ACIN RANCH HISTORIC MINING INVESTIGATION

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1. Executive Summary

The question of whether the expanded mining proposed on the Acin Ranch fall under the scope of vested rights (and therefore are exempt from permit requirements)

hinge upon whether there is objective evidence manifesting the then-owner's clear intent prior to the effective date of County Ordinance 971 (September 29, 1958) to expand mining into these new areas. Activities and evidence <u>after</u> the date that this County ordinance was adopted <u>cannot</u> be used to show vesting.

The burden of proof to establish vesting falls upon the Claimant. The Claimant must show "evidence that the owner or operator at the time the use became nonconforming had exhibited an intent to extend the use to the entire property owned at the time." (Hanson Bros., 12 Cal.4th 533, 556.) Use of a portion of a parcel does not establish a vested right to mine other parts of the same parcel or ownership – there must be specific, tangible and credible evidence from <u>before</u> September 29, 1958 showing an intent to mine that specific area where expansion is proposed today. Thus this case turns on the photographic images from that era.

In Summary, Sepulveda claims to have a vested right to expand its operations of "Site1A" onto parcel "-009," but aerial photos show that pre-1958 mining activities were all on the adjacent parcel "-015". While 1961 aerial photography does show mining extending into new area on -009, that was <u>after</u> the County adopted its zoning ordinance and such work was and is subject to a Conditional Use Permit.

Prepared for a nearby business owner, the following analysis explains that the available historic evidence, including high resolution period topographical maps and aerial photographs, do not support the claim of vested rights to expand mining in new locations. These materials demonstrate conclusively that there was no mining activities on Parcel 083-060-009 in 1958 and nothing that reflects a specific intent in 1958 to expand the mining operations onto this parcel.

Attached to this analysis are a series of appendices with the higher resolution photos addressing each area with a complete timeline. Due to the large file size, these are separate files that can be opened and sections zoomed in for much better understanding of the physical features present at the time.

The mining activity sites and proposed expansion areas are not contiguous with one another. Proposed expansion of the sites are broken down into Site 1A and Site 1B. Site 1A is located on Parcel 083-060-015, and currently contains the quarry activities, cattle grazing, and row crop farming. The Claimant proposes to expand Site 1A onto Parcel 083-060-009. Site 1B includes Parcels 083-070-018 and 083-070-010. The current

use of the land includes processing and storage of the quarried stone, cattle grazing, and row-crop farming.

2. Historic US Geological Survey Topographical Maps

The Claimant supplied a 1956 historic topographical map (without delineation of parcel outlines) showing a pickaxe symbol indicating a quarry on the southern side of the highway, opposite the property, contending that this demonstrated active quarrying outside of Parcel -015 prior to 1958. This contention is not supported by the evidence they submitted.

A. Historic 1956 USGS topographical map

By superimposing the parcel outlines upon a larger section of a historic topo map from 1956 it is evident that the pickaxe symbol is clearly associated with the



Fig. 1. Historic 1956 USGS topographical map

diatomaceous earth mine approximately one mile to the south. No pickaxe symbols are associated with any part of the property.

B. Historic 1959 USGS topographical map

The next update of the region's USGS topographical map is from 1959. According to Maria McCormick of the US Geological Survey, new survey work was undertaken beginning with aerial photographs taken in 1956 and field work which was completed in June, 1958. The updated map was completed and published in 1959. This topo map is the first to include a pickaxe symbol and the word 'quarry' beneath it on what is now the Acin Ranch, on Parcel 083-060-015. Dashed-line dirt road symbols associated



Fig. 2. Historic 1959 USGS topographical map, field work completed in 1958

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with pickaxe symbols **do not extend** into any other area of the property, nor are they present on any earlier topo map. USGS location of the quarry activities and its timeline is corroborated by historic aerial photographs documenting that **mining activity is limited exclusively to Parcel -015 in 1958**.

The neighboring parcel to the north, across the Santa Ynez River, does show a shovel symbol associated with a sand and gravel mine on the riverbed section of this neighboring parcel. This neighboring sand and gravel mine is also corroborated by the 1958 and 1961 photos. The neighbor's sand and gravel mine at this time may account for the anecdotal account of mining in this area.

This historic 1959 USGS topographical map does not show any pickaxe symbols associated with Parcel 083-060-009 or the parcels that comprise Site 1B.

Thus, the historic USGS topographical maps fail to support a claim of pre-1958 mining on parcel -009 and demonstrate instead that **the mining was exclusively located on Parcel -015**.

3. Applicant's Aerial Photo and Claims of Historic Mining

A 1954 aerial photograph of Site 1A labeled "Exhibit B" was provided by the Applicant, with lines indicating the boundary between the parcels. (It should be noted that these boundaries in this exhibit are not accurate, and the boundary between -009 and -015 should be further to the south, as in the photos in Appendices A through E.)

Four areas of alleged mining on Parcel -009 were indicated by arrows superimposed on the photograph. These arrows were unlabeled in the original, but for clarity's sake in this discussion, each area and arrow in question have been assigned a number, as seen in Fig. 3 below.

Area 1 - Parcel -009, near the western boundary/meeting points of -015, -009, and an old Mission Lands parcel to the west, bordering Hwy 1.

Area 2 - Rock outcrop down a steep slope and to the north of Area 1 on Parcel -009, approximately halfway between Area 1 and the Santa Ynez Riverbed.

Area 3 - Area on the riverbed itself, which seems to be an area of shifting alluvial deposition. This area is partially located in Parcel -009 and partially on the neighboring parcel.



Fig 3. Claimant's 1954 aerial photograph, with arrows labeled 1 through 4.

Area 4 - Declivity in the bluff on the eastern edge of the slope of -009, where it meets row-crop acreage bordering the Santa Ynez River.

Historic photographic exhibits of Site 1B parcels were not provided by the Applicant, but Site 1B historic aerial photos are discussed in the course of this report.

4. UCSB Special Collections Historic Aerial Photos

Historic aerial photographs provide an impartial, objective record of activity on the property. These aerial photographs are often difficult to interpret. The image quality, photo scale and angle, altitude of the aircraft, clouds, angle of the sun, brightness, and contrast can vary considerably, and it is only by careful comparison of the land features between many photos that one can get a clear idea of the use of a site over time.

Unfortunately, the poor quality of the photos provided by the applicant obscure an accurate interpretation of the features on the landscape. Fortunately, we obtained from UCSB a different set of images with much greater resolution and one that **clearly and conclusively depicts the site's unimproved condition in August 1958**, six weeks before Ordinance 971 took effect.

UCSB Library's Special Collections has a large archive of historic aerial photographs of Santa Barbara County, including the area in question. Although this is an extensive collection, not every year is documented in every location. Photographs from 1928 to 1961 are the most relevant in determining activity prior to and just after the adoption of County Ordinance 971 on September 29, 1958. The dates historic aerial photograph series were available are as follows:

-March 11, 1928 (earliest date available)

-May 22, 1945 -April 9, 1954 -April 20, 1956 -May 15, 1956 -June 4, 1956 -August 12, 1958 (six weeks before County Ordinance 971, effective Sept 29, 1958) -June 24, 1961

Parcel boundaries on these photographs were determined by closely comparing the survey lines on topographical maps and the applicant's engineer's map dated May 10,

2011. This map was closely compared with the historic photos for key landmarks and features such as visible fence lines, and lines were inserted to show the parcel boundaries.

Please refer to the Appendices to view these images.

A. Signatures of Surface Mining.

Human activities alter the landscape. Scars from human alterations of the landscape create a lasting 'signature' of the activity performed, and through careful observation of these signatures we can interpret past activities of the humans that made them, as we do through archaeology. These signatures can last for years, decades, or millennia.

The activity of surface mining has several physical components. From personal accounts and family stories, we know that early mining activities on the property consisted of individuals digging out the stone with various hand tools, such as picks and shovels, from easily accessible areas such as the base of exposed stone outcrops. The stone was then loaded by hand onto pickup trucks, and removed from the site.

These actions (hand digging and driving a vehicle to and from a location) would **create the signature of a road for driving, terminating in an area of light surface soil disturbance.** Depending on the season and image contrast, roads and other signatures of use may appear as white or dark lines on black and white photos. Historically, the property has primarily been used for farming and ranching. These activities also involve roads and soil disturbance, but they create signatures that are different than surface mining. Therefore, in examining historic aerial photographs, the only objective evidence available for these early periods, we would be looking for a signature of two-wheel tire track roads terminating in patchy soil disturbance unrelated to farming activities.

B. Site Features and Patterns of Use, and their Signatures

Comparison over time, rather than a single photo, allows a more accurate interpretation of the use and development on the parcels in question. Several different features on the landscapes such as roads, soil disturbance, and natural geologic landforms and processes were examined to determine the presence of mining activities. Natural vegetation also varies over time, and is dependent upon changes in grazing pressure, seasonal weather, and available moisture.

i. Road Development. A main feature distinguishing vehicle-use roads from cattle trails on historic aerial photographs is that roads have parallel tire tracks, whereas cattle trails

are single-track pathways. The scale and image quality of these photos varies, but this difference is easily determined on all of the photos available. The development and utilization of roads would be a key feature in extracting stone materials from the land, but merely the presence of a road does not necessarily prove mining. Vehicles are often used in cattle ranching activities, such as in caring for the animals and pasture lands. Row-crop farming utilizes roads for field construction and installation of irrigation systems, planting, harvesting, and transportation of the crop. Therefore, not all roads, tracks or pathways are related solely to mining. Roads that terminate in patchy soil disturbance not associated with farming activity were determined to indicate mining activity. **The terminus of a road is significant, in that it indicates the purpose of that road; where it is going and what it is used for, and the location of the activity performed**. Roads connecting areas of disturbance, such as between a quarry area, a stockpile, or a spoils dump site could also be an objective manifestation of mining activity.

ii. Cattle Trails. The land in question has been used for cattle grazing since Mission times. Cattle make distinctive single-track trails and paths across the landscape, often more evident on steeper slopes and during the dry seasons. These paths often follow terrain contours and generally track the easiest or most direct routes between areas. Cattle are known to utilize the same routes traveling to food, water and shelter, and these trails are visible on a landscape, and repeated use of these trails over time can widen them and create the impression of a road. It is the parallel tire tracks of vehicles that would distinguish these wider sections from a road.

iii. Soil Disturbance. Quarrying activities involve the excavating the soil, extracting the stone from the ground, loading it onto trucks, and transporting it. Low-intensity quarrying activities with hand tools and pickup trucks such as described by the Acin family and neighbors do not leave highly visible remains, but extensive soil disturbance and human activity in conjunction with a two-wheeled road terminating in a region where no other farming activity is occurring is considered an objective indication of mining activity.

iv. Natural landforms. The geologic soils of this region are very light-colored soils. In areas of steep ridges, bluffs and slopes, natural erosion of this soil is visible as whitish bands of soil, bare of vegetation. Areas of natural erosion should not necessarily be confused with mining activity.

5. Summary of Photographic Evidence

The historic photographs from UCSB's Special Collections listed above were obtained and closeups of these compared to the Applicant's 1954 Exhibit B photograph to

determine whether mining activity had been taking place in these areas prior to the September 29, 1958 enactment of County Ordinance 971. This discussion of photographic examination is broken down into each of the indicated areas.

A summary of each area is given below, and each area is discussed more intensively with the accompanying photos in Appendix A, B, C, D, E, and F, attached herewith.

A. *APPENDIX A, SITE 1A Overview.* These large-scale photos show the general condition of the property from each photo series. Parcel line boundaries to help orient the viewer, and provide a framework of reference for areas under discussion.

B. *APPENDIX B, Area 1*. Area 1 does not show roads or mining activity until June 24, 1961, well after the September 29, 1958 effective date of County Ordinance 971. Historically, the area south of Area 1 has shown surface mining activity, located on Parcel -015. Indeed, the land immediately adjacent and to the south of Area 1 is the location of a prehistoric chert quarry. Areas of rock outcrops adjacent to Area 1 are visible in aerial photos, but these do not carry the signature of human activity that manifest objective evidence of modern quarrying, such as roads or soil disturbance.

Historic photographs show an access road coming from the southern portion of -015. This road crosses into Parcel -009 but swings back down into -015 and its terminus is well within Parcel - 015, below Area 1. The terminus of the road is significant, in that it indicates the purpose of that road; where it is going and what it is used for, and the location of the activity performed. In this case, the terminus of the road indicates that early mining activity has been located exclusively on Parcel -015.

An aerial photograph taken in 1961 shows a considerable shift in mining activity intensity, with power equipment now being utilized to quarry the stone. This activity has pushed up into Parcel -009 and is the first clear evidence of mining in Area 1, well after the effective date of County Ordinance 971. This activity in 1961 may account for the anecdotal account of early mining in Area 1.

C. *APPENDIX C, Area 2*. The first evidence of roads or soil disturbance in Area 2 are in the photo dated June 24, 1961, well after the 1958 effective date of County Ordinance 971. Although not illustrated in this report, considerable intensification of mining activity in Area 2 occurred between June 24, 1961, and February 26, 1966 and may account for the anecdotal account of mining in this area.

D. *APPENDIX D, Area 3.* Area 3 does not show any roads or historic mining activity until after 1961. Historic photos show the shifting of the river's path of flow and the creation of this alluvial deposit between 1945 and 1954. No roads or soil disturbance noted until the 1961 photo, and in 1961 cleared lines of vegetation appear to be related to recent boundary line surveys in the region. It appears there was mining of alluvial deposits in the riverbed to the east, however, this occurs exclusively on the neighboring parcels. Although not illustrated in this report, Area 3 was mined some time between 1961 and 1966, also seemingly associated with encroachment of the neighbor's sand and gravel mine. This may account for the anecdotal account of mining in this area.

E. *APPENDIX E Area 4*. No evidence of mining in this area is shown prior to the effective date of September 29, 1958. No roads terminated in this location, though they skirted around it. The roads leading to this area well below the bluff seem to be related to the construction of the new row-crop farm field some time between 1954 and 1956. Although not illustrated in this report, a photograph of February 26, 1966, shows a road terminus, an excavation trench and other soil disturbance activity at the far end of the northeastern part of -009, bordering the upper bend of the Santa Ynez River and may account for the anecdotal reports of mining on this section of Parcel -009.

F. APPENDIX F, Site 1B. No mining activities are evident on these parcels, either before or after the effective date of County Ordinance 971. Historically, these parcels have been dominated by farming activities. The pole barn currently used for stone processing is first visible in the June 24, 1961 photo, though no activity other than farming is evident in its vicinity. Roads all appear to be farming-related.

Unfortunately, the photographic series of August 12, 1958, six weeks prior to County Ordinance 971, did not extend over the entirety of Site 1B, but it did cover the upper northeastern section of Parcel -010. This photo does show the newly evident dirt road seen in the 1956 photo in the riverbed area of Parcel -010 is apparently related to the access to and extensive expansion of the row-crop farm field in this area between April 20, 1956 and August 12, 1958.

6. Conclusion

The question of vested rights and the right to expand mining into new areas without permits under the diminishing asset doctrine rests on whether there is objective evidence of an intent to mine in the new area prior to the enactment of County Ordinance 971 on September 29, 1958. On August 12, 1958, aerial photos of Site 1A and a section of Site 1B were taken, six weeks prior to the effective date. From this photo, it can be

inferred that no great changes in mining activity locations or intent to mine in new locations were likely to occur in those six weeks. It is the Applicant's burden to **prove** otherwise.

The only evidence of surface mining before this effective date exists on Parcel 083-060-015 of Site 1A. Oral stories of mining in other locations on the property prior to September 29, 1958 are not supported by aerial photographs or historic topographical maps, and all mining on -009 appears to have started some time between 1959 and 1966.

Site 1B shows no evidence of mining activity on Parcels 083-070-010 or 083-070-018, either before or after the effective date of 1958. The agricultural pole barn that was repurposed for processing the stone excavated from Site 1A was built some time between 1956 and 1961, but no evidence of any historical activities other than farming were associated with this building, even as late as 1978.

Family lore and personal anecdote have been relied upon to provide evidence of the intent to expand mining into new areas prior to September 29, 1958. Such accounts are often confused in location as well as imprecise regarding specific dates. Activity in the areas mentioned did occur in the past and may account for the anecdotal reports of mining on this section of Parcel -009, however, the objective evidence presented by close investigation of high-quality images demonstrate mining activities in these areas all occurred after the effective date of the enactment of County Ordinance 971 on September 29, 1958.

Given this impartial, tangible, physical evidence, vested rights for any portion of the Acin Ranch other than the primary mining area on Parcel 083-060-015 have not been upheld.

7. References:

- 1. Mitigated Negative Declaration 12NGD-00000-00022 dated 12-11-17
- 2. Exhibit B. Historic Photograph dated 1954, from Price, Postel, and Parma
- 3. Historic Aerials, Historic Topographical Maps, https://www.historicaerials.com
- 4. UCSB Library FrameFinder, Historic Aerial Photographs, http://mil.library.ucsb.edu/ap_indexes/FrameFinder/
- Maria McCormick, Supervisory Cartographer, USGS-NGTOC, Lakewood, Colorado, (303) 202-4295, <u>mlmccormick@usgs.gov</u>. Personal Communication of April 24, 2018.

APPENDIX A HISTORIC PHOTOS OF SITE 1A OVERVIEW



Fig. 4. Modern overview of the Acin Ranch Site 1A topography.



Fig. 5. 1928 aerial photograph of Site 1A.

This photo is the earliest available in the region. The locations identified in Exhibit B of Price, Postel, and Parma are labeled Areas 1 through 4, and are stated to be areas of mining on Parcel 083-060-009 before the effective date of County Ordinance 971 on September 29, 1958.

Only one faint road is visible in the pasture areas. The row-crop farm fields are not yet fully developed. Cattle have created trails across the surrounding landscape, largely visible in brushy areas. A fence line not in line with the actual parcel boundary appears to be on the north side of Area 1. Area 3 appears to be an active edge of an alluvial deposit in the Santa Ynez River bed.

No mining or soil disturbance associated with surface mining are evident on the Site 1A parcels.



Fig. 6. 1945 aerial photograph of Site 1A.

A faint access road comes up from the southeast of Area 1, swings up into Parcel -009, and swings back down to terminate in Parcel -015. The route of this particular road stays the same in decades to follow.

Areas of flatter surface topography of the entire Acin Ranch show repetitive parallel lines in the soil, assumed to be agricultural 'ripping' or subsoiling. Subsoiling is done to improve drainage or remedy hardpan soils. In this case, the marks appear in the cattle grazing sections of Sites 1A and 1B in 1945, both in areas known to contain stone as well as those that were not. This would indicate these manmade features are indeed agricultural in nature and related to pasture improvement. These features can create the appearance of false roads, both in the areas treated as well as the untreated areas, creating blank spots in the pattern, however, in this case these blank areas do not show the parallel tire track marks that identify unpaved roads.

No mining or soil disturbance related to surface mining is visible in Areas 1 through 4. Area 3 appears to be under water in Santa Ynez River bed.



Fig. 7. 1954 aerial photograph of Site 1A.

This photo appears to be of the same 1954 aerial series as provided by Price, Postel, and Parma.

The same faint road appears in 1954, coming from the southeast and crossing into -009 but its terminus is well within -015. At this date, the road appears to be so faint it may have fallen into disuse. At the terminus it looks like some small rock outcrops and activity areas exist near the boundary but are squarely in the -015 parcel. A previous cattle track has now become a ranch road leading into -009.

No mining or soil disturbance associated with surface mining activity is discernible in Area 1 on Parcel -009. The Santa Ynez River has shifted its bed and Area 3 appears to be a recent alluvial deposit in the riverbed.



Fig 8. April 20, 1956 aerial photograph of Site 1A.

The same faint road coming from Parcel -015 is visible, crossing into -009 but its terminus is well within -015. At the terminus it looks like some small rock outcrops and activity areas exist near the boundary but are squarely within the -015 parcel boundary.



Fig. 9. May 15, 1956 aerial photograph of Site 1A.

Excellent photo, with a low angle to show topographical relief and clear enough to show individual bushes, trees, and rock outcrops.

It appears that the southern access road has grown over with vegetation and no activity is taking place on Parcel -015 at this time.

Appendix A Site 1A Overview



Fig. 10. June 4, 1956 aerial photograph of Site 1A.

Excellent quality photo of the region.

The same faint road coming from Parcel -015 is visible, crossing into -009 but its terminus is well within -015. At the terminus it looks like some small rock outcrops and activity areas exist near the boundary but are squarely within the -015 parcel boundary. The ranch roads have extended throughout -009 but do not terminate in soil disturbance.

No mining or soil disturbance associated with surface mining activity is visible in Areas 1 through 4, and the primary use of the site appears to be farming.

Appendix A Site 1A Overview



Fig. 11. August 12, 1958 aerial photograph of Site 1A.

This photo was taken approximately six weeks prior to the enactment of County Ordinance 971 on September 29, 1958. It can be inferred that this photo represents an accurate and objective manifestation of the intent of the owner for the use of the property in question at the time of implementation of County Ordinance 971, and that surface mining is restricted to -015.

The southern access road is shown curving up and over into Parcel -009, but again terminating in -015. The neighbor to the north has begun mining sand and gravel on the edge of the riverbed, and is shown to have later expanded to the active alluvial surface a few years later. This could account for the anecdotal reference to mining in this location.

Although ranch roads are visible, no other roads terminating in soil disturbance are located in Areas 1 through 4, nor anywhere else on Parcel -009.

Appendix A Site 1A Overview



Fig. 12. June 24, 1961 aerial photograph of Site 1A.

This photograph is included to illustrate the expansion of mining activities in this location after the effective date of County Ordinance 971 on September 29, 1958.

Multiple areas of surface mining are noted on both parcels. Areas 1 and 2 show access roads and soil disturbance, and the original access road and road terminus can be seen. Area 3 has mining nearby to the east on -009. The neighbor's sand and gravel operation has expanded to the alluvial surface and borders the parcel boundary. The 1961 aerial photos show vegetation clearing along the parcel boundaries of Sites 1A and 1B, allowing a clear illustration of the boundaries for these historic photos. This photo in 1961 provides the first clear evidence of mining on -009. Significant expansion and intensification of mining activities are visible on Parcel -015 to the south. The expansion of mining activities on this parcel occur after the effective date of County Ordinance 971 of September 29, 1958.

APPENDIX B

HISTORIC PHOTOS OF

SITE 1A

AREA 1



Fig. 4. Modern overview of the Acin Ranch Site 1A topography.



Fig. 13. 1928 aerial photograph closeup of Area 1.

This photo is the earliest available for this area. The area identified as Area 1 in Exhibit B of Price, Postel, and Parma is stated to be an area of mining on Parcel 083-060-009 before the effective date of County Ordinance 971 on September 29, 1958.

This area is characterized as being near the high point of the Acin Ranch on Parcel -009, on grassland. Rock outcrops occur to the west and to the south.

No definitive roads exist in this area, with the exception of a faint road to the east. Cattle have created trails across the surrounding landscape. A fence line not in line with the actual parcel boundary appears to be on the north side of Area 1.

No mining or soil disturbance associated with surface mining are evident in Area 1.



Fig. 14. 1945 aerial photograph closeup of Area 1.

This photo in 1945 shows greater definition of cattle trails on the slope north of Area 1.

A faint access road comes up from the southeast of Area 1, swings up into Parcel -009, and swings back down to terminate in Parcel -015. The route of this particular road stays the same in decades to follow. The terminus of the road is significant, in that it indicates the purpose of that road; where it is going and what it is used for, and the location of the activity performed. No other intensive agriculture is visible on this portion of -015, so it is assumed that this road is related to mining this area. In this case, the terminus of the road indicates that early mining activity has been located exclusively on Parcel -015. The route of this road changes little in the decades to follow.

Areas of flatter surface topography of the entire Acin Ranch show repetitive parallel lines in the soil, assumed to be agricultural 'ripping' or subsoiling as discussed in Appendix A, Fig. 6. This activity can create the appearance of false roads, both in the areas treated as well as the untreated areas, creating blank spots in the pattern.

No mining or soil disturbance related to surface mining is visible in Area 1.



Fig. 15. 1954 aerial photograph closeup of Area 1.

This photo appears to be of the same 1954 aerial series as provided by Price, Postel, and Parma. A closeup of this photo is used, rather than a general overview of the entire ranch, to better illustrate the areas in question.

The same faint road appears in 1954, coming from the southeast and crossing into -009 but its terminus is well within -015. At this date, the road appears to be so faint it may have fallen into disuse. At the terminus it looks like some small rock outcrops and activity areas near the boundary but squarely in the -015 parcel.



Fig. 16. April 20, 1956 aerial photograph closeup of Area 1.

The same faint road coming from Parcel -015 is visible, crossing into -009 but its terminus is well within -015. At the terminus it looks like some small rock outcrops and activity areas exist near the boundary but are squarely within the -015 parcel boundary.



Fig. 17. May 15, 1956 aerial photograph closeup of Area 1.

Excellent photo, low angle, clear enough to show rock outcrops.

It appears that the southern access road has grown over with vegetation and no activity is taking place on Parcel -015 at this time.

Appendix B Site 1A Area 1



Fig. 18. June 4, 1956 aerial photograph closeup of Area 1.

Excellent closeup photo of the area.

The same faint road coming from Parcel -015 is visible, crossing into -009 but its terminus is well within -015. At the terminus it looks like some small rock outcrops and activity areas exist near the boundary but are squarely within the -015 parcel boundary.

Appendix B Site 1A Area 1



Fig. 19. August 12, 1958 aerial photograph closeup of Area 1.

This photo was taken six weeks prior to the enactment of County Ordinance 971.

The southern access road is shown curving up and over into Parcel -009, but again terminating in -015. A faint road track is visible to the north of this road, but also terminates within Parcel -015. A small spur road runs along the western fence line, and approaches the boundary but does not cross it or appear to have any disturbance across the boundary into -009. Early quarrying on the Acin Ranch is said to have been done by hand, loading the stone into pickup trucks for transport. Given these accounts, the terminus of these roads identified by parallel tire tracks ending in soil disturbance are the best indication of quarrying.

No roads terminate in Area 1 or any other nearby location within Parcel -009. No mining or soil disturbance associated with surface mining are visible in Area 1.

Appendix B Site 1A Area 1



Fig. 20. June 24, 1961 aerial photograph closeup of Area 1.

This photograph is included to illustrate the expansion of mining activities in this location after the effective date of County Ordinance 971 on September 29, 1958.

This photo in 1961 provides the first clear evidence of mining in Area 1. Significant expansion and intensification of mining activities are visible on Parcel -015 to the south. Multiple roads now extend across the area, including to Area 2, but the original access road is still in use providing evidence as to its development in the course of surface mining on Parcel -015.

APPENDIX C

HISTORIC PHOTOS OF

SITE 1A

AREA 2



Fig. 4. Modern overview of the Acin Ranch Site 1A topography.



Fig. 21. March 11, 1928 aerial photograph closeup of Area 2.

The area identified as Area 2 in Exhibit B of Price, Postel, and Parma is stated to be an area of mining on Parcel 083-060-009 before the effective date of County Ordinance 971 on September 29, 1958.

Area 2 is characterized as a rock outcrop down a steep slope and to the north of Area 1 on Parcel -009, approximately halfway between Area 1 and the Santa Ynez Riverbed.

This 1928 photo is the earliest available for this portion of Santa Barbara County. No definitive roads exist to this area, though cattle trails criss-cross through the brush nearby. No mining or soil disturbance related to surface mining is visible in this area.



Fig. 22. May 22, 1945 aerial photograph closeup of Area 2.

This photo in 1945 shows greater definition of cattle trails surrounding Area 2.

No definitive roads exist to this area. No mining or soil disturbance related to surface mining is visible in this area.

Areas of flatter surface topography show lines in the soil, assumed to be agricultural 'ripping' or subsoiling as discussed in Appendix A, Fig. 6. This activity can create the appearance of false roads, both in the areas treated as well as the untreated areas, creating 'blanks' in the pattern.



Fig. 23. April 9, 1954 aerial photograph closeup of Area 2.

This photo appears to be of the same 1954 aerial series as provided by Price, Postel, and Parma. A closeup of this photo is used, rather than a general overview of the entire ranch, to better identify activity the areas in question.

This photo in 1954 shows no definitive roads to this area.

No mining or soil disturbance related to surface mining is visible in this area.



Fig. 24. April 20, 1956 aerial photograph closeup of Area 2.

This photo in 1956 shows no definitive roads to this area. Cattle trails are visible in the surrounding area.

No mining or soil disturbance related to surface mining is visible in this area.


Fig. 25. May 15, 1956 aerial photograph closeup of Area 2.

This photo in 1956 is an excellent, high resolution photo.

No definitive roads to this area, though the access road to -015 is quite visible. Cattle trails are visible in the surrounding vegetation, but not as evident due to the low angle of the photo.



Fig. 26. June 24, 1956 aerial photograph closeup of Area 2.

This photo in 1956 is another excellent, high resolution photo with good relief and contrast.

No definitive roads to this area, though the access road to -015 is quite visible. Cattle trails are visible in the surrounding vegetation, but not as evident due to the low angle of the photo.



Fig. 27. August 12, 1958 aerial photograph closeup of Area 2.

This photo is dated six weeks prior to the enactment of County Ordinance 971, effective September 29, 1958. It can be inferred that no great changes in mining activity locations were likely to occur in those six weeks and this represents an accurate account of activity up to that time.

No definitive roads exist to this area, though the access road to -015 is well-defined and quite visible. Cattle trails are visible in the surrounding vegetation, in the same locations as in previous decades.





This photo is dated after the enactment of County Ordinance 971 of September 29, 1958.

One definitive road exists to this area. Cattle trails are visible in the surrounding vegetation, in the same locations as in previous decades.

Some mining and surface activity disturbance is visible in this area by this date and would account for the anecdotal account of early mining in Area 2. Though not illustrated in this report, activity in this location in 1966 has an access road coming up from the east, where it is less steep.

APPENDIX D

HISTORIC PHOTOS OF

SITE 1A

AREA 3



Fig. 4. Modern overview of the Acin Ranch Site 1A topography.



Fig. 29. March 11, 1928 aerial photograph closeup of Area 3.

The area identified as Area 3 in Exhibit B of Price, Postel, and Parma is stated to be an area of mining on Parcel 083-060-009 before the effective date of County Ordinance 971 on September 29, 1958.

Area 3 is characterized as an alluvial deposit on the Santa Ynez Riverbed.

This 1928 photo is the earliest available for this portion of Santa Barbara County. No definitive roads exist to this area, though cattle trails criss-cross through the brush nearby. The soils vegetation on an active riverbed are ephemeral at best, because of the potential for the shifting of the river itself.



Fig. 30. May 22, 1945 aerial photograph closeup of Area 3.

This photo of 1945 shows no definitive roads to this area. The Santa Ynez River has shifted its course, and is actively running through this area and has recontoured the landscape surrounding Area 3.



Fig. 31. April 9, 1954 aerial photograph closeup of Area 3.

This photo appears to be of the same 1954 aerial series as provided by Price, Postel, and Parma. A closeup of this photo is used, rather than a general overview of the entire ranch, to better identify activity the areas in question.

This photo in 1954 shows no definitive roads to this area. The Santa Ynez River has shifted its course to the north and revegetation of the alluvial bed in Area 3 is occurring.



Fig. 32. April 20, 1956 aerial photograph closeup of Area 3.

This photo in 1956 shows no definitive roads to Area 3. Cattle trails are evident on the slopes above Area 3.



Fig. 33. May 15, 1956 aerial photograph closeup of Area 3.

This photo in 1956 is an excellent, high resolution photo.

No definitive roads to this area, though the access road to -015 is quite visible. Cattle trails are visible in the surrounding vegetation of the upper slopes.



Fig. 34. June 24, 1956 aerial photograph closeup of Area 3.

This photo in 1956 is another excellent, high resolution photo.

No definitive roads to Area 3. Cattle trails are visible on the upper slopes in the surrounding vegetation.



Fig. 35. August 12, 1958 aerial photograph closeup of Area 3.

This photo is dated six weeks prior to the enactment of County Ordinance 971, effective September 29, 1958. It can be inferred that no great changes in mining activity locations were likely to occur in those six weeks and this represents an accurate account of activity up to that time.

No definitive roads exist to Area 3. Cattle trails are visible on the upper slopes in the surrounding vegetation, in the same locations as in previous decades.



Fig. 36. June 24, 1961 aerial photograph closeup of Area 3.

This photo is dated after the enactment of County Ordinance 971 of September 29, 1958.

An area of cleared vegetation along the parcel boundary does not appear to be a road, but rather, clearing for a recent boundary survey in the region.

No mining and surface activity disturbance is visible in Area 3 by this date. Though not illustrated in this photo, there is an active sand and gravel mine operation on the neighboring parcel to the north and of Area 3 and to the east along the riverbed. This activity would account for the anecdotal account of early mining in Area 3.

APPENDIX E

HISTORIC PHOTOS OF

SITE 1A

AREA 4



Fig. 4. Modern overview of the Acin Ranch Site 1A topography.



Fig. 37. March 11, 1928 aerial photograph closeup of Area 4.

The area identified as Area 4 in Exhibit B of Price, Postel, and Parma is stated to be an area of mining on Parcel 083-060-009 before the effective date of County Ordinance 971 on September 29, 1958.

This area is characterized as an eroding declivity in an area of steep bluff faces. The activity in this area is cattle ranching, bordered on the south side by flat row-crop farmland. In 1928, the riverbed area directly below the bluffs have not yet been converted to row-crop farming, and is covered with native vegetation.

No definitive roads exist in this area, with the exception of the roads associated with the flat row-crop farmland to the south and west of Area 4. Cattle have created trails from the declivity in Area 4 to the west and across the surrounding landscape.



Fig. 38. May 22, 1945 aerial photograph closeup of Area 4.

No roads or development has taken place in Area 4, and activities are still associated with cattle ranching. Agricultural 'ripping' or subsoiling seems to have taken place on the pastures.

It appears that a cattle trail from the southwest has evolved into a ranch road.

In 1945, the riverbed area directly below the bluffs have not yet been converted to row-crop farming, and is covered with native vegetation.



Fig. 39. April 9, 1954 aerial photograph closeup of Area 4.

This photo appears to be of the same 1954 aerial series as provided by Price, Postel, and Parma. A closeup of this photo is used, rather than a general overview of the entire ranch, to better identify activity the areas in question.

No roads or development has taken place in Area 4, and activities are still largely associated with cattle ranching in the immediate vicinity.

The field below Area 4 has begun the clearing of vegetation for conversion to row-crop farming.

Appendix E Site 1A Area 4



Fig. 40. April 20, 1956 aerial photograph closeup of Area 4.

By this date in 1956, the flat riverbed area directly to the south and east of the bluff has been graded into beds and converted to row-crop farming. Roads to this area can be seen in the photo,

Since row-crop tillage quickly obliterates surface geologic features such as former stream beds and alluvial fan patterns seen in the soil in the photo, it can be assumed that this conversion is recent and the road development is related to the use of heavy equipment for grading and preparation of the field.

It appears that a cattle trail from the south has evolved into a ranch road but peters out into a cattle trail. No roads are seen in the immediate vicinity of Area 4.



Fig. 41. May 15, 1956 aerial photograph closeup of Area 4.

No roads are seen in the immediate vicinity of Area 4.

No significant change is visible in the use of the farm roads or the ranch roads, and the primary use of the land is in cattle grazing and row crop farming.



Fig. 42. June 4, 1956 aerial photograph closeup of Area 4.

The cattle trail crossing the middle of the photo from the west has now evolved into a ranch road, continuing past Area 4. Faint road tracks are visible in the vegetation but skirt around, with no roads terminate to Area 4.

No significant change is visible in the use of the farm roads or the ranch roads, though it seems the roads are still in use for farming activities. A ditch on the recently developed farm field is likely related to the installation of irrigation.

A large area of soil slumping or a landslide can be seen at the base of the hill, near the farm road, and would account for the large amount of bare soil visible.



Fig. 43. August 12, 1958 aerial photograph closeup of Area 4.

This photo was taken six weeks before the implementation of County Ordinance 971 on September 29, 1958.

The cattle trail crossing the middle of the photo from the west has now evolved into a ranch road, continuing past Area 4. The faint road tracks to the east and north of Area 4 are no longer visible.

It seems the area disturbed by the installation of the new row-crop farmland is regrowing vegetation.

Little change in Area 4, with the same cattle tracks still visible. No surface mining or soil disturbance associated with surface mining is visible in this location.

Appendix E Site 1A Area 4



Fig. 44. June 24, 1961 aerial photograph closeup of Area 4.

This photo illustrates the conditions in Area 4 on June 24, 1961, after the implementation of County Ordinance 971, effective on September 29, 1958.

The high contrast of the photo does not allow close comparison with the previous photos, but does not show any substantive change from the previous series.

No surface mining or soil disturbance associated with surface mining is visible in this location. Although not illustrated here, a 1966 photo of an area far to the northeast near the river bend of Parcel -009 shows a trench dug by heavy equipment and soil disturbance associated with surface mining. This may account for the anecdotal reports of mining on this portion of Parcel -009.

APPENDIX F

HISTORIC PHOTOS OF

SITE 1B



Fig. 4. Modern overview of the Acin Ranch Site 1B topography.



Fig. 45. March 11, 1928 aerial photograph of Site 1B.

The additional parcels that comprise the Acin Ranch, APN 083-070-010 and APN 083-070-018, are also said to be covered by California Mine ID #91-42-0011. As such, they would be bound by the County Ordinance 971, effective Sept 29, 1958.

The red parcel boundaries are taken from the 1961 aerial photograph, as it appears recent survey work bounding the parcels had taken place and the boundary lines cleared of vegetation. Given that aerial photographs can vary from angle of the photo and the height of the plane (closeup satellite imagery was not available this period in time), these parcel boundaries are not an exact match, but a best-fit analysis. These are still exact enough for the purpose of determining mining activity in the area.

These parcels are largely given over to row-crop farming on the alluvial plains and river benches. One long sharp ridge, on Parcel -010, has been used as cattle pasture and cattle trails are evident. Rock outcrops appear the same throughout time, and no roads lead to them.

No mining or soil disturbance is evident at this time. Road development, as evidenced by wide surfaces and two-wheel parallel tracks, on these parcels is slight and is associated solely with row-crop farming activities.

The row-crop field on the east curve of the sharp ridge appears to be in the process of expansion into native vegetation on the riverbench.



Fig. 46. May 22, 1945 aerial photograph of Site 1B.

Expansion of row-crop farming is evident, including a small narrow field to the west at the foot of the ridge, to the north, and to the east curve of the ridge along the river bench. A cleared field appears to have been placed along the top of the sharp ridge.

No mining or soil disturbance is evident at this time. Road development, as evidenced by wide surfaces and two-wheel parallel tracks, on these parcels is slight and is associated solely with row-crop farming activities.



Fig. 47. May 31, 1954 aerial photograph of Site 1B.

By this date in 1954, row-crop farming is well-established on the eastern curve of the riverbench, between the active riverbed and the sharp ridge.

The cultivated field on the top of the sharp ridge and the narrow field to the west along the toe of the slope appear to have fallen into disuse.

Cattle trails are evident on the ridge, and road development appears to be restricted to farm use.



Fig. 48. April 20, 1956 aerial photograph of Site 1B.

No significant change is visible in the use of the farm roads. A small dirt road is visible along the western boundary line, accessing the northwestern farm fields.

Cattle trails are evident in the brush and vegetation on the sharp ridge. Because of the steepness of the slopes on the sides of the ridge, the top of the ridge would be more heavily utilized by cattle.

No mining activities or storage of stone products are present and the primary use of the land remains cattle grazing and row crops.



Fig. 49. August 12, 1958 aerial photograph of Site 1B.

This photo is dated August 12, 1958, six weeks prior to the effective date of County Ordinance 971 on September 29, 1958. Unfortunately, the aerial series on this date did not cover the entirety of the Site 1B parcels, but it does illustrate the development of the dirt road on the riverbed in the northwest portion as being related to farming, not mining.

No significant change is visible in the use of the farm roads visible. The small dirt road along the western boundary line, accessing the northwestern farm fields, when taken in conjunction with the 1956 photo, appears to have been related to the expansion of the row crop field in this location.

No mining activities or storage of stone products are present in this limited view and the primary use of the land remains cattle grazing and row crops.



Fig. 50. June 24, 1961 aerial photograph of Site 1B.

This photo illustrates the conditions after the implementation of County Ordinance 971 on September 29, 1958.

By this date, the Site 1A parcels have shown significant development in mining activities, however, these parcels of Site 1B do not show any visible activities other than cattle grazing and row-crop farming.

The pole barn has been built in the western corner of Parcel -018, but no activities other than farming are visible in its vicinity.

No mining activities or storage of stone products are present and the primary use of the land remains cattle grazing and row crops.