during 1954-55 it has been enlarged until it ranks among the 5 largest and most modern plants in California.



Map of California showing the location of the various cement plants with respect to the principal markets and to the limestone deposits of current and potential economic importance.

raw materials used. The plant was temporarily shut down during 1962 by a rock slide and operations have been curtailed from time to time by flooding on San Vicente Creek, but the plant has remained in almost continuous operation since 1906.

- 1908—First cement shipments made from Henry Cowell Lime and Cement Company at Cowell, Contra Costa County. Depletion of the calcareous tufa and travertine deposits and loss of rail facilities resulted in closing of the plant in 1942.
- 1909—Plant of Riverside Portland Cement Company erected at Crestmore, Riverside County. This plant, altered and enlarged several times, is now being rebuilt. Also completed during 1909 was a plant at Monolith near Tehachapi, Kern County. Originally built and operated by the City of Los Angeles to supply cement for the Los Angeles aqueduct, this plant was ultimately taken over and is still operated by Monolith Portland Cement Company. It is in process of modernization.
- 1910—The Golden State Portland Cement Company commenced production at Oro Grande, San Bernardino County. This plant was later taken over by Riverside Cement Company and was rebuilt during the period 1950-55.
- 1914—Old Mission Portland Cement Company began to build a plant at San Juan Bautista, San Benito County. First shipments made in 1918. This plant was later acquired by Pacific Portland Cement Company which in turn was sold to Ideal Cement Company in 1952.
- 1916—Establishment of Southwestern Portland Cement Company at Victorville, San Bernardino County. This plant has been enlarged and modernized several times.
- 1924—Opening of Pacific Portland Cement Company's plant at bayside in Redwood City, San Mateo County. This is the only California plant that utilizes seashells and bay mud. It is now operated by Ideal Cement Company.
- 1925—Yosemite Portland Cement Company built a plant at Merced, Merced County. A slaty limestone from a tributary to the Merced River Canyon was utilized. This plant closed down on June 30, 1944 when traffic over the Yosemite Valley Railroad was discontinued.
- 1926—Calaveras Cement Company opened a plant at San Andreas, Calaveras County. Productive capacity has

been tripled since World War II. Calaveras became a division of the Flintkote Company in 1960.

- 1930—Blue Diamond Corporation, Ltd. completed a grinding and finishing plant at Los Angeles utilizing clinker purchased from other companies. The company became a division of the Flintkote Company in 1961.
- 1931—National Cement Company of Dallas, Texas built a small plant (annual capacity 5,320 barrels) for making white cement at Chubbuck, San Bernardino County. It never operated at full capacity and was shut down in 1932.
- 1940—Establishment of the Permanente Cement Company plant at Permanente near Los Altos, Santa Clara County—currently the largest producer in California.
- 1952—Ideal Cement Company acquired the holdings of Pacific Portland Cement Company.
- 1954—California Portland Cement Corporation began construction of a new plant at Creal near Mojave, Kern County. The raw materials deposits were purchased from Ideal Cement Company. The plant capacity recently was enlarged to 6,000,000 barrels per year.
- 1955—Permanente Cement Company began construction of its second plant near Lucerne Valley, San Bernardino County. The capacity of this plant is now being more than doubled to 5,200,000 barrels per year.
- 1956—Pacific Coast Aggregates Company and Santa Cruz Portland Cement Company merged, the new corporation being re-named Pacific Cement and Aggregate Company.
- 1958—Riverside Cement Company, Peerless Cement Corporation of Detroit and Hercules Cement Corporation of Philadelphia merged, the new corporation being named the American Cement Corporation. Later that year the Phoenix Cement Company also became a division of American Cement Corporation.
- 1959—Calaveras Cement Company and the Blue Diamond Corporation, Ltd. became divisions of the Flintkote Corporation.
- 1961—The old Blue Diamond mill on Alameda Street in Los Angeles closed down January first and has been dismantled.
- 1962—The first shipments of cement from the new Redding plant of Calaveras Cement Division of the Flintkote Corporation were made, bringing the total number of California cement plants to 13.

The first of two parts. This article will be concluded in the next issue of Mineral Information Service.



Left. Miner engaged in the lost art of single-jacking. In single-jacking, a miner worked alone, using a short-handled, light-weight hammer to strike the drill, which he held in his other hand. Miner's candle is stuck into wall beside drill. Photo taken in the Keystone mine, Good Springs, Nevada, in 1902. Courtesy J.H. Morris.

EXHIBIT 18

1 Mark D. Harrison (State Bar No. 142958)
Adam K. Guernsey (State Bar No. 282105)
2 HARRISON, TEMBLADOR,
HUNGERFORD & JOHNSON LLP
3 2801 T Street
Sacramento, CA 95816
4 Telephone: (916) 382-4377
Facsimile: (916) 382-4380
5 Attorneys for Braavos, LLC.
6
7

8 **DECLARATION OF ROBERT DEL GAGNON**
9

10 I, Robert Del Gagnon, declare as follows:

11 1. I am a competent adult over the age of eighteen. I have personal knowledge of the
12 facts stated in this declaration and, if called as a witness in this matter, could and would testify
13 competently to those facts.

14 2. I currently reside at 46211 Tierra Del Oro, Palm Desert, California. I am the
15 founder of Del Gagnon Company (the "Company"). I am semi-retired now, but I am still active
16 in operating the Company with my wife, Lori, and my son, Adam. I founded the Company in
17 approximately 1962. The fundamental business of the Company is to acquire, hold, and sell
18 properties, with significant focus in the Southern California desert. Our acquisitions have, as will
19 be described, sometimes extended beyond the desert region, particularly for mining and mineral
20 resources properties. The Company also engages in brokering sales of properties throughout the
21 Southern California desert.

22 3. I was born on November 13, 1933, in Los Angeles. I attended both elementary
23 and high school in Santa Monica, California.

24 4. After college, I began training to become a lawyer, and I worked as a law clerk at a
25 law firm in Beverly Hills.

26 5. At this same time, my father was active in real estate, and had already been
27 investing in the Palm Springs and Palm Desert area for several years. After visiting this area with
28 my father on numerous occasions over the years, I changed my career path and became active in

1 real estate and the acquisition of valuable properties in the Palm Desert area. I moved to Palm
2 Desert approximately 60 years ago.

3 6. At or around the same time that I moved to Palm Desert, I opened a book and map
4 store named "Desert Map and Aerial Photo." The family still owns and runs this bookstore today.
5 Its address is 73612 Highway 111, Palm Desert, California.

6 7. I have always had a strong interest in mining and mining properties. Because of
7 this, I included as part of the bookstore a large section on mining. Further, there was an absence
8 of locations in the desert region to obtain United States Geologic Survey maps, and California
9 Division of Mines and Geology maps, which both show the location of mines and mineral
10 deposits. Those maps and books were instrumental in my locating of mining properties,
11 understanding the history of mining, and identifying valuable mine sites. I met many individuals
12 from the mining industry who frequented the store for maps and other information. Through the
13 connections made at Desert Map and Aerial Photo, I have been able to acquire information on
14 mining properties that I eventually purchased.

15 8. In 1982, I met Donald Gustafson ("Don") at Desert Map and Aerial Photo. Don
16 needed maps for business purposes. Don was well known in the mining industry, particularly for
17 his expertise in limestone and gypsum. Don and I became close friends over the years. Using my
18 knowledge of mining properties and coupling it with Don's extraordinary knowledge of the
19 market for limestone products, I began to acquire mining properties, in addition to my other real
20 estate investments.

21 9. My Company's general business model is to acquire properties that have inherent
22 value and hold them until the correct market conditions present themselves. Some properties are
23 profitable shortly after acquisition, while other properties take decades before they become
24 profitable. The amount of time that I hold a property depends on many factors including the
25 location, the market conditions, and any natural resources located on the property.

26 10. Throughout my career, my son and I regularly attended mining conferences to
27 increase our expertise about the mining industry, network with individuals in the mining industry,
28

1 and monitor markets to determine how to best acquire and hold properties with natural resources.
2 Engagement with the mining industry was, and is, a very important aspect of our Company, since
3 it is always likely that sites of these nature may be operated as partnerships or joint ventures given
4 the technical expertise and capital requirements to operate a significant mining operation.

5 11. In addition to the Chubbuck Mine, discussed more fully below, I have acquired
6 numerous other resource properties including: the Cactus and Short Horn gold mine, formerly
7 located just outside and now within the Joshua Tree National Park; mineral interests in gold
8 mines on properties in Northern California; a salt deposit near Pyramid Lake in the State of
9 Nevada, and hydrocarbon mineral interests in Kentucky.

10 12. Together with two partners, I owned and developed a sand and gravel deposit
11 north of Indio. The mine was located on Dillon Road. The mine contained a rock plant and it
12 operated under the name "Three Sheiks Boulder Company." Three Sheiks Boulder Company
13 sold rock and gravel to developers and golf courses in the area. After operating for some time,
14 Three Sheiks entered into a royalty agreement with an operator. I eventually sold the deposit to
15 Valley Rock and Sand.

16 13. Of all the properties my wife and I acquired over the years, I consider the
17 Chubbuck Mine to be the crown jewel of our property portfolio.

18 14. I first learned about the Chubbuck Mine by consulting topographic maps. These
19 maps indicated that the Chubbuck Mine was a mine site near both Cadiz Road and, very
20 significantly, an operating railroad. I believed at that time that the Chubbuck Mine would be a
21 valuable property based on the location, the access from Cadiz Road and the railroad, as well as
22 the market for limestone. I began to research the history of Chubbuck and the surrounding area.
23 I learned of the quality and magnitude of the limestone deposit and the mine's long and
24 significant operating record. The market for limestone materials had changed over the years, of
25 course, but from my own research and my collaboration with Don, I could see that the Chubbuck
26 mine could profitably continue to sell materials.
27
28

1 15. I purchased the Chubbuck Mine in three separate transactions, one in 1985 and
2 two in 1988. I approached the landowners at the time and purchased the Chubbuck properties
3 directly from them. I also purchased available interests in parcels between the Chubbuck mining
4 parcels and the railroad. From the historical records one can see public access roads and a single
5 gauge rail track running from the main line railroad to the mine itself.

6 16. Since our acquisition of the Chubbuck Mine, our Company has operated the
7 property as any owner of a significant deposit operates a property of this nature. We, of course,
8 keep taxes current. But more importantly, we hold the mineral reserve in inventory while we
9 monitor limestone markets, confer with experts in such markets, conduct testing as to quantity,
10 quality and volume and confer with transportation companies, in this case the adjacent railroad—
11 the Arizona and California Railroad. We have operated the mine in this way and, obviously,
12 never intended to give up my rights in the Chubbuck mine or ever took any action of any nature
13 that would suggest to anyone that we intended to abandon my Company's, and our family's, key
14 holding.

15 17. Even though the mine is very remote, over the years there have been modest sales
16 of stockpiled material during our ownership in both 1999 and 2001. Our primary operation of the
17 mine has been to continue to hold it in inventory and prepare the site for continuing production as
18 the market develops for this resource in this area.

19
20 I declare under the penalty of perjury that the foregoing is true and correct. Executed this
21 29 day of June 2020, in Palm Desert, California.


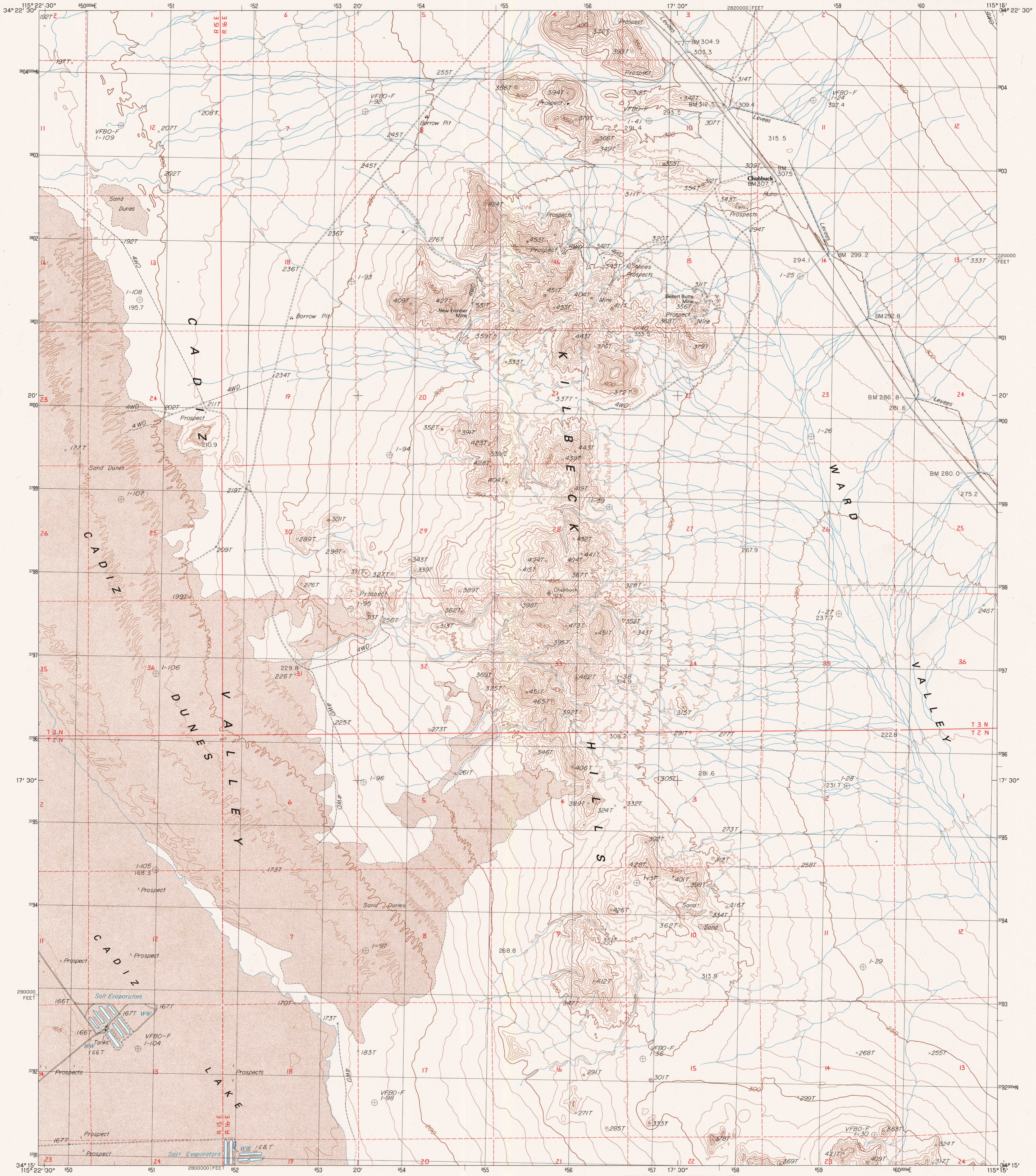
22
23 
24 _____
25 Robert Del Gagnon
26
27
28

EXHIBIT 19



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY U.S.G.S. NOS. 10000
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1981
FIELD CHECKED 1982 MAP EDITED 1985
PROJECTION UNIVERSAL TRANSVERSE MERCATOR
GRID 1000-METER UNIVERSAL TRANSVERSE MERCATOR ZONE 11
10,000-FOOT STATE GRID TICKS CALIFORNIA, ZONE 5
UTM GRID DECLINATION 0957 EAST
1980 MAGNETIC NORTH DECLINATION 14° EAST
VERTICAL DATUM 1927 NORTH AMERICAN DATUM
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
(0 meters north / 76 meters east)
There may be private inholdings within the boundaries of any
Federal and State Reservations shown on this map
No distinction made between houses, barns and other buildings

PROVISIONAL MAP
Produced from original
manuscript drawings. Infor-
mation shown as of date of
photography.

SCALE 1:24 000
1 000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000
KILOMETERS
METERS
MILES
FEET
CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVALS 5 METERS
CONTOUR ELEVATIONS SHOWN TO THE NEAREST 0.1 METERS
OTHER ELEVATIONS SHOWN TO THE NEAREST METER
To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, 2093 K ST., COLORADO 80225, OR RESTON, VIRGINIA 22092

CONTOURS AND ELEVATIONS IN METERS
ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route U.S. Route State Route
QUADRANGLE LOCATION
1 2 3 4 5 6 7 8
1 Cadiz Lake NW
2 Cadiz Lake NE
3 Sheep Camp Spring
4 Cadiz Lake
5 Milligan
6 Cadiz Valley NW
7 Cadiz Valley NE
8 Iron Mountains
CHUBBUCK, CALIF.
PROVISIONAL EDITION 1985
34115-C3-TM-024 188

EXHIBIT 20

TRI-STATES ROCK & MINERAL, INC.

4802 Fifth Street
Fallbrook, CA 92028
(760) 310-2828

(760) 310-2603 cell

December 9, 1999

Robert Del Gagnon
73-612 Highway 111
Palm Desert, CA 92260

Re: Right to Enter/Mine

Dear Mr. Gagnon:

The purpose of this letter is confirm that you have agreed to allow Tri-States Rock & Mineral, Inc., and its agents, employees and subcontractors, a right to enter the property described on Exhibit "A" attached hereto owned by you, for a period of six months for the purpose of performing quality and marketability testing of the rocks and minerals located on the property. Under this agreement, Tri-States shall have the right to remove and sell rock and mineral materials from your property, for which it will pay to you a royalty of \$1.00 per ton removed within sixty (60) days of removal. Weight slips for all material removed from the site will be provided to you on a regular basis.

Tri-States will maintain the appropriate general liability and workmen's compensation insurance to cover its operations at all times during the term of this agreement.

During the six month period referenced above, you and I will discuss the possibility of Tri-States leasing, leasing with an option to purchase, or outright purchasing your property.

If the above is acceptable to you, please sign and date where indicated below. The six month test period will commence on Monday, December 13, 1999, and expire on May 12, 2000, unless otherwise extended by a written agreement between the parties.

Sincerely,

TRI-STATES ROCK & MINERAL, INC.

ACCEPTED:


NEIL R. ZOLLER, President


ROBERT DEL GAGNON

12/9/99

DLZ:dq

Call: 3/27/00 re update Sold 6000 TONS of rock to mesquite
Haul to Overton + 20.00 per Ton For Golf Course/Bunker
*3/4" SAND
4/26/00 Casco/Myra Everett re Limestone mine

EXHIBIT 21

ROCKET MATERIALS INC.
6546 Bradford Street
San Diego, CA 92115

March 30, 2002

Robert Del Gagnon
73-612 Highway 111
Palm Desert, CA 92260

Re: Right to Enter/Mine

Dear Mr. Gagnon:

The purpose of this letter is to confirm that you have agreed to allow Rocket Materials Inc., and its agents, employees and subcontractors, a right to enter the property described on Exhibit "A" attached hereto owned by you, for a period of six months for the purpose of performing quality and marketability testing of the rocks and minerals located on the property. Under this agreement, Rocket Materials shall have the right to remove and sell rock and mineral materials from your property, for which it will pay to you a royalty of \$1.00 per ton removed within sixty (60) days of removal. Weight slips for all material removed from the site will be provided to you on a regular basis.

Rocket materials will maintain the appropriate general liability and workmen's compensation insurance to cover its operations at all times during the term of this agreement.

During the six months period referenced above, Robert Del Gagnon and Rocket Materials Inc. shall agree to the lease, lease purchase, or outright purchase of your property.

If the above is acceptable to you, please sign and date where indicated below. The six month test period will commence on Monday April 1, 2002 and expire on October 1, 2002.

Sincerely,

Cecyenne Everett

Rocket Materials Inc.

Accepted:

Robert Del Gagnon

Robert Del Gagnon

4-1-02

LEGAL DESCRIPTION

✓ APN #644 211 02)

38 ± Acres

Taxes \$ 11.82

The Southeast quarter of the Southeast quarter, less right of way, Section 10, Township 3 North, Range 16 East, San Bernardino Base and Meridian.

(APN #644 221 02)

120 Acres

Taxes \$ 26.09

✓ The Northeast quarter of the Southwest quarter and the Northwest quarter of the Southwest and the Southwest quarter of the Northwest quarter of Section 15, Township 3 North, Range 16 East, San Bernardino Base and Meridian.

✓ (APN #644 221 06) 120 Acres

Taxes \$ 26.09

The Southwest quarter of the Southeast quarter and the Southeast quarter of the Southwest quarter and the Northwest quarter of the Southeast quarter of Section 15, Township 3 North, Range 16 East, San Bernardino Base and Meridian.

✓ (APN #644 221 07) 80 Acres

Taxes \$ 19.17

The Northwest quarter of the Northeast quarter and the Northeast quarter of the Northwest quarter of Section 22, Township 3 North, Range 16 East, San Bernardino Base and Meridian.

✓ (APN #644 231 03) 640 Acres

Taxes \$ 72.70

All of Section 21, Township 3 North, Range 16 East, San Bernardino Base and Meridian.

plus - 320 AC - APN - 644-201-5
E 1/2 of Sec 10 T 3 N R 16 E SBBM

EXHIBIT 22

June 18, 2014

Adam Gagnon
Del Gagnon Company, Inc.
73-612 Highway 111
Palm Desert, CA 92260

Re: Preliminary Mineral Potential of the Braavos LLC property at Chubbuck, San Bernardino County, California

This letter report documents the results of the preliminary mineral potential study of the Braavos LLC (Client) property at Chubbuck, San Bernardino County California. The study conducted assessed the economic potential of the carbonate resources at the Chubbuck mine area. The Chubbuck Mine is located in south central San Bernardino County. The Chubbuck site area is located about 20 miles south of Chambliss on Route 66, and about 28 miles north of State Highway 62 on Cadiz Road (see Figure 1, Location Map of the Chubbuck Mine Area). Access from the north (Route 66) and the south (Route 62) is via Cadiz Road - a well-graded road.

The site is situated in the north-south trending Kilbeck Hills (see property map photo Figure 2). The property consists of 1,318 acres, in Sections 10, 15, 16 and 21, T 3N, R16E, SBBM. The land is patented and is owned by the Braavos LLC. The Client property is surrounded by BLM managed lands, private property and state lands (Figure 3, BLM Land Use Map).

Scope of Work:

- Acquisition and examination of relevant geological and analytical data. The data acquired included materials supplied by the Client as well as publically available historical and geological information. In addition the investigators had access to mapping, sampling and drilling data conducted by Howard Brown, a TerraMin's Associate, in the early 1980's.
- Reconnaissance field review was conducted on March 19, 2014. The one man-day reconnaissance included field checking existing mapping, and sample collecting. Considerable time was spent in attempting to access the mapped carbonate resources in the south part of Section 16 at a specific request of the Client.
- Report preparation including compilation of a geologic map from published and unpublished geological mapping from the U.S Geological Survey and Howard Brown and preliminary calculations of recoverable carbonate resources.

History: In 1921 Charles Inglis Chubbuck purchased 1,600 acres of mining claims to provide a source for whiting agents for products of Union Carbide and as crushed limestone and lime products. In 1922 and 1923 there was considerable construction at Chubbuck siding. A mining railroad, town and processing facilities were built, however full scale mineral production did not begin until 1925.

The mine was located along the original Parker branch of the Santa Fe railroad. The rail line is owned by the Arizona and California Railroad Co. The limestone products were shipped by rail to San Francisco and Los Angeles.

Limestone from the mine was transported by rail approximately 600 feet to a crushing and screening plant just below the mine. Five different products were produced; 5/16 and ½ inch were taken to the lime kiln and 1/8, 16 and 40 mesh were taken to the limestone plant. Both plants and lime kilns were located at the Chubbuck rail siding.

Chubbuck was a town with 30 to 40 buildings and a school. There were residences for 24 families, the limestone plants, and support structures.

Chubbuck limestone products were used in the construction of the Colorado River Aqueduct in 1937 to 1938. At one time, 90% of the homes built in Palm Springs had Chubbuck products used in roof coatings. Production at Chubbuck continued from 1925 until 1951 when the facility closed.

The Harms Brothers Construction Company purchased the property in 1951 with the intention of mining the limestone to make lime but found too much silica in the rock to make salable products. In 1954 all the site equipment was auctioned off. The Chubbuck rail siding was removed in 1975 – 1976 when new track was installed. There has been no production or mining at the site since 1951.

Geology: The Chubbuck area (Kilbeck Hills) has exposed a complexly deformed assemblage of Pre Cambrian gneisses, Paleozoic and early Mesozoic carbonate and no-carbonate facies metasedimentary rocks, and several varieties of plutonic rocks. Meta sedimentary rocks present are correlated with Cordilleran platform and shelf facies rocks, and include Cambrian Tapeats Sandstone, Bright Angel Shale, Bonanza King formation (Muav limestone member), Mississippian Monte Cristo formation, Pennsylvanian / Permian Bird Spring and Triassic Moenkopi formation. Metamorphic and Structural deformation in the area is intense and includes several episodes of thrust faulting and folding, which have “shuffled” the sedimentary deck. The result is a pile of folded thrust nappes in which rocks of various ages are bounded by thrust faults and have been stacked together and subsequently refolded. Deformation occurred during several phases of a prolonged sequences of tectonic events which affected the central Mojave region during middle – late Mesozoic time. High angle faults and open warps of Cenozoic age are also present.

The “simplified” Geologic Map compilation accompanying this report partly indicates the extreme complexity of the geology in the subject area (Figure 4). The major carbonate units in this area are the Metamorphosed Kaibab Limestone (Pk – primarily dolomitic), the Permian and Pennsylvanian aged marbles and dolomitic marble (PMb – primarily rocks of the Bird Springs Formation) and the Devonian and Cambrian age marble and dolomitic marbles of the Bonanza King Formation (DCm). The relevant geologic units for this report are described in Appendix A.

The property under investigation can be divided into specific areas for potential development based on the carbonate resources recognized within those discrete areas. The Client parcels (as depicted on Figure 2, the aerial photo) are superimposed on the Geologic Map (Figure 4) in red outline. Brief descriptions of the carbonate resources in the parcels are provided below:

- **Parcels 1 and 3:** Parcels 1 and 3 (Figure 5) located in Sections 15 and 16, contain the carbonate resources of the Bird Spring Formation (PMb as identified by Brown, 1980), and dolomitic marble identified as the Bonanza King formation (DCm). This report includes preliminary estimates of the recoverable carbonates in these parcels.
- **Parcel 2:** Parcel 2 (Figure 6), located in Section 10 is located just north of identified carbonate resources. In the early 1980’s Howard Brown mapped sampled and drilled the hill adjacent to Parcel 1 and identified about 3 to 7 million tons of mineable carbonate resources.
- **Parcels 4 and 5:** Parcels 4 and 5 (Figure 7) are located within Section 15 and include the major sites of past mining operations. The major carbonate units exposed there (and the target of past mining operations) are the Bird Springs Formation (PMb). The Kaibab limestone (PK) is exposed in the southern part of Parcel 4 and in Parcel 5 but is mostly recorded as dolomitic.
- **Parcel 6:** Parcel 6 (Figure 8) includes the entire area of Section 21. Although there are exposures of carbonates (PMb) in the extreme northern part of Parcel 6, these exposures are small, largely inaccessible except overland. The major geologic units within Section 21 are the late Cretaceous age Cadiz Lake granodiorite (Kccl) and the Old Woman Granodiorite (Ko) as mapped by Howard (2002 – Figure 9).

Reserve Calculations: After reviewing the available geologic data and mapping (from Brown, 1980, and Howard, 2002), conducting field reconnaissance and sampling and reviewing testing results, the investigators determined that the primary unit of interest is

the exposures of the metamorphosed Bird Spring Formation (PMb on the geological maps) in Parcels 1 and 3 (Figure 5) and Parcels 4 and 5 (Figure 7). Although there are other carbonate units on the properties, they are mostly dolomitic or siliceous and have marginal product value. The testing results indicated that the Bird Springs is the most viable target resource unit (see sampling map and testing results in Appendix C). These two areas appear to host potentially mineable Bird Spring formation marble which appear in testing to be high grade carbonate suitable for the existing market.

The Geologic Map (Figure 4) and geologic sections in Parcels 4 and 5 (A-A' Figure 7) and Parcels 1 and 3 (B-B' Figure 5) show the Bird Spring Formation dipping 20 to 45 degrees to the north. The geologic cross section from Howard (2002) indicates that the Bird Spring unit shows a continuous dip of several hundred feet below grade, however for the purposes of this report, and in the absence of subsurface data, we use a conservative 100 feet of depth for reserve calculations. This would provide an open pit mine with approximately four benches to the bottom. Exploration drilling could verify the extension depth of the Bird Spring formation and possibly identify additional reserves.

For all Bird Spring unit calculations we use 2.2 tons/Yd³: Waste factor is estimated to be as 30% or higher.

- Parcels 4 and 5 tonnage estimate: a total of 22,000,000 Yd³ of marble multiplied by factor 2.2 tons / yd³ = 48.7 million tons of material (see cross sections and calculations in Appendix B).
- Parcels 1 and 3 tonnage estimate: a total of 14.7 million Yd³ of marble multiplied by factor 2.2 tons / yd³ = 32.3 million tons of material (see cross sections and calculations in Appendix B).


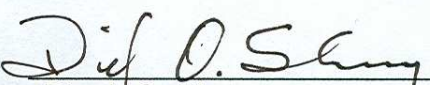
A third area, south of Parcel 2 (Figure 6) is located near the entrance road and the railroad tracks. This area was mapped and drilled by Omya and found to contain 3 to 7 million tons of Bird Spring formation, but most of the identified material is just south adjacent to the Braavos LLC Parcel 2 property. Figure 3 shows the land management status. The lands drilled by Omya are managed by the BLM, and could be put under claim for chemical grade calcium carbonate.

Reserve summary: Parcels 4 and 5 + Parcels 1 and 3 = 48.7 + 32.3 = 80.7 million tons of Bird Spring Formation. Although no subsurface information exists to verify the reserves (Appendix B), the investigator conservatively estimates that the Bird Spring Formation resources total 80 to 100 million tons of mineable reserves at Chubbuck.

Recommendations: Reconnaissance geologic field work at the Braavos LLC Properties near Chubbuck is encouraging. Access to previous mapping by Brown (1980) and Howard (2002) and sampling for this study had identified potential resource

areas, primarily associated with the Bird Springs Formation. It is recommended that a more extensive surface sampling program and detailed mapping of the carbonates be conducted to identify additional areas of resources. It is further recommended that a drilling program be conducted in the two areas of interest (Parcels 1 and 3, and Parcels 4 and 5) to extend the depth of identified resources. Please contact me if you have any questions.

Sincere regards,


Douglas C. Shumway
Mining Engineer
Dinah O. Shumway
Principal Geologist
CA RG 5818

References:

- Brown, H., 1980, Geology of a portion of the Chubbuck Area, San Bernardino County, California, proprietary report.
- Brown, H.J., 1980, Chubbuck Marble Deposit, San Bernardino County
- Howard, K. A., 2002, Geologic Map of the Sheep Hole Mountains 30' x 60' Quadrangle, San Bernardino and Riverside Counties, California
- Wright, L.A., Stewart, R.M., Gay, T.E., Hazenbush, G.C., 1951, Mines and Mineral Deposits of San Bernardino County California., p. 173, 152.
- Vredenburg, L.M., Shumway, G.L., Hartill, R.D. 1981, Desert Fever: an overview of mining in the California Desert, Living West Press, p. 132-134

Figures and Tables

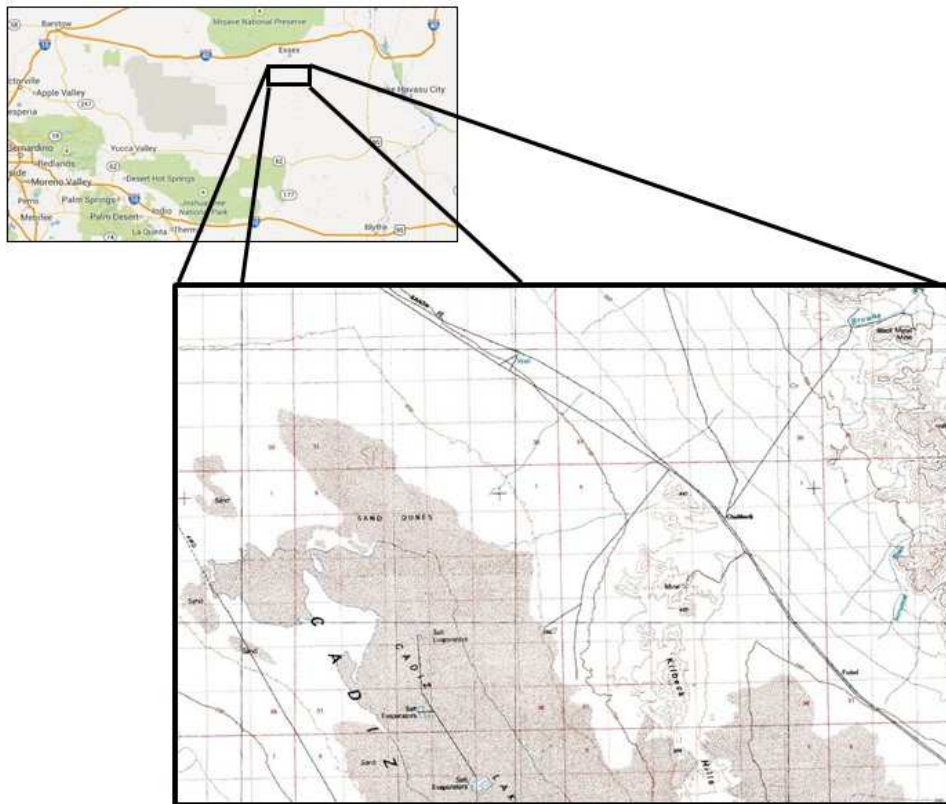


Figure 1: Location Map for the Gagnon Properties at Chubbuck, San Bernardino County, California

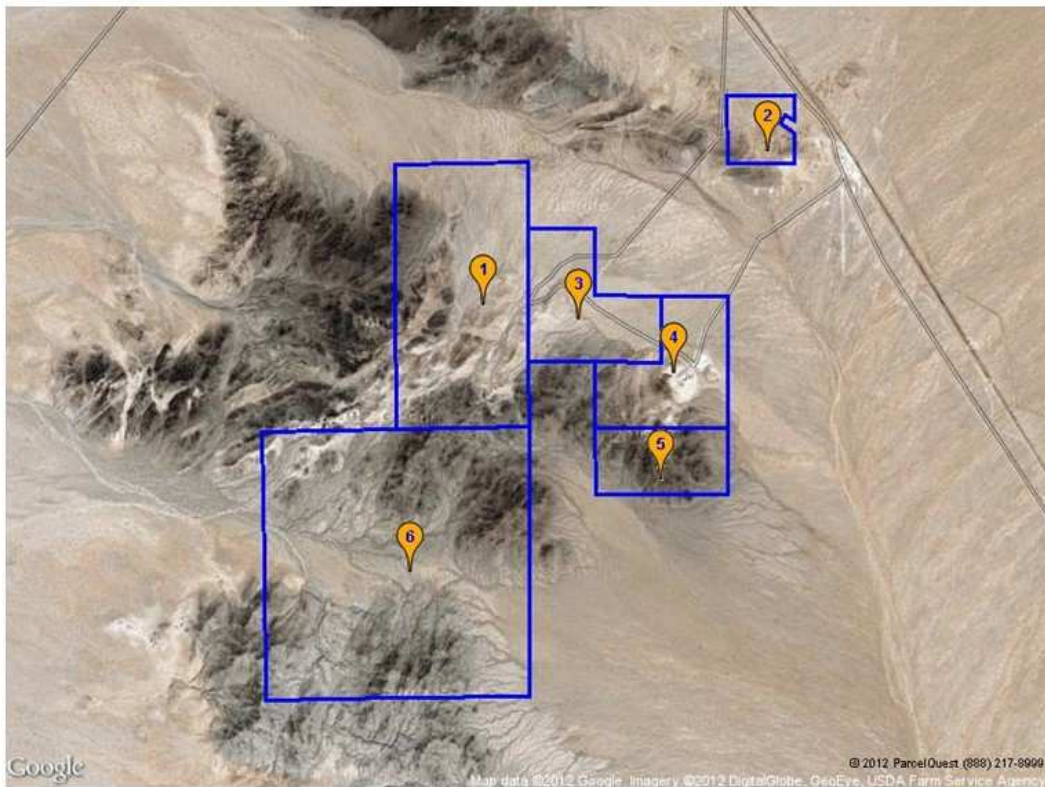


Figure 2: Areal Photo showing the Gagnon Properties, near Chubbuck, San Bernardino County, California

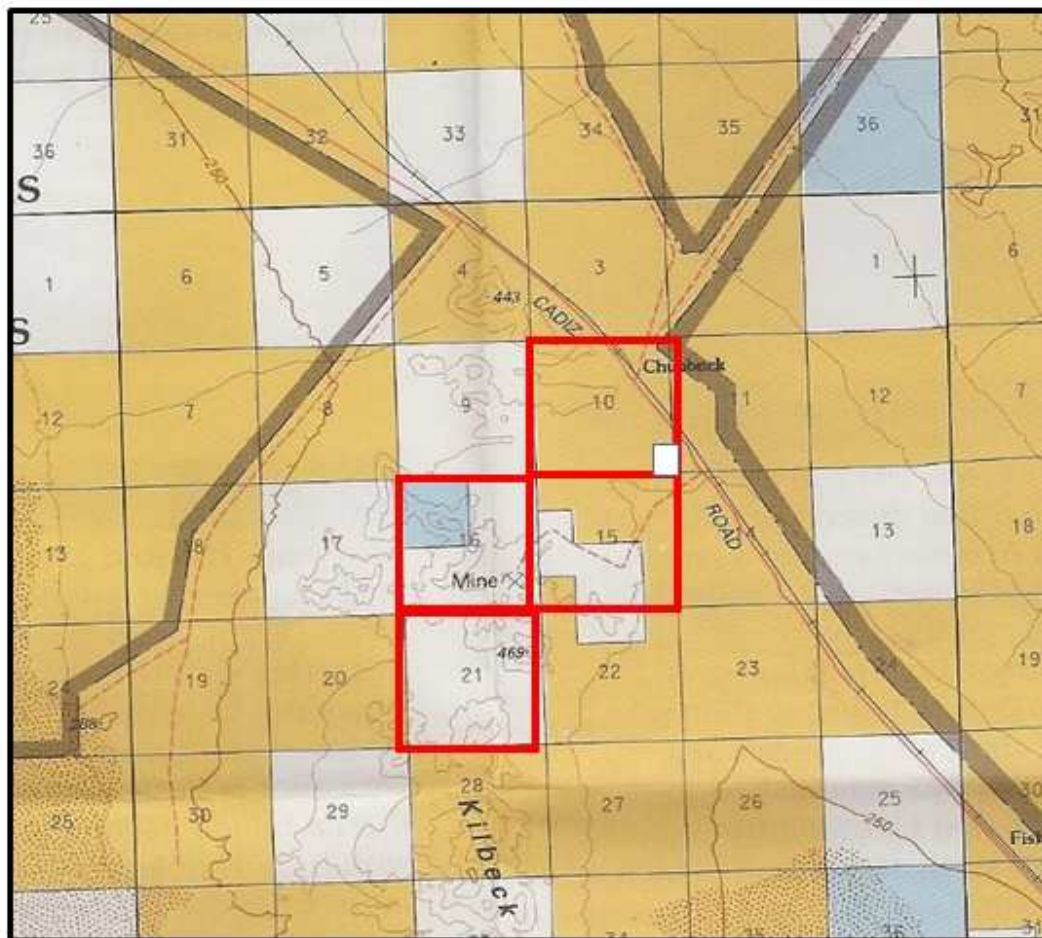


Figure 3: Bureau of Land Management Land Use Map: Sections 10, 15, 16 and 21 shown in red outline; BLM managed lands in yellow; Private / Patented lands in white; California State Lands in blue

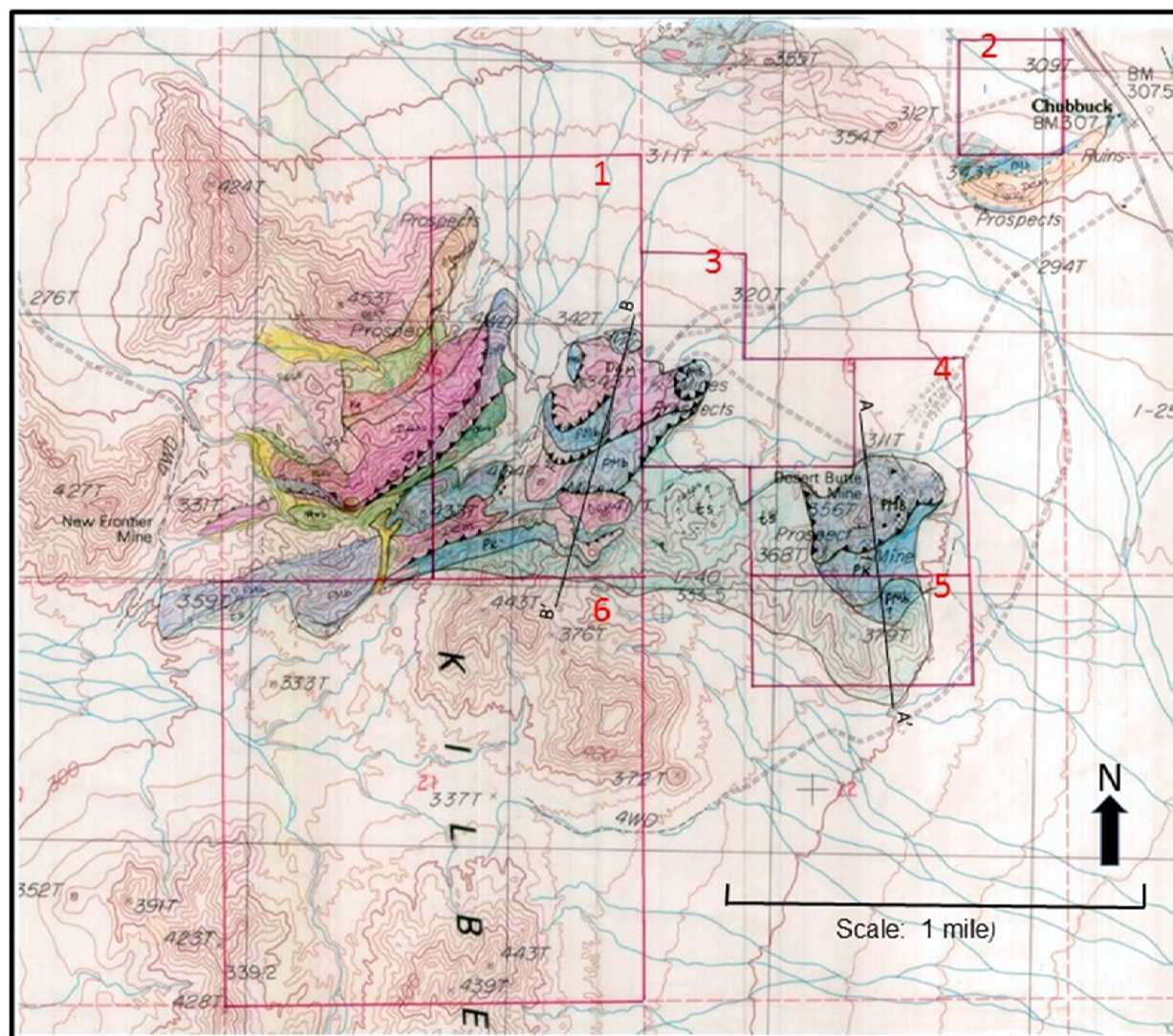


Figure 4: Geological Map of the Kilbeck Hills, near Chubbuck, San Bernardino County, California; Shown are the Braavos LLC Property Parcels (in red outline), and the location of cross sections A-A' and B-B'

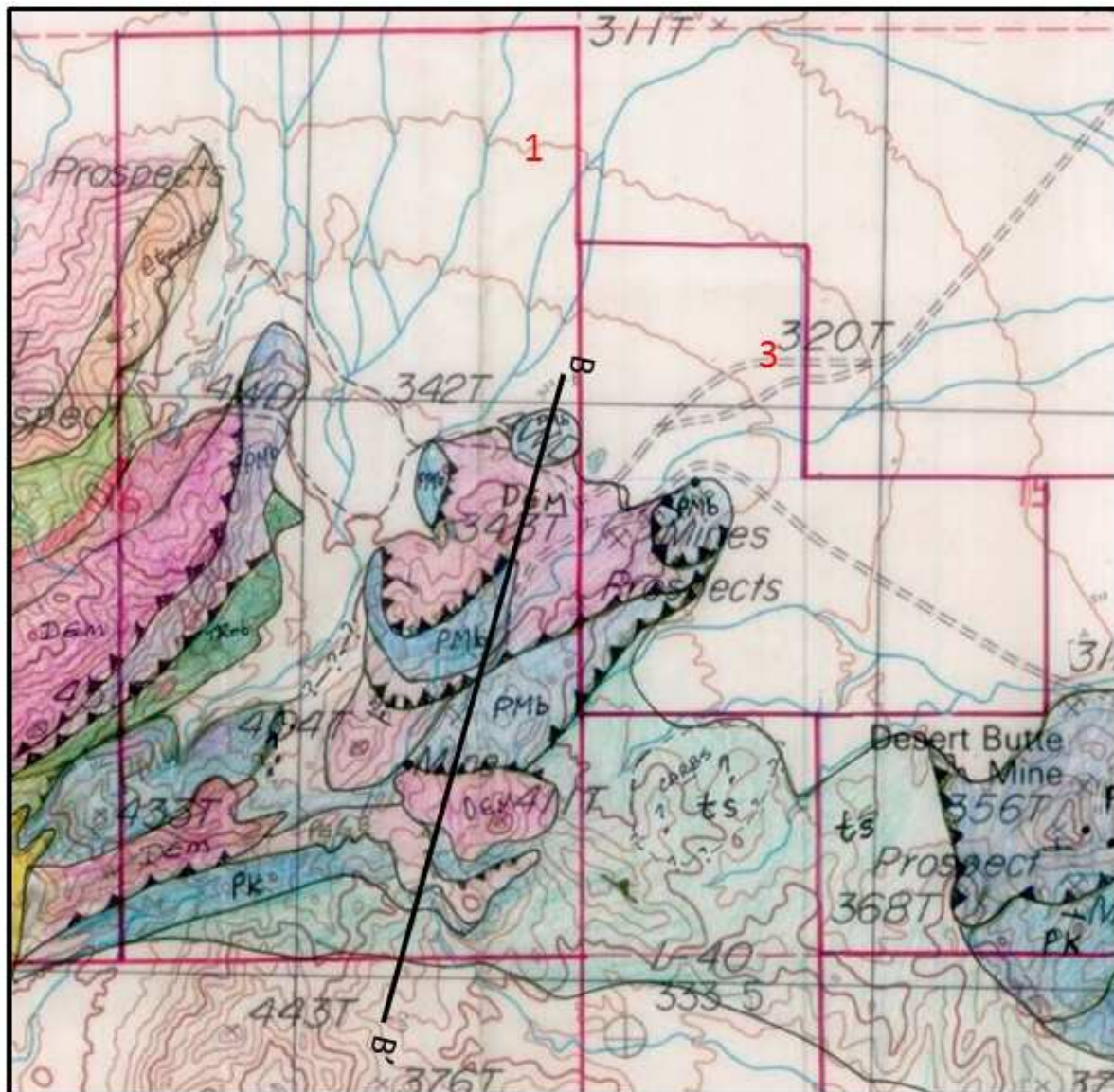


Figure 5: Geologic Map of Gagnon Parcels 1 and 3 showing the location of cross section B-B'; Appendix A describes the units shown and discussed in the text of this report

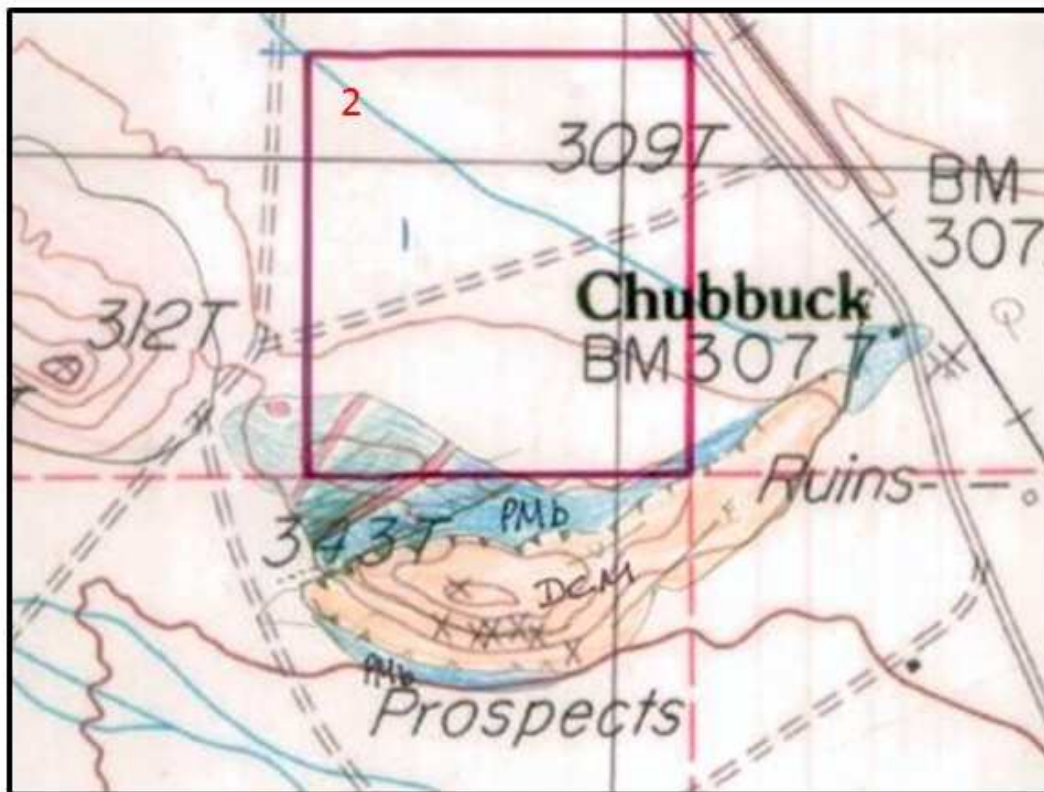


Figure 6: Geologic Map of Gagnon Parcels 2; Appendix A describes the units shown and discussed in the text of this report

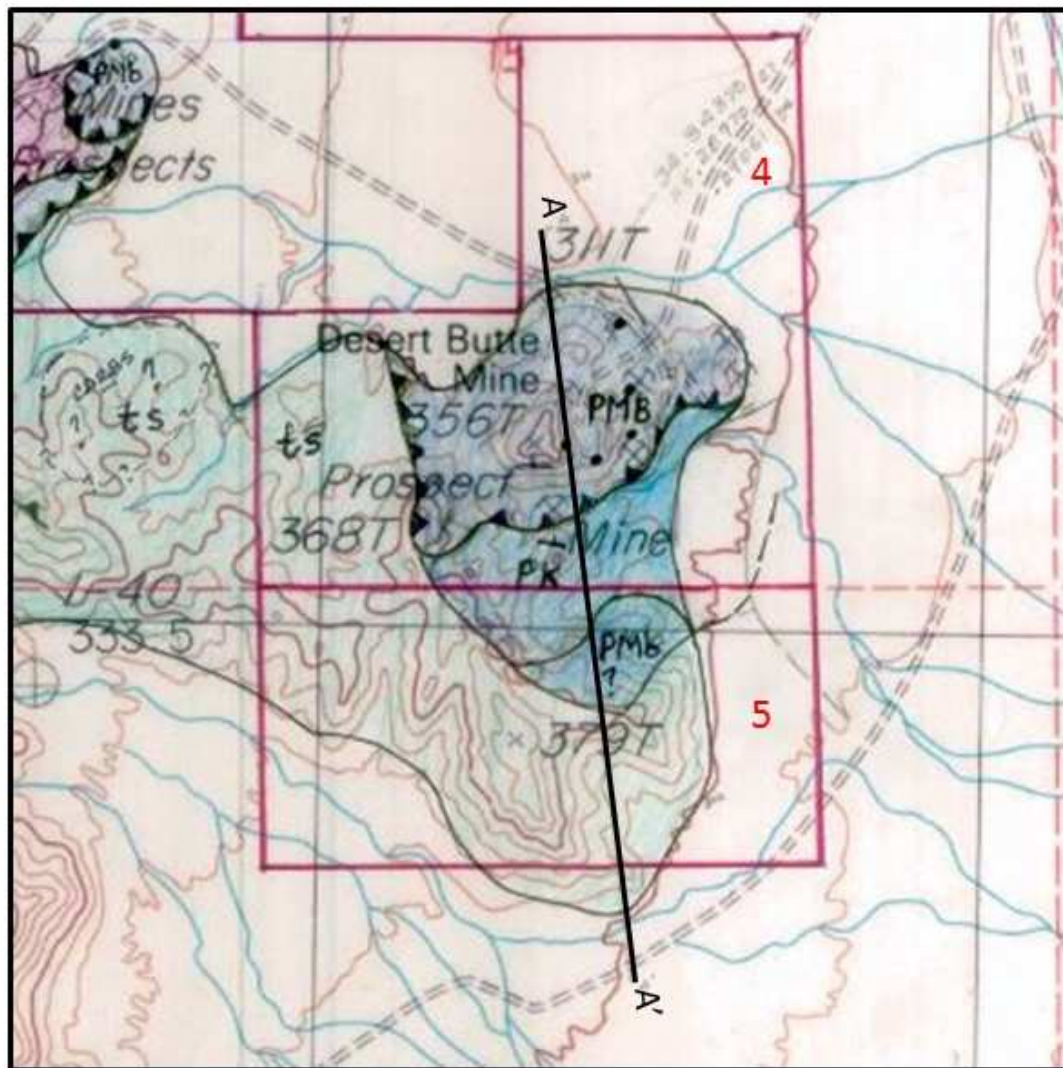


Figure 7: Geologic Map of Gagnon Parcels 4 and 5 showing the location of cross section A-A'; Appendix A describes the units shown and discussed in the text of this report

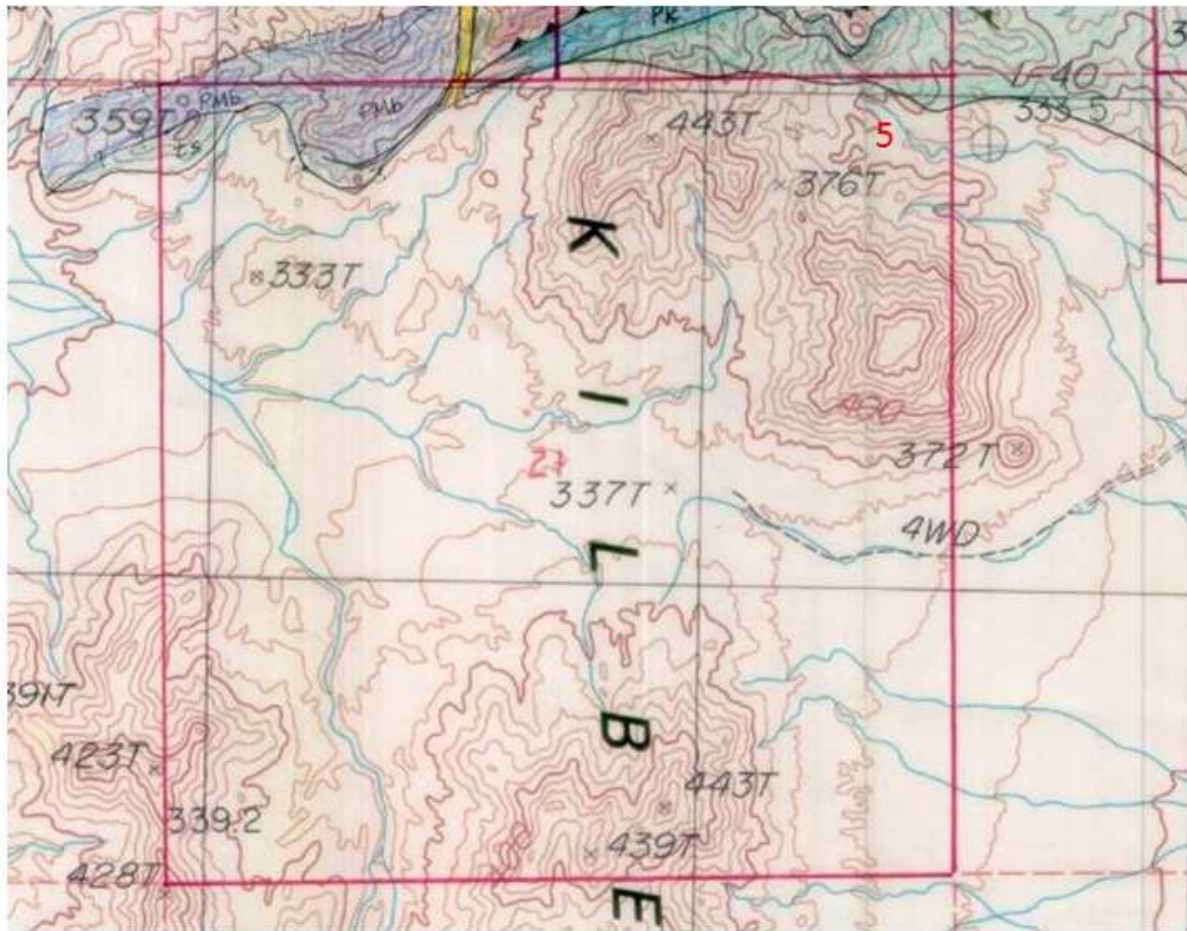


Figure 8: Partial Geologic Map of Gagnon Parcel 5, Section 21, T3N, R16E; Appendix A describes the units shown and discussed in the text of this report

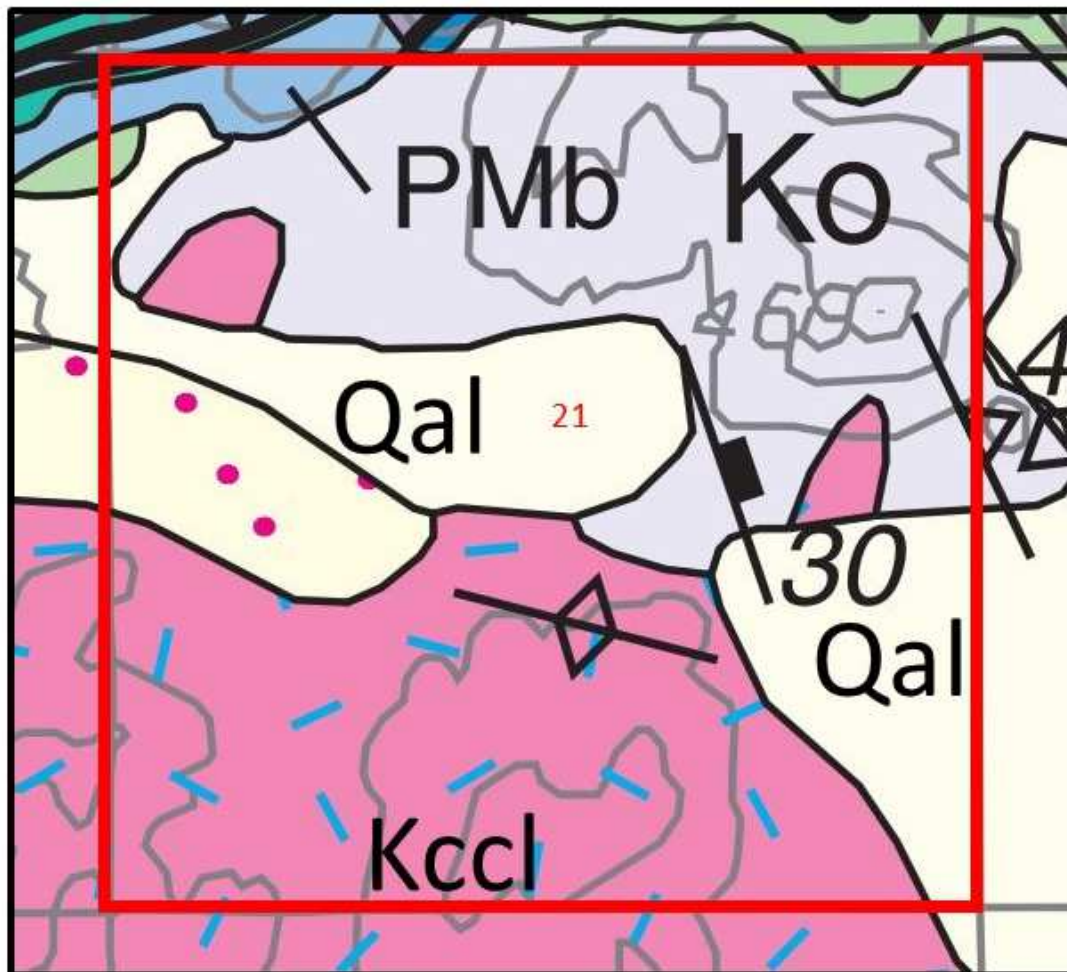


Figure 9: Geologic Map of Gagnon Parcel 5 (Section 21, T3N, R16E); Geology from Howard, 2002. The Appendix A describes the units shown and discussed in the text of this report

Appendix A Geological Map Symbols and Geological Units





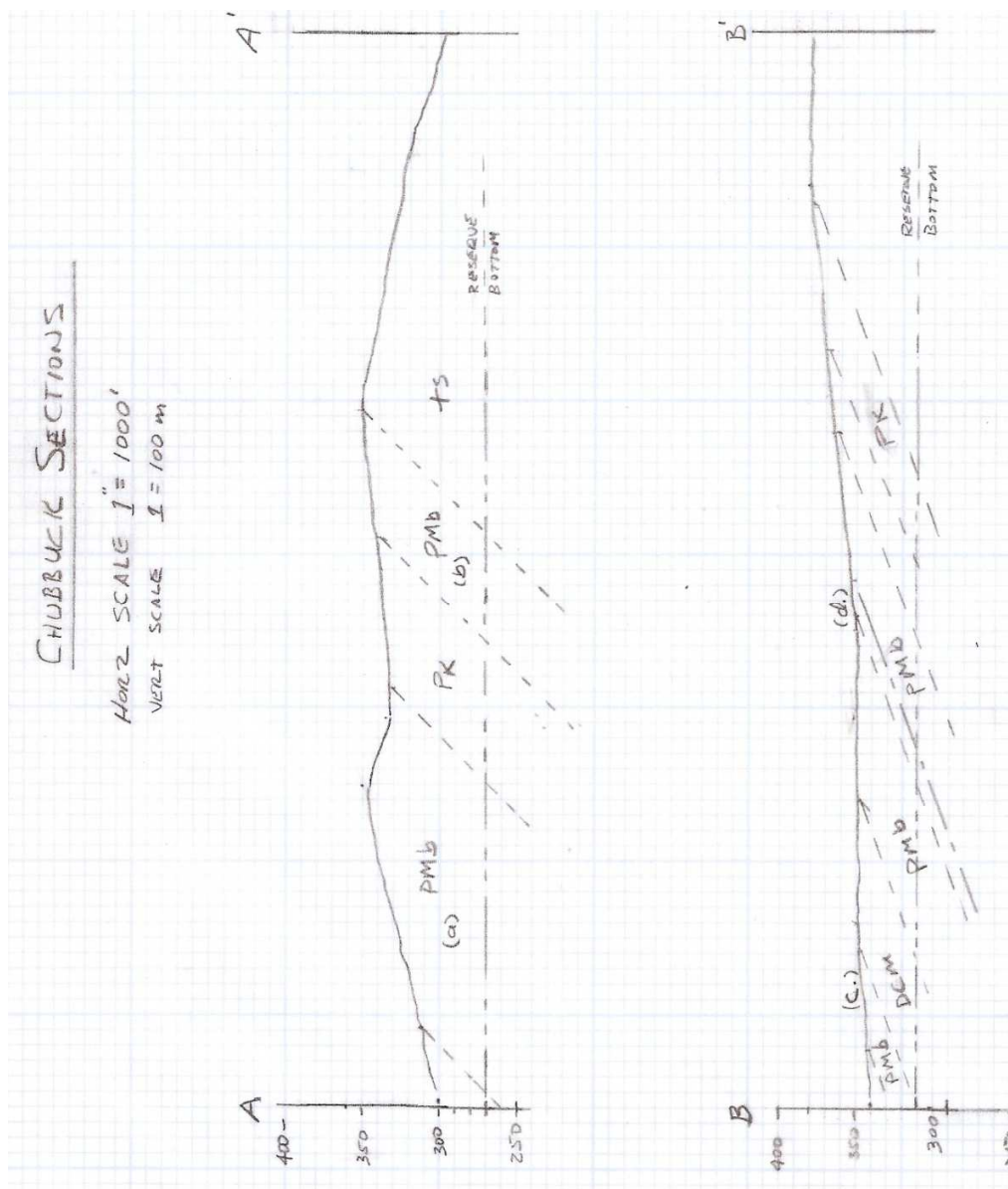
LEGEND	
Ko	Old Woman Mountains Granodiorite (Late Cretaceous) Medium-grained, granodiorite; 71 Ma +/-
Kop	Old Woman Mountains Granodiorite (Late Cretaceous) Medium-grained, granodiorite and monzogranite;
T _{rb}	Buckskin Formation(Triassic) : Calc-schist, pelitic schist, and gneiss; correlative with the Moenkopi Formation
PK	Kaibab Limestone (Permian and Pennsylvanian), metamorphosed dolomitic calcitic marble and fine grained metaquartzite
PMb	Bird Spring Formation (Pennsylvanian/Permian): metamorphosed calcitic marble, quartzitic and wollastonite marble and quartzite
DCm	Bonanza King Formation (Devonian): metamorphosed; brownish dolomitic marble and gray calcitic marble
Ct	Tapeats Sandstone (Cambrian) :fine-grained to conglomeratic,cross-bedded quartzite
Xf	Fenner Gneiss (early Proterozoic)
ts	Proterozoic age: Highly foliated, gneiss; heterogeneous, highly strained and recrystallized
	Geologic Contact
	Thrust Fault
	Strike and dip
	Property Boundary

Table describing the relevant units that outcrop on the Gagnon Parcels in the Kilbeck Hills, near Chubbuck, San Bernardino County, California

APPENDIX B

Cross Sections and Reserve Calculations



CHUBBUCK RESERVE CALCULATIONS

FROM GEOLOGIC SECTIONS

Pmb = BIRD SPRING FORMATION

SECTION A-A'

PARCEL 4: $Pmb = 1200' \times 1700' = 2,040,000 \text{ FT}^2$

(a) $250' \times 2,040,000 = 510,000,000 \text{ FT}^3$

PARCEL 5: $600 \times 700 = 420,000 \text{ FT}^2$

(b) $200' \times 420,000' = 84,000,000 \text{ FT}^3$

PARCEL 4 + 5 = $510 \text{ M} + 84 \text{ M FT}^3 = 594 \text{ M FT}^3$

$594 \text{ M FT}^3 \div 27 \text{ FT}^3/\text{YD}^3 = 22 \text{ M YD}^3$

$2.2 \text{ TONS}/\text{YD}^3 \times 22 \text{ M YD}^3 = 48.4 \text{ M tons}$

SECTION B-B'

PARCEL 3: $500' \times 600' = 300,000 \text{ FT}^2$

(c.) $300,000 \text{ FT}^2 \times 200' = 60 \text{ M FT}^3$

PARCEL 1 + 3:

(d) $1200' \times 1200' = 1,44 \text{ M FT}^2$

$1.44 \text{ M FT}^2 \times 200' = 288 \text{ M FT}^3$

(e.) $600' \times 400' = 240,000 \text{ FT}^2$

$240,000 \times 120' = 28.8 \text{ M FT}^3$

(f.) $1000' \times 200' = 200,000 \text{ FT}^2$

$200,000 \times 100 = 20 \text{ M FT}^3$

$c + d + e + f = 60 \text{ M FT}^3 + 288 \text{ M FT}^3 + 28.8 \text{ M FT}^3 + 20 \text{ M FT}^3$
 $= 396.8 \text{ M FT}^3$

$396.8 \text{ M FT}^3 \div 27 \text{ FT}^3/\text{YD}^3 = 14.7 \text{ M YD}^3$

$14.7 \text{ M YD}^3 \times 2.2 \text{ TONS}/\text{YD}^3 = 32.3 \text{ M tons}$

TOTAL TONS = $48.4 + 32.3 \text{ M tons} = \underline{80.7 \text{ M tons}}$

Appendix C

Sample Location Map and Testing Results

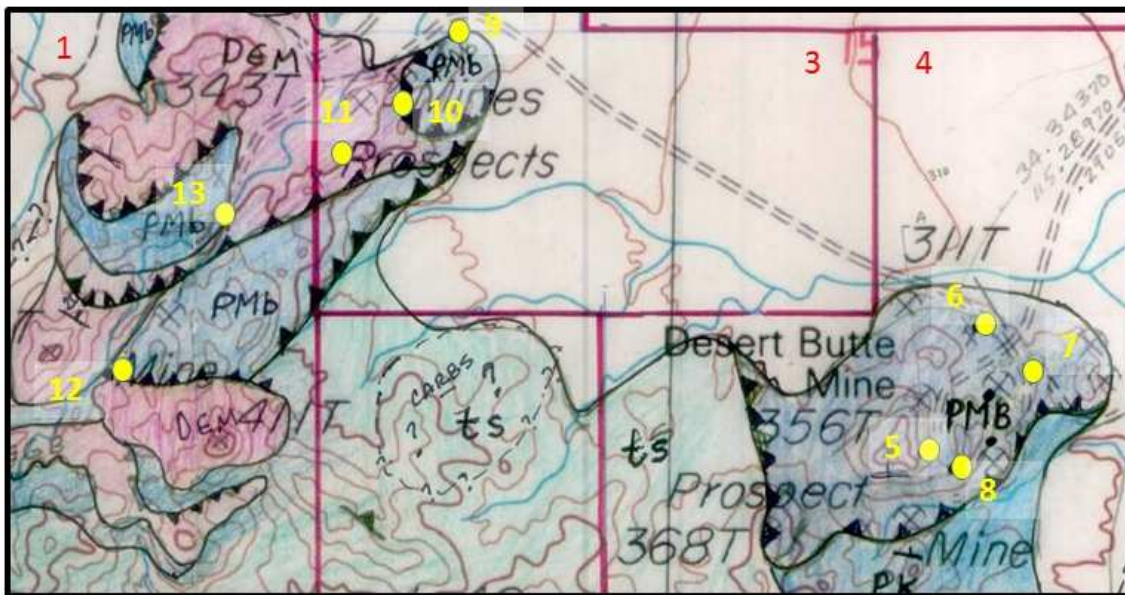


Figure 10: Geologic Map of portions of Parcels 1, 3 and 4 showing the locations of samples.

CHUBBUCK SAMPLES

Date	Description	CaO	Fe2O3	wt %		MgO	CaCO3	Color	L-color
3/27/2014	CHUBBUCK # 202 SAMPLE # 1	51.3	0.18	SiO2	4.0	0.6	94.2	249	91.72
3/27/2014	CHUBBUCK # 202 SAMPLE # 3	47.9	0.37	Al2O3	3.4	4.3	86.9	1760	73.76
3/27/2014	CHUBBUCK # 202 SAMPLE # 4	53.0	0.10		2.1	0.5	96.5	272	90.90
3/27/2014	CHUBBUCK # 202 SAMPLE # 5	53.4	0.07		1.2	0.4	97.8	192	94.08
3/27/2014	CHUBBUCK # 202 SAMPLE # 6	54.2	0.05		0.5	0.3	98.6	178	94.80
3/27/2014	CHUBBUCK # 202 SAMPLE # 7	54.3	0.06		0.5	0.4	98.4	199	93.77
3/27/2014	CHUBBUCK # 202 SAMPLE # 8	54.7	0.04		0.0	0.4	99.0	159	95.83
3/27/2014	CHUBBUCK # 202 SAMPLE # 9	54.1	0.07		0.5	0.4	98.4	175	94.93
3/27/2014	CHUBBUCK # 202 SAMPLE # 10	54.7	0.05		0.0	0.4	99.1	160	95.76
3/27/2014	CHUBBUCK # 202 SAMPLE # 11	36.4	0.23		0.6	16.7	63.9	390	87.59
3/27/2014	CHUBBUCK # 202 SAMPLE # 12	52.8	0.08		1.4	1.4	95.4	234	92.27
3/27/2014	CHUBBUCK # 202 SAMPLE # 13	54.3	0.05		0.1	0.5	98.7	159	95.82
3/27/2014	CHUBBUCK # 202 SAMPLE # 14	32.3	0.31		0.6	20.6	55.6	276	90.78

EXHIBIT 23

1 Mark D. Harrison (State Bar No. 142958)
2 Adam K. Guernsey (State Bar No. 282105)
3 HARRISON, TEMBLADOR,
4 HUNGERFORD & JOHNSON LLP
5 2801 T Street
6 Sacramento, CA 95816
7 Telephone: (916) 382-4377
8 Facsimile: (916) 382-4380

9 Attorneys for Braavos, LLC.

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DECLARATION OF DONALD M. GUSTAFSON

I, Donald M. Gustafson, declare as follows:

1. I am a competent adult over the age of eighteen. I have personal knowledge of the facts stated in this declaration and, if called as a witness in this matter, could and would testify competently to those facts.

2. I currently reside in Palm Springs, CA. I am retired Vice President of Blue Mountain Minerals. Blue Mountain Minerals manufactures high quality limestone and dolomitic limestone for a variety of industrial and agricultural applications in California, Oregon, Washington, Nevada, and Arizona.

3. The purpose of this declaration is to memorialize my recollection of historical operations at the Chubbuck Mine, located in the Kilbeck Hills of the Mojave Desert, in the County of San Bernardino.

4. On April 11, 2019, I met with Mark D. Harrison, Adam K. Guernsey, and James I. Anderson, attorneys at Harrison, Temblador, Hungerford & Johnson LLP at the Chubbuck Mine for the purpose of being interviewed regarding my involvement with Braavos, LLC and the history of limestone operations in the state of California, County of San Bernardino, and, more specifically, the Chubbuck Mine.

5. I was born on June 13, 1933 in Pasadena, California. I graduated high school from the Flintridge Preparatory School for Boys in 1951. I graduated from Claremont Men's College, where I served as student body President, achieved the rank of Cadet Lieutenant Colonel of the

1 R.O.T.C., served as Cadet Commander of the R.O.T.C. Battalion for Pomona College and
2 Claremont Men's College, and graduated cum laude as Valedictorian with a Bachelor of Arts in
3 Business Administration in 1955.

4 6. I attended graduate school at the University of Southern California, studying
5 marketing. Additional post graduate courses in minerology and marketing were completed at Los
6 Angeles State College and Pasadena City College.

7 7. My military service includes achieving the rank of Army Reserve Infantry Major.

8 8. My mining career started at the Wrightwood limestone mine in California in
9 1955.

10 9. I co-founded Premier Resources, Inc. ("Premier Resources") in 1958. Premier
11 Resources specialized in the underground mining, quarrying, and distribution of architectural
12 aggregates used across the world. Premier Resources extracted stone and other construction
13 materials from mineral deposits in Lone Pine and Wrightwood, California. I served as Premier
14 Resources' President through 1971. As president of Premier Resources, my duties included, but
15 were not limited to the management of Premier's 65 employees engaged in underground and open
16 pit limestone and dolomite mines in California, as well as administering exclusive sales rights on
17 natural stone deposits in Mexico, Utah, and California. Premier Resources' materials were used
18 in masonry, terrazzo, roofing, landscaping, and chemical filler industries throughout the United
19 States.

20 10. In 1971, I merged Premier Resources into the western United States' oldest cement
21 producer, the California Portland Cement Company ("Cal Portland"), which was founded in
22 1891. At the time of Cal Portland's acquisition of Premier Resources, Cal Portland was doing
23 Seventy-Five Million Dollars (\$75,000,000.00) of business per year. Following Cal Portland's
24 acquisition, I continued as President of Premier Resources as a subsidiary of Cal Portland.

25 11. From 1971 through 1984, I was Manager of Cal Portland's limestone and lime
26 division. In this role, my duties included, but were not limited to, continued management of
27 Premier Resources division of Cal Portland (until 1976), along with overall responsibility for Cal
28 Portland's limestone and lime division, consisting of 36 personnel at Colton, California.

1 Limestone from this mine was shipped to glass factories, feed mills, environmental clean-up sites,
2 and other applications. Quicklime and hydrated lime were sacked for customers in western
3 United States, Mexico, STP in New York, and to government installations in France and
4 Germany.

5 12. From 1984 through 1987, I ran a limestone mine in La Rumarosa, Baja California,
6 Mexico. In this role, my duties included, but were not limited to, the crushing and screening of
7 limestone products for animal feed mills in Mexico and Southern California.

8 13. From 1987 through 1994, I worked for the Bechtel Corporation. The Bechtel
9 Corporation is an engineering, procurement, construction, and project management company.
10 The Bechtel Corporation is the largest construction company, and one of the largest privately-
11 owned companies, in the United States.

12 14. During that time, Bechtel Engineering owned Blue Mountain Minerals. Blue
13 Mountain Minerals owns a limestone and marble property in Columbia, California. The Blue
14 Mountain Minerals Quarry has been in operation under various ownerships since 1850. Blue
15 Mountain Minerals manufactures high quality limestone and dolomitic limestone for a variety of
16 industrial and agricultural applications in California, Oregon, Nevada, and Arizona. During
17 Bechtel's ownership of Blue Mountain Minerals, my duties included, but were not limited to, the
18 development of a long-term marketing strategy to increase sales volumes for limestone and
19 dolomite into the glass, roofing, animal feed, power plant, and agriculture industries.

20 15. In 1994, the Bechtel Corporation sold Blue Mountain Minerals. From 1994
21 through my retirement from employment in 2018, I worked directly for Blue Mountain Minerals
22 as Vice-President of Marketing. My duties included, but were not limited to, the marketing,
23 chemistry, gradation, freight issues, and supply chain of limestone and dolomite products for
24 glass factories, feed mills, agricultural applications, roofing manufacturers, power plants, and
25 concrete products.

26 16. During my 64-year career, I have gained an extensive knowledge of the
27 construction materials and mining industries, specifically with regards to limestone mines and
28 limestone-based products. Throughout my career, it was critical that I understand every facet of

1 the limestone and lime products industry, including, but not limited to; market, competition,
2 deposit location, minerology, and chemistry. Accordingly, I am familiar with most of the
3 limestone mines and limestone deposits in southwestern United States, including the Chubbuck
4 Mine. I have consulted on numerous projects over the past six decades, including; a market
5 survey of the Los Angeles basin's aggregate reserves in late 1950's, teaching a day class for 120
6 students in San Marino in the late 1960's, assessment work in Brazil on behalf of Union 76 in the
7 late 1980's, etc. I have also sold stone for the construction of some of the most notable
8 landmarks in the western U.S., including the; Hollywood Walk of Fame, Los Angeles
9 International Airport (LAX), City of Los Angeles Department of Water and Power, and the State
10 Capitol in Carson City, NV. I was the primary supplier to the dealer who sold to the creator of
11 "pet rocks", Gary Dahl. I have shipped product all over the world, including; Hawaii, Tahiti and
12 other Pacific Islands, France, and Germany. I was also a contributor to California Division of
13 Mines and Geology's Bulletin 194, which is an extensive report on the limestone and dolomite
14 resources of California.

15 17. I first heard about the Chubbuck Mine when I met Mr. Chubbuck at the Flintkote
16 Laboratory on South Alameda Street in Los Angeles in 1955. I was 22 years old at the time, and
17 Mr. Chubbuck was in his late 70's. We discussed the limestone market in general, the merits of a
18 high purity limestone reserve in Southern California, and his property in particular.

19 18. Given my familiarity with the Chubbuck Mine and the superior quality of the
20 limestone deposit, I always considered the Chubbuck Mine an important source of limestone that
21 would have economic value given the right market conditions.

22 19. In 1982, I met Robert "Del" Gagnon. Del and his family own Desert Map &
23 Aerial Photo in Palm Desert, California. Desert Map & Aerial Photo is and was one of the only
24 places I could purchase USGS topographic maps for mining purposes. Del also owns a real estate
25 and investment firm, Del Gagnon Company. Del and I became close friends over the years.

26 20. In 1985, Del purchased a portion of the Chubbuck Mine, and continued to acquire
27 the balance of the property over the following few years. Del wanted to resume sales at the
28 Chubbuck Mine and, given my life's commitment to the limestone industry and personal

1 connection, wanted my assistance in doing so. At that time, however, I did not have any available
2 time to help Del.

3 21. Since that time, however, Del's son Adam Gagnon, and I have continued to
4 discuss the viability of resuming sales from the Chubbuck Mine. On one occasion Adam and I
5 had the opportunity to visit the Dunn Siding mineral processing plant outside of Barstow, CA to
6 assess its investment potential for the Gagnon family and a business associate of theirs.

7 22. Since Del purchased the site in 1985, I have always understood the Gagnon
8 family's ultimate goal was to have operations and shipments resume at the Chubbuck Mine.
9 Notwithstanding the lack of significant recent sales, the Gagnon family has operated the
10 Chubbuck Mine like any operator would. Specifically, the Gagnon family has held the Chubbuck
11 Mine's mineral reserves in inventory while monitoring the limestone market, has conferred with
12 experts in those markets, conducted testing as to quantity and quality, and conferred with
13 transportation companies. Like mineral extraction itself, these activities are fundamental
14 components of a surface mining operation.

15 I declare under the penalty of perjury that the foregoing is true and correct. Executed this
16 28 day of June 2020, in Palm Springs, California.

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18 

19 Donald M. Gustafson
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H. Appendix

APPENDIX

Deeds and Property Records

Document	Appendix Page
Title Report APNs 0644-221-02, -06, -07	1
1924 Patent	11
Title Report APN 0644-231-03	13
Title Report APN 0644-201-15	21

*Beard Land Services
P. O. Box 118
Keene, CA 93531
Phone: 661-750-9360*

TITLE REPORT

APNs: 0644-221-02, 06 & 07

DESCRIPTION:

SW/4 NW/4, N/2 SW/4, SE/4 SW/4, W/2 SE/4, Section 15, and NW/4 NE/4 & NE/4 NW/4 Section 22, Township 3 North, Range 16 East, San Bernardino Base and Meridian, situated in the County of San Bernardino, State of California,

containing 320 acres, more or less.

FEE SIMPLE ABSOLUTE OWNER (Surface & Minerals)		INTEREST	GROSS ACRES	NET ACRES
	Braavos LLC*	100%	320	320

***TITLE REMARKS:**

Patent:

The property described above was granted to Charles I. Chubbuck by the United States of America by Patent# 94533, dated October 1, 1924, and recorded March 26, 1925 in Book O of Patents in Page 133 in the records of San Bernardino County, California. This Patent referenced Lime Quarry # 1 and Lime Quarry # 2 placer mining claims and the rights conveyed to Charles I. Chubbuck are subject to the following four stipulations:

“First. That the grant hereby made is restricted to the exterior limits of the mining premises and to any veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper or other valuable deposits which have been discovered within said limits subsequent to and which were not known to exist prior to February 16, 1924.”

“Second. That should any veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper or other valuable deposits be claimed or known to exist within the above-described premises at said last-named date, the same is expressly excepted and excluded from these presents.”

“Third. That the premises hereby conveyed shall be held subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes and the rights to ditches and reservoirs used in connection with such water rights as may be recognized by the local laws, customs and decisions of the courts. And there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States.”

“Fourth. In the absence of necessary legislation by Congress, the legislature of California may provide for rules for working the mining claim or premises hereby granted involving easements, drainage or other necessary means to complete the development thereof.”

There are no recorded Mining Locations nor any Proofs of Labor covering the above-described premises on or prior to February 16, 1924. Therefore, notwithstanding the first and second stipulations contained in the Patent (as noted above), it is exceedingly unlikely there are any veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper or other valuable deposits claimed or known to exist within the above-described premises on or before February 16, 1924 and any such claim would need proof, which would generally be found in the form of a recorded Mining Location and Proofs of Labor.

Tax Deed

Conveyance of Real Property recorded August 7, 1928 as Instrument # 131 in Book 17 of Tax Deeds, Page 19 in the Records of San Bernardino County, California describes the Dolomite Mining Claim and lists this Section 15 and other lands. Since the property described above was patented in 1924, it appears this Conveyance of Real Property has no effect on the property described above. Furthermore, the lot books covering these lands indicate subsequent tax sales for C.I. Chubbuck's interest in these lands, and it appears these tax sales were subsequently redeemed. I consider this Conveyance of Real Property as a “cloud on the title”, but not an actual title defect.

Inaccurate Grantees

The property described above was granted to Charles I. Chubbuck by the United States of America by Patent# 94533, dated October 1, 1924, and recorded March 26, 1925 in Book O of Patents in Page 133, and by Grant Deed dated 8/8/1929, C. I. Chubbuck deeded this property to Chubbuck Lime Company. Although there is no evidence Charles I. Chubbuck and C. I. Chubbuck are the same person, it is reasonable to believe it is so. **This situation creates a title defect, but since I consider it to be a minor title defect, title is shown above as vested in Braavos LLC, subject to this minor title defect.**

By Corporation Grant Deed, recorded March 30, 1967 as Instrument # 596 in Book 6796, Page 64 in the Official Records of San Bernardino County, California, Land Investment of Panama S.A. granted the above described property to The Florida-Brazil Cattle and Grain Corp. By Corporation Quitclaim Deed, recorded October 16, 1975, as Instrument # 282 in Book 8785, Page 413, in the Official Records of San Bernardino County, California, The Florida-Brazil Cattle & Grain Corporation quitclaimed the above described property to Productos Y Servicios, S.A. While the names of the Grantee on the first deed referenced in this paragraph and the Grantor on the subsequent deed are very similar, there is no documentation evidencing these companies are one and the same, and I was unable to locate any documentation indicating The Florida-Brazil Cattle and Grain Corp. became The Florida-Brazil Cattle & Grain Corporation nor that The Florida-Brazil Cattle & Grain Corporation acquired the interest of The Florida-Brazil Cattle and Grain Corp. Also, the San Bernardino County Grantor/Grantee index from 1958 forward shows only the one document for The Florida-Brazil Cattle and Grain Corp., recorded in 1967 and the Florida Secretary of State has no records for this entity. **This situation also creates a title defect, but since I also consider it to be another minor title defect, title is shown above as vested in Braavos LLC, subject to this minor title defect.**

This Title Report was prepared by Bridget Beard, CPL, for Mr. Adam Gagnon. This title report is intended solely for the purpose of identifying the ownership of mineral rights, fee (surface) and (if applicable) leasehold ownership, and is not intended to substitute for a title opinion from a qualified attorney well versed in the practice of real property and mineral law. The subject property was searched from Patent to June 22, 2018 at 5:00 PM. To the best of my knowledge, this report represents recorded documents affecting the subject property during that time period, with the exception of UCC's, Mortgages, Deeds of Trust, other non-essential documents and certain liens, which are beyond their statutory limits, which have not been made a part of this report, as follows:

- A. Involuntary liens over 10 years old (pursuant to Civil Code of Procedure Sec. 683.010-683.050);
- B. Voluntary liens over 60 years old (pursuant to Civil Code Sec. 882.020-882.040);

In the preparation of this report indexes and documents were obtained from TitlePoint. That information was supplemented, when necessary, by various online resources provided by the County of San Bernardino and/or the United States Bureau of Land Management.

This work is deemed reliable, however, it is not a Legal Title Opinion nor an Official Records Guarantee of Title. This report is provided without warranty, express or implied.

Bridget Beard June 30, 2018

Bridget Beard
Certified Professional Landman

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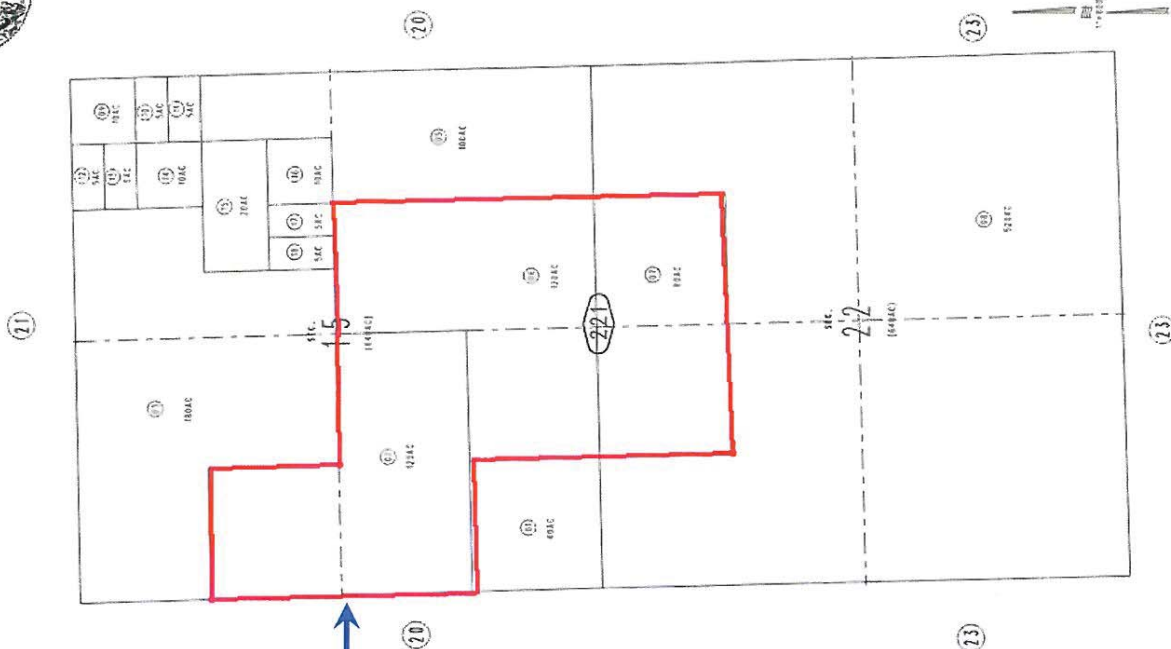
ASSESSOR'S MAP

THIS MAP IS FOR THE PURPOSE
OF AD VALOREM TAXATION ONLY

Sec's. 15 & 22, T.3N., R.16E., S.B.B.M.

Needles Unified
Tax Rate Area
96000

0644-22



JULY 2004

Assessor's Map
Book 0644 Page 22
San Bernardino County

REVISED
10/15/12 BY: MC

NW/4 SE/4, N/2 SW/4,
SE/4 SW/4, W/2 SE/4 Sec. 15,
NW/4 NE/4 & NE/4 NW/4 Sec. 22,
T3N, R16E, SBB&M
San Bernardino County, California

EXHIBIT B

Findings

Proposed Findings

The Planning Commission FINDS, the following factual and legal determinations with respect to recognizing the existence of vested mining rights for APNs: 0644-221-02, 0644-231-03, 0644-221-06, 0644-221-07 and 0644-201-15 ("Properties"):

1. Prior to the 1920's, 1,600 acres of mining claims along the Parker branch of the Santa Fe Railroad, then known as the Desert Butte mine were claimed by Marcus Pluth and Tom Schofield. The claim is now known as the Chubbuck Mine. (Braavos, LLC Chubbuck Mine Vested Rights Submittal (July 2020) ("VR Submittal"), at p. 7 and Exhibits 1-3.)
2. In 1922, Charles Inglis Chubbuck purchased the mining claims from Pluth and Schofield. (VR Submittal, p. 7 and Exhibits 1-2.)
3. From 1922-1925, C.I. Chubbuck hired workers and built infrastructure for the mining operation. The mining operation consisted of three main components: an extraction area, a processing area, and mineral resources held in reserve. The extraction area, where mineral extraction took place, included the limestone outcrops and immediate surrounding area. Initially, mining was conducted underground through a network of tunnels blasted and bored into the base of the limestone outcrops. The Mine ultimately evolved into an open surface mining operation. In addition to mining the base of the limestone outcrops, the cliff sides also were blasted with explosives. Raw limestone was initially processed by a primary rock crusher which broke limestone into smaller, more manageable sizes that were then sent one-mile northeast to the processing area. (VR Submittal, pp. 7-9 and Exhibit 1.)
4. The processing area was adjacent to the rail line and adjacent to the town of Chubbuck. C.I. Chubbuck installed a dirt road and a narrow-gauge track to connect the extraction and processing areas. (VR Submittal, p. 7 and Exhibit 1.)
5. In 1924, the United States Government patented the "Lime Quarry 1" and "Lime Quarry 2" placer mining claims, consisting of 320 acres, to C.I. Chubbuck, consisting of APNs 0644-221-02, 0644-221-06, and 0644-221-07. (VR Submittal, pp. 9 and Appendix, at A-11.)
6. In 1929, C.I. Chubbuck partnered with the National Portland Cement Co. to develop a cement plant adjacent to the processing area. The cement plant had a capacity of 750 barrels of cement per day and was intended to employ up to 200 workers. (VR Submittal, p. 11 and Exhibits 5-6.)

7. The cement plant, supplied with crushed limestone from the mine, operated for approximately 18 months until closing in 1932. C.I. Chubbuck then relocated his limestone processing plant to the former cement plant site. (VR Submittal, p. 11 and Exhibits 1, 17.1.)
8. In 1943, the Chubbuck Lime Co., Inc. acquired an additional 640 acres in fee from the South Pacific Land Company, consisting of APN 0644-231-03. (VR Submittal, p. 12 and Appendix, at A-16.)
9. In 1947, the State of California patented 480 acres to C.I. Chubbuck, including current APN 0644-201-15. (VR Submittal, p. 14 and Exhibit 10.)
10. By 1947, the Chubbuck Mine was an integrated approximately 1,600-acre mining operation, of which 1,280 acres are currently owned by the applicant. (VR Submittal, pp. 7-14.)
11. In 1949, the White Mountain Lime Company acquired the Chubbuck Mine. The White Mountain Lime Company operated the mine from 1949 through 1952 and planned to continue operations into the future. (VR Submittal, p. 15 and Exhibit 12.)
12. On August 8, 1951, the County of San Bernardino adopted Ordinance 687 establishing land use regulations. Among these regulations was the requirement that surface mining required a County permit. By convention, existing mining uses were generally allowed to continue. (VR Submittal, p. 15 and Exhibit 13.)
13. In 1952, Harms Brothers Construction Company acquired the Chubbuck Mine, with an intention of opening new deposits at Cadiz and expand production of industrial lime and other lime products to meet increasing demand. (VR Submittal, pp. 15-16 and Exhibit 14.)
14. Active mineral extraction and sales paused in 1954, due to increasing transportation costs and the development of competing products. In the years following 1954, the mining holding were never explicitly abandoned, nor were any rights to the mine. Rather, the Properties were held as inventory as subsequent owners sought to continue operations and restore sales. In addition to holding as inventory, the Properties' owners conducted active mining operations such as market analyses, mineral testing as to both quality and quantity, and strategic planning for the changing market. (VR Submittal, p. 16 and Exhibits 2, 15.)
15. The preponderance of the evidence contained in the record is sufficient to establish that an intent by the owners to resume mining existed on the effective date of the Surface Mining and Reclamation Act (SMARA) and the County's local mining regulations.

16. The preponderance of the evidence fails to show an intent by the owners of the Properties to abandon their right to exploit the mineral interests on the Properties.
17. A vested mining right exists, allowing, without further County land use permitting, surface mining operations on the Properties in order to develop the limestone resources. This vested mining right includes the following:
 - a. The right to exhaust the Properties' mineral reserves in volumes necessary to meet market demand, consistent with production principles established in California law;
 - b. The right to drill, blast and utilize all customary equipment as reasonable and necessary to extract, transport, process, crush, wash, sort, stockpile, load and otherwise manage commercial quantities of minerals from the Properties.
 - c. The right to continue surface mining operations at the Properties, subject to a County- approved and valid Reclamation Plan and adequate Financial Assurances pursuant to the Surface Mining and Reclamation Act of 1975.

EXHIBIT C

Court Decisions:

- Hansen Brothers
- Calvert
- Hardesty

HANSEN BROTHERS ENTERPRISES v. BOARD OF SUPERVISORS OF COUNTY OF NEVADA

Court of Appeal, Third District, California.

HANSEN BROTHERS ENTERPRISES, Plaintiff and Appellant, v. BOARD OF SUPERVISORS OF the COUNTY OF NEVADA et al., Defendants and Respondents.

No. C017070.

Decided: November 15, 1994

The Diepenbrock Law Firm and Mark D. Harrison, Sacramento, for plaintiff and appellant. Harold E. Degraw, Nevada City, for defendants and respondents.

In response to a law requiring mines to have reclamation plans, the owner of a mine asked the county to approve a plan based on substantial future increases in mining activities. The county declined because the property was not zoned for mining and the contemplated operations were more than those which the owner had a prior vested right to continue, despite the zoning ordinance, as a legal nonconforming use. The owner petitioned for a writ of administrative mandate to require the county to approve the plan. The trial court denied the petition. We affirm and hold a property owner with the vested right to continue mining as a nonconforming use may not substantially intensify mining operations without acquiring a use permit from the county.

FACTS AND PROCEDURE

Hansen Brothers Enterprises (Hansen Brothers) owns approximately 67 acres of property along the Bear River. The property consists of the riverbed, adjacent hills, and a flat yard. Sixty acres of the property is in Nevada County, and seven acres lies across the river in Placer County. The property is called Bear's Elbow Mine. Hansen Brothers uses the property for aggregate mining and processing and has done so since it acquired the property in 1954. The mine was in operation for eight years before Hansen Brothers bought it.

Between 1955 and 1989, Bear's Elbow Mine produced 209,000 cubic yards of aggregate, 44,700 from the Nevada County side. Average annual yield for the 34 years of operation is 6,200 cubic yards total, 1,300 from the Nevada County side. There were large volumes removed from the property; however, their main source was renewable river deposits in the riverbed. In recent years this supply has dwindled because a dam was constructed upstream. While minimal quarrying was done on the hillsides, there has been no such quarrying in years. Fifteen-foot-tall trees have overgrown the previously quarried areas.

In 1954, the Nevada County Board of Supervisors (the Board) adopted zoning ordinances which did not provide for mining on the Hansen Brothers property. However, the mine remained in operation as a legal nonconforming use under what today is Article 29, section L–II 29.2 of the county's Development Code. This section provides:

“Any use lawfully in existence at the time this Chapter or amendments thereto takes effect, although such use does not conform to the provisions of this Chapter, may continue as follows:

“A. No such use shall be enlarged or intensified. Nor shall any such use be extended to occupy a greater area of land than that occupied at the time of the adoption of this Ordinance. Nor shall any such use be moved in whole or in part to any other portion of the lot or parcel of land occupied at the time of the adoption of this Chapter or amendment thereto.

“B. If the nonconforming use is discontinued for a period of one hundred eighty (180) days or more, any following use shall be in conformity with all applicable requirements of this Chapter.”

In 1975, the Surface Mining and Reclamation Act (SMRA) was passed in California. (Pub.Resources Code, § 2710 et seq.) The SMRA required mining operators, as a condition to continued operations, to submit a reclamation plan to the relevant lead agency for approval. (See Pub.Resources Code, § 2770.) The lead agency in this case is the county, represented by the Board. (See Pub.Resources Code, § 2728.) The SMRA requires mining operators to obtain a use permit unless the operator had a vested right to conduct the mining prior to 1976 and the operation has not substantially changed. (Pub.Resources Code, §§ 2770, subd. (a); 2776.) The “vested right” referred to in section 2776 of the Public Resources Code is the right, protected by due process concerns, to continue the use existing at the time a zoning ordinance is passed even though the ordinance does not allow such use. (See *Livingston Rock etc. Co. v. County of L.A.* (1954) 43 Cal.2d 121, 126, 272 P.2d 4 (*Livingston Rock*).)

To comply with the SMRA, Hansen Brothers prepared a reclamation plan for Bear's Elbow Mine and submitted it to Nevada County. Claiming the vested right to mine both the riverbed and the hillsides, Hansen Brothers included mining operations over the entire 60-acre Nevada County parcel in its plan for the next 100 years or more. It proposed to remove 5,000,000 cubic yards of materials, ranging anywhere from 5,000 to 250,000 cubic yards per year and leaving 500,000 cubic yards of waste. Where mining from the hillsides has been abandoned in recent years, Hansen Brothers proposed to excavate and extract virtually all of them to a maximum anticipated depth of 350 feet.

The reclamation plan represented a major change both in volume of materials and location of the mining efforts. For more than three decades, from 1955 to 1989, Hansen Brothers mined a total of 44,700 cubic yards of aggregate from the Nevada County portion of Bear's Elbow Mine. This amounted to 1,300 cubic yards annually. The plan proposed extraction of up to 250,000 cubic yards per year, a possible 200-fold increase. While most of the aggregate was taken from Placer County and virtually all of it was removed from the riverbed, the plan proposed extraction mostly from the hillsides in Nevada County.

After review by the planning commission, the Board considered the reclamation plan. It made no findings concerning the mining activities in the riverbed, but it found Hansen Brothers abandoned the hillside quarrying for more than 180 days. In making this finding, the Board concluded the storage of materials previously extracted from the hillsides was insufficient to constitute continuance of the hillside mining operation. The Board also found the reclamation plan contemplated an enlargement and intensification of the mining operation far beyond Hansen Brothers's vested rights. Based on these findings, the Board refused to approve the reclamation plan and returned it to Hansen Brothers for revision and resubmission. The Board noted Hansen Brothers would need a conditional use permit to conduct the operations proposed in the reclamation plan.

Asserting it had a vested right to conduct the mining operation contemplated by the reclamation plan, Hansen Brothers filed a petition for writ of administrative mandate (Code Civ.Proc., § 1094.5) and complaint for damages, injunctive relief, and declaratory relief. The parties recognized a determination on the petition for writ of administrative mandate would resolve the major issue in the case concerning vested rights. Accordingly, they stipulated to and the trial court approved a bifurcation of the petition from the remainder of the proceedings.

The trial court heard the petition for writ of administrative mandate and issued a statement of decision denying it. The court agreed with the Board that (1) Hansen Brothers abandoned the hillside mining operation and (2) the reclamation plan contemplated “a substantial expansion and intensification of any previous use of the property and a substantial change in operations.” To facilitate finality, Hansen Brothers stipulated to dismissal of the remaining causes of action in the complaint (see *Connolly v. County of Orange* (1992) 1 Cal.4th 1105, 1111, 4 Cal.Rptr.2d 857, 824 P.2d 663), and the court entered judgment. Hansen Brothers appeals.

The parties agree the facts are undisputed. Accordingly, we need only determine the legal effect of those facts. (*Halaco Engineering Co. v. South Central Coast Regional Com.* (1986) 42 Cal.3d 52, 75, 227 Cal.Rptr. 667, 720 P.2d 15.)

DISCUSSION

Enactment of zoning ordinances is a legitimate exercise of the police power. (*Livingston Rock*, supra, 43 Cal.2d at p. 126, 272 P.2d 4.) Courts may not diminish the effect of a zoning ordinance unless it is arbitrary and unreasonable. (*Beverly Oil Co. v. City of Los Angeles* (1953) 40 Cal.2d 552, 560, 254 P.2d 865 (*Beverly Oil*).) If a zoning ordinance impairs the vested right in an existing use of property, considerations of due process come into play. In some, although not all, cases, the property owner's due process right to continued use of the property overcomes the police power exerted in the zoning ordinance. (See *id.* at p. 557, 254 P.2d 865 for discussion of interplay between due process rights and police power.)

To avoid doubt as to constitutionality, zoning ordinances often include provisions permitting continued nonconforming use of the property by an owner already engaged in such use at the time the ordinance was adopted. (*Livingston Rock*, supra, 43 Cal.2d at p. 127, 272 P.2d 4.) This type of exception to the zoning ordinance, however, generally prohibits expansion or intensification of the nonconforming use and provides for expiration of the exception if the owner abandons the nonconforming use. (See *Sabek, Inc. v. County of Sonoma* (1987) 190 Cal.App.3d 163, 166–168, 235 Cal.Rptr. 350 and cases cited therein.)

The spirit of zoning ordinances and accompanying provisions allowing continued nonconforming uses is to restrict, not increase, the nonconforming use. (*Edmonds v. County of Los Angeles* (1953) 40 Cal.2d 642, 651, 255 P.2d 772.) Accordingly, courts generally sustain restrictions on extension or enlargement of a nonconforming use, thereby enforcing the zoning ordinance and upholding the police power. (*County of San Diego v. McClurken* (1951) 37 Cal.2d 683, 686–687, 234 P.2d 972 (*McClurken*).)

For example, in *McClurken*, the defendant used property within the plaintiff county for storage of paint, lumber, steel beams, fuel, and other items and did some preliminary grading for permanent structures. (37 Cal.2d at p. 685, 234 P.2d 972.) The fuel was stored in movable tanks. (*Id.* at p. 687, 234 P.2d 972.) The plaintiff county enacted a zoning ordinance, zoning part of the subject property as residential, but allowed continuance of the defendant's use of the property under a provision permitting uses which were nonconforming when the ordinance was enacted to be continued. (*Id.* at pp. 686–687, 234 P.2d 972.) Thereafter, the defendant built four permanent fuel storage tanks on the residentially-zoned portion of the property, increasing the fuel storage capacity on the property by more than five times. (*Id.* at p. 687, 234 P.2d 972.)

The county brought an action to compel the defendant to remove the nonconforming fuel tanks. (*McClurken*, supra, 37 Cal.2d at p. 684, 234 P.2d 972.) Judgment was entered for the defendants, but the Supreme Court reversed. (*Id.* at pp. 684, 692, 234 P.2d 972.) It held: “Such a formidable expansion can hardly be viewed as a mere continuance of the nonconforming use consisting of the intermittent storage of lumber and scrap metal, preliminary grading, steel beam storage, or even the use of movable tanks. [The new permanent tanks] constitute an unwarranted enlargement of that nonconforming use.” (*Id.* at pp. 687–688, 234 P.2d 972.)

In a mining operation, the relationship between the vested right to mine on the property and the restriction on expansion of a zoning ordinance presents unique problems because the mine is a diminishing asset. (*McCaslin v. City of Monterey Park* (1958) 163 Cal.App.2d 339, 349, 329 P.2d 522.) “The very nature and use of an extractive business contemplates the continuance of such use of the entire parcel of land as a whole, without limitation or restriction to the immediate area excavated at the time the ordinance was passed. A mineral extractive operation is susceptible of use and has value only in the place where the resources are found, and once the minerals are extracted it cannot again be used for that purpose.” (*Ibid.*)

In McCaslin, the plaintiff, owner of 70 acres, mined decomposed granite as an existing use when the city enacted a zoning ordinance which did not allow mining on the subject property. (163 Cal.App.2d at p. 344, 329 P.2d 522.) The zoning ordinance temporarily permitted preexisting nonconforming uses, but prohibited expansion of such uses. (Id. at pp. 344–345, 329 P.2d 522.) An amendment to the zoning ordinance singled out the plaintiff's mining operations and prohibited it as a public nuisance. (Id. at p. 345, 329 P.2d 522.)

The plaintiff sought a judicial declaration the zoning ordinance was unconstitutional and void as to him, and the city cross-complained seeking an injunction on further mining. (McCaslin, supra, 163 Cal.App.2d at pp. 345–346, 329 P.2d 522.) The trial court held in favor of the plaintiff, finding he had a vested right to continue his mining operation. (Id. at p. 346, 329 P.2d 522.) On appeal, the city complained the trial court failed to apply the provision prohibiting expansion of nonconforming uses. Even if allowed to continue mining, argued the city, the plaintiff was limited to further expansion of the portion of the property already excavated. (Id. at p. 349, 329 P.2d 522.)

The Court of Appeal rejected the city's reasoning. It held the entire tract fell within the exemption of preexisting uses from the effect of the zoning ordinance. (McCaslin, supra, 163 Cal.App.2d at p. 349, 329 P.2d 522.) To prohibit mining of the entire tract, reasoned the court, would constitute an unconstitutional taking of property without due process of law. (Ibid.)

Hansen Brothers asserts the holding in McCaslin mandates reversal of the determination it did not have a vested right to continue mining operations as reflected in the reclamation plan. It attempts to equate the mining operation in McCaslin with its own and thereby obtain the benefit of the McCaslin holding that it is entitled to mine the entire property as a vested right.

The dispositive difference between McCaslin and this case, however, is the absence of any indication the plaintiff in McCaslin intended to intensify the mining operation. There is no indication he desired to do anything but maintain the status quo. Here, the reclamation plan proposes mining of 5,000,000 cubic yards of aggregate over the next 100–or–so years, at a possible peak production of 250,000 cubic yards in but a single year, even though the mine produced only 209,000 cubic yards in more than three decades spanning from 1955 to 1989. In addition, the plan proposed to extract the nonrenewable hillsides instead of the renewable riverbed theretofore exploited. Such a formidable intensification of use is not addressed in McCaslin, but in McClurken (the fuel storage tank case) an analogous intensification was held to go beyond the vested right to continue a nonconforming use. (See McClurken, supra, 37 Cal.2d at pp. 688–689, 234 P.2d 972.)

Although there may exist a logical argument extending McCaslin to give Hansen Brothers the right to mine over the next 100 years as planned, this argument extends logic beyond the limits of common sense. Due process does not support and common sense does not sustain an ambitious intensification of Hansen Brothers's nonconforming mining operations. Simply put, due process requires the government to allow the company to continue in its prior beneficial use of the land, no more. The zoning ordinance, an exercise of the police power, effectively freezes the right to use the land in the nonconforming way at its present level and then progressively prohibits uses that are abandoned.

The constitutional mandate and the only justification for allowing a landowner to use the land in ways prohibited by a zoning ordinance is that government, in determining appropriate land uses, cannot, in most cases, deprive the landowner of its present use. Hansen Brothers's advocacy here loses sight of the foundation of McCaslin and all other nonconforming use cases. Due process does not give license to vastly intensify a nonconforming use. Instead, the zoning ordinance, under command of due process, indulges the nonconforming use's existence while tolerating no expansion.

The permissible limitation of nonconforming uses made under vested rights is reflected in the municipal ordinance applied by the Board here. “No [nonconforming] use shall be enlarged or intensified.” (Nevada County Development Code, art. 29, § L–II 29.2, subd. (a).)

Hansen Brothers contends it is improper to assess the character of the mining operation by the volume of aggregate extracted because the operation must be allowed to fluctuate with market demands. It denies such fluctuation is “intensification” or “substantial change.” While we grant small fluctuations may not compromise the vested right, the intensification contemplated in Hansen Brothers’s reclamation plan exceeds the vested right. The use, not the intended use, is the measure by which exception to the zoning ordinance works. That Hansen Brothers intends to increase its operation as the market demands does not bring it within the vested right exception to enforcement of the zoning ordinances. “The intention to expand the business in the future does not give [Hansen Brothers] the right to expand a nonconforming use.” (McClurken, *supra*, 37 Cal.2d at p. 690, 234 P.2d 972.) “The purpose of the landowner in purchasing the property must yield to the public interest in the enforcement of a comprehensive zoning plan.” (Ibid.)

Our distinguished colleague denies an increase in mining activities can be an intensification of a nonconforming use beyond the vested rights, not even when an owner who previously engaged in very limited and renewable aggregate removal from a small part of the property now proposes a possible 200–fold increase in extraction, excavating the entire Nevada County area, which was previously barely touched, to a depth of 350 feet. As long as it was a mining operation before the zoning ordinance was adopted, he reasons, the government can do nothing to prevent intensification of the extraction without paying the owner. While we may agree with much of his philosophy, we do not write on a clean slate. Our position in the judicial hierarchy compels us to consider this case in light of precedent that controls either directly or by compelling analogy. (*Auto Equity Sales, Inc. v. Superior Court* (1962) 57 Cal.2d 450, 455, 20 Cal.Rptr. 321, 369 P.2d 937; see also *County of Santa Clara v. Superior Court* (1992) 2 Cal.App.4th 1686, 1691, fn. 3, 5 Cal.Rptr.2d 7.)

Generally, intensification of a previous use, though intended by the property owner at the time the zoning ordinance was passed, is not part of the owner’s vested rights. (McClurken, *supra*, 37 Cal.2d at pp. 689–690, 234 P.2d 972.) The dissent proposes no authority to except mining from this principle. “The purpose of a zoning law is to regulate the use of land.” (*Morehart v. County of Santa Barbara* (1994) 7 Cal.4th 725, 750, 29 Cal.Rptr.2d 804, 872 P.2d 143, *italics in original*.) The ordinance in question here only regulates the use of land beyond the use to which the land was put before enactment of the ordinance. Thus, it does not interfere with vested rights and does not constitute a taking for which the government must provide compensation. (See *Livingston Rock*, *supra*, 43 Cal.2d at p. 127, 272 P.2d 4.)

If undertaken as set forth in the reclamation plan, this mining operation would go beyond what due process requires and the local ordinance and state law allow as a nonconforming use. The intensification of the mining operation represented in the plan is unjustified, using as a reference point the scope of the operation before the zoning through the time the plan was submitted to the Board.

The intensification of mining operations contemplated by the reclamation plan was only one reason the Board denied approval of the plan. To this point, we have not discussed the abandonment of the hillside quarrying or the change in mining from the river deposits in the riverbed to the hillsides. We need not consider these other reasons given by the Board for denial because the intensification of operations alone exceeds the vested right to conduct the mining operation as planned. Since there was no right to conduct the mining operation as planned, the Board validly denied approval, requiring Hansen Brothers to either obtain a conditional use permit to conduct the operation as planned or change the plan to reflect the scope of its vested right to continue the mining operation.

DISPOSITION

The judgment is affirmed.

The Board denied approval of Hansen Brothers’ reclamation plan on two bases: (1) increased production and (2) excavation on the hillside. The majority addresses only the first, concluding the substantial increase contemplated in the reclamation plan exceeds any allowable fluctuation in the vested right. I

would hold the Board may not apply the zoning ordinance to limit the Hansen Brothers' mining operations to historic levels without the payment of just compensation for the value of the property thereby taken. For the guidance of the parties on remand, I would also address the second basis as well. In my view, Hansen Brothers' vested right to extract aggregate is not limited to the river bed but includes any portion of the property containing aggregate. I would therefore hold the Board may not apply the zoning ordinance to prohibit mining in any part of the property without the payment of just compensation for the value of property thus taken.

I

The Fifth Amendment to the United States Constitution provides: “[N]or shall private property be taken for public use, without just compensation.” This provision is applicable to the states by virtue of the Fourteenth Amendment. (*Keystone Bituminous Coal Assn. v. DeBenedictis* (1987) 480 U.S. 470, 481 fn. 10, 107 S.Ct. 1232, 1240 fn. 10, 94 L.Ed.2d 472, 486 fn. 10.) The California Constitution also prohibits the deprivation of “life, liberty, or property” without due process. (Cal. Const., art. I, § 7, subd. (a).)

Twentieth Century history confirms the wisdom of the solicitude for property rights enshrined in the Bill of Rights. “[I]n a free government almost all other rights would become utterly worthless if the government possessed an uncontrollable power over the private fortune of every citizen. One of the fundamental objects of every good government must be the due administration of justice; and how vain it would be to speak of such an administration, when all property is subject to the will or caprice of the legislature and the rulers.” (Joseph Story, *Commentaries on the Constitution of the United States* (Little, Brown & Co. 1891) Vol. 2, § 1790, pp. 568–570.) Justice Story's nineteenth century dictum prefigured the monstrous tyrannies of the century to follow.

The just compensation clause is bound up with the concept of “natural rights,” including liberty and property, which exist independent of government. (Richard A. Epstein, *Takings: Private Property and the Power of Eminent Domain* (Harvard Univ. Press 1985) pp. 5–6.) It is “designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.” (*Armstrong v. United States* (1960) 364 U.S. 40, 49, 80 S.Ct. 1563, 1569, 4 L.Ed.2d 1554, 1561.)

Despite the unambiguous constitutional command, the protection of property interests mandated by the just compensation clause began to erode before the ink on the Bill of Rights had dried. From the outset, the judiciary demonstrated a marked reluctance to invoke the provision in the face of popular social legislation perceived as addressing the transient ills of the day. The intent of the framers was initially subverted by limiting the clause to cases of actual physical appropriation of property. (See *Mugler v. Kansas* (1887) 123 U.S. 623, 8 S.Ct. 273, 31 L.Ed. 205.) In time, this approach was rejected by Justice Holmes, who ventured that “property may be regulated to a certain extent, [but] if regulation goes too far it will be recognized as a taking.” (Emphasis added; *Pennsylvania Coal Co. v. Mahon* (1922) 260 U.S. 393, 415, 43 S.Ct. 158, 160, 67 L.Ed. 322, 326.) Alas, the courts still refused to recognize regulatory takings, interpreting Justice Holmes's limitation, expressed as “too far,” to encompass infinity. (See, e.g., *New State Ice Co. v. Liebmann* (1932) 285 U.S. 262, 52 S.Ct. 371, 76 L.Ed. 747; *United States v. Carolene Products Co.* (1937) 304 U.S. 144, 58 S.Ct. 778, 82 L.Ed. 1234; *Goldblatt v. Hempstead* (1962) 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130; *Penn Cent. Transp. Co. v. City of New York* (1978) 438 U.S. 104, 98 S.Ct. 2646, 57 L.Ed.2d 631; *Keystone Bituminous Coal Assn. v. DeBenedictis*, *supra*, 480 U.S. 470, 107 S.Ct. 1232, 94 L.Ed.2d 472.)

These later decisions betray adherence to an unprincipled dual standard for the protection of property and liberty interests, relegating property rights to the “legal dust bin.” (James Oakes, ‘Property Rights’ in *Constitutional Analysis Today*, 56 Wash.L.Rev. 583, 608; James W. Ely, *The Guardian of Every Other Right: A Constitutional History of Property Rights* (Oxford Univ. Press 1992) (hereafter Ely) 133–134.) That dichotomy mocks the manifest intent and understanding of the framers, immanent in the Bill of Rights, that liberty and property rights are closely related and the protection of property is essential to the enjoyment of liberty. (*Lynch v. Household Finance Corp.* (1972) 405 U.S. 538, 552, 92 S.Ct. 1113, 1121, 31

L.Ed.2d 424, 435; Ely, at p. 134.) Over two hundred years ago, James Madison wrote: “Government is instituted no less for protection of the property, than of the person, of individuals.” (The Federalist, No. 54, at p. 369 (Heritage Press 1945).)

Recently there has been a modest reawakening to the fundamental principles underlying the just compensation clause. In cases such as *Nollan v. California Coastal Comm'n* (1987) 483 U.S. 825, 107 S.Ct. 3141, 97 L.Ed.2d 677, *Lucas v. So. Carolina Coastal Council* (1992) 505 U.S. 1003, 112 S.Ct. 2886, 120 L.Ed.2d 798, and *Dolan v. City of Tigard* (1994) 512 U.S. 374, 114 S.Ct. 2309, 129 L.Ed.2d 304, the court has stated no more than the obvious: that government regulation of property which does not actually further its stated purpose (*Nollan* and *Dolan*) or which renders property commercially worthless (*Lucas*) is a taking for which compensation is required.¹

In concluding Hansen Brothers may be prohibited from expanding its business beyond the historic norm, the majority misapprehends the effect of the just compensation clause on a mineral extraction business. This case is not about whether the Board may prohibit the expansion of mining operations on the Hansen Brothers' property. For purposes of this appeal, we may assume the Board's legislative power is broad enough not only to prohibit expansion but to shut down the operation altogether. However, “a strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change.” (*Pennsylvania Coal Co. v. Mahon*, supra, 260 U.S. at p. 416, 43 S.Ct. at p. 160, 67 L.Ed. at p. 326.)

Were I writing on a clean slate, I would conclude that, except for cases of nuisance affecting the property rights of others, due process requires compensation for any public restriction on any lawful uses of private property, both current and prospective. I can conceive of no principled reason why the burden of all restrictions on private property for the benefit of the public should not be borne by the public.

Yet it has long been accepted legal orthodoxy that adoption of a zoning ordinance may prohibit certain uses of private property without payment of just compensation. (See *Village of Euclid v. Ambler Realty Co.* (1926) 272 U.S. 365, 47 S.Ct. at 114, 71 L.Ed. 303; *Consolidated Rock Products Co. v. City of Los Angeles* (1962) 57 Cal.2d 515, 20 Cal.Rptr. 638, 370 P.2d 342; *Beverly Oil Co. v. City of Los Angeles* (1953) 40 Cal.2d 552, 254 P.2d 865; *Edmonds v. County of Los Angeles* (1953) 40 Cal.2d 642, 255 P.2d 772; *Rehfeld v. City and County of San Francisco* (1933) 218 Cal. 83, 21 P.2d 419.) And while an existing, nonconforming use may not be so restricted (see *Livingston Rock & Gravel Co. v. County of Los Angeles* (1954) 43 Cal.2d 121, 126, 272 P.2d 4), a proposed expansion of that use may be prohibited, in the case of commercial property, where it would effect a change in the basic nature of the business (4 *Rathkopf, The Law of Zoning and Planning* (4th ed.) § 51A.04, p. 51A–49; 6 *Powell on Real Property*, ¶ 871[3][c][ii]).

In concluding Hansen Brothers may not expand its mining operation as contemplated in the reclamation plan, the majority apparently view the proposed increase as a change in the fundamental nature of the business. They rely primarily on *San Diego County v. McClurken* (1951) 37 Cal.2d 683, 234 P.2d 972, in which the court concluded erection of four permanent storage tanks on a parcel of property, increasing storage capacity five-fold, where only movable tanks had been used for intermittent storage in the past, was not a continuation of an existing use and could be prohibited consistent with due process. Other cases in which the result turns on a perceived change in the fundamental nature of the business have also involved erection or expansion of permanent structures. (See, e.g., *Beverly Oil Co. v. City of Los Angeles*, supra, 40 Cal.2d 552, 254 P.2d 865 [addition of oil wells to existing field]; *Edmonds v. County of Los Angeles*, supra, 40 Cal.2d 642, 255 P.2d 772 [increase in trailer park from 20 to 50 units requiring expansion of utility houses]; *Rehfeld v. City and County of San Francisco*, supra, 218 Cal. 83, 21 P.2d 419 [extension of a grocery store 22 feet backward onto a vacant lot].)

I am aware of no paramount decisional authority in which a change in the nature of a mineral extraction business, wrought solely by an increase in production, warranted restriction as a nonconforming use.² This is not surprising. The same general rules that might be applied to more typical businesses are not readily transferable to a mining operation. “By its very nature, quarrying involves a unique use of land.

As opposed to other nonconforming uses in which the land is merely incidental to the activities conducted upon it, quarrying contemplates the excavation and sale of the corpus of the land itself as a resource.” (Syracuse Aggregate Corp. v. Weise (1980) 51 N.Y.2d 278, 434 N.Y.S.2d 150, 153–154, 414 N.E.2d 651.) Since an extractive business involves a wasting asset, it has a finite life. Whether all of the minerals are extracted in a brief span or over a longer period of time, the total amount extracted is the same.

An increase in production in an extractive business is not a change in the basic nature of the business. The nature of the business is to extract as much of the available minerals as may profitably be marketed and as surrounding circumstances will permit. Whether all of the available minerals are extracted in one year or one hundred years is immaterial. In fact, under certain circumstances, it might well be in the public's interest if the rate of extraction were increased, since this would hasten the eventual termination of the nonconforming use. In my view, the Board erred in denying approval of the reclamation plan on the basis of the proposed increase in production.

II

The Board also erred in concluding the hillside may not be mined. As explained in *McCaslin v. City of Monterey Park* (1958) 163 Cal.App.2d 339, 349, 329 P.2d 522: “The very nature and use of an extractive business contemplates the continuance of such use of the entire parcel of land as a whole, without limitation or restriction to the immediate area excavated at the time the ordinance was passed.” The great weight of authority from other jurisdictions is in accord. (See, e.g., *Gibbons & Reed Co. v. North Salt Lake City* (1967) 19 Utah 2d 329, 431 P.2d 559, 564; *Moore v. Bridgewater Township* (1961) 69 N.J.Super. 1, 173 A.2d 430; *County of DuPage v. Elmhurst—Chicago Stone Co.* (Ill.1960) 18 Ill.2d 479, 165 N.E.2d 310, 313; *Hawkins v. Talbot* (1957) 248 Minn. 549, 80 N.W.2d 863, 865–866; *Cheswick v. Bechman* (1945) 352 Pa. 79, 42 A.2d 60, 62; contra, *Flanagan v. Hollis* (1972) 112 N.H. 222, 293 A.2d 328; *Wayland v. Lee* (1950) 325 Mass. 637, 91 N.E.2d 835.)

If the Board's position on this issue is upheld, it would leave no principled basis to prevent the Board also from prohibiting mining further up or down the river or at greater depths than previously attained. In effect, the mining operation would have to cease immediately because only property previously used, i.e., where the ore had already been extracted, could be mined. The absurdity of such a result is self-evident.

As explained in *Syracuse Aggregate Corp. v. Weise* (1980) 51 N.Y.2d 278, 286, 434 N.Y.S.2d 150, 153–154, 414 N.E.2d 651, 655: “By its very nature, quarrying involves a unique use of land. As opposed to other nonconforming uses in which the land is merely incidental to the activities conducted upon it, quarrying contemplates the excavation and sale of the corpus of the land itself as a resource. Depending on customer needs, the land will be gradually excavated in order to supply the various grades of sand and gravel demanded. Thus, as a matter of practicality as well as economic necessity, a quarry operator will not excavate his entire parcel of land at once, but will leave areas in reserve, virtually untouched until they are actually needed.

“It is because of the unique realities of gravel mining that most courts which have addressed the particular issue involved herein have recognized that quarrying constitutes the use of land as a ‘diminishing asset’. Consequently, these courts have been nearly unanimous in holding that quarrying, as a nonconforming use, cannot be limited to the land actually excavated at the time of enactment of the restrictive ordinance because to do so would, in effect, deprive the landowner of his use of the property as a quarry.” (Citations omitted.)

In my view, Hansen Brothers has a constitutional right to pursue its mining operation on any part of its property and to increase production as desired, consistent with the law of nuisance.

Even assuming that I would disagree with the majority's analysis of the hillside issue, their failure to address the issue is unfortunate. As a result of the majority decision, Hansen Brothers must submit a new reclamation plan. Even if the new plan does not contain a proposed increase in production, there is no reason to believe Hansen Brothers will abandon its plan to mine the hillside and the matter will be

back before the courts on one of the very issues now before us. The question should be resolved here and now so that further court proceedings on that issue may be averted.

I would reverse the judgment and remand with directions to the trial court to issue a writ of mandate compelling the Board to approve Hansen Brothers' reclamation plan.

FOOTNOTES

1. Dolan held that a forced public dedication in exchange for a permit to expand a business on private property must be roughly proportional to the impact of the proposed construction on public interests. In dissent, Justice Stevens, with no apparent sense of irony, lamented that “property owners have surely found a new friend today.” (Dolan v. City of Tigard, *supra*, 512 U.S. at p. ———, 114 S.Ct. at p. 2326, 129 L.Ed.2d at p. 329.) The irony is that even as Justice Stevens was deploring the high court's rebuff of government's attempt to coerce property owners, lovers of freedom were rejoicing that millions of people the world over had finally been rescued from coercive government or, to use Justice Stevens's phrase, had “found a new friend.” It is paradoxical that in the world's oldest democracy there is significant support for the principle that property rights are subordinate to the coercive whims of government.

2. Although the court in *Beverly Oil Co. v. City of Los Angeles*, *supra*, 40 Cal.2d 552, 254 P.2d 865 upheld a zoning ordinance prohibiting the owner of property containing oil wells from increasing the number of wells or extending existing wells to a greater depth in order to tap the reserves at lower levels, there was no indication the owner desired to increase production. The court did not address the issue of just compensation but instead noted the owner received reciprocal benefits from the ordinance because surrounding owners were not permitted to sink wells and, as oil is a migratory substance, the plaintiff could extract oil from beneath surrounding land. (40 Cal.2d at p. 559, 254 P.2d 865.) The court concluded the owner failed to prove there had been an impairment of its property interests. (*Ibid.*)

NICHOLSON, Associate Justice.

BLEASE, J., concurs.

WILLIAM CALVERT et al., Plaintiffs and Appellants,
v.
COUNTY OF YUBA et al., Defendants and Respondents; WESTERN
AGGREGATES LLC, Real Party in Interest and Appellant.

C047857

COURT OF APPEAL OF CALIFORNIA, THIRD APPELLATE DISTRICT

*145 Cal. App. 4th 613; 51 Cal. Rptr. 3d 797; 2006 Cal. App. LEXIS 1918; 2006
Daily Journal DAR 15903*

December 5, 2006, Filed

NOTICE: As modified Jan. 3, 2007.

SUBSEQUENT HISTORY: Modified by *Calvert v. County of Yuba*, 2007 Cal. App. LEXIS 8 (Cal. App. 3d Dist., Jan. 3, 2007)

PRIOR HISTORY: [***1] APPEAL from a judgment of the Superior Court of Sacramento County, No. 00CS01434, Raymond M. Cadei, Judge.

SUMMARY: CALIFORNIA OFFICIAL REPORTS SUMMARY

The trial court granted summary adjudication to adjacent landowners on a challenge to a county's determination that a mining company had vested rights under the Surface Mining and Reclamation Act of 1975 (SMARA) (*Pub. Resources Code*, § 2710 *et seq.*). The trial court ruled against the adjacent landowners' claims seeking enforcement of SMARA. The county made the vested rights determination under *Pub. Resources Code*, § 2776, without notice and without a hearing. (Superior Court of Sacramento County, No. 00CS01434, Raymond M. Cadei, Judge.)

The Court of Appeal affirmed the judgment as modified to vacate certain remand conditions and to impose conditions requiring the mining company to either prove its claim of vested rights in a public adjudicatory hearing or obtain a permit to conduct surface mining based on a public adjudicatory hearing. The court held that the county's determination violated the procedural due process requirements under *U.S. Const.*, 5th Amend., and *Cal. Const.*, art. I, § 7, *subd. (a)*, of reasonable notice and an opportunity to be heard. The determination was adjudicative, not ministerial, because it encompassed factual issues that had to be resolved through the adjudicative exercise of judgment. Because the surface mining operation implicated the diminishing asset doctrine, the mining company had to show that the area it desired to excavate was clearly intended to be excavated at the time the permit requirement went into effect. The determination implicated significant or substantial deprivations of the adjacent landowners' property rights, and their settlement of claims against the mining company did not waive due process protections. The adjacent landowners were not entitled to a writ of mandate under *Pub. Resources Code*, § 2716, to enforce SMARA because there was no clear violation. Private enforcement actions are not authorized by *Pub. Resources Code*, § 2774.1, *subd. (g)*. (Opinion by Davis, J., with Blease, Acting P. J., and Hull, J., concurring.) [*614]

HEADNOTES: CALIFORNIA OFFICIAL REPORTS HEADNOTES

Classified to California Digest of Official Reports

(1) Estoppel § 3--By Filing Legal Proceedings or Pleadings Therein--Inconsistent Positions in Litigation.--The principle of judicial estoppel forecloses a litigant from taking inconsistent positions that suit its purposes at different points in the litigation and that impinge on the integrity of the judicial process.

(2) Administrative Law § 89--Limitations on Availability of Judicial Review or Relief--Exhaustion of Administrative Remedies--Exceptions--Inadequate Remedies.--One need not exhaust inadequate remedies in order to challenge their sufficiency.

(3) Constitutional Law § 107--Procedural Due Process--Significant or Substantial Property Deprivation--Adjudicative Governmental Action.--The California and federal Constitutions prohibit the government from depriving persons of property without due process (*U.S. Const., 5th Amend.*; *Cal. Const., art. I, § 7, subd. (a)*). In line with this constitutional bedrock, an adjudicative governmental action that implicates a significant or substantial property deprivation generally requires the procedural due process standards of reasonable notice and opportunity to be heard. Legislative action generally is not governed by these procedural due process requirements because it is not practical that everyone should have a direct voice in legislative decisions; elections provide the check there. Ministerial action is generally not within this constitutional realm either. This is because ministerial decisions are essentially automatic based on whether certain fixed standards and objective measurements have been met.

(4) Mines and Minerals § 11--Operations--Surface Mining--Vested Rights.--Generally, for a nonconforming land use to be allowed to continue, the use must be similar to the use existing at the time the land use law became effective. Intensification or expansion of the use is prohibited. This general principle, however, does not apply neatly to surface mining operations. This is because, unlike other nonconforming uses in which the land is merely incidental to the activities conducted upon it, surface mining contemplates the excavation and sale of the land itself, and the excavated land is a diminishing asset that requires expanding the mining into nonexcavated areas to continue the land use. In this situation, California follows the diminishing asset doctrine. Under that doctrine, a vested right to surface mine into an expanded area requires the mining owner to show (1) part of the same area was being [*615] surface mined when the land use law became effective, and (2) the area the owner desires to surface mine was clearly intended to be mined when the land use law became effective, as measured by objective manifestations and not by subjective intent.

(5) Constitutional Law § 107--Procedural Due Process--Discretionary and Ministerial Functions.--Statutory policy, not semantics, forms the standard for segregating discretionary from ministerial functions.

(6) Constitutional Law § 107--Procedural Due Process--Adjudicatory Land Use Proceedings.--Adjudicatory land use decisions substantially affect the property rights of adjacent landowners may constitute property deprivations within the context of procedural due process, requiring reasonable notice and an opportunity to be heard for those landowners before the land use decision is made. Due process notice and hearing requirements are triggered only by governmental action which results in significant or substantial deprivations of property, not by agency decisions having only a de minimis effect on land. The property interests of adjacent landowners are at stake in such an adjudicatory land use proceeding, and procedural due process protections are therefore invoked.

(7) Estoppel § 20--Rights and Privileges Waivable--Constitutional Rights.--A waiver of a constitutional right requires a knowing and intentional relinquishment of that right, and such a waiver is disfavored in the law.

(8) Parties § 1.2--Standing--Injury of Sufficient Magnitude.--A party lacks standing if it lacks a real interest in the ultimate adjudication because it has neither suffered nor is about to suffer any injury of sufficient magnitude reasonably to assure that all of the relevant facts and issues will be adequately presented.

(9) Courts § 36--Prospective and Retroactive Decisions--Judicial Discretion--Factors Considered--Fairness and Public Policy.--Generally, judicial decisions are applied retroactively. But considerations of fairness and public policy may limit such application.

(10) Mines and Minerals § 11--Operations--Surface Mining--Vested Rights--Procedural Due Process.--The trial court properly granted summary adjudication to adjacent landowners who challenged a county's determination that a mining company had vested rights under the Surface Mining and Reclamation Act of 1975 (*Pub. Resources Code, § 2710 et seq.*) to mine aggregate. This determination, which was made [*616] without notice to adjacent landowners or to the public and without a hearing, violated procedural due process requirements of reasonable notice and an opportunity to be heard.

[7 Witkin, Summary of Cal. Law (10th ed. 2005) Constitutional Law, § 1043; 3 Witkin, Cal. Procedure (4th ed. 1996) Actions, § 73; 9 Witkin, Cal. Procedure (4th ed. 1997) Appeal, § § 984, 986, 949; 8 Witkin, Cal. Procedure, Extraordinary Writs, § 72.]

(11) Mandamus and Prohibition § 5--Conditions Affecting Issuance--Duty and Right to Performance.--For petitioners to obtain a traditional writ of mandate, they must show: (1) a clear, present and usually ministerial duty on the part of a public entity; and (2) a clear, present, and beneficial right on the petitioners' part to the performance of that duty.

(12) Mines and Minerals § 12--Actions and Proceedings--Surface Mining--Private Enforcement Not Contemplated.--The Legislature has created a comprehensive administrative scheme to enforce the Surface Mining and Reclamation Act of 1975, *Pub. Resources Code, § 2710 et seq.*, indicating that private enforcement is not contemplated.

(13) Mandamus and Prohibition § 9--Conditions Affecting Issuance--Effectiveness and Necessity--Action Already Performed.--A writ of mandate will not issue to compel an action that already has been performed.

COUNSEL: Jeffer, Mangels, Butler & Marmaro, Kerry Shapiro, Paul L. Warner and Melanie L. Tang for Real Party in Interest and Appellant Western Aggregates LLC.

Weinberg, Roger & Rosenfeld, David A. Rosenfeld, Christian L. Raisner, Theodore Franklin and M. Suzanne Murphy for Plaintiffs and Appellants William Calvert and Yuba Goldfields Access Coalition.

No appearance on behalf of Defendant and Respondent County of Yuba.

Bill Lockyer, Attorney General, Tom Greene, Chief Assistant Attorney General, Mary E. Hackenbracht, Assistant Attorney General and Russell B. Hildreth, Deputy Attorney General, for Defendants and Respondents Department of Conservation and State Mining and Geology Board.

JUDGES: Davis, J., with Blease, Acting P. J., and Hull, J., concurring.

OPINION BY: DAVIS [*617]

OPINION:

[**800] **DAVIS, J.**--This appeal involves the Surface Mining and Reclamation Act of 1975. (SMARA; *Pub. Resources Code, § 2710 et seq.*) Our principal conclusion is that if an entity claims a vested right pursuant to SMARA to conduct a surface mining operation that is [***2] subject to the diminishing asset doctrine, that claim must be determined in a public adjudicatory hearing that meets procedural due process requirements of reasonable notice and an opportunity to be heard. We give this conclusion limited retroactive effect. We shall affirm the judgment with certain modifications.

Background

The Legislature enacted SMARA in 1975 "to create and maintain an effective and comprehensive surface mining and reclamation policy." (*Pub. Resources Code, § 2712.*)ⁿ¹ Through SMARA, the Legislature intended to: prevent or minimize adverse environmental effects and reclaim mined lands; encourage the production and conservation of minerals while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; and eliminate residual hazards to the public health and safety. (§ 2712, *subds. (a)-(c).*)

ⁿ¹ Hereafter, undesignated section references are to the Public Resources Code.

At the heart of [***3] SMARA is the general requirement that every surface mining operation have a permit, a reclamation plan, and financial assurances to implement the planned reclamation. (§ 2770, *subd. (a); People ex rel. Dept. of Conservation v. El Dorado County* (2005) 36 Cal.4th 971, 984 [**801] [32 Cal. Rptr. 3d 109, 116 P.3d 567] (*El Dorado*).)

Under section 2776 of SMARA, though, "[n]o person who has obtained a vested right to conduct surface mining operations prior to January 1, 1976, shall be required to secure a permit pursuant to [SMARA] as long as the vested right continues and as long as no substantial changes are made in the operation A person shall be deemed to have vested rights if, prior to January 1, 1976, he or she has, in good faith and in reliance upon a permit or other authorization, if the permit or other authorization was required, diligently commenced surface mining operations and incurred substantial liabilities for work and materials necessary therefor." Notwithstanding a vested right to conduct surface mining operations, the two other basic requirements of SMARA--a reclamation plan and financial assurances--apply to operations conducted after January 1, 1976. (§ § 2776, 2770, *subds. (b), [***4] (c).*) [*618]

Recognizing the diverse conditions throughout the state, SMARA provides for "home rule." This means the local lead agency, usually a city or county, has primary responsibility to implement the provisions of SMARA. (§ 2728; *El Dorado, supra*, 36 Cal.4th at p. 984.) The State Mining and Geology Board (the Board), which is part of the Department of Conservation within the Resources Agency, may step into the shoes and assume the role of the local lead agency if the Board finds that the local agency has not been fulfilling its duties under SMARA. (§ § 601, 660, 2774.4.)

The action before us arises from the determination of Yuba County (County or the County) in May 2000 that Western Aggregates LLC (Western) has a vested right to mine "aggregate" (sand, gravel and rock for construction) from approximately 3,430 acres in the Yuba Goldfields. The Yuba Goldfields consists of approximately 10,000 acres bordering the Yuba River; it once had been mined for gold and now contains massive aggregate deposits resulting from the placer/hydraulic mining of gold dating to the 19th century.

County determined Western's vested rights after the superior court in a previous lawsuit [***5] (the *Gilt Edge* lawsuit) had concluded in 1999 that County's zoning authorization for surface mining in the Yuba Goldfields was not a proper substitute for a SMARA permit. After this lawsuit, County invited all mine operators, including Western, to apply for a vested rights determination pursuant to SMARA.

In February 2000, Western filed with County its vested rights submittal, consisting of a six-page cover letter, a 70-page memorandum of law and fact, and nearly 370 exhibits. In May 2000, County sent Western a determination letter. The letter stated that the community development director had found, based on Western's vested rights submittal and materials in County's files, that Western has a vested right to mine aggregate in the 3,430 acres of the Yuba Goldfields. This determination was made without notice to adjacent landowners or to the public, and without a hearing. (Western does not presently mine the total 3,430 acres, but is mining in roughly one-third of this area, apparently intending to move into unmined areas as mined areas are depleted of aggregate. Western also has its sights on about 5,000 additional acres in the Yuba Goldfields.)

Challenging the County's vested [***6] rights determination as to Western (and other mining operators), William Calvert and the Yuba Goldfields Access Coalition (collectively, Petitioners) sued the County, the state (including the Board and the Director of the Department of Conservation; collectively, the State) and Western (real party [**802] in interest). Calvert has lived on his ranch in the Yuba Goldfields since 1974 and owns property 300 feet from Western's property. The Yuba Goldfields Access Coalition is a nonprofit organization [*619] that includes Yuba County residents and taxpayers. The coalition seeks to open the Yuba Goldfields for public recreational use and establish environmentally sound uses of the Goldfields' natural resources and the Yuba River.

The operative pleading is the Petitioners' third amended complaint and petition for writ of mandate, which the trial court reorganized and clarified. All parties on appeal have accepted this reorganized and clarified pleading, and have used it as the centerpiece of their appeals. We will do likewise.

Petitioners' complaint and petition, as it pertains to Western, contains the following five reorganized causes of action: first--a claim against the County and the State to take [***7] enforcement action against Western for allegedly violating SMARA by operating without a permit or a valid reclamation plan, seeking as a remedy an injunction or a writ of mandate; second and third--direct actions against Western for violating SMARA by, respectively, not having a permit or vested rights and not having a valid reclamation plan, and seeking an injunction; fourth--a claim against the State that it abused its discretion by not enforcing SMARA and not taking over the functions of the County as the lead agency, and seeking a writ of mandate; and fifth--a claim that County violated due process requirements of notice and hearing in determining that Western has vested rights to mine the 3,430 acres, and seeking a writ of mandate to remand the matter for proper proceedings.

Western moved for summary adjudication or summary judgment, and Petitioners moved for summary adjudication. (*Code Civ. Proc.*, § 437c.) The trial court granted Western summary adjudication on the first through

fourth causes of action, and granted Petitioners summary adjudication on the fifth. Given the ruling on the fifth cause of action, the trial court denied Western's motion [***8] for summary judgment as Western's motion did not dispose of all five causes of action. The cross-motions for summary adjudication did account for all five causes of action, though, and the trial court entered a judgment on this summary adjudication.

Western and Petitioners, in an appeal and a cross-appeal respectively, have appealed their losses here. The only mining operation involved in these appeals is Western's.

Discussion

1. *Fifth Cause of Action--Vested Rights Determination and Procedural Due Process*

We start with the fifth cause of action because it sets the stage for discussing the others. [*620]

On the fifth cause of action, as noted, Petitioners moved successfully for summary adjudication, the trial court finding that the County had violated procedural due process requirements of reasonable notice and hearing in determining that Western has vested rights to mine the 3,430 acres at issue in the Yuba Goldfields. (The parties have continued to use this 3,430-acre figure, although it may be overstated by 120 acres. We will use it as well, and express no view regarding the 120-acre issue.)

In its original summary adjudication order regarding this cause of action, [***9] the trial court issued a writ of mandate that vacated County's vested rights determination as to Western and remanded for further proceedings in compliance with procedural [**803] due process. Western then moved for clarification, noting that this order did not specify whether the County or the Board would conduct the remanded proceedings. In a modification to the order (carried into the judgment), the trial court remanded to the County for further proceedings, subject to the following three conditions: County was not required to hold a new vested rights proceeding; Western was not required to request one; and if County did hold such a proceeding, it had to satisfy procedural due process requirements of reasonable notice and opportunity to be heard. (The trial court's modified order had also noted that other administrative bodies were not foreclosed from determining Western's vested rights if legally authorized or required to do so.)

Western appeals from that portion of the judgment on the fifth cause of action that states that Western's vested rights must be determined pursuant to procedural due process requirements of reasonable notice and opportunity to be heard. Petitioners cross-appeal [***10] from the modified portion of this judgment setting forth the three remand-related conditions.

Before we tackle the merits of these claims, we must address several threshold issues tendered by Western.

First, Western claims we lack jurisdiction because Petitioners did not pray in their complaint for a remand for a public hearing on Western's vested rights determination, and did not specify in their notice of appeal that they were appealing the modified portions of the judgment as to the fifth cause of action. As Western acknowledges, however, Petitioners, in the operative complaint and petition, allege that County's vested rights determination was improperly made " 'without public notice' " and " 'without affording the public an opportunity to comment.' " A remand for a proper procedure that meets these requirements goes without saying. As for their notice of cross-appeal, Petitioners stated in part that they were appealing the portion of the judgment "incorporating the *Modified Orders Granting Summary Adjudication* [i.e., the remand-related three conditions regarding the fifth cause of action]." (Italics added.) [*621]

Next, Western asserts that Petitioners have abandoned their arguments [***11] regarding reclamation plan deficiencies. Not so. Those deficiencies have been a part of Petitioners' case since they filed their complaint and petition. In their brief on appeal, Petitioners define the nature of their action in the following terms: "This action seeks enforcement of SMARA as to a broad expanse of the Yuba Goldfields--in particular, the requirement that all surface mining operations be conducted pursuant to permit and that the permit be conditioned upon a valid reclamation plan ... approved by the lead agency."

As for its final complement of threshold contentions, Western argues that Petitioners are foreclosed from claiming procedural due process requirements as to the vested rights determination by the principles of judicial estoppel, statute of limitations and failure to exhaust administrative remedies. We take these in turn.

(1) The principle of judicial estoppel forecloses a litigant from taking inconsistent positions that suit its purposes at different points in the litigation and that impinge on the integrity of the judicial process. (*Jackson v. County of Los Angeles* (1997) 60 Cal.App.4th 171, 181 [70 Cal. Rptr. 2d 96].) The problem for Western on this point is that [***12] the examples it cites of Petitioners' purported inconsistencies regarding their due process position show that Petitioners have *consistently* maintained this position *against Western*. For example, Petitioners moved to sever the issue of procedural due process with respect to [**804] vested rights from other issues, and Western opposed this motion on nonsubstantive grounds. Petitioners opposed Western's motion to join two other mining operators as indispensable parties, arguing that these two operators had entirely different mining operations from Western's. And Petitioners settled with operators other than Western even though vested rights of these operators had not been established in due process hearings.

(2) As for the statute of limitations, Western contends that Petitioners failed to meet the short statute of limitations under the California Environmental Quality Act. (CEQA; § 21000 *et seq.*) County filed a notice that its vested rights determination as to Western--a ministerial determination, County maintained--was exempt from CEQA. However, Petitioners do not challenge the vested rights determination on CEQA grounds; therefore, the CEQA statute of limitations does not apply. In [***13] any event, as we shall see later, the vested rights determination here is not a ministerial determination under CEQA.

And, finally, there is a fundamental problem with Western's claim of Petitioners' failure to exhaust administrative remedies: The essence of Petitioners' fifth cause of action is that the administrative procedure the County used to determine Western's vested rights is constitutionally inadequate. As [*622] the state Supreme Court remarked in rejecting a similar claim, "[o]ne need not exhaust inadequate remedies in order to challenge their sufficiency." (*Horn v. County of Ventura* (1979) 24 Cal.3d 605, 611 [156 Cal. Rptr. 718, 596 P.2d 1134] (*Horn*).)

That brings us to the substance of Western's appeal involving the fifth cause of action: Is the vested rights determination regarding Western's surface mining operation as to the 3,430 acres subject to procedural due process requirements of reasonable notice and opportunity to be heard? Our answer: Yes.

To begin our analysis, we set forth some basic principles of how procedural due process applies generally to land use decisions.

There are three general types of actions that local government agencies take in land use [***14] matters: legislative, adjudicative and ministerial. (2 Longtin's Cal. Land Use (2d ed. 1987) § 11.10, p. 989 (Longtin's); see also *Horn, supra*, 24 Cal.3d at pp. 612, 615-616.) Legislative actions involve the enactment of general laws, standards or policies, such as general plans or zoning ordinances. (Longtin's, *supra*, pp. 989-990.) Adjudicative actions--sometimes called quasi-judicial, quasi-adjudicative or administrative actions--involve discretionary decisions in which legislative laws are applied to specific development projects; examples include approvals for zoning permits and tentative subdivision maps. (Longtin's, *supra*, p. 990.) Ministerial actions involve nondiscretionary decisions based only on fixed and objective standards, not subjective judgment; an example is the issuance of a typical, small-scale building permit. (*Ibid.*; see *Horn, supra*, 24 Cal.3d at p. 616; see also *Friends of Westwood, Inc. v. City of Los Angeles* (1987) 191 Cal.App.3d 259, 271-272 [235 Cal. Rptr. 788] (*Friends of Westwood*); *People v. Department of Housing & Community Dev. (Ramey)* (1975) 45 Cal.App.3d 185, 193-194 [119 Cal. Rptr. 266] [***15] (*Ramey*).)

(3) The state and federal Constitutions prohibit the government from depriving persons of property without due process. (*U.S. Const.*, 5th Amend.; *Cal. Const.*, art. I, § 7, subd. (a).) In line with this constitutional bedrock, an adjudicative governmental action that implicates a significant [**805] or substantial property deprivation generally requires the procedural due process standards of reasonable notice and opportunity to be heard. (*Horn, supra*, 24 Cal.3d at pp. 612-616.) Legislative action generally is not governed by these procedural due process requirements because it is not practical that everyone should have a direct voice in legislative decisions; elections provide the check there. (*Id.* at p. 613; see Longtin's, *supra*, § 11.10, p. 990.) Ministerial action is generally not within this constitutional realm either. This is because [*623] ministerial decisions are essentially automatic based on whether certain fixed standards and objective measurements have been met. (*Horn, supra*, 24 Cal.3d at pp. 615-616.)

There is one more legal principle that plays a pivotal role in our analysis: the principle of vested rights. In light [***16] of the *state and federal constitutional takings clauses*, when zoning ordinances or similar land use

regulations are enacted, they customarily exempt existing land uses (or amortize them over time) to avoid questions as to the constitutionality of their application to those uses. (*Hansen Brothers Enterprises, Inc. v. Board of Supervisors* (1996) 12 Cal.4th 533, 551-552 [48 Cal. Rptr. 2d 778, 907 P.2d 1324] (*Hansen*).) Such exempted uses are known as nonconforming uses and provide the basis for vested rights as to such uses. (*Ibid.*)

(4) Generally, for a nonconforming land use to be allowed to continue, the use must be similar to the use existing at the time the land use law became effective. Intensification or expansion of the use is prohibited. (*Hansen, supra*, 12 Cal.4th at p. 552.) This general principle, however, does not apply neatly to surface mining operations. This is because, unlike other nonconforming uses in which the land is merely incidental to the activities conducted upon it, surface mining contemplates the excavation and sale of the land itself, and the excavated land is a " 'diminishing asset' " that requires expanding the mining into nonexcavated areas to continue the land [***17] use. (*Id.* at pp. 553-556.) In this situation, California follows the "diminishing asset" doctrine. Under that doctrine, a vested right to surface mine into an expanded area requires the mining owner to show (1) part of the same area was being surface mined when the land use law became effective, and (2) the area the owner desires to surface mine was clearly intended to be mined when the land use law became effective, as measured by objective manifestations and not by subjective intent. (*Id.* at pp. 555-556; see *id.* at p. 576 (conc. opn. of Werdegar, J.).)

With these principles in mind, Western contends that its vested rights determination is ministerial. Petitioners counter that this determination is adjudicative and requires the procedural due process protections of reasonable notice and an opportunity to be heard for persons significantly affected by the determination. We agree with Petitioners.

We start with the SMARA statute on vested rights. *Section 2776* states as pertinent: "No person who has obtained a vested right to conduct surface mining operations prior to January 1, 1976, shall be required to secure a permit pursuant to [***18] [SMARA] as long as the *vested right continues* and as long as *no substantial changes* are made in the operation except in accordance with [SMARA]. A person shall be deemed to have vested rights if, [*624] prior to January 1, 1976, he or she has, in [**806] *good faith* and in reliance upon a permit or other authorization, if the permit or other authorization was required, *diligently commenced surface mining operations* and *incurred substantial liabilities* for work and materials *necessary therefor*." (Italics added.)

These italicized portions of *section 2776* encompass several factual issues that must be resolved through the adjudicative exercise of judgment rather than the ministerial (automatic, nondiscretionary) application of fixed standards and objective measurements.

A good example of this dichotomy is provided by a decision from this court, *Ramey*. (*Ramey, supra*, 45 Cal.App.3d 185.) In *Ramey*, we concluded that the approval of a mobilehome park construction permit was a discretionary act subject to CEQA rather than a ministerial act exempt from CEQA. (A ministerial decision under CEQA similarly involves only the use of fixed standards or objective [***19] measurements.) Although the approval process in *Ramey* involved a large number of "ministerial" decisions applying "fixed" design and construction specifications, there were other approval decisions where the standards were "relatively general": for example, " 'sufficient' " supply of lighting; "satisfactory" sewage disposal; "adequate" water supply; and " 'well-drained' " site. (*Ramey, supra*, 45 Cal.App.3d at p. 193; see also *Friends of Westwood, supra*, 191 Cal.App.3d at pp. 270-271.) These relatively general approval decisions did not have the agency, in ministerial fashion, " 'merely appl[ying] the law to the facts ... us[ing] no special discretion or judgment in reaching a decision.' " (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 117 [65 Cal. Rptr. 2d 580, 939 P.2d 1280].) Instead, these general approval decisions involved "relatively personal decisions addressed to the sound judgment and enlightened choice of the [agency]... . Inevitably they evoke[d] a strong admixture of discretion." (*Ramey, supra*, 45 Cal.App.3d at p. 193; see *Friends of Westwood, supra*, 191 Cal.App.3d at p. 272.)

The same can be said, [***20] and has been said, for *section 2776*'s issues of "substantial changes ... in the operation," and "in good faith ... diligently commenced ... operations and incurred substantial liabilities for work and materials necessary therefor." In construing *section 2776* in a 1976 opinion, the Attorney General concluded that determining "substantial change[s]" in operations and " 'substantial liabilities' " for work and materials constitute questions of fact which can only be determined on a case-by-case basis in a proper vested rights proceeding before the lead agency. (59 Ops.Cal.Atty.Gen. 641, 643, 655-656 (1976); see also *Horn, supra*, 24 Cal.3d at p. 614 [subdivision development approvals involve the application of general standards to specific parcels of real property; such governmental conduct, affecting the relatively few, is " 'determined by facts peculiar to the individual case' and is 'adjudicatory' in nature"].) [*625]

Furthermore, the vested rights determination here encompasses more than just these factual issues set forth in section 2776. Western's extractive surface mining operation implicates the diminishing asset doctrine. Consequently, Western [***21] must show that the area it desires to excavate was " 'clearly intended' " to be excavated--as measured by objective manifestations, not subjective intent--when the vested rights trigger of a new law was pulled. (Western concedes this triggering occurred when County's first mining regulation [**807] --a mining permit ordinance--became effective in April 1971.) (*Hansen, supra*, 12 Cal.4th at p. 556, italics omitted; see *id.* at p. 576 (conc. opn. of Werdegar, J.)). Moreover, there are issues here regarding whether the alleged vested right has been "continu[ous]" (§ 2776), as the subject site has involved gold mining and not simply aggregate mining.

The sheer quantity and complexity of these factual issues illustrate why the government agency in *Hansen* held a public adjudicatory hearing--with testimony from nearby landowners--and made a findings-based determination regarding a diminishing asset claim of vested rights to mine aggregate on a 67-acre parcel of riverbed and adjacent land. (See *Hansen, supra*, 12 Cal.4th at pp. 540-544, 545-546, fn. 9, 568.) Bear in mind, we are dealing here with a diminishing asset claim of vested rights to mine aggregate on [***22] 3,430 acres of river-related land, which is more than five square miles and more than 50 times the size of the area at issue in *Hansen*.

(5) *Ramey* noted, importantly, that "[s]tatutory policy, not semantics, forms the standard for segregating discretionary from ministerial functions." (*Ramey, supra*, 45 Cal.App.3d at p. 194.) SMARA's policy is to assure that adverse environmental effects are prevented or minimized; that mined lands are reclaimed to a usable condition; that the production and conservation of minerals are encouraged while giving consideration to recreational, ecological and aesthetic values; and that residual hazards to the public health and safety are eliminated. (§ 2712.) A public adjudicatory hearing that examines all the evidence regarding a claim of vested rights to surface mine in the diminishing asset context will promote these goals much more than will a mining owner's one-sided presentation that takes place behind an agency's closed doors.

A vested rights determination acts as the fulcrum in SMARA policy because it (or its analogue, a permit to surface mine) governs the coverage of the reclamation plan and, in turn, the financial [***23] assurances to implement the plan. (§ § 2770, subds. (a)-(c), 2772, subd. (c)(5), (6); see *El Dorado, supra*, 36 Cal.4th at p. 984 [permit, plan and assurances are the heart of SMARA].) A vested rights determination functions in the SMARA scheme as does a surface mining permit--it sets the tone for all that follows. Western concedes the law is settled that the issuance of such permits "is adjudicatory in nature and therefore subject to notice and hearing requirements." (*Hayssen v. Board* [*626] of *Zoning Adjustments* (1985) 171 Cal.App.3d 400, 404 [217 Cal. Rptr. 464] (*Hayssen*)). A similarity in function between permits and vested rights argues for a similarity in their issuance. Western asserts, though, that vested rights are to be distinguished from conditional permits such as surface mining permits. That is true. Vested rights, if established and continued, generally cannot be conditioned (although they can be limited in time--for example, through amortization of investment). (See *Hansen, supra*, 12 Cal.4th at p. 552.) This recognition, however, does not foreclose vested rights from being established in a basic procedure similar to [***24] that for such permits.

We conclude, then, that the determination of Western's vested rights claim to surface mine in the diminishing asset context presents an adjudicative rather than a ministerial determination.

The question remains whether this adjudicative determination implicates significant or substantial deprivations of property [**808] to trigger procedural due process protections. (*Horn, supra*, 24 Cal.3d at pp. 612, 616; *Scott v. City of Indian Wells* (1972) 6 Cal.3d 541, 548-549 [99 Cal. Rptr. 745, 492 P.2d 1137] (*Scott*); *Hayssen, supra*, 171 Cal.App.3d at p. 404.) We conclude it does.

(6) In *Horn* and *Scott*, our state Supreme Court emphasized that adjudicatory land use decisions--in those cases, approvals for significant development projects--which " 'substantially affect' " the property rights of adjacent landowners may constitute property " 'deprivation[s]' " within the context of procedural due process, requiring reasonable notice and an opportunity to be heard for those landowners before the land use decision is made. (*Horn, supra*, 24 Cal.3d at pp. 615-616; *Scott, supra*, 6 Cal.3d at pp. 548-549.) Due process [***25] "notice and hearing requirements are triggered only by governmental action which results in 'significant' or 'substantial' deprivations of property, not by agency decisions having only a de minimis effect on land." (*Horn, supra*, at p. 616.) "It is ... now settled law that the property interests of adjacent landowners are at stake in [such an adjudicatory] land use proceeding, and that procedural due process protections are therefore invoked." (*Hayssen, supra*, 171 Cal.App.3d at p. 404, citing *Scott, supra*, 6 Cal.3d at p. 549.)

Here, Western's vested rights claim involves mining aggregate on over 3,400 acres. Western presently mines on about 1,200 acres, so Western is claiming almost a threefold increase pursuant to vested rights. The mining at issue is extractive surface mining with an expansive appetite. This description itself is enough to envision significant environmental consequences and adverse effects to adjacent properties. As such, property owners adjacent to the proposed mining have significant property interests at stake. (*Horn, supra*, 24 Cal.3d at p. 616; *Aries Dev. Co. v. California Coastal Zone Conservation Com.* (1975) 48 Cal.App.3d 534, 541 [122 Cal. Rptr. 315] [***26] (*Aries*).) [*627]

Petitioner Calvert presents a typical example of the property deprivations at play for adjacent landowners. In the complaint and petition, Calvert, who owns a house and ranch land within 300 feet of Western's property, alleged that Western's mining operation exposed his property to dust, noise, and air, water and toxic pollution; furthermore, Western's operation has damaged at-risk species of chinook salmon and steelhead trout and made area roadways more dangerous. Calvert has adequately described a property deprivation "substantial" enough to require procedural due process protection. (See *Horn, supra*, 24 Cal.3d at p. 615 [plaintiff there alleged sufficiently that the proposed development project would interfere with his property access and increase traffic congestion and air pollution].) Consequently, Calvert and the other property owners adjacent to Western's vested rights-claimed mining operation are entitled to reasonable notice and an opportunity to be heard in an evidentiary public adjudicatory hearing before that vested rights claim is determined. (*Horn, supra*, 24 Cal.3d at pp. 612, 616; *Scott, supra*, 6 Cal.3d at pp. 548-549; [***27] *Hayssen, supra*, 171 Cal.App.3d at p. 404; *Aries, supra*, 48 Cal.App.3d at p. 541.)

Pursuant to court questioning at oral argument, however, Western maintained [**809] that Calvert has forfeited any claim of substantial property deprivation by settling a prior federal lawsuit against Western (for \$ 10,000, along with other plaintiffs, we note) and by dismissing with prejudice his original third cause of action here against Western for nuisance. In the settlement agreement in the federal suit, Calvert reserved "the right to bring and prosecute a lawsuit in state court alleging violations of ... (SMARA)" by the County, the State and Western, and also reserved the right to "bring a nuisance claim against Western predicated on alleged noise and vibration from Western's operations," but the nuisance claim could not include "any claim for alleged water or air pollution by Western, which claims [were] ... explicitly waived and released" Of course, Calvert has brought the present state court action, which includes the SMARA causes of action, and which also included, originally, a nuisance cause of action against Western that was based essentially on allegations [***28] of dust and air pollution. Calvert has since dismissed with prejudice this nuisance cause of action against Western.

We conclude that the settlement of the federal lawsuit against Western for \$ 10,000 and the dismissal of the nuisance cause of action against Western do not mean that Calvert has forfeited or waived his constitutional right to receive notice and an opportunity to be heard from the governmental entity that will determine Western's vested rights claim. The record cited by Western at oral argument does not disclose the substance of the federal lawsuit--Western's counsel at oral argument referred to it as the "Proposition 65" suit (Proposition 65 covers pollution discharges and warnings)--but Calvert, along with other plaintiffs, settled that suit for \$ 10,000. Even assuming that Calvert has settled and dismissed any property deprivation [*628] claims he has against Western, that only means that Calvert is foreclosed from making any further such claims against Western. Calvert's fifth cause of action here for notice and hearing regarding Western's vested rights determination--under SMARA--is *not* a claim *against Western* for property deprivation. Rather, it is a claim [***29] *against the County* for violating procedural due process requirements of notice and hearing in determining that Western has vested rights to mine the 3,430 acres. And Calvert is not maintaining this procedural due process claim against the County *for* his property deprivation, but *because* of such deprivation. Recall that due process "notice and hearing requirements are triggered only by governmental action which results [or will result] in 'significant' or 'substantial' deprivations of property." (*Horn, supra*, 24 Cal.3d at p. 616, italics added.)

In other words, while Calvert may be foreclosed from seeking any further remedy against Western for property deprivation, he is still entitled to due process notice from, and an opportunity to be heard before, the governmental entity deciding Western's vested rights claim because he has "suffered [a] significant deprivation of property" related to that claim. (See *Horn, supra*, 24 Cal.3d at p. 615 [rejecting argument that landowner "suffered no significant deprivation of property which would invoke constitutional rights to notice and hearing"].)

Moreover, as we have explained, Western's [***30] vested rights determination centers on factual issues involving Western's mining operations and intent. And for over 30 years, Calvert has lived and ranched in the area that is the subject of that determination. Why should Calvert be foreclosed from having his say before the

governmental entity deciding these factual issues and [**810] making that determination simply because he has settled his property deprivation claims against Western?

(7) A waiver of a constitutional right requires a knowing and intentional relinquishment of that right, and such a waiver is disfavored in the law. (See *City of Ukiah v. Fones* (1966) 64 Cal.2d 104, 107-108 [48 Cal. Rptr. 865, 410 P.2d 369]; see also *Waller v. Truck Ins. Exchange, Inc.* (1995) 11 Cal.4th 1, 31 [44 Cal. Rptr. 2d 370, 900 P.2d 619]; 7 Witkin, Summary of Cal. Law (10th ed. 2005) Constitutional Law, § 104, p. 208.) It cannot seriously be argued that Calvert knowingly and intentionally relinquished his constitutional right to notice and hearing from the governmental entity deciding Western's vested rights claim simply because he settled a federal lawsuit against Western (for \$ 10,000, along with others) and dismissed a nuisance cause of action against Western, where [***31] neither action involved this constitutional notice and hearing right.

(8) Nor can there be any dispute that Calvert has standing to maintain the fifth cause of action. The question of property deprivation sufficient to obtain [*629] due process-based notice and hearing regarding adjudicatory land use decisions must be distinguished from the question of standing to bring the fifth cause of action. Although Western has thrown every threshold procedural roadblock it can think of at Petitioners, it has not claimed that they lack standing to bring the fifth cause of action. Nor could it. A party lacks standing if it lacks "a real interest in the ultimate adjudication because [it] has neither suffered nor is about to suffer any injury of sufficient magnitude reasonably to assure that all of the relevant facts and issues will be adequately presented." (*California Water & Telephone Co. v. County of Los Angeles* (1967) 253 Cal.App.2d 16, 23 [61 Cal. Rptr. 618]; see 3 Witkin, Cal. Procedure (4th ed. 1996) Actions, § 73, pp. 132-133.) That certainly cannot be said here. As attested to by the \$ 10,000 settlement in the federal lawsuit and by the scores [***32] of pages devoted to appellate briefing on the fifth cause of action, Calvert has suffered and stands to suffer an injury of sufficient magnitude through the governmental determination of Western's vested rights claim to assure that all of the relevant facts and issues have been adequately presented.

We conclude that the governmental determination of Western's vested rights claim implicates property deprivations significant or substantial enough to trigger procedural due process protections for landowners, including Calvert, adjacent to Western's proposed vested rights mining operation.

Western raises several other counterpoints to the conclusion we have reached regarding the necessity for public notice and hearing as to Western's vested rights claim, aside from its argument that a vested rights determination is a ministerial one. We are unpersuaded.

Western first raises a trio of statutory points. As Western correctly observes, SMARA does not specify a procedure for making a vested rights determination. But given the factual issues raised by SMARA's vested rights statute (§ 2776) and by the diminishing asset doctrine, and given that Western has the burden of proving its vested [***33] rights claim (*Hansen, supra*, 12 Cal.4th at p. 564), the existence, nature and scope of such rights must be determined pursuant to some procedure even if SMARA fails to specify one. It goes without saying that that procedure must be a constitutional one.

Along similar statutory lines, Western also notes that SMARA, unlike the California [**811] Coastal Act of 1976 (§ 30000 *et seq.*) or the federal Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. § 1201 *et seq.*), does not contain a procedure for a public hearing to determine vested rights. As Western acknowledges in its briefing, though, these non-SMARA statutes do not contain this procedure, but regulations enacted pursuant to them do. (§ 30000 *et seq.*; Cal. Code Regs., tit. 14, §§ 13200-13205, 13059; 30 U.S.C. § 1201 *et seq.*; 30 C.F.R. § § 761.11, 761.16 (2005).) Furthermore, the state [*630] coastal act statute on vested rights has been characterized as "remarkably similar" to the SMARA statute on vested rights, *section 2776*. (See § 30608, former § 27404 [as characterized in 59 Ops.Cal.Atty.Gen., *supra*, at p. 647].) [***34]

And for the third point in Western's statutory trilogy, *section 2774 of SMARA* states that every lead agency shall adopt ordinances establishing procedures that require at least one public hearing for the review and approval of reclamation plans and financial assurances and the issuance of surface mining permits. (§ 2774, *subd. (a).*) Although *section 2774* does not mention vested rights determinations, the section recognizes that public hearings are required to address the complex, judgment-based issues raised by permits, reclamation plans and financial assurances. We have seen that vested rights determinations in the diminishing asset context raise analogous complexities and judgment calls. Western, however, sees a distinction: determinations of mining permits and reclamation plans look to the future and involve what should happen, while determinations of vested rights look to the past and involve what has happened. Actually, it can be said that vested rights determinations, particularly in the

diminishing asset context, look to the past to look to the future. But semantics aside, Western's observation is of little help in deciding what procedural due process requires. [***35] For that, we must look, not so much to the past or to the future, but to what is being decided and to the consequences of that decision.

Finally, Western is concerned that if a public adjudicatory hearing is required to confirm vested rights, public hearings will have to be held statewide for all operations based on vested rights. As we have emphasized, though, our decision applies only to an entity claiming a vested right under SMARA to conduct a surface mining operation that is subject to the diminishing asset doctrine.

(9) This concern does raise, however, the issue of whether our decision should be given prospective or retroactive effect. Generally, judicial decisions are applied retroactively. But considerations of fairness and public policy may limit such application. (*Woods v. Young* (1991) 53 Cal.3d 315, 330 [279 Cal. Rptr. 613, 807 P.2d 455]; see *Neel v. Magana, Olney, Levy, Cathcart & Gelfand* (1971) 6 Cal.3d 176, 193 [98 Cal. Rptr. 837, 491 P.2d 421]; see also 9 Witkin, Cal. Procedure (4th ed. 1997) Appeal, § 984, p. 1038.) We prefer to steer a middle course of limited retroactivity here, making our decision apply to all cases, including [***36] the one before us, in which no final judgment on appeal has yet been rendered, or in which an administrative determination of SMARA-based vested rights, in the context presented here of diminishing asset surface mining, is yet to be made or has been made and is still subject to administrative or judicial review. (See 9 Witkin, Cal. Procedure, *supra*, Appeal, § 986, pp. 1042-1043, & cases cited therein.) Our concern is that property rights may have been founded and deemed vested in accordance [***631] with a less formal vested rights determination under SMARA, which does not specify a procedure for this determination. (See 9 Witkin, Cal. Procedure, *supra*, Appeal, § 949, p. 992 [perhaps the strongest of the considerations that influence courts to follow an established rule is that property rights have been founded and have become vested in accordance with the rule].)

[**812] (10) We conclude the trial court properly granted Petitioners summary adjudication on their fifth cause of action against Western. County's determination that Western had vested rights under SMARA to mine aggregate on the 3,430 acres violated procedural due process requirements of reasonable notice and an opportunity to be heard.

Now we turn to Petitioners' cross-appeal. As to the fifth cause of action, Petitioners properly obtained a writ of mandate to remand for constitutionally proper proceedings. (*Townsel v. San Diego Metropolitan Transit Development Bd.* (1998) 65 Cal.App.4th 940, 953 [77 Cal. Rptr. 2d 231] [***37] [ordinary mandate appropriate to compel agency to hold legally required hearing].) The trial court's modified judgment, as noted, imposed three remand-related conditions: County was not required to hold a new vested rights proceeding; Western was not required to request one; and if County held such a proceeding, it had to meet procedural due process requirements. In their cross-appeal, Petitioners contend these conditions have effectively foreclosed any remedy for the constitutional violation the trial court found pursuant to the fifth cause of action. We agree and resolve the cross-appeal as follows.

If Western wants to continue its aggregate mining in the Yuba Goldfields, it will either have to prove its claim of vested rights in a public adjudicatory hearing before the Board (§ 2776), or obtain a permit to conduct such surface mining in a public adjudicatory hearing before the County (§ § 2770, *subd. (a)*, 2774, *subd. (a)*, 2774.4, *subd. (a)*; *Hayssen, supra*, 171 Cal.App.3d at p. 404). This is because the Board has taken over the County's SMARA duties regarding Western. (§ 2774.4.) Under *section 2774.4*, when the Board takes over for a lead agency, it "shall [***38] exercise" any of the SMARA powers of that lead agency "except for permitting authority." (§ 2774.4, *subd. (a)*.) n2

n2 We have specified a deadline for this choice--vested rights or permit--in the Disposition section of this opinion. Apparently, Western has continued mining during the pendency of these proceedings and has not been, to this point, legally precluded from doing so. Until the vested rights or permit decision is made, Western may continue with its current mining, if any, in similar fashion but not expand or intensify that mining. (See *Bauer v. City of San Diego* (1999) 75 Cal.App.4th 1281, 1296 [89 Cal. Rptr. 2d 795] [city could not properly deem plaintiff's vested property rights based on an existing legal nonconforming use automatically terminated without providing plaintiff an opportunity to be heard]; see also *Hansen, supra*, 12 Cal.4th at p. 552 [describing legal requirements for a continuance of a nonconforming use].) Western remains subject to all applicable SMARA provisions regarding reclamation plans and financial assurances as to any such ongoing mining. (§ 2770.)

***39] [*632]

Furthermore, the Board will conduct any public adjudicatory hearing to determine Western's vested rights claim at an appropriate site within the County. (See, e.g., § 2774.4, *subd. (c)* [the Board shall hold a public hearing as to a lead agency's section 2774.4 deficiencies "within the lead agency's area of jurisdiction".]) Western remains subject to all applicable SMARA provisions regarding reclamation plans and financial assurances as to any authorized mining. (§ 2770.)

Notice of any public adjudicatory hearing regarding vested rights must be reasonably calculated to afford affected persons the realistic opportunity to protect their interests. Such notice must occur sufficiently prior to the determination of vested rights to provide a meaningful predeprivation hearing to affected landowners. (*Horn, supra*, 24 Cal.3d at pp. 617-618; see § 2774 [*813] [concerning public hearing regarding permit].) As suggested in *Horn*, an acceptable notice technique might include the mailing of notice to property owners of record within a reasonable distance of the subject property and the posting of notice at or near the project site. (*Horn, supra*, 24 Cal.3d at p. 618.) [***40] n3

n3 In light of our resolution of the fifth cause of action, we will not consider the parties' evidence and arguments regarding the existence, nature and scope of Western's alleged vested rights to mine aggregate in the 3,430-acre area. That will be the subject of the public adjudicatory hearing on vested rights, if that procedure is chosen.

2. First Cause of Action--Mandate to Compel SMARA Enforcement

In their first cause of action, Petitioners essentially seek a writ of mandate to compel the County and the State to enforce SMARA against Western for having no permit and no valid reclamation plan. We conclude the trial court properly granted summary adjudication to Western on this cause of action.

(11) Under SMARA, "[a]ny person may commence an action on his or her own behalf against the [B]oard, the State Geologist, or the director [of the Department of Conservation] for [a traditional] writ of mandate ... to compel the [B]oard, the State Geologist, or the director to carry out any duty [***41] imposed upon them pursuant to [SMARA]." (§ 2716.) For Petitioners to obtain a traditional writ of mandate, they must show: (1) a clear, present and usually ministerial duty on the part of the State or the County; and (2) a clear, present, and beneficial right on the Petitioners' part to the performance of that duty. (*Mobley v. Los Angeles Unified School Dist. (2001)* 90 Cal.App.4th 1221, 1244 [109 Cal. Rptr. 2d 591] (*Mobley*); *Code Civ. Proc.*, § § 1085-1086; see 8 Witkin, Cal. Procedure, *supra*, Extraordinary Writs, § 72, p. 853, & cases cited therein.)

As noted, at the heart of SMARA is the requirement that every surface mining operation have a permit (or a vested right to mine), a reclamation plan, and financial assurances for reclamation. (§ 2770, *subd. (a)*; *El Dorado*, [*633] *supra*, 36 Cal.4th at p. 984.) From this, Petitioners argue that SMARA does not allow surface mining without a permit and an approved reclamation plan based on it, except where vested rights have been established, and that is not the case here. Petitioners assert that, with no established vested rights, Western's mining without a permit or [***42] a reclamation plan based on it simply cannot be ignored or excused. Having vacated County's vested rights determination, the trial court should immediately have issued a writ of mandate compelling the County and the State to enforce SMARA, Petitioners maintain.

Leaving aside any issues of how the principle of agency prosecutorial discretion may apply here (see, e.g., *Heckler v. Chaney (1985)* 470 U.S. 821, 831-832 [84 L.Ed.2d 714, 105 S. Ct. 1649]; see also § 2774.1, *subd. (a)*), Petitioners cannot show that they meet the two basic requirements for issuance of a writ of mandate. n4

n4 We deny the State's request to take judicial notice regarding the prosecutorial discretion of the State Water Resources Control Board.

Western did establish its vested rights in a proceeding before the County. Furthermore, it is undisputed that Western has a reclamation plan that was approved in 1980. As the new lead agency, the State accepted the County's vested rights determination and is relying on that determination as well [***43] as on Western's 1980 [**814] reclamation plan to process an amendment to the plan.

As we and the trial court have concluded, County's procedure for determining Western's vested rights violated procedural due process, and a new proceeding will have to be held pursuant to reasonable notice and an opportunity to be heard. Thus, it has not been determined substantively that Western lacks vested rights, only that the procedure for determining vested rights was legally flawed. And Western does have an approved reclamation plan, although it is being updated.

In this muddled context, then, there is no clear, present and ministerial duty on the State's part to enforce SMARA against Western for having no mining permit and corresponding reclamation plan. Consequently, there is no clear, present and beneficial right on the Petitioners' part to such enforcement. Accordingly, Petitioners are not entitled to the writ of mandate they seek in the first cause of action, and summary adjudication in favor of Western was properly granted on this action.

3. Second and Third Causes of Action--Direct Actions Against Western for SMARA Violations

In their second and third causes of action, Petitioners [***44] allege direct actions against Western for violating SMARA by, respectively, not having a permit or [634] vested rights and not having a reclamation plan. Petitioners seek injunctive relief in these causes of action.

After reviewing these matters, we conclude the trial court properly resolved them. We adopt the trial court's summary adjudication opinion on these causes of action as our own. With appropriate deletions and additions, that opinion reads as follows: n5

n5 Single brackets without enclosed material indicate our deletions while double brackets with enclosed material indicate our additions to the opinion. (See, e.g., *People v. Coria* (1999) 21 Cal.4th 868, 871, fn. 1 [89 Cal. Rptr. 2d 650, 985 P.2d 970].)

SMARA does not contain an explicit provision authorizing private enforcement through an action for an injunction against a mining operator. Instead, SMARA sets forth detailed provisions for administrative enforcement by the lead agency or the Director of the Department of Conservation. (See, [[e.g.]] [] [§ 2774.1.] [***45] The only provision of SMARA that explicitly permits an action by a member of the public at large is [] section 2716, which permits "any person" to commence an action for a writ of mandate against certain state agencies or officers to compel them to carry out any duty imposed upon them pursuant to SMARA. This provision does not authorize a direct action against a mining operator.

(12) Petitioners rely on [] section 2774.1[[], subdivision]](g), which states that "[r]emedies under this section are in addition to, and do not supersede or limit, any and all other remedies, civil or criminal." [[We are]] not persuaded that [[this provision]] authorizes private enforcement of SMARA. In *Moradi-Shalal v. Fireman's Fund Ins[.] Companies* (1988) 46 Cal.3d 287 [250 Cal. Rptr. 116, 758 P.2d 58] [[*Moradi-Shalal*]], the Supreme Court held that a similar provision in a comprehensive statutory scheme for administrative enforcement of unfair practices claims in the insurance business did not establish a private right of action against insurance companies that committed such practices. Here, as in *Moradi-Shalal*, the Legislature created a comprehensive administrative [***46] scheme to enforce SMARA, indicating that private enforcement was not contemplated, at least not in the form attempted here.

[**815] The fact that SMARA does not authorize enforcement actions by private parties does not mean that private parties affected by mining in violation of SMARA have no remedy. As the Supreme Court explained in *Moradi-Shalal*, apart from administrative remedies, the courts retain jurisdiction to impose civil damages or other remedies in appropriate common law actions based on [635] traditional theories, i.e., based on law other than the administrative enforcement scheme itself. (46 Cal.3d at [pp.] 304-305.) In fact, SMARA explicitly recognizes and preserves the right of private parties to seek relief against mine operators under other law. (See [] [§ 2715][,

subd.]](d).) As set forth therein, such relief might be sought in an action ☐ private nuisance ☐ or for other appropriate private relief☐. ☐ The present action as it stands, however, is based purely on the alleged violations of SMARA. Petitioners' separate nuisance claim has been dismissed, and the Complaint/Petition does not purport to state a cause of action for ☐ any other ☐ claim arising outside of SMARA. ☐

☐ Petitioners' ☐ second and third☐ cause☐[s]☐ of action ☐ therefore ☐ are☐ not authorized by SMARA and the motion for summary adjudication ☐ regarding them was properly☐ granted.

[End of quotation from the trial court's opinion.]

4. *Fourth Cause of Action--SMARA Enforcement and State as Lead Agency*

In their fourth cause of action, Petitioners seek a writ of mandate, claiming the State has abused its discretion by not enforcing SMARA and by not taking over the lead agency functions from the County.

(13) Summary adjudication was properly granted in Western's favor on this cause of action. We have already rejected the writ of mandate claim involving State SMARA enforcement in part 2 of the Discussion concerning the first cause of action. And the Board in this matter has already taken over the lead agency SMARA functions from the County. As the trial court noted, a writ of mandate will not issue to compel an action that already has been performed. (See *Mobley, supra*, 90 Cal.App.4th at p. 1244.)

Disposition

The judgment is modified as follows. The three conditions on remand specified in the judgment are vacated and the following conditions ☐ are imposed: If Western wants to continue its aggregate mining in the Yuba Goldfields, it will either have to prove its claim of vested rights in a public adjudicatory hearing before the Board (to be conducted within the County's area of jurisdiction), or obtain a permit to conduct such surface mining based ☐ on a public adjudicatory hearing before the County. Western will have 30 days from the issuance of this Court's remittitur to inform the Board and the County of its choice. Depending on that choice, the Board or the County will then proceed immediately to provide adjacent landowners reasonable notice and an opportunity to be heard. Western remains subject to all applicable SMARA provisions regarding reclamation plans and financial assurances.

As modified, the judgment is affirmed. Each party shall pay its own costs on appeal.
Blease, Acting P. J., and Hull, J., concurred.

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
THIRD APPELLATE DISTRICT
(Sacramento)

JOE HARDESTY et al.,

Plaintiffs and Appellants,

v.

STATE MINING AND GEOLOGY BOARD,

Defendant and Respondent.

C079617

(Super. Ct. No. 34-2010-
80000594-CU-WM-GDS)

In this suit under the Surface Mining and Reclamation Act of 1975 (SMARA) (Pub. Resources Code § 2710 et. seq.),¹ plaintiffs Joe and Yvette Hardesty (collectively, Hardesty), attack findings by the State Mining and Geology Board (Board). The Board’s disputed findings conclude there are no vested rights to surface mine at the Big Cut Mine in El Dorado County (County, not a party herein). The findings in effect deny Hardesty a “grandfather” exemption from the need to obtain a County mining permit. (See § 2776,

¹ Further undesignated statutory references are to the Public Resources Code.

subd. (a).) The trial court denied Hardesty's mandamus petition, and Hardesty timely appealed from the ensuing judgment.

On appeal, Hardesty raises both substantive and procedural claims.

Substantively, in three somewhat interconnected claims, Hardesty contends the Board and the trial court misunderstood the legal force of his 19th century federal mining patents. He asserts they establish a vested right to surface mine after the passage of SMARA without the need to prove he was surface mining on SMARA's operative date of January 1, 1976. He argues that the Board and trial court misapplied the law of nonconforming uses in finding Hardesty had no vested right and separately misapplied the law in finding that his predecessors abandoned any right to mine. These contentions turn on legal disputes about the SMARA grandfather clause and the force of federal mining patents.

As we will explain, the *facts*, viewed in favor of the Board's and trial court's decision, undermine Hardesty's claims. A federal mining patent--a deed perfected after working a mining claim--has no effect on the application of state regulation of mining. This point was made emphatically in a recent California Supreme Court case, *People v. Rinehart* (2016) 1 Cal.5th 652 (*Rinehart*), about which we solicited supplemental briefing. Simply put, the fact that mines were worked on the property years ago does not necessarily mean any surface or other mining existed when SMARA took effect, such that any right to surface mine was grandfathered.

Procedurally, Hardesty alleges the Board's findings do not "bridge the gap" between the raw evidence and the administrative findings. Hardesty also challenges the fairness of the administrative process itself, alleging that purported ex parte communications by the Board's executive director, Stephen Testa, tainted the proceedings. However, we agree with the trial court's conclusions that, on this record, neither of these procedural claims proves persuasive.

Accordingly, we shall affirm the judgment denying the mandamus petition.

BACKGROUND

Preliminary Observations

We first note that Hardesty's briefing consistently draws evidentiary inferences in the light most favorable to himself, contrary to the appropriate standard of review, which requires us to draw inferences in favor of the judgment. (See *Fukuda v. City of Angels* (1999) 20 Cal.4th 805, 824 ["Even when . . . the trial court is required to review an administrative decision under the independent judgment standard of review, the standard of review on appeal . . . is the substantial evidence test"].) "The reviewing court, like the trial court, may not reweigh the evidence, and is 'bound to consider the facts in the light most favorable to the Board, giving it every reasonable inference and resolving all conflicts in its favor.' " (*Jaramillo v. State Bd. for Geologists & Geophysicists* (2006) 136 Cal.App.4th 880, 889.) Hardesty also presumes that any evidence that was not directly contradicted--including expert evidence--must be accepted as true, contrary to applicable standards. (See *Hicks v. Reis* (1943) 21 Cal.2d 654, 659-660 ["Provided the trier of the facts does not act arbitrarily, he may reject *in toto* the testimony of a witness, even though the witness is uncontradicted"]; *Foreman & Clark Corp. v. Fallon* (1971) 3 Cal.3d 875, 890 [rule applies to expert witnesses] (*Foreman & Clark*).)

Hardesty's contentions are unnecessarily muddled by his persistent refusal to acknowledge the *facts* supporting the Board's and the trial court's conclusions. "[Hardesty] has not waived the legal issues [he] raises. But in addressing [his] issues we will not be drawn onto inaccurate factual ground." (*Western Aggregates, Inc. v. County of Yuba* (2002) 101 Cal.App.4th 278, 291 (*Western Aggregates*).) Because Hardesty does not portray the evidence fairly, any intended factual disputes are forfeited.² (See

² Hardesty's trial court papers reflected the same flaw, which the Board pointed out to the trial court.

Foreman & Clark, supra, 3 Cal.3d at p. 881; *Western Aggregates, supra*, 101 Cal.App.4th at pp. 290-291.)

In 2009, Hardesty filed a Request for Determination (RFD) of his vested rights--later augmented by a 2010 supplement--outlining his legal and factual positions. The RFD includes a declaration of counsel that purports to affirm the truth of the facts contained in hundreds of pages of attachments. The attachments include an unpublished decision of this court in a tangentially related case, *Tankersley v. State Mining & Geology Bd.* (Jan. 31, 2006, C049372) 2006 Cal.App.Unpub. Lexis 835 (nonpub. opn.) (*Tankersley*), and extracts of private and apparently unsworn interviews of witnesses by Hardesty's counsel.³ Hardesty also presented extracts of depositions taken in separate litigation between a non-party herein and his predecessors (*Legacy Land Co. v. Donovan*, El Dorado Super. Ct. No. PC20020116 (*Legacy Land*)), with no indication that the opposing side in that case had the same motivation to cross-examine as would an opponent of Hardesty's RFD. Some of these weaknesses in Hardesty's evidentiary submissions were pointed out at the Board hearing.

At the hearing itself, Hardesty bore the burden of proof. (Cal. Code Regs., tit. 14, § 3950.)⁴ A Board regulation provides that “[r]elevant evidence in a proceeding for determination of a claim of vested rights shall be written or oral evidentiary statements *or material* demonstrating or delimiting the existence, nature and scope of the claimed vested right[s].” (Regs., § 3963, italics added.) The Board evidently interprets this

³ Under Board regulations, “All information submitted pursuant to this section shall be accompanied by a declaration or affidavit attesting to the true and accurate nature of the materials provided.” (Regs., § 3952.) Hardesty's lengthy 2010 RFD supplement does not appear to have been accompanied by a declaration. However, the parties treat the supplement with the same dignity as the material contained in the RFD. We will do the same.

⁴ Further references to “Regs.” are to title 14 of the California Code of Regulations.

regulation to mean that “[t]estimony and comments presented at hearings need not conform to the technical rules of evidence provided that the testimony and comments are reasonably relevant to the issues before the [Board].” But the fact the Board *may* accept as true “material” which would not qualify as evidence in a court of law does not mean it was *compelled* to accept as true all material contained in Hardesty’s documents. Instead, the flaws we have noted above, and others, gave the Board ample, rational grounds to reject much of Hardesty’s evidence. (See *Hicks v. Reis*, *supra*, 21 Cal.2d at pp. 659-660.) Further, the Board also considered contrary evidence, principally contained in detailed written proposed findings drafted by Testa. These findings were based on Testa’s investigation, as well as statements by members of the public at the hearing--statements not mentioned in Hardesty’s briefs. Thus to the (great) extent that Hardesty’s briefing is based on the implicit view that the Board and trial court were somehow compelled to accept his evidentiary submissions as true, the foundation of his briefing is undermined.

On the other hand, facts asserted by Hardesty in the trial court or on appeal may be deemed as admissions, and we may also accept as true facts agreed by the parties in their briefing on appeal. (See *Fremont Comp. Ins. Co. v. Sierra Pine* (2004) 121 Cal.App.4th 389, 394; *County of El Dorado v. Misura* (1995) 33 Cal.App.4th 73, 77.)

We make these observations at the outset, to explain our upcoming rejection of Hardesty’s many factual assertions that are supported only by references to material that the Board and trial court were free to find was either inaccurate or simply unpersuasive as to the particular subject addressed.

The Basic Facts and Findings

Hardesty owns about 150 acres near Placerville, now known as the Big Cut Mine, but once known--if perhaps only in part--as the Landecker mine. For purposes of appeal, we accept that his property was formed from 19th century federal mining patents.

The land was mined for gold until the 1940’s. During World War II, gold mining was restricted by the federal government to shift mining resources to minerals necessary

for military purposes. (See *United States v. Central Eureka Mining Co.* (1958) 357 U.S. 155, 157-161, 166-169 [2 L.Ed.2d 1228, 1230-1232].) A property history contained in Hardesty's RFD supplement concedes "There are no records presently available . . . to show what kind of mining business [Stanley Triplett, the owner from 1921 to 1988] conducted on the property after the war." The trial court found that through the 1970's, the property "was essentially 'dormant.' At most, there was sporadic, limited mining involving only a very small portion of the property during this period, and there is virtually no evidence that those mining activities 'continued' to exist at the time SMARA was enacted [effective January 1, 1976]." However, Hardesty's RFD sought to establish a vested right to mine the property for gold, sand, and gravel (as well as diamonds and platinum).

Although the wartime mining order was lifted in 1945, Hardesty contends that the purported loss of mining equipment during the war "and low gold prices, made it largely infeasible to resume mining"--a point we address in more detail, *post*, in our Discussion. The record contains a document showing the ounce price for gold was about \$36 in 1970, rose to about \$160 by 1975, shot up in 1980, and then fell significantly.

Clinton and Kathleen Donovan (Donovan) bought the land in 1988 from Stanley Triplett, who we accept had owned it since 1921. Donovan contracted to sell to Legacy Land, but the deal did not go through--leading to litigation--and he sold the property to Hardesty in 2006.⁵

The part of Hardesty's RFD outlining the history of the property consolidates the broad Triplett period of ownership, 1921-1988, but fails to describe what, if anything was happening on the property *on or immediately before* January 1, 1976.

⁵ The Board agrees Triplett took control of the property in 1921 and accepts Hardesty's present ownership for purposes of this case.

The trial court found that in the 1990's, unpermitted surface (open-pit) aggregate and gold mining began, different in nature from the "hydraulic, drift, and tunnel" mining that historically had been conducted on the land. The RFD alleged the new proposed open-pit mining was safer and better for the environment. Donovan had allowed Barney's Sand and Gravel (Barney's) to mine on the property beginning about 1992, Legacy Land bought out Barney's around 1994, and also attempted to buy the property itself from Donovan, but, as indicated, that deal was not consummated and instead led to litigation.

Our *Tankersley* decision involved what was described as the Donovan Ranch Property, but which the RFD treats as the same property at issue herein. According to *Tankersley*, "In 1998, [the County], the SMARA lead agency at the time, declared the mining site *closed and reclaimed*. [¶] By 2002, the Board had assumed authority over surface mining operations at the Property. On November 12, 2002, the State Office of Mining and Reclamation (OMR) and the County inspected the Property and determined that 20 to 25 acres had been disturbed by surface mining operations. The Board notified the Donovans of the results of the inspection and instructed them to cease all mining operations until they obtain a reclamation plan, financial assurances, and any necessary County permit." (Italics added.) During those proceedings, the Hardestys and Churches declared that they accepted full financial responsibility for reclamation of the land; Tankersley also claimed to be a partner in the mining operations, and all those parties (the Hardestys, the Churches, and Tankersley) were appellants.

As an alternative to the finding of no vested right, based on the lack of mining as of the date SMARA took effect, which we discuss in more detail, *post*, the Board and the trial court found that any right to mine had been abandoned. On a required state reporting form in 1998, Donovan checked a box to indicate the mine was "Closed with no intent to resume." This document stated reclamation was in progress. On the 1999 reporting form, Donovan checked a box to indicate the mine was "Closed-reclamation

certified complete by Lead Agency.” But in prior years, Donovan had checked a box stating the mine was “Active.” This change in reporting shows Donovan knew the difference between an “Active” mine, a “Closed” mine, and a mine that was both closed and for which reclamation had been completed.⁶

A letter submitted by the County to Testa in 2010 explained that Donovan “always asserted that he was not mining, but was only searching for gold as a hobby and used the gravel for on-site road work” and Donovan had not provided any records showing “continuous mining having occurred since the 1940s to the present time.”

The trial court upheld the Board’s finding that any right to mine had been abandoned, finding “a clear manifestation of intent to discontinue mine operations during the period from the 1940s until the early 1990s, and again when Mr. Donovan intentionally ‘closed’ the mine to facilitate a sale of the property.”

There is no evidence that Triplett regularly mined the property after World War II, only vague and disconnected items showing sporadic activity. For example, some 1960’s batteries and various dated tunnel markers were found, but there was no direct evidence why they were there or who put them there. In May 1971, Triplett wrote to a potential buyer, describing the property as *not* in a saleable condition, and describing some of its

⁶ Each form was signed under the following statement: “I certify that the information submitted herein is complete and accurate (failure to submit complete and accurate requisite information may result in an administrative penalty as provided for in Public Resources Code Section 2774.1).” The yearly report is required by section 2207, which has always required a mine owner or operator to specify “[t]he mining operation’s status as active, idle, reclaimed, or in the process of being reclaimed.” (§ 2207, subd. (a)(6); see Stats. 1990, ch. 1097, § 2, p. 4575.) Under the law in effect at the time of Donovan’s reports, “ ‘Idle’ means to curtail for a period of one year or more surface mining operations by more than 90 percent of the operation’s previous maximum annual mineral production, *with the intent to resume those surface mining operations at a future date.*” (Former § 2727.1, italics added, see Stats. 1990, ch. 1097, § 3, p. 4578.) Therefore, had Donovan retained an intention to resume operations at a later date, he could have so declared on the annual forms, which contained a box to indicate the mine was idle, rather than closed.

history. This included his belief in the possible location thereon of part of the “deep blue lead” that had proven rich in other places. Although he stated whether “the deep channel can be worked profitably or not, is speculation,” he believed it had possibilities, and his intent would be to find a rich investor so that “if expectations failed, losses could be written off.” Nothing in the letter hints at any active mining, and as the Board contends, it at best expresses Triplett’s *hope* that mining--but not necessarily surface mining--would resume. Triplett’s nephew, a geological engineer named Jim Brune, declared Triplett spoke with him about his belief in the deep blue lead, as well as where on the property Triplett “speculated the vein ran” and Triplett’s purported intent to mine the property. Aerial photographs beginning in 1952 show some roads that were later expanded, but there was no hard evidence of what they were used for before 1976, and by Hardesty’s own interpretation, they covered but a fraction of the property.

Significantly, at the Board hearing, *Hardesty’s counsel conceded the mine was dormant until at least the late 1980’s*, although counsel attributed this to market forces. Hardesty submitted other evidence, but the Board and the trial court could rationally reject it. There was no hard evidence, such as production records, employment records, equipment records, and so forth, showing any significant mining after World War II.

SMARA and Hardesty’s Legal Attacks

As indicated, the key date for SMARA purposes is January 1, 1976, when the law became operative. SMARA requires that all surface mining operations have an approved reclamation plan and approved financial assurances to implement the plan. (§ 2770, subd. (a).) At the time of the hearing, the Board served as the lead agency for SMARA purposes in the County, although the County retained permitting authority. (See § 2774.4, subd. (a).) Persons with existing surface mining operations were required to submit reclamation plans by March 31, 1988. (§ 2770, subd. (b).) Absent an approved

reclamation plan and proper financial assurances (with exceptions not applicable herein) surface mining is prohibited. (§ 2770, subd. (d).)⁷

SMARA was enacted with the knowledge that many miners had extant private property rights, and the Legislature wanted to avoid paying compensation therefor. (See § 2713; *Surface Mining Operations—Vested Rights—Permit, Reclamation Requirements*, 59 Ops.Cal.Atty.Gen. 641, 644-645 (1976) (*Surface Mining*).) Accordingly, SMARA included the following grandfather provision, to avoid any property “takings” claims:

“No person who has obtained a vested right *to conduct surface mining operations prior to January 1, 1976*, shall be required to secure a permit pursuant to the provisions of this chapter as long as such vested right continues; provided, however, that *no substantial changes may be made in any such operation except in accordance with the provisions of this chapter*. A person shall be deemed to have such vested rights if, prior to January 1, 1976, he has, in good faith and in reliance upon a permit or other authorization, if such permit or other authorization was required, *diligently commenced surface mining operations* and incurred substantial liabilities for work and materials necessary therefor. . . .

“A person who has obtained a vested right *to conduct surface mining operations prior to January 1, 1976*, shall submit to the lead agency and receive, within a reasonable period of time, approval of a reclamation plan for operations to be conducted after January 1, 1976, unless a reclamation plan was approved by the lead agency prior to January 1, 1976

“Nothing in this chapter shall be construed as requiring the filing of a reclamation plan for, or the reclamation of, mined lands *on which surface mining operations were conducted prior to January 1, 1976*.” (Former § 2776, Stats. 1975, ch. 1131, § 11, italics added.)⁸

⁷ Section 2770 and some other sections were recently amended. (See Stats. 2016, ch. 7, § 5.) We cite to the provisions in effect during the trial court litigation, as do the parties.

⁸ Some of this language incorporates the general definition of “vesting” as used in building development cases. (See *Avco Community Developers, Inc. v. South Coast Regional Com.* (1976) 17 Cal.3d 785, 791 [“if a property owner has performed *substantial work and incurred substantial liabilities* in good faith reliance upon a permit issued by the government, he acquires a vested right to complete construction in

The first paragraph of section 2776 forms the core of Hardesty's legal attacks on the Board's decision, because he is of the view that he established a vested right to mine through his 19th century mining patents and uncontested pre-World War II mining activity, in addition to his contested claims--impliedly rejected by the Board and trial court--of post-World War II mining activity. However, the italicized portion of the statute speaks of vested rights to *surface* mining, not *any* mining. "Surface mining involves stripping off the top of an area to reach minerals, in contrast to boring down through tunnels or shafts to extract them." (*Rinehart, supra*, 1 Cal.5th at p. 671, fn. 10.)

Hardesty's mandamus petition alleged his predecessors-in-interest acquired vested rights to mine via federal mining patents, and he alleged "completion of a valid mining 'location' vests equitable title in the locator, authorizes the locator to hold and mine the claim *indefinitely*, and creates a transferrable property interest." (Italics added.) His position is that this "vesting" under federal law equates to a "vested" right under SMARA, regardless of whether mining was still being conducted when SMARA took effect, or of the nature or scope of such mining.

After a public hearing, the Board adopted proposed findings prepared by Testa, and found the evidence did not support Hardesty's claim. On June 10, 2010, after receipt of objections from Hardesty's counsel as to several findings, the Board formally denied Hardesty's claim.

On July 9, 2010, Hardesty filed a mandamus petition to set aside the Board's action, and on January 6, 2015, filed the instant amended petition.

accordance with the terms of the permit"], italics added.) It is also consistent with language from the then-recently adopted California Coastal Zone Conservation Act. (Former § 27404; see Ballot Pamp., Gen. Elec. (Nov. 7, 1972), text of Prop. 20, p. 32 [generally, a permit holder who "diligently commenced construction and performed substantial work . . . and incurred substantial liabilities" before act adopted was not required to obtain a regional coastal commission permit, if no substantial changes were made to the development]; see *Urban Renewal Agency v. California Coastal Zone Conservation Com.* (1975) 15 Cal.3d 577, 582-584.)

The trial court denied the petition after a hearing on March 27, 2015, and Hardesty timely appealed from the ensuing judgment.

The Board's Findings in Detail

As stated, the Board adopted proposed findings prepared by Testa, some of which reference documents submitted within Hardesty's RFD. These findings included the following. The property is located in an area within the County now zoned so as to generally prohibit surface mining within 10,000 feet of any residence absent a finding that the project would not have any adverse impact on the environment and would not discourage residential use. No evidence of post-World War II mining "other than recreational, was presented." No production records (such as drill logs, evidence of amount of material extracted, or "historic or current sales records") were produced by Hardesty. "A 1966 date appears written on a tunnel wall; however, there is no evidence correlating the existence of that mark with any mining activity." "Access roads are evident in various aerial photographs; however, there is no adequate evidence to demonstrate that such roads were haul roads used for mining purposes." Unpermitted surface mining by Barney's beginning around 1991 was halted by the County and the Board, and "[r]eclamation was completed to the County's satisfaction in 1998." Further unpermitted mining occurred in 2002-2003, until halted by the County. The County never made a finding of vested rights. No reclamation plan had been submitted by the SMARA deadline of March 31, 1988. Donovan "did not demonstrate an objective manifestation of intent to mine all" the property and "No documents or evidence were presented to support the overall scale of historic production conducted by" Donovan.⁹

⁹ There is a claim that at some point Donovan gave Legacy Land a box of documents detailing mining activities on the property, in aid of negotiating a sale of the property, but that those documents were lost to him, evidently after Legacy Land declared bankruptcy. This claim did not have to be believed.

The Board made several “Conclusions of Law,” in part as follows: Hardesty had the burden of proof by a preponderance of the evidence to show vested rights to surface mine. For planned expansion, Hardesty had to produce evidence of clear intent to expand “ ‘measured by objective manifestations, and not subjective intent at the time of passage of the law, or laws, affecting [his] right to continue surface mining operations without a permit.’ ” (Partly quoting Regs., § 3963, italics omitted.) “No evidence demonstrating authorization to mine was granted from the mid-1940s to January 1, 1976, or to the present date as well.”¹⁰ “The cessation of mining activities subsequent to World War II, lasting through the 1990s and, even then, commencing for a brief period without authorization from [the] County and without submission and approval of reclamation plans and financial assurances as required by SMARA, coupled with a succession of land owners who did not conduct commercial mining operations during that period, precludes reliance on the pre-World War II historic gold mining operations as a basis for establishing a current vested right to mine” the property. “The historical record regarding gold mining prior to World War II, and the subsequent conduct of owners of the subject property demonstrates clear and knowing intent . . . to waive, abandon, or otherwise forego any vested right that may have pertained to those pre-World War II mining efforts.”

¹⁰ This finding may be overbroad, as it is not clear any entity required “authorization” for surface mining before a County ordinance was adopted in 1979, as Hardesty insists. But this does not change the lack of proof his predecessors “commenced *surface* mining operations” (§ 2776, italics added) before SMARA took effect in 1976. Contrary to Hardesty’s reading, the Attorney General did not opine that the lack of need of further approvals *precludes* a finding of substantial changes in the nature of the mining, but opined that each case turned on its particular facts--i.e., whether changes were substantial--and that needing further approvals would “certainly constitute” a substantial change. (*Surface Mining, supra*, 59 Ops.Cal.Atty.Gen. at pp. 643, 655-656.)

A formal resolution recites the Board accepted Testa’s findings “and determined that a preponderance of evidence did not exist that demonstrated Big Cut Mine has vested rights” and the “Board denies the claim of vested right of Big Cut Mine’s proposed surface mining operation located in the County.”

The Trial Court’s Ruling in Detail

The trial court found the Board’s decision adequately linked the evidence with the findings. The trial court agreed with Hardesty that the party asserting abandonment had the burden of proof, but rejected Hardesty’s claim that the Board shifted the burden of proof on this issue to Hardesty, as nothing in the Board’s findings addressed the point one way or another, and “it is presumed that the Board acted properly.” The trial court granted a motion to augment the record with declarations from Testa, Will Arcand, and Richard Thalhammer, described, *post*, and found no improper ex parte communications occurred.

The trial court also rejected Hardesty’s view that the federal patents vest in him a right to mine the property regardless of what was happening on the effective date of SMARA, finding a lawful nonconforming use must be extant on such date.

Separately, the trial court found that even if Hardesty’s legal view were correct, “the evidence shows there were substantial changes in the use of the property” in that “there is virtually no evidence of mining activities during the period from the 1940s through the 1980s” and even if there were, “aerial photos suggest any mining was limited to at most about six-tenths of an acre. For the vested right to include the remainder of the . . . property, [Hardesty] would have to produce objective evidence demonstrating that the owners clearly intended, on the effective date of [SMARA], to expand mining in to the remainder of the property. There is no such evidence in the record.” Further, the nature of the mining had shifted from hydraulic, drift, and tunnel mining, to open-pit (that is, *surface*) mining, reflecting a substantial change in use.

Finally, the trial court found any vested right that may have existed had been abandoned: “There is a clear manifestation of intent to discontinue mine operations during the period from the 1940s to until the early 1990s, and again when Mr. Donovan intentionally ‘closed’ the mine to facilitate a sale of the property.”

Accordingly, the trial court denied Hardesty’s administrative mandamus petition.

DISCUSSION

I

Vested Rights Claims

Hardesty contends that the existence of federal mining patents confers vested mining rights forever, and that the Board and trial court erred by adding additional requirements, namely, continued mining operations, to find a vested right under SMARA. He further contends the trial court misapplied the “nonconforming use” zoning doctrine and thereby reached an erroneous conclusion. He adds that the Board and trial court misapplied the doctrine of abandonment. Because these three contentions of legal error overlap, we address them together.

Hardesty principally relies on the first paragraph of section 2776, arguing that he has a vested right to mine the property at issue. In his view, his federal mining patents, which would have been issued only upon proof of actual mining operations--though not necessarily *surface* mining operations--not only conveyed title to the property, they conveyed a vested right to mine. He contends that because those patents predate 1976, he is covered by section 2776’s grandfather provision.

As we will explain, we agree the patents conferred on Hardesty vested rights *as a property owner*, but that is not the same as a vested right *to mine* the property absent compliance with state environmental laws. The Board and the trial court correctly concluded Hardesty had to show active surface mining was occurring on the effective date of SMARA, or at the very least show objective evidence that the then-owner contemplated resumption of such activities. Under the facts, viewed in the appropriate

light, Hardesty did not carry his burden to show that *any* mining was occurring or any intent to mine existed on the relevant date. Further, the Board and trial court correctly applied the “nonconforming use” and abandonment doctrines to the facts herein.

A. Legal Effect of a Federal Mining Patent

Early federal policy had been to reserve federal lands, but this shifted after the Civil War due to the need to pay off the ensuing national debt, and the West--then almost entirely owned by the federal government--was opened to mineral exploration. (See *Western Aggregates, supra*, 101 Cal.App.4th at pp. 293-294.) Since that time, after locating a claim and performing certain work and other requirements, the “holder of a perfected mining claim may secure a patent to the land by complying with the requirements of the Mining Act and regulations promulgated thereunder . . . and, upon issuance of the patent, legal title to the land passes to the patentholder.” (*California Coastal Comm’n v. Granite Rock* (1987) 480 U.S. 572, 575-576 [94 L.Ed.2d 577, 588] (*Granite Rock*); see *Pathfinder Mines Corporation v. Hodel* (9th Cir. 1987) 811 F.2d 1288, 1291.)¹¹

But “ ‘the State is free to enforce its criminal and civil laws’ on federal land so long as those laws do not conflict with federal law. [Citation.] The Property Clause itself does not automatically conflict with all state regulation of federal land. Rather, . . . ‘[a]bsent consent or cession a State undoubtedly retains jurisdiction over federal lands within its territory, but Congress equally surely retains the power *to enact legislation* respecting those lands pursuant to the Property Clause. *And when Congress so acts*, the federal legislation necessarily overrides conflicting state laws under the Supremacy Clause.’ ” (*Granite Rock, supra*, 480 U.S. at pp. 580-581 [94 L.Ed.2d at p. 591], italics

¹¹ We accept for purposes of this appeal that Hardesty’s predecessors performed the work then required by the federal government. (See *Rogers v. DeCambra* (1901) 132 Cal. 502, 505-506 [federal land officials presumed to have followed proper procedures].)

added; see *State Regulation of Mining in Death Valley National Monument*, 60 Ops.Cal.Atty.Gen. 162, 163 (1977) [“California can regulate all mining within the Death Valley National Monument . . . regardless of land ownership status, pursuant to [SMARA], subject to preemption in particular instances of conflict with federal law”].) It is well settled that environmental concerns about mining and its after-effects are legitimate matters for state regulation. (See *Death Valley*, *supra*, 60 Ops.Cal.Atty.Gen. 162; *State ex rel. Andrus v. Click* (1976) 97 Idaho 791, 798-799 [554 P.2d 969, 976-977] (*Andrus*).)

Indeed, in a case involving a *different* open-pit mine also operated by Hardesty, we rejected his view that a “vested right” to mine under SMARA obviates the need to comply with state environmental laws: “Hardesty has cited no authority standing for the proposition that the holder of a vested mining right is exempt from complying with California’s air pollution laws.” (*Hardesty v. Sacramento Metropolitan Air Quality Management Dist.* (2011) 202 Cal.App.4th 404, 427.)

The United States Supreme Court has acknowledged that some state laws, although purportedly passed to regulate mining, could have the effect of halting all productive use of federally patented mining areas. “The line between environmental regulation and land use planning will not always be bright; for example, one may hypothesize a state environmental regulation so severe that a particular land use would become commercially impracticable.” (*Granite Rock*, *supra*, 480 U.S. at p. 587 [94 L.Ed.2d at p. 595].) But the high court went on to hold that this result was *generally permissible*, and only precluded where a *direct conflict* between a state and a federal law was presented. (*Id.* at pp. 587-588 [94 L.Ed.2d at pp. 595-596].)

In a recent case involving a state prohibition (a moratorium) on dredge mining, our Supreme Court rejected the view that state laws that impact or even halt mining necessarily conflict with federal mining laws. Instead, the general purpose of federal mining laws is to delineate “the real property interests of miners vis-à-vis each other and

the federal government.” (*Rinehart, supra*, 1 Cal.5th at p. 663.) “[T]he one area where the law *does* intend to displace state law is with respect to laws governing title. In other areas, state and local law are granted free rein.” (*Ibid.*) “The mining laws were neither a guarantee that mining would prove feasible nor a grant of immunity against local regulation, but simply an assurance that the ultimate original landowner, the United States, would not interfere by asserting its own property rights.” (*Id.* at p. 666.) “[I]f Congress intended to do more, we can reasonably infer it would have said so. It did not; indeed, quite to the contrary, it specifically noted the continuing obligation of miners with possessory interests, such as *Rinehart*, to obey state law. [Citations.] Collectively, the text and legislative history reveal no intent to displace state law.” (*Id.* at p. 667.)

Most of the cases relied on by Hardesty which address vested mining rights involve disputes between competing private claimants, not between miners and government entities seeking to regulate them, and most predate *Granite Rock*. (See, e.g., *Watterson v. Cruse* (1918) 179 Cal. 379 [competing claim locators sought injunction]; *Ames v. Empire Star Mines Co., Ltd.* (1941) 17 Cal.2d 213 [injunction and accounting]; *Favot v. Kingsbury* (1929) 98 Cal.App. 284, 287-289 [suit to restrain issuance of state patent to competing claimants]; *Brown v. Luddy* (1932) 121 Cal.App. 494, 503-504 [quiet title]; *Montgomery v. Gerlinger* (1956) 146 Cal.App.2d 650 [quiet title].)

In his reply brief, Hardesty “does not dispute that a state may impose permit requirements that qualify as ‘environmental regulation.’ ” He then cites cases holding that regulations were found preempted by federal mining law. His evident view is that if he cannot comply with a state law regarding vesting of nonconforming use (i.e., SMARA), that state law necessarily impairs his right to mine contrary to federal law. But, as just explained, *Rinehart* rejects this view of the law.

For example, Hardesty relies heavily on *South Dakota Mining Ass’n, Inc. v. Lawrence County* (8th Cir. 1998) 155 F.3d 1005, where a local ordinance prohibited new permits for surface mining, and companies that had mined for many years sued to enjoin

the ordinance. (*Id.* at p. 1007.) *Lawrence County* held the ordinance was preempted because “The ordinance’s de facto ban on mining on federal land acts as a clear obstacle to the accomplishment of the Congressional purposes and objectives embodied in the Mining Act.” (*Id.* at p. 1011.) However, our Supreme Court summarized *Lawrence County* and *rejected* its analysis as follows:

“We do not disagree that Congress adopted a real property regime in the Mining Law of 1872 with the larger purpose in mind of encouraging ongoing mineral exploration across the West. Where we part company is with the conclusion that such general, overarching goals would be frustrated by state and local determinations that the use of particular methods, in particular areas of the country, would disserve other compelling interests. Congress could have made express that it viewed mining as the highest and best use of federal land wherever minerals were found, or could have delegated to federal agencies exclusive authority to issue permits and make accommodations between mining and other purposes. It did neither, instead committing miners to continued compliance with state and local laws (30 U.S.C. § 26) and endorsing limits on destructive mining techniques imposed under such laws [citation]. These actions cannot be reconciled with the view that Congress intended preemption of such state and local determinations.” (*Rinehart, supra*, 1 Cal.5th at p. 672.)

Thus, *Rinehart* rejected the view that state laws that make mining more difficult or even impracticable necessarily conflict with Congressional intent, and we are bound to do the same. (See *Auto Equity Sales, Inc. v. Superior Court* (1962) 57 Cal.2d 450, 455.)

Hardesty also relies on *Brubaker v. Bd. of County Commrs., El Paso County* (Colo. 1982) 652 P.2d 1050, where holders of unpatented mining claims unsuccessfully sought local permits for test drilling approved by the federal government to see if they had located “valuable mineral deposits under federal mining law.” (*Id.* at p. 1052.) *Brubaker* held the local entity sought “to prohibit the very activities contemplated and authorized by federal law” and therefore presented an obstacle to federal policy. (*Id.* at pp. 1056-1057.) However, as explained by our Supreme Court, *Brubaker* was decided before *Granite Rock*, and therefore is not persuasive. (*Rinehart, supra*, 1 Cal.5th at p. 671.) Further, other cases have recognized the legitimacy of applying environmental

laws, even if they increase the costs of mining. (See *Andrus, supra*, 97 Idaho at p. 797 [554 P.2d at p. 975] [“Neither the requirement of obtaining a permit or of restoring the land render it impossible to exercise [mining] rights specifically granted by the federal legislation, although they may make it more difficult”].)

SMARA itself does not preclude Hardesty from mining. SMARA was enacted with respect for extant mining operations and merely requires assurances that surface mining operations develop adequate reclamation plans, a neutral state environmental rule. It also allowed *then-active* surface mines to bypass the need to obtain a local permit. The fact that application of SMARA’s requirements to a particular operation might make it more expensive to mine, perhaps to the point where mining is infeasible, is not precluded under *Rinehart*. (See also *Andrus, supra*, 97 Idaho at p. 797 [554 P.2d at p. 975].)

To the extent Hardesty contends he has a vested right to *surface mine* under section 2776, he simply failed to carry his burden to prove any substantial *surface* mining on the property had been conducted by that date. As the trial court found, substantial evidence shows that prior mining had been hydraulic, tunnel, and drift mining, not surface mining, which began in the 1990’s, and which represented a substantial change, contrary to former section 2776’s requirement “that no substantial changes may be made in any such operation except” according to SMARA’s terms. The evidence before the Board supports this finding.

Accordingly, federal mining patents, alone, do not satisfy section 2776.¹²

¹² Because Hardesty has not yet applied for a permit, it would be premature to hold that the permit process directly conflicts with some specific federal law. (See *Granite Rock, supra*, 480 U.S. at pp. 588-589 [94 L.Ed.2d at pp. 596-597] [party sought injunctive and declaratory relief, did not know what permit requirements would actually be imposed, and therefore was limited to arguing that no permit could be required under any circumstances].) References in the record and briefs to a 1979 County permit ordinance are unnecessary to address, because this appeal does not turn on it, nor were the Board’s or trial court’s findings hinged on noncompliance therewith, although an extraneous

B. *Proof of a Nonconforming Use*

To show he had a vested right to engage in mining on the property, Hardesty's briefing emphasizes evidence of mining on the property before 1976. However, Hardesty failed to prove *any* mining was occurring on or even reasonably before the date SMARA took effect. SMARA was designed to allow *existing, operating* surface mines to continue operating after its effective date without the need to obtain local permits. SMARA's grandfather provision does not extend to truly dormant mines.

Hansen Brothers Enterprises, Inc. v. Board of Supervisors (1996) 12 Cal.4th 533 (*Hansen Brothers*)--consistent with a long line of zoning cases--holds that a use must be present *at the time* a new law takes effect, to be considered a nonconforming use. (*Id.* at pp. 540-568; see *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal. 4th 310, 323, fn. 8 ["the traditional protection for nonconforming uses established *at the time* zoning restrictions become effective"], italics added; *McCaslin v. City of Monterey Park* (1958) 163 Cal.App.2d 339, 346 ["A nonconforming use is a lawful use existing *on the effective date* of the zoning restriction and continuing since that time in nonconformance to the ordinance"], italics added.) Neither a dormant nor an abandoned use is a nonconforming use. (*Hansen Brothers*, at p. 552 ["Nonuse is not a nonconforming use"].) As stated by our Supreme Court, "The ultimate purpose of zoning is . . . to reduce all nonconforming uses within the zone to conformity as speedily as is consistent with proper safeguards for the interests of those affected." [Citation.] We have recognized that, given this purpose, courts should follow a strict policy against extension or expansion of those uses. [Citation.] That policy necessarily applies to *attempts to continue nonconforming uses which have ceased operation.*" (*Hansen Brothers*, at p. 568, italics added.)

portion of the trial court's ruling references it and Testa's report mentioned it to explain that two separate periods of *post*-SMARA surface mining (by Barney's and by Donovan) were "unpermitted."

It was Hardesty's burden to prove he was conducting a nonconforming use *at the time the law changed*. (See *Hansen Brothers, supra*, 12 Cal.4th at p. 564; *Calvert v. County of Yuba* (2006) 145 Cal.App.4th 613, 629 (*Calvert*); *Melton v. City of San Pablo* (1967) 252 Cal.App.2d 794, 804 [“The burden of proof is on the party asserting a right to a nonconforming use to establish *the lawful* and continuing existence of the use *at the time* of the enactment of the ordinance”], second italics added.) Here, the relevant date is January 1, 1976, when SMARA took effect. The evidence, construed in the light most favorable to the Board's and the trial court's decisions, shows that no mining had been occurring for decades. Because, as explained, *ante*, Hardesty has forfeited any evidentiary contentions by portraying the evidence in the light most favorable to himself, we are not obliged to respond point-by-point to his many misstatements of the facts on this issue.

In *Stokes v. Board of Permit Appeals* (1997) 52 Cal.App.4th 1348, Stokes bought a vacant property in 1993 that had been used as a bathhouse, but not for at least seven years. In 1985, new zoning rules took effect. (*Id.* at p. 1351.) Local laws allowed legal, nonconforming uses to continue unless, inter alia, they had been discontinued or abandoned, and deemed a three-year period of disuse to reflect an intent to abandon. (*Id.* at pp. 1351-1352.) Stokes obtained permits and began work, but was stopped on the ground the long vacancy meant he had to obtain a conditional use permit. (*Id.* at p. 1352.) A local board upheld the stop order in part because the bathhouse had been closed for at least three years. (*Id.* at pp. 1352-1353.) Acknowledging that mere discontinuance of use does not *necessarily* reflect an intent to abandon, though it is a factor that may help show abandonment, *Stokes* explained that “Stokes's predecessors had completely vacated the building for seven years and the building had not been used for *any* purpose at the time [Stokes] took possession. There are no facts to which Stokes can point as evidence the prior owners intended to and in fact did continue to operate the property as a bathhouse or for a related use.” (*Id.* at pp. 1355-1356.)

Here, the evidence shows Donovan bought a mine already in a state of disuse, much as Stokes bought a long-closed bathhouse. (See also *Walnut Properties, Inc. v. City Council* (1980) 100 Cal.App.3d 1018, 1024 [party bought a closed movie theater, “In other words, the property was not being put to a lawful use which use continued up to and after the time the use became unlawful or nonconforming”].) Donovan then certified to the government that the mine was closed in order to sell it. In the *Legacy Land* depositions, Donovan testified his intent in trying to sell the property “was to let them buy the property and [then] move on”; his wife in turn testified “everything was going to be closed so we could move and have our life together.” This vitiates the claim he did not know what he was doing, or that he retained some subjective intention to mine, or have his successors mine the property, as Hardesty contends.

Further, the record shows a proposed significant *change* in use since pre-1976 times. “The continuance of a nonconforming use ‘is a continuance of the same use and not some other kind of use.’ ” (*County of San Diego v. McClurken* (1951) 37 Cal.2d 683, 688; see *Edmonds v. County of Los Angeles* (1953) 40 Cal.2d 642, 651 [“enlargement of plaintiffs’ trailer court to accommodate 30 more trailers is clearly a different use”]; *County of Orange v. Goldring* (1953) 121 Cal.App.2d 442, 446-447].) Surface mining is a changed use on Hardesty’s property, when contrasted with the pre-SMARA use. Nor can Hardesty persuasively rely on post-1976 *unpermitted* surface mining--twice halted by the government--to show that surface mining was an extant use before 1976.

C. Abandonment

As an alternate basis for decision, the Board and the trial court found any right to mine was abandoned.

Preliminarily, we agree with Hardesty that extractive industries like mining often exist at the mercy of market forces. If the price dips, an operator may scale back or cease active operations, while retaining the intention to resume operations when prices recover. As an illustration of this, *Hansen Brothers* described a sister-state case where “the failure

to operate a concrete mixing facility for six months during a business slowdown, while the operator filled orders from another plant, was *not* a cessation of operation. There . . . the plant, equipment, inventory, and utilities were maintained throughout the period and the plant could be made operational within two hours.” (*Hansen Brothers, supra*, 12 Cal.4th at p. 569, italics added.) The question in such cases is whether there is an intent to abandon or permanently cease operations, or instead a business judgment that a temporary--even if prolonged--hiatus should be made. Otherwise, as Hardesty suggests, an operator might be forced to continue operations at a loss--perhaps for decades--in order to await market recovery at some unknowable future point.

But this does not mean that every operator who closes a mine because of economic reasons retains an intention to reopen the mine one day, *although* we accept Hardesty’s theoretical point that fluctuating mineral prices *may* induce an operator to close a mine temporarily while retaining the intention to reopen, to ride out the market. (See *Hansen Brothers, supra*, 12 Cal.4th at pp. 545-546, 569) [demand for mined aggregates fluctuates with the market; temporary closure during a business slowdown does not of itself constitute abandonment]; accord, *Pardee Construction Co. v. California Coastal Com.* (1979) 95 Cal.App.3d 471, 475, 481-482 [after building most planned units, developer allowed permits to lapse during a recession, but intended to complete remaining units when “sales warranted their construction”; held, no abandonment of vested right]; cf. *Miscovich v. Trych* (Alaska 1994) 875 P.2d 1293, 1296 [“Because government control held gold prices at \$35 per ounce . . . mining was not economically feasible”].) But that does not mean *all* gold mines were closed because of low prices, with the intent to reopen when profitable. In other words, the fact national gold prices were low until shortly before SMARA took effect (January 1, 1976) does not *compel* a finding that future mining was intended by Hardesty’s predecessors.

As stated by *Hansen Brothers*, in the zoning context, “ ‘[A]bandonment of a nonconforming use ordinarily depends upon a concurrence of two factors: (1) An

intention to abandon; and (2) an overt act, or failure to act, which carries the implication the owner does not claim or retain any interest in the right to the nonconforming use [citation]. Mere cessation of use does not of itself amount to abandonment although *the duration of nonuse may be a factor in determining whether the nonconforming use has been abandoned* [citation].’ ” (*Hansen Brothers, supra*, 12 Cal.4th at p. 569, italics added.) Apart from adding his view that precedent states abandonment must be shown by clear and convincing evidence by the party relying on abandonment, Hardesty does not dispute the *Hansen Brothers* test as to abandonment.

Hardesty relies on cases such as *Gerhard v. Stephens* (1968) 68 Cal.2d 864, which held “abandonment hinges upon the intent of the owner to forego all future conforming uses of his property and the trier of fact must find the conduct demonstrating the intent ‘so decisive and conclusive as to indicate a clear intent to abandon.’ ” (*Id.* at p. 889.) Assuming that equates to “clear and convincing” evidence, we find it difficult to conceive of clearer evidence of an intent to abandon than a certified statement by the owner to the government that the mine has been closed with no intent to reopen it, and the Board and the trial court could rationally find Donovan’s statement meant what it said. Indeed, at the hearing one Board member gave his opinion that “the statements signed by the operator that the site is abandoned and reclamation is complete really [are] dispositive at this point and that bell cannot be un-rung by creative discussion later.” Although the statement of one Board member does not necessarily reflect the views of the entire Board, here it would be rational for the whole Board to adopt that view.¹³

¹³ A leading treatise states that “[a]n abandonment may be effected by an instrument of relinquishment filed in the land office.” (2 Lindley on Mines (3d ed. 1914) Abandonment and Forfeiture, § 644, p. 1601.) Here, Donovan filed with the government an instrument stating with exquisite clarity his intent to discontinue mining, consistent with the treatise.

As for Hardesty's view that the Board misapplied both the *standard* of proof and *burden* of proof, the Board found "clear and knowing intent" by Hardesty's predecessors to abandon. In our view, that was an adequate finding under a "clear and convincing" standard, particularly because, like the trial court did, we must presume the Board applied the correct law. (Evid. Code, § 664 [presumption that official duty has been performed]; see *Milligan v. Hearing Aid Dispensers Examining Com.* (1983) 142 Cal.App.3d 1002, 1008.) Further, the clear tenor of the factual findings, given the evidence, renders irrelevant any error about who bore the burden of proof.

Here, the evidence of abandonment was overwhelming. Although possibly Triplett had dreams of someone finding the elusive deep blue lead, he did not actually mine for many, many years. Further, a person's subjective "hope" is not enough to preserve rights; a desire to mine when a land-use law takes effect is "measured by objective manifestations and not by subjective intent." (*Calvert, supra*, 145 Cal.App.4th at p. 623.) Critically, Donovan certified to the government that all mining had ceased, *with no intent to resume*, which was uniquely persuasive evidence of abandonment. Indeed, it is difficult to conceive of clearer evidence that the mine was permanently closed than Donovan's certification, which is direct evidence of Donovan's intent to classify the mine as closed with no intent to reopen. Hardesty contends Donovan was illiterate, and that Donovan had been directed how to fill out the forms by a County employee and therefore the forms do not accurately reflect his true intentions, which purportedly were that the property should always be mined. These points were discussed at the Board hearing, and the Board and the trial court were free to weigh the evidence and find the documents Donovan filed meant what they said.

Moreover, two public commentators gave significant statements relevant to abandonment, not rebutted at the hearing and not mentioned in Hardesty's briefs. First, Mary Harris-Nugent, whose family has owned the Harris Ranch bordering the Big Cut Mine property since "the mid-1800's" and who had personally lived on the family ranch

for 52 years, stated “to my knowledge, there has been no operational surface mining of any kind . . . during my lifetime. [¶] The property has remained dormant and abandoned until Mr. Donovan purchased it. He built his home and a road to his ranch and that is about all the activity we [have] seen as the closest neighbors to him.” Second, a neighbor of hers, Gail Taxera, has lived on Harris Road, a mile from the proposed mine, for over 50 years and had “never heard or seen signs of active mining with the exception of the activities during the time the Donovans occupied the property.” (Recall that the Donovans did not buy the property until 1988, well after SMARA took effect.) The Board could rationally accept these public statements, corroborated by other information before the Board. They dovetail with Donovan’s own documentation showing he ceased mining with no intention to resume.¹⁴ Thus, viewed through the appropriate lens, overwhelming evidence supports the Board’s and the trial court’s findings of abandonment.

Even if the Board erred in assignment of the burden of proof, the trial court did not, and Hardesty has failed to show the outcome at the Board would have differed.

II

Adequacy of Administrative Findings

In a multi-part claim, Hardesty contends the Board’s findings fail “to bridge the analytic gap between the raw evidence” and the Board’s decision so as to prevent this court from evaluating the “analytic route the administrative agency traveled from evidence to action.” (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515.) In particular, he claims the decision rests on abandonment

¹⁴ Hardesty suggests Donovan’s declarations applied to only a very small part of the entire property. Even if true, that point would not account for decades of nonuse and lack of hard evidence of mining on the rest of the property.

and argues the Board and trial court did not apply legally appropriate rules to find abandonment, nor do the facts support such a finding.

To the extent Hardesty separately attacks the *trial court's* decision in this section of his briefing, his points are forfeited, as he has failed to state the facts fairly, as explained in our Preliminary Observations, *ante*. We will address only his claim that the *Board's* findings were insufficient as a matter of law.

Two of the Board's findings were as follows:

“The cessation of mining activities subsequent to World War II, *lasting through the 1990s* and, even then, commencing for a brief period without authorization from El Dorado County and without submission and approval of reclamation plans and financial assurances as required by SMARA, coupled with a succession of land owners who did not conduct commercial mining operations during that period, precludes reliance on the pre-World War II historic gold mining operations as a basis for establishing a current vested right to mine on Claimant's property.” (Italics added.)

“The historical record regarding gold mining prior to World War II, and *the subsequent conduct of owners of the subject property demonstrates clear and knowing intent by the claimant's predecessors to waive, abandon, or otherwise forego any vested right* that may have pertained to those pre-World War II mining efforts.” (Italics added.)

These findings show the Board credited evidence presented to it--disputed by Hardesty but nonetheless substantial, as recounted above--that Hardesty's predecessors (1) stopped active mining operations long before 1976, *and* (2) abandoned the mine.

Administrative findings suffice when they both “inform the parties of the bases on which to seek review” and “permit the courts to determine whether the [administrative] decision is based on lawful principles.” (*McMillan v. American General Finance Corp.* (1976) 60 Cal.App.3d 175, 185; see *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 516 [“The findings do not need to be extensive or detailed. ‘ “[W]here reference to the administrative record informs the parties and reviewing courts of the theory upon which an agency has arrived

at its ultimate finding and decision it has long been recognized that the decision should be upheld if the agency ‘in truth found those facts which as a matter of law are essential to sustain its . . . [decision]’ ” ” ”).)

The Board’s findings here are sufficiently clear to permit judicial review, and further evidentiary detail was not necessary. This is not a case where there were many possible analytical routes to a decision: Either Hardesty and his predecessors mined (or intended to mine) the property actively before the relevant date or they did not, and Donovan either abandoned any right to mine by declaring the mine closed with no intent to reopen or he did not. The Board was presented with two starkly contrasting versions of history and emphatically rejected Hardesty’s version. Contrary to Hardesty’s implicit view, the Board was not required to discuss and dissect the raw evidence item-by-item. “Here, the analytic route is clear.” (*Singh v. Davi* (2012) 211 Cal.App.4th 141, 152.)

Accordingly, we agree with the trial court that the Board’s findings were adequate.

IV

Procedural Due Process

Hardesty contends the Board violated procedural due process because “after Hardesty requested a determination of vested rights, the Board’s Executive Officer met with the County to discuss matters at issue, and reviewed the County’s file. The County file was not submitted as part of the record, and no County witness appeared in person at the hearing.” In his view, the contact between Testa and the County tainted the Board’s hearing process. We disagree.

Hardesty relies on the rule that “one adversary should not be permitted to bend the ear of the ultimate decision maker or the decision maker’s advisers in private.” (*Department of Alcoholic Beverage Control v. Alcoholic Beverage Control Appeals Bd.* (2006) 40 Cal.4th 1, 5 (*Beverage Control*).) But the flaw in Hardesty’s claim is that Testa provided written reports to the Board that were in the public record and available to Hardesty, and there is no evidence that he provided any *other* information to the Board or

its members. Although Testa discussed the facts with County officials, no information from those discussions was shared with the Board *except* as reflected by Testa's reports. There is no evidence Testa gave the Board information not available to Hardesty.

The trial court granted a motion to augment the administrative record with declarations, a ruling not challenged on appeal. Testa declared he had no communications with the Board, or any member or advisor thereof about Hardesty's matter, except at public hearings, but spoke with Arcand and Thalhammer. Arcand, a senior engineering geologist with the Board, had no communications with the Board, or any member or advisor thereof about Hardesty's matter, but did speak with Testa. Thalhammer, a former deputy attorney general, had acted as the Board's legal advisor, had no communications with the Board, or any member or advisor thereof regarding Hardesty's matter, except at public hearings, but he did speak with Testa. This evidence supports the trial court's finding there were no *ex parte* communications with the Board. Everything Testa told the Board was a matter of public record and known to Hardesty.

Hardesty's complaint that Testa's discussions with County officials were improper *ex parte* communications is unsupported by authority holding a person who writes a publicly available report must include summaries of every source of information, therefore the point "is deemed to be without foundation and requires no discussion by the reviewing court." (*Atchley v. City of Fresno* (1984) 151 Cal.App.3d 635, 647.)

Further, as the trial court put it, not only was there "internal separation" between Testa and the Board, "Testa did not act as an advisor to the Board, but as an advocate for the agency. Thus, it was not inappropriate for [him] to communicate with the County or to prepare a 'staff recommended' decision prior to the hearing. It was up to the members of the Board to decide whether to accept that recommendation."¹⁵

¹⁵ Hardesty suggests the Board was limited to considering "submitted evidence . . . not to develop or investigate the facts." But the Board may consider "additional evidence"

In the lead case relied on by Hardesty, *Beverage Control*, *supra*, 40 Cal.4th 1, our Supreme Court invalidated a procedure whereby an agency prosecutor at the ALJ hearing then provided ex parte information to the full board. But *Beverage Control* also held that “nothing in the [Administrative Procedures Act] precludes the ultimate decision maker from considering posthearing briefs submitted by, and served on, each side. The Department if it so chooses may continue to use the report of hearing procedure, *so long as it provides licensees a copy of the report and the opportunity to respond.*” (*Id.* at p. 17, italics added; see *City of Pleasanton v. Board of Administration* (2012) 211 Cal.App.4th 522, 531-532.) *Beverage Control* did *not* hold that a public entity “is precluded from soliciting or receiving a written analysis and recommendation from the agency’s prosecuting attorney delivered to it as part of a public agenda packet along with the adversary’s opposing analysis and recommendation.” (*Pleasanton*, at p. 533.)

Hardesty contends anything Testa learned *from the County* should have been disclosed to him, but as the trial court correctly found, assuming any communications from the County that were not included in Testa’s report took place, they would be irrelevant because they could not have affected the Board’s decision. This is not a situation where the Board received ex parte information but denies it was considered. (Cf. *Beverage Control*, *supra*, 40 Cal.4th at p. 16 [“the agency engaging in ex parte discussions cannot raise as a shield that the advice was *not* considered”].) Further, before the hearing Hardesty had access to a letter from the County formally opposing his RFD, which describes the County’s factual and legal objections. Thus, Hardesty had access to the County’s views and an opportunity to respond, even if he did not know precisely what

(see Regs., §§ 3956, 3961, subd. (b)) and it is both commonplace and unobjectionable for a public entity to consider a staff report made public before a hearing. (See, e.g., *Today’s Fresh Start, Inc. v. Los Angeles County Office of Education* (2013) 57 Cal.4th 197, 225-230; *Tily B., Inc. v. City of Newport Beach* (1998) 69 Cal.App.4th 1, 14-15.)

the County may have told Testa apart from what Testa included in his report to the Board.

Thus, we agree with the trial court that there was no procedural unfairness.

DISPOSITION

The judgment is affirmed. Hardesty shall pay the Board's costs of this appeal.
(See Cal. Rules of Court, rule 8.278(a).)

/s/
Duarte, J.

We concur:

/s/
Nicholson, Acting P. J.

/s/
Butz, J.

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
THIRD APPELLATE DISTRICT
(Sacramento)

JOE HARDESTY ET AL.,

Plaintiffs and Appellants,

v.

STATE MINING AND GEOLOGY BOARD,

Defendant and Respondent.

C079617

(Super. Ct. No. 34-2010-
80000594-CU-WM-GDS)

ORDER DENYING
PETITION FOR
REHEARING &
CERTIFYING OPINION
FOR PARTIAL
PUBLICATION

[NO CHANGE IN
JUDGMENT]

* Pursuant to California Rules of Court, rules 8.1105 and 8.1110, this opinion is certified for publication with the exception of parts II and III of the Discussion.

THE COURT:

Plaintiffs Joe Hardesty et al., have filed a petition for rehearing with this court. Nonparty Steven L. Mayer of Arnold & Porter Kaye Scholer LLP has filed a request for publication with this court. It is hereby ordered:

1. Petitioners' petition for rehearing is denied.
2. The opinion in the above-entitled matter filed April 17, 2017, was not certified for publication in the Official Reports. For good cause it now appears part I of the opinion should be published in the Official Reports and it is so ordered.

BY THE COURT:

/s/
Nicholson, Acting P. J.

/s/
Butz, J.

/s/
Duarte, J.

EDITORIAL LISTING

APPEAL from a judgment of the Superior Court of Sacramento County, Timothy Frawley, Judge. Affirmed.

Diepenbrock Elkin Gleason LLP and Jennifer L. Dauer for Plaintiffs and Appellants.

Kamala D. Harris, Attorney General, David Chaney, Chief Assistant Attorney General, John Saurenman, Senior Assistant Attorney General, Christiana Tiedemann, Deputy Attorney General, David G. Alderson and Tara L. Mueller, Deputy Attorneys General, for Defendant and Respondent.

EXHIBIT D

California Vested Rights Law, Mark D. Harrison,
Esq., February 5, 1998

CA Vested Rights Law

PRESENTATION FOR THE CONSTRUCTION MATERIALS ASSOCIATION OF CALIFORNIA
HOLIDAY INN CAPITOL PLAZA, SACRAMENTO, CA
FEBRUARY 5, 1998

VESTED MINING RIGHTS AND THE RIGHT TO EXPAND OPERATIONS

BY MARK D. HARRISON, ESQ.

1. VESTED MINING RIGHTS---WHAT ARE THEY?

- Property right to continue operating in a certain location and in a certain way without being required to conform to all current land use restrictions.
- Legally, a vested mining right is a "nonconforming use" of land. The California Supreme Court has defined a nonconforming use this way:

A legal nonconforming use is one that existed lawfully before a zoning restriction became effective and that is not in conformity with the ordinance when it continues thereafter. [Citations omitted] The use of the land, not its ownership, at the time the use becomes nonconforming determines the right to continue the use. Transfer of title does not affect the right to continue a lawful nonconforming use which runs with the land [Citations omitted]...

Hansen Brothers Enterprises v. Board of Supervisors, 12 Cal. 4th 533, 540 fn.1 (1996)("Hansen").

2. FOR WHOM ARE VESTED RIGHTS IMPORTANT?

- Owners and operators of vested, nonconforming operations.
- Companies who are considering purchasing or leasing such operations.
- Owners and operators who are doing business under older, open-ended use permits.

3. WHY IS IT IMPORTANT TO KNOW YOUR LEGAL RIGHTS?

- Vested, nonconforming uses of all kinds are disfavored by the law and by planning agencies.
- The public (including many local planners, state regulators and the judiciary) have an ingrained, negative attitude towards mining uses. When asserting your rights to continue or expand a vested operation, you can expect, and must prepare for, opposition.

4. HOW IS THE SCOPE AND EXTENT OF A VESTED MINING RIGHT DEFINED?

A. Geographical Scope.

- Land use agencies will often argue that a use permit is required when a vested mining use seeks to expand operations into areas of the property not previously mined.
- In 1996, the California Supreme Court in Hansen Brothers Enterprises v. Board of Supervisors, 12 Cal. 4th 533 (1996), rejected this argument. The Supreme Court established the rule that a vested mining right ordinarily includes the right to complete mineral extraction from the entire mining property. The miner, however, must have "objectively manifested" its intent to mine the entire tract at the time the use first became nonconforming (usually at the time a use permit was first required).
- Hansen did not discuss what facts are sufficient to show the required "objective manifestation" of intent to mine the entire tract. Law from other states, however, suggests that all operational factors are considered, such as 1) the physical nature of the mining parcel; 2) whether the mine consists of one or more parcels; 3) the steady continuation of mining (including the stockpiling) over time; 4) the existence of roads on the property; 5) where processing facilities are located on the property; and 6) the type of mining equipment used on the site.

- Based on these factors, it is usually the case that a typical commercial mining operation can show that it "objectively manifested" the intent to mine the entire tract. The vested right, therefore, would include the right to enlarge operations to harvest all areas of the mine. It is improper for a local agency to limit the geographical scope of the mining operation to less than the entire tract.

B. Operational Scope (Production Volumes).

- Even in cases where the local land use authority recognizes the geographical scope of the vested use, attempts are sometimes made to limit the miner's production volumes. Vested operators will face the argument that they can not produce at a level above their past annual maximum, or at a level above the average of past years production or that their increases in production (if allowed at all) should be restricted.

- Hansen, the only California legal authority that has addressed the question of whether an increase in production volumes impermissibly intensify or enlarge a vested mining use, rejected this argument.

- The evidence in Hansen was that, at unspecified times in the operation's history, aggregate production from the mine sometimes reached 200,000 tons (or 133,000 cubic yards) per year, although average annual production was far less. Hansen, *supra*, 12 Cal. 4th at 546. Hansen Brothers' reclamation plan application forecast a minimum yearly production of 5000 cubic yards and a maximum yearly production of 250,000 cubic yards per year. *Id.* at 574.

- The County of Nevada argued that under SMARA section 2776 (prohibiting "substantial changes" in vested mining operations without first securing a use permit and its local nonconforming use ordinance (which prohibited "intensification" of a nonconforming use), the miner's future operations, as described in the reclamation plan, would impermissibly intensify the operation through an increase in production volumes.

- The Court began its analysis by stating that "...the natural and reasonable expansion of a quarry business to meet increased demand is not an impermissible enlargement or change in the use of the property." *Id.* at 572. The Court treated this conclusion as a corollary to the general rule that "an increase in business volume alone is not an expansion of a nonconforming use..." *Id.* at 573. The Court found that neither the County's nonconforming use ordinance nor SMARA section 2776 contained a "prohibition against a gradual and natural increase in a lawful, nonconforming use of a property, including quarry property...[W]here increased population created an increased demand for the aggregate used in road construction, an increase to meet that demand would not be construed as an enlargement or intensification of the use..." *Id.* Based on these legal principles, the Court held: "Unless Hansen Brothers proposes immediate removal of quantities of rock which substantially exceed the amount of aggregate materials extracted in past years, there is no impermissible intensification of use..." *Id.* at 575.

- Hansen, and its discussion of increased production, appears to stand for the proposition that a 100% increase in production volumes from a mine (133,000 cubic yards to 250,000 cubic yards) is not impermissible intensification of the use. This assumes that the mine production in question, like the mine involved in the Hansen case, is market driven and the increase is in response to market forces. The increase, to some degree, must be a "gradual and natural" expansion of the use and not an increase associated with the addition of massive new industrial instrumentalities or a fundamental change in the way the business operates.

- The significant point to take away from the Hansen case on the question of volume is that production increases (even relatively aggressive increases) are clearly allowable as part of a nonconforming mining use.

C. Operational Scope (Adding and Modernizing Equipment).

- Another argument made to limit a vested mining operation is that the vested operation is not permitted change or modernize mining methods and equipment.

- Although no California case has ever directly addressed the issue, Hansen does provide assistance in how to frame the general analysis.

- In Hansen, the California Supreme Court addressed Nevada County's claims that an aggregate production operation should be compartmentalized into separate "uses" (such as riverbed extraction, hillside extraction, storage and processing). The Court expressly rejected this type of cramped, definitional approach. The Court held that:

In determining the use to which the land was being put at the time the use became nonconforming, the overall business operation must be considered. '[O]ne entitled to a nonconforming use has a right to. . . engage in uses normally incidental and auxiliary to the nonconforming use. . . Furthermore, open areas in connection with an improvement existing at the time of the adoption of zoning regulations are exempt from such regulations as a nonconforming use if such open areas were in use or partially used in connection with the use existing when the regulations were adopted. ' The mining uses of the Hansen Brothers property are incidental aspects of the aggregate production business.

Hansen, *supra*, 12 Cal. 4th at 565-566 (quoting 8A McQuillin at section 25. 200, p. 89).

- Hansen clearly sanctions a unitary use theory in which the overall business operation is used as the vested rights benchmark. As a result, Hansen necessarily expands the existing use baseline, and arguably expands the range of allowable changes that can be made to a mining operation while maintaining overall similarity with the pre-existing use. Therefore, mine operators can, and should always, define the baseline operation as one that produces rock and aggregate products. All operations at the mine occur as ancillary components supporting this overall use.

- Cases from other jurisdictions are uniform in holding that the adding and modernizing of equipment is not a prohibited change, provided that the new equipment does not change the fundamental nature of the use. For example:

- In *Cheswick Borough v. Bechman* 352 Pa. 79, 82-83 (1945), the court held:

That modern and more effective instrumentalities are used in the business will not bring it within the prohibition of the Ordinance if in fact there was an existing use, provided these are ordinarily and reasonably adapted to the carrying on of the existing business...

- Similarly, in *Moore, v. Bridgewater Township*, 173 A.2d 430, 442 (1961) the Superior Court of New Jersey specifically rejected the claim that the miner should be prevented from adding a rock crusher on the basis that such a machine was not in use at the time the use became nonconforming. The court held:

Let us assume an extreme situation where an owner is quarrying with only a pick and shovel, when an ordinance is passed making his operation nonconforming. Should we decide that thereafter the owner, his heirs, or assigns, may only quarry with a pick and shovel? We have decided in the instant case that the right to quarry extends to the owner's entire tract because not to permit it would, in effect, end the operation. The same reasoning is applicable to the problem of structures. We are of the opinion that in a "diminishing asset" case the holder of the nonconforming use should be permitted to modernize his operation; and change, add to, or increase the size of his equipment (though deemed to be structures), even though this increases his output and intensifies the use; provided that by such action he does not change the original protected nonconforming use.

- As with all aspects of a nonconforming use, however, each case must ultimately stand on its own facts. There will come a point where the addition of new machinery will be considered fundamental change, rather than modernization. This usually occurs due to the fact that either the change in equipment is so massive so as to constitute a "new" use or the original use was clearly different from the use to be accomplished by employing the added equipment. For example:

- In *DeFelice v. Zoning Board of Appeals*, 32 A.2d 635 (1943), the Connecticut appeals court, while acknowledging the basic rule allowing modernization of equipment, nonetheless prohibited the miner's attempt to install a wet sand classifier. The wet sand classifier was 106 feet long, 85 feet wide and 40 feet in height. The floor area was 2,000 square feet. The structure was made mostly of steel with several concrete footings. The classifier also required a standing body of water sufficient to sustain a float 15 feet long and 10 feet wide equipped with a diesel suction dredge. This machinery would eventually convert the entire property into a permanent lake covering the entire mine acreage. The De Felice court found that this additional equipment would be a substantial departure from the original nature and purpose of the use which had been limited to sand excavation using, first picks and shovels, and later a steam

shovel. Id. at 638.

- Similarly, *Paramount Rock Co. v. County of San Diego*, 180 Cal. App. 2d 217 (1960) the court held that the addition of a large, rock-crushing unit consisting of "a system of crushers, vibrating screens, washing devices, electric motors and conveyor belts. . .[using] 576,000 gallons of water per day and [requiring] 250 horsepower to operate. . .and [occupying] an area about twice that occupied. . .", Id. at 222, by the preexisting concrete premix plant was not "substantially similar", Id. at 228, to the preexisting use.

5. CLOSING REMARKS