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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: TURQUOISE MINE

ALTERNATE NAMES:

HERGET TURQUOISE
AVALON
DIAMOND BACK

COCHISE COUNTY MILS NUMBER: 220

LOCATION: TOWNSHIP 19 S RANGE 25 E SECTION 17 QUARTER SW
LATITUDE: N 31DEG 46MIN 33SEC LONGITUDE: W 109DEG 49MIN 28SEC
TOPO MAP NAME: PEARCE - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

GEMSTONE TURQUOISE

BIBLIOGRAPHY:

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ADMMR TURQUOISE MINE FILE
AZBM BULL 123, P. 52-66, PL. II
HEINRICHS, GEOEX 1966 (ADMMR GEOLOGY FILE)
MCRAE, OTIS M. (ADMMR GEOLOGY FILE)
ADMMR MAPS - (UPSTARS AZBM ROLLED BOXES)
CRAWFORD, WM P (ADMMR GEOLOGY FILE)

Patrick J. Goosherst
Turquoise Mountain
P.O. Box 1123
Bisbee, Arizona 85603

May 7, 1996

H. Mason Coggin
Director
Arizona Department of Mines and Mineral Resources
1502 W. Washington
Phoenix, Arizona 85007

Re: Turquoise Mountain Park Informational Packet

Dear Mr. Coggin;

I am writing to request your office please return the entire Turquoise Mountain Park packet, including all color plates, copies of letters and Historical Materials, as soon as possible. You are welcome to copy any and all of the material.

I am very disappointed that the leaders of the State of Arizona are so short sighted that they are not capable of understanding the value of this cultural asset. Once again I would like to emphasize that this is the **one and only and last** opportunity to fill the **missing gap** in Arizona's state heritage. Noting the fact that the greatest portion of land in our state is made up of Indian Reservations, it's a slap in the face to these people the state so proudly represents. Wake up!! Why doesn't anyone grasp the opportunity at hand!?!

At this time I have placed the property for sale, including the 650 acres that would have been transferred to the state for **free** from the federal government. The price for Turquoise Mountain and surrounding land has been set at 1.2 million dollars. If the State of Arizona still has an interest in acquiring this educationally historic landmark I am open to defer payment for a mutually agreeable period of time. I urge you to sincerely rethink the lost opportunity you will be responsible for to the State of Arizona!

Sincerely,



Patrick J. Goosherst

Sent 5/17/96
ax

HMC
↓
A.T.
↓

Did we file
this?

HISTORICAL RESOURCE MATERIALS

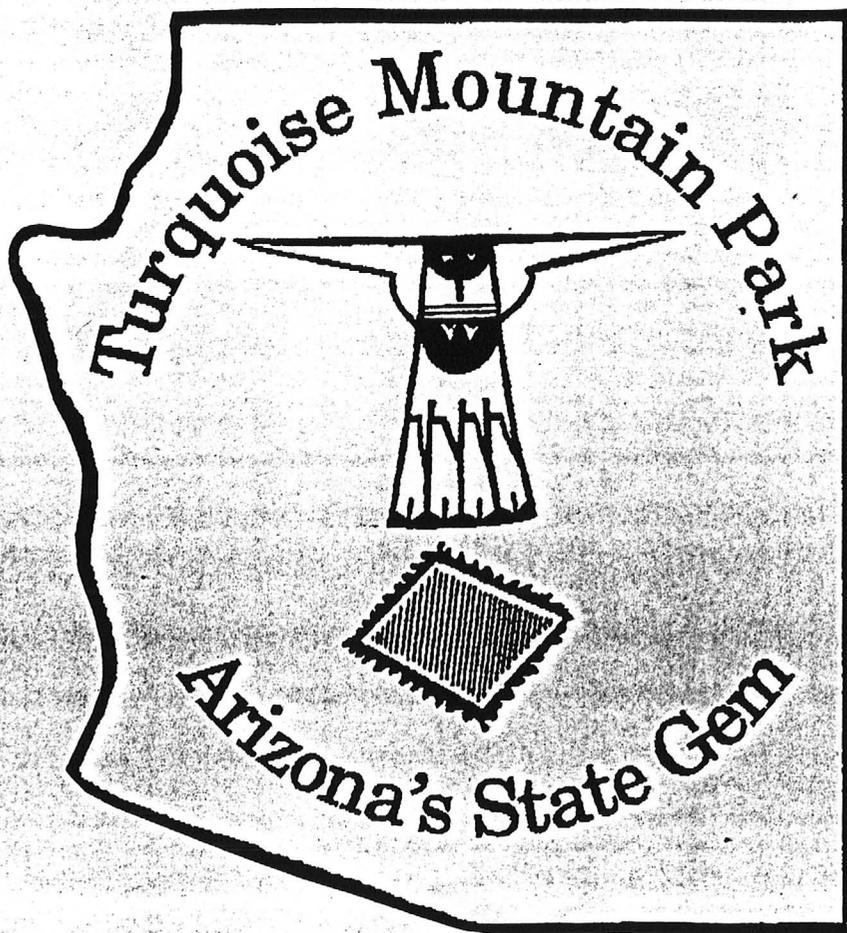
Used For Interpretation

of

TURQUOISE MOUNTAIN

TURQUOISE MINING DISTRICT, COCHISE COUNTY

ARIZONA



RESEARCH MATERIALS DIRECTLY RELATED

TO

TURQUOISE MOUNTAIN

- 1880 THE WEEKLY NUGGET. "The Turquoise District"
- 1880 ARIZONA QUARTERLY ILLUSTRATED. "The Turquoise Mountains"
- 1883 AMERICAN JOURNAL OF SCIENCE. "New Locality of Chalchuite"
by William P. Blake
- 1892 GEMS AND PRECIOUS STONES OF NORTH AMERICA.
by George Federick Kunz
- 1895 THE TOMBSTONE PROSPECTOR. A series of articles relating a
turquoise strike on Turquoise Mountain.
- 1895 THE TOMBSTONE EPITAPH. Several articles describing a rich
find of turquoise on Turquoise Mountain.
- 1899 THE AMERICAN ANTIQUARIAN. "Aboriginal Turquoise Mining"
by William P. Blake
- 1900 THE TOMBSTONE EPITAPH. Article regarding abundance of turquoise
- 1913 UNITED STATES GEOLOGICAL SURVEY. "The Turquoise-Copper Mining
District, Arizona" by F.L. Ransome
- 1915 TURQUOIS: Memoirs of the National Academy of Sciences
Description of the turquoise found on Turquoise Mountain.
by Joseph E. Pogue
- 1926 ARIZONA BUREAU OF MINES.
"Geology of Courtland-Gleeson Region"
- 1937 ECONOMIC GEOLOGY.
"Turquoise Deposits of Courtland, Arizona"
by Wm. P. Crawford & Frank Johnson
- 1939 "THE USE OF TURQUOISE AMONG THE NAVAJO"
by Gertrude Frances Hill
- 1939 ARIZONA HIGHWAYS. "Turquoise" A detailed article of
mining on Turquoise Mountain and its history.
by Helen M. Smith
- 1939 ARIZONA HIGHWAYS. "Indian Jewelry"
by Mrs. White Mountain Smith

- 1940 "AN ARCHAEOLOGICAL SITE NEAR GLEESON, ARIZONA".
by Wm. Shirley Fulton & Carr Tuthill
- 1947 THE DESERT MAGAZINE. "Trail to Turquoise"
by Richard Van Valkenburg
- 1953 "THE SOBAIPURI INDIANS OF THE UPPER SAN PEDRO RIVER VALLEY,
SOUTHEASTERN ARIZONA. by Charles C. Di Peso
The Amerind Foundation
- 1955 THE ARIZONA DAILY STAR. An article relating current mining
of turquoise on Turquoise Mountain.
- 1959 INDIAN LIFE. "Red Men and Blue Stone"
by Phillip Ferry
- 1968 KIVA. Arizona Archeological & Historical Society
"A Cache at Huerfano Butte" by Mark Bahti
- 1970 ARIZONA BUREAU OF MINES. A report of recent and historical
mining in the Turquoise Mining District
- 1972 LAPIDARY JOURNAL. "The Mines and Minerals of Cochise
County, Arizona" by Roger Sassen
- 1973 SOUTHWESTERN TURQUOISE THE INDIANS SKY STONE
by Lee Hammons
- 1975 THE INTERNATIONAL TURQUOISE ANNUAL
- 1986 LAPIDARY JOURNAL "Tantalizing Turquoise"
by Edgar B. Heylmun, Ph.D.
- 1990 LAPIDARY JOURNAL "Eternal Sky" by June Culp Zeitner
Recounts turquoise artifact finds near Tucson
- 1990 EVOLVING DESIGNS. Jewelry by Southwest American Indians
by Nancy N. Schiffer
- 1992 THE ROCKHOUND GUIDE TO ARIZONA. by Jerry Blair
- 1995 THE GRAN CHICHIMECA:ESSAYS ON THE ARCHAEOLOGY AND
ETHNOHISTORY OF NORTHERN MESOAMERICA
"Value in Mesoamerican-Southwestern Trade"
edited by Jonathan E. Reyman

THE WEEKLY NUGGET. May 6, 1880. "The Turquoise District"

"So called, although not organized, consists of a section of mining country at the south east end of the Dragoon mountains, about fifteen miles east of Tombstone. It consists of a half dozen or so large hills detached from the main Dragoons, and standing out in the Sulfur Spring valley. The formation is syenite on the west and limestone on the east, and the veins are nearly all contact veins as far as shown. These mountains contain old mines of which even the tradition is lost, really pre-historic, but a supposition exists and is told as tradition, that they were worked by the early Jesuits and Indians for a stone that has been called turquoise, and from which the mountains take their name."

ARIZONA QUARTERLY ILLUSTRATED. July 1880,
"The Turquoise Mountains"

"These mountains, co-called, are a cluster of high hills rising up out of the Sulphur Spring Valley, near the south end of the Dragoons, about fourteen miles east of Tombstone. Notice was first attracted to these hills in the spring of 1879, by the discovery of old mine dumps, in relation to which a legend exists, that these dumps are all that remain to evidence the fact that the natives, from pre-historic times, excavated the earth and rocks at these places, in search of a peculiar blue and variegated stone of great hardness, that they valued very highly for ornaments. A tradition also exists, that when the Jesuits entered the country, as early as the sixteenth century, they saw the pretty ornaments of the Indians, pronounced them to be Turquoise stones, and at once went in search of them. That they found the place and having secured large quantities sent them as valued trophies to the old world, presenting them to the Kings, Queens, and Princes of Spain, and even to the Pope of Rome, and that some may to this day be found, among the jewels in the Royal Palace at Madrid, and among the holy rosaries, in the Vatican at Rome, there can be little doubt.

"Some few of these Turquoise stones are said to have been found recently at these dumps, but we were not shown any. However the facts may be as to the Turquoise stones, such is the legend, and the tradition, and the dumps we have seen plainly show that in years long past--so long that a tree of perhaps a century's growth now stands upon the earth that was once placed there by human labor."

AMERICAN JOURNAL OF SCIENCE. March, 1883. "New Locality of
Chalchuite (Turquoise) by William P. Blake

"I have recently visited another locality where chalchuite occurs and was mined by the ancients. This is in Cochise County, Arizona, about twenty miles from Tombstone, in an outlying ridge or spur of the Dragoon Mountains and not far from the stronghold of the Apache chief, Cochise, so long the terror of that region. This elevation is now known as the "Turquoise Mountain," and as there are several deposits of argentiferous ores near it, a mining district has been formed called the "Turquoise District."

"At the turquoise locality there are two or more ancient excavations upon the south face of the mountain, and large piles of waste or debris thrown out are overgrown with century plants, yuccas and (Cactus). It has not been worked for a long time and probably never by the Apaches."

"This stone is peculiarly interesting archaeologically. I have shown, in my former paper, that it was in general use and high esteem among the Aztecs and Moctezumas, before the advent of the Spaniards, and that the Pueblos and Navajoes still value it highly. It is evident that the stone was known to all the leading tribes inhabiting the plateau region of Mexico, including the northern portion now known as Arizona and New Mexico."

GEMS AND PRECIOUS STONES OF NORTH AMERICA. 1892,
by George Frederick Kunz

"Additional evidence of the antiquity of the turquoise workings of New Mexico and Arizona has been gathered by the Hemenway Expedition, sent out by Mrs. Hemenway, under the direction of Lieut. Frank H. Cushing. There was found a prairie dog cut out of white marble, with turquoises for eyes; also, about ten miles from Tempe, Ariz., enclosed in asbestos, in a decorated Zuni jar, a sea shell coated with black pitch, in which were incrustated turquoises and garnets in the form of a toad, the sacred emblem of the Zuni. The Christy Collection in London contains two human skulls which are inlaid with turquoise and have eyes made of iron pyrites, and a finger-ring made of the central whorl of a cone-like shell, in which triangular-shaped pieces of turquoise and red spondylus shell were inlaid."

THE TOMBSTONE PROSPECTOR. June 3, 1895, "At Turquoise"

"I think Turquoise will become one of the best camps in the county within a short time," said Mr. N.C. Roscom to a Prospector reporter when questioned regarding his camp and the progress of the Turquoise mines of which he is

superintendent. "Our Turquoise mines are looking well, and we are producing turquoise that is superior in quality than much that is now produced and imported and on the market."

"Mr. Roscom has devoted many years to turquoise mining and speaks from experience. There are but two turquoise working mines in the United States—one in New Mexico and the other at Turquoise, this county—the most of the stone being imported from Persia. The new company which has taken hold of the turquoise mines did well in securing the services of such an expert superintendent as Mr. Roscom, and they already note the beneficial results of his wise course.

"Even centuries ago the value of this stone was apparent among the extinct races, as there is evidence of extensive workings at Turquoise by the Aztecs, who are supposed to have inhabited this entire section of country after this precious mineral. Much has been written about these ancient workings, their curious methods, etc. Occasionally yet is found some tools used by the ancients, showing their crude and laborious method of working.

"Years upon years of hard work is represented by the many workings that are left to tell of the existence of a powerful race of people. There are to be seen in this district numerous immense openings or mines where the Aztecs mined ages since. Many of these excavations have not yet been explored but judging from the workings in a few of them, and the lay of the exposed ground, some very rich specimens of turquoise were extracted.

"The mines were not very deep but are dangerous to examine. Work is being pushed by the company in one of these abandoned shafts and indications point to finding a deposit of turquoise that will yield handsomely. Work on other claims of the company is being vigorously pushed by a force of men with most favorable and flattering results. The ledge or veins containing turquoise is of various widths and is most generally imbedded in a talc substance.

"The working ground, however, is of extra hard formation and considerable blasting must be resorted to. Six shipments of the peculiar bluish-green calsite have been made this month and after it has been submitted to the polishing process will help supply the market for it is a much sought after stone used for jewelry, etc. and the camp of Turquoise and Cochise county will soon have a far-famed reputation as a turquoise producer and also to bear out the assertion of Mr. Roscom as appears at the first of this article."

THE TOMBSTONE PROSPECTOR. July 23, 1895

"Mayor Warnekros returned from Turquoise Sunday where he went to take a look at the gem producing camp which enjoys the distinction of possessing the only turquoise mine in the territory, and the second in the United States, New Mexico possessing the other. He reports considerable activity in the district, and everybody in a happy mood brought about by the fact that all seem to be enjoying reasonable prosperity and meeting with successful progress in the mining work.

"When it is born in mind that a pound of genuine Turquoise at the present market price brings the magnificent sum of \$8 per carret, or \$11,360 per pound, an idea of the value of a vein of turquoise can be readily imagined, and when it is stated that shipments of turquoise is sent from this district monthly to be separated and dressed in New York, which yield handsome returns, it would be sufficient to make the owner of a gold mine turn green with envy.

"Mr. Roscom, the superintendent of a group of valuable mines, has a force of 10 men at work, and as in evidence of the fact that they are supplying to the markets a goodly quantity of it's needs but to be stated that shipment is about ready to be made to New York, a sack of over 30 pounds being ready for assortment. Mr. Julius Goldsmith one of the owners of the property is on the ground, having arrived recently, and in all probability may consider the working of the mines on a larger scale."

THE TOMBSTONE PROSPECTOR. July 27, 1895

"Mr. T.S. Parker, of Turquoise, was in town today and paid The Prospector a pleasant call. Mr. Parker states that the mines on which himself and partners, Messrs. Harvey and Bell of Silver City, New Mexico, have a bond, are looking nicely. Mr. Parker is an experienced mining man and has gained through practical acquaintance with turquoise mining extending over many years a most thorough knowledge of the character, class and method of extracting these valuable gems."

THE TOMBSTONE EPITAPH. August 6, 1895

"One of Durkee's big teams crossed the gulch near the lime kiln last night with one wagon of Turquoise ore. Two other wagons were left on the other side till this morning owing to high water."

THE TOMBSTONE EPITAPH. August 20, 1895. Front page headline:

"Rich Vein Of Turquoise Is Discovered"
"Heavy Rain Bares A Six-Inch Vein Of Precious Stone."
"Great Activity Reported At The Camp East Of The Dragons"
"Accidentally Found"

"Mayor P.B. Warnekros returned yesterday from Turquoise where he had been on a trip to the camp that is now coming into such prominence through the marvelous rich deposits of turquoise gems and their intrinsic value.

"The mayor reports much activity and bustle at the camp and a general air of prosperity seems to pervade all who are fortunate enough to be interested in the Gem district of the county. The heavy rain and washout last week at that camp did considerable damage, while again it was a blessing in disguise, inasmuch as the rushing waters uncovered a valuable vein of turquoise over six inches wide."

"Mr. Goldsmith, brother of Julius Goldsmith now on the grounds and one of the owners of the bonanza group of which Mr. N.C. Rascom is superintendent, is expected to arrive here some time next week to carry into execution the more extensive work which has about been decided upon, and upon his arrival the opening up of the mines and employment of more men is probable.

"Regular shipments of ore are being sent to New York by Wells Fargo and Company and one hundred pounds is now ready, after being sorted, to be sent east."

TOMBSTONE EPITAPH. September 3, 1895. "The Turquoise Find"

"Developing in Large Proportions--Another Shipment"

"Messrs. Julius Goldsmith and H.F. Hazelwood were in town today from Turquoise. When seen in regard to the progress and result of work on the new turquoise find that was recently discovered in a canyon, the vein being uncovered by the action of the water washing over it and exposing a rich deposit of turquoise, they speak enthusiastically of the find and think it will develop into extensive proportions., Work has begun and already a shipment has been taken from near the surface. The colors taken out are the most desirable and with further work indications become more encouraging of becoming a bonanza; other properties of the company continue to produce their usual quota for the regular shipment of gems.

"The arrival of one of the owners of the turquoise group is expected within a short time on a visit, and undoubtedly

other properties, of this valuable group will be opened and thus work on an extensive scale assured.

"Superintendent Roscom, who has given such universal satisfaction to the company by his able management, has given notice of his resignation on September First. Mr. Roscom owns some valuable turquoise properties both at Turquoise and near Silver City and his sole reason of resigning his position is to personally look after his own interests.

"It is very likely Mr. Roscom will begin operations at Turquoise with a few men on his own property. The superintendency made vacant by Mr. Roscom's resignation will probably be filled by Mr. Hazelwood, who is spoken of highly as an experienced manager, having had charge of the famous Azure mines in the Burro mountains, New Mexico, for the past five years, which have produced fabulous wealth. Mr. Hazelwood is no novice at turquoise mining and is a successful mining man."

THE AMERICAN ANTIQUARIAN. September, 1899.

"Aboriginal Turquoise Mining" by William P. Blake

"Another locality of chalcuite in Arizona, which shows aboriginal workings, is in Cochise County, twenty miles east of Tombstone, on the eastern slope of the Dragoon Mountains, in the district known as Turquoise. Here there are large excavations and dumps giving conclusive evidence of extensive working."

"It is unnecessary to give all the evidence here of the high esteem in which the turquoise was held by the ancient inhabitants of this region. We know from the narrative of Bernal Diaz and the journals of the Coronado expedition, that it was in general use for personal adornment, and that it was most highly prized, and was an object of trade or commerce between the various tribes. It was also reported as in use at Cibola for the adornment of the portals of chiefs' houses, by inlaying. Thus, the Friar Marcos de Niza, in his reconnaissance in Sonora and northwards in search of the seven large cities of Cibola, was informed that he would there find the chief doorways ornamented with turquoise. On his way, he met Sonora Indians, returning from the north, who explained that they had been to Cibola to get turquoises and cow [buffalo] skins. Turquoises were suspended in their ears and noses, and they wore belts adorned with turquoises. At one village the chief men were adorned with collars of turquoise, while others were allowed to use them in their ears and noses only."

THE TOMBSTONE EPITAPH. August 27, 1900

"Turquoise is showing up well and all indications point to a big mining camp there in the near future."

UNITED STATES GEOLOGICAL SURVEY. 1913. Bulletin 530 C.
"The Turquoise Copper-Mining District, Arizona"
By F.L. Ransome

"The turquoise occurs in joints and small irregular fractures in a bed of Cambrian quartzite that dips 65° E. and outcrops along the west side of Turquoise Hill a few feet above the contact with the decomposed granitic rock previously referred to. At the opening examined the bed has been stoped to a width of 4 feet and a depth of 75 feet or more, the bottom of the shaft being now filled with water. A short distance north of this opening and near the western boundary of the area mapped other workings, perhaps a little more extensive than those visited, have been opened on the same bed of quartzite"

TURQUOIS. 1915. Memoirs of the National Academy of Sciences
by Joseph E. Pogue

"According to Blake, (Amer.Journ.Sci.,1883) turquoise is found on an outlying spur of the Dragoon Mountains, 20 miles from Tombstone, where considerable ancient excavation had been undertaken."

"The Turquoise District, Arizona, Cochise County. Located on the west flank of Turquoise Ridge, 3/4 mile west of Courtland. Turquoise occurs as stringers and nuggets in both Bolsa quartzite and in a granite that intrudes the quartzite. Some fine turquoise from this deposit."

"Turquoise Mountain. Arizona, Cochise County. Prehistoric mines located here.

"Turquoise Ridge. Arizona, Cochise County. Located east of Gleeson. Turquoise found in this area."

ARIZONA BUREAU OF MINES. 1926.
"Geology of Courtland-Gleeson Region"

(This article gives a full description of the mines on Turquoise Mountain and their production. A photograph of G.S. Goode standing in front of the Avalon claim on the mountain is also included.)

ARIZONA BUREAU OF MINES 1927

"Geology and Ore Deposits of the Courtland-Gleeson
Region, Arizona by Eldred E. Wilson

Contains a very detailed description of every facet of the
Turquoise Mining District; history, production, climate
and vegetation, geography, water supply, and several maps.

ARIZONA HISTORICAL SOCIETY, Tucson c. 1935

Beginning research on Kelso Family and Petty's Indian
Trading Post. Petty received 100% of Kelso production
from Avalon Mine, Turquoise Mountain. This relationship
was noted in Helen M. Smith's article, "Turquoise",
ARIZONA HIGHWAYS, March, 1939. The following quotes are
from a brochure of the trading post.

"The Spaniards, on first entering the region now New
Mexico and Arizona, lured on by the tales of fabulous
riches of the Seven Cities of Cibola, found the turquoise
held in high regard, and recent excavations in the ancient
pueblos and cliff dwellings of these two States have
revealed a wealth of turquoise ornaments that reflect
credit on the artistic ability of their makers.

"The Turquoise has long occupied a prominent place in the
mythology and folklore of the Indians of the Southwest,
not alone because of its wide use among them, but also as
a result of the peculiar psychological appeal its color
seems to make to the untutored mind. It enters into the
adornment fetiches, and finds application in many
ceremonials, such as the famed Snake Dance of the Hopi.
This stone is frequently alluded to in folktales of the
Zuni, like that of "The Youth and the Eagle," in which the
eagle bore the youth upward into the sky world, where "it
alighted with its beloved burden on the summit of the
Mountain of Turquoise, so blue that the lights shining on
it paint the sky blue."

ECONOMIC GEOLOGY. 1937.

"Turquoise Deposits of Courtland, Arizona".
by Wm. P. Crawford & Frank Johnson

"In America--The American Indians worked turquoise mines in our own Southwest at a number of places before the Spanish arrived. That some of these considerably antedate the discovery of America is shown by the many thousands of turquoise beads and pendants found in Pueblo Bonito, dating from about 900 to 1100 A.D. Antedating the last at least 1,000 years are the turquoise pendants from the late Basket Makers village in Chaco Canyon, New Mexico. The turquoise mines at TURQUOISE MOUNTAIN, Cochise County, Arizona; at Los Cerillos, and in the Burro Mountains, New Mexico, were worked in pre-Columbian time and other ancient turquoise deposits are known."

"THE USE OF TURQUOISE AMONG THE NAVAJO" February, 1939
by Gertrude Frances Hill

"Among no other group of people inhabiting the Southwest does turquoise play such an important social, religious, and economic role as it does with the Navajo. From the very beginning, dotl'izhi (turquoise) has been a part of their life, probably largely through contact with the sedentary Pueblos. Turquoise is the most frequently mentioned of all the precious materials appearing in Navajo myths and tales. There is scarcely a single part of their Origin Legend which does not contain a reference to it. When the Dine' came from the Underworld, it is said they found a vast expanse of land covered with water. In order to drain the earth and make it habitable, they dug channels by means of turquoise shovels tipped with coral."

(This book continues with numerous examples of ceremonial, medicinal, and spiritual uses of turquoise with the Navajo. Included in this book is a map denoting the location of Turquoise Mountain.)

ARIZONA HIGHWAYS. March, 1939. "Turquoise" by Helen M. Smith

"In the list of interesting occupations, Turquoise mining as practiced by Mr. T.E. Kelso, should rank high. Mr. Kelso's mine, the "Avalon", is situated well toward the top of Turquoise Ridge in the Courtland-Gleeson mining region of south-central Cochise County, at an elevation of more than five thousand feet."

"According to Mr. Kelso, some of the best turquoise is of a variety known as "spider-web". The spider-web consists of thin stringers of turquoise so blended and hardened

into the rock in which it is formed as to be inseparable from it; the whole creating an effect of gems set in filagree. Most of the filagree is of a dark reddish color, but Mr. Kelso states that he has encountered in small quantities spider-web turquoise with a black matrix-presumably manganese. The best blue turquoise is slightly transparent. There is also a solid blue which is very good. The value of good turquoise ranges from fifty cents to one dollar per carat."

"Mr. Kelso's entire output of high grade turquoise is used in Petty's Indian Trading Post located at 14 South Stone Avenue, Tucson. There the turquoise is cut, polished and mounted by Indians in Mr. Petty's employ. Mr. Kelso states that Mr. Petty employs one Indian who does nothing but cut turquoise the year around.

"It is remarkable that there is no occurrence of turquoise known at present where traces of prehistoric workings have been found. Certainly by far the oldest mineral production of the Courtland mining area was turquoise mined by Indians. Upon the advent of the white man, old turquoise workings were found scattered along much of the length of the west side of Turquoise Ridge. Due to the lack of effectual mining implements, the Indians were able to work only three or four feet deep; but they turned over whole hillsides in their search for the sky-blue gem. Some of these diggings still remain as last worked by the red man, while others have been driven deeper into the ridge by more modern seekers after turquoise.

"The sole mining implements of the Indians appear to have been heavy hammers, shaped by the savages from the hardest rock obtainable; and a lighter instrument, also of rock, but with a carefully sharpened, hatchet-like edge. Undoubtedly the heavy hammers were used for breaking the rock which surrounded the gem of their search, while the sharper tool might well have been employed in cutting the turquoise away from the surrounding rock. Some of these tools, many of which are still in evidence on the scene, are shaped from rock of volcanic origin, remarkably hard, and of glass-like sharpness. This material was evidently brought from some distance, since no rock of similar formation is found native to this region.

"The Indians will, in the words of Mr. Kelso, "trade the old lady" for turquoise, which they hold in the highest esteem, and call the "medicine stone". They cannot be deceived as regards quality; hence an ordinary Indian may possess thousands of dollars worth of gems."

"Several years ago Mr. Shattuck sold one claim, the Avalon, to Kelso and Petty of Tucson. Today Mr. Shattuck and Mr. Kelso are the only turquoise producers of the region.

"A number of colleges and schools of mines exhibit specimens of turquoise from these claims, as do also many dealers in the gem. Mr. Shattuck has given to tourists many of the small pieces of rock coated thinly with turquoise, which abound on his claims.

"It has been Mr. Shattuck's experience the market for turquoise remains steady. Buyers from Los Angeles, Albuquerque, Gallup, and elsewhere come to Courtland and purchase the gem on the ground."

ARIZONA HIGHWAYS. June, 1939.

"Indian Jewelry" by Mrs. White Mountain Smith

"Turquoise has always been a sort of magic stone to Southwestern Indians. Prehistoric graves yield strings of this cherished gem and shells inlaid with bits of it are found in almost every deserted ruin. It would be almost impossible to find a Navajo without a bit of turquoise somewhere on his person. The richest may wear thousands of dollars worth around his neck and still be dressed in perfect taste, but he is no more under the protection of the Navajo Powers-That-Be than his poorest brother who has only one small bead tied somewhere in his knot of coarse black hair. Turquoise protects the wearer from snake bites and chindees; from being struck by lightning and from the evil designs of his mother-in-law. If one is fortunate enough to possess a bit of the hard blue stone found in a prehistoric dwelling, then one is indeed blessed by the Navajo gods. More than likely the owner will be called upon to use it in "sing" and money cannot buy it. On the cradleboard of each Navajo baby a turquoise bead is tied and on a string around its neck is placed such a bead when the first tooth is cut, when the first word is spoken, and the first step is taken, and each and every event of its life is marked by the addition of another bead.

"Among the Zuni Indians, finest turquoise workers of all the tribes, the clear blue stone holds many virtues. If the wearer of this semi-precious stone does a dishonorable act, the turquoise turns a sickly yellow and does not resume its own pure blueness until atonement for the act has been made. Bits of turquoise were found sticking in the houses of the Zunis when the greedy Spaniards conquered Cibola in search of great wealth. The Zunis think turquoise will cure blindness and they carve small fetishes from it which are carried as pocket pieces. The mane of each racing pony conceals a turquoise, and the finest and best turquoise necklaces are buried with their owner in order that the inmates of the next world may know that a person of importance has come to dwell among them. The Zuni Indians wear great ropes of odd-shaped turquoise

as necklaces. These, together with strings of rose colored coral and a few silver beads are part of any up and doing Zuni's dress."

"AN ARCHAEOLOGICAL SITE NEAR GLEESON, ARIZONA". 1940
by William Shirley Fulton & Carr Tuthill
for The Amerind Foundation, Inc.
Dragoon, Arizona

"Forty-seven of the one hundred and two inhumations, or 46.1 percent, had some form of burial accompaniment. The number of these vary from one small turquoise bead, which had apparently been fastened to the upper arm in an adult burial, to a necklace of turquoise, shell and stone beads, eleven shell bracelets and five pieces of pottery in that of a child."

THE DESERT MAGAZINE. February, 1947. "Trail to Turquoise"
by Richard Van Valkenburgh

"Following a clue given him by his Navajo friend, Frank Walker, Richard Van Valkenburgh took a trail that led deep into the old Apache stronghold--and there he and his companions found the abandoned workings of turquoise mines which once were an important source of the blue gemstone for Indians of the Southwest." (Desert Mag. Editor)

"There was no question in my mind that the mines on Turquoise ridge were those visited by Chino and Slim Chiricahua in 1884. And then as I looked north to where the Pinaleno range lay as the first landmark in the 300 miles to the Navajo-Hopi-Zuni country I wondered:

"The Navajo were down here. And early Spanish chroniclers tell of the trade between the Zuni and the Sobaipuris of the nearby San Pedro valley. Could these ancient mines on the ridge have been the "lost" mines from which the Zuni in the prehistoric days obtained their turquoise?"

"THE SOBAIPURI INDIANS OF THE UPPER SAN PEDRO RIVER VALLEY,
SOUTHEASTERN ARIZONA. 1953. by Charles C. Di Peso
for The Amerind Foundation, Inc., Dragoon, Arizona

"Most of the prehistoric mines of Arizona have been reworked in modern times. The principle deposits which produce turquoise of gem quality are found at Courtland, southeastern Cochise County. (Crawford & Johnson. "Turquoise Deposits of Courtland, Arizona. Economic Geology. June-July, 1937)"

"Turquoise occurs in the La Barranea copper district of Sonora, in volcanic rock similar to that at Turquoise Mountain, Arizona. ("Foreign Mining News". Engineering and Mining Journal. March 16, 1901)"

"Trischka (Carl, "Hohokam: A Chapter in the History of Red-on-Buff Culture of Arizona.") records several sites on the eastern slope of the Mule Mountains, Cochise County, Arizona, some ten to fourteen miles from Bisbee. Small turquoise beads, usually bleached white from exposure, were picked up on the surface. Of particular interest is a pendant of turquoise representing a frog. The head of the effigy is perforated for suspension. The source of all this material was probably the turquoise deposits at Courtland and Gleeson" (Turquoise Mountain).

"Historic Interlude; Perhaps our earliest historic mention of turquoise in the Southwest comes from an account of the wanderings of Alvar-Nunez Cabeza de Vaca (1528-1536). Somewhere in the vicinity of the Rio Grande, probably quite a distance east of the Yaqui River in Sonora, Mexico, de Vaca and his companions were presented with many turquoises of good quality which the Indians told them were obtained from the north (1534). Apparently there existed quite an extensive commercial intercourse between the people of Cibola (Zuni) and those south of the Gila River. The Seri Indians exchanged iridescent shells from the Gulf of California for turquoise from the Zuni pueblos;"

THE ARIZONA DAILY STAR. September 30, 1955

"Work Started On Reopening Of Ancient Semi-Precious Stone Mine At Gleeson" (headline)

"Gleeson, Sept.29 (Special)--Work will start on moving the top of a mountain at the old Turquoise mine near Gleeson and mining the semi-precious stone by open-pit methods.

"Lionel Herget, who has owned the mine since 1952, is an authority on the turquoise. He points out the old mine was worked in ancient days by Indians and has been workd

since 1903 by white men. At one time the mine was leased by Tiffany & Co., the New York jewelers. Tiffany & Co. employed 40 miners. Much of their turquoise was shipped to China and India for fine inaly work.

"L.D. Shattuck owned the mine for 15 years and while he operated it a 3 1/2 pound nugget was mined, valued at \$350.

"Nuggets weighing up to 2 pounds are being mined today as well as tiny nuggets and veins in a talc formation. New Mexico Zuni craftsmen buy much of the turquoise from this mine and C.G. Wallace and Associates won the blue ribbon at this year's Zuni Ceremonial meeting.

"Herget says a survey by a mining engineer shows the old mine is far from worked out. Important pockets have been found 60 feet underground."

INDIAN LIFE. August, 1959. The Magazine of the Inter-Tribal
Indian Ceremonial

"Red Men and Blue Stone" by Phillip Ferry

(This article contains a black and white photo of two men drilling underground in the south mine of Turquoise Mountain. This mine, known as the Last Chance, was owned at this time by the well-known trader of Zuni jewelry C.G. Wallace. Using turquoise from Turquoise Mountain, Zuni jewelers in C.G. Wallace's employ were awarded many first place blue ribbons at Ceremonial competitions several years in a row during the 1950's. To this day collections of the trader are being auctioned by Sotheby's in New York.)

KIVA Arizona Archeological & Historical Society publication
"A Cache at Huerfano Butte" by Mark Bahti

"A cached jar containing turquoise and shell beads and pendants was found by Tani Bahti at Huerfano Butte south of Tucson, and presented by her to the Arizona State Museum. The cache is assigned to the Rincon Phase.

"On January 17, 1965, a young girl on a picnic found what she thought at first to be a small grinding stone. It turned out to be a pottery jar with a bowl as a lid, containing 1,212 beads, 240 pendants, two domed beads, two frog pendants, one flat bead and one pendant fragment, all of turquoise, three carved glycimeris shell birds, one shell bead, and 36 perforated glycimeris shells.

"The cache, now at the Arizona State Museum (ASM-#A-24,171), was dated at about 1100 AD. This dating was done

on the basis of the pottery container and lid, both of which were identified as being examples of Gila plainware of the Rincon phase of the Hohokam culture."

"The 1,212 turquoise beads with a few exceptions are of very high quality, being a deep blue with brown matrix. They vary in diameter from .8 cm. to .3 cm.. The thickness ranges from .4 cm. to .1 cm.. The holes, which have a median diameter of .09 cm, were probably not drilled with a stone tip. Such a tip was used with a pump drill experimentally and was found unsatisfactory on turquoise of quality similar to that in the cache. The point required constant re-dressing, took a considerable length of time and produced a rather large hole. The stone tip was quite satisfactory on shell, but cactus needles were found to be faster and more effective than stone tips on turquoise..."

ARIZONA BUREAU OF MINES. 1970

"The mining of turquoise in Arizona has been carried on for at least the last 5,000 years, for records indicate exploitation in pre-Colombian time. Arizona production in the early 1960's, ranked first in the United States, and in 1962 totaled about 11,500 pounds valued at about \$17,000 (Hartwell and Brett, 1963,p.586)

"In the Turquoise district the principle deposits, which were rediscovered in 1890, occur on the west flank of Turquoise Ridge three-fourths of a mile west of Courtland. Turquoise occurs as stringers and nuggets in both Bolsa Quartzite (Cambrian) and in a granite that intrudes the quartzite. In the late 1920's one occurrence yielded 80 pounds of material valued at \$8,000 to \$9,000, an average of about \$100 per pound (Sinkankas,1959,p.220). Overall production is not known but amounts to thousands of pounds."

SOUTHWESTERN TURQUOISE THE INDIAN'S SKY STONE. 1973
by Lee Hammons

(This publication gives a location of the turquoise deposits of Turquoise Mountain. Most importantly is a black and white photograph of Lionel Herget sitting in the portal of the Avalon mine in front of a mining car inspecting a piece of turquoise.)

THE INTERNATIONAL TURQUOISE ANNUAL. 1975

(This publication shows some of the collection of C.G. Wallace, including a color photograph of a prize-winning Navajo belt made by Roger Skeet, 1948, set with turquoise from Turquoise Mountain's Last Chance Mine.)

LAPIDARY JOURNAL. July, 1972

"The Mines and Minerals of Cochise County, Arizona"
by Roger Sassen

(This article relates the history of the mines of Turquoise Mountain and the writer recounts a colorful story of his visit with Lionel Herget.)

LAPIDARY JOURNAL. September, 1986

"Tantalizing Turquoise" by Edgar B. Heylmun, Ph.D.

"Indians mined turquoise near Courtland, Arizona, long before the white man arrived, who discovered the material for himself along with the old Indian diggings in the early 1880s. Mining operations were actually begun about a decade later. Since then, several tons of highgrade turquoise have been retrieved, though the mines have been worked only sporadically. Their heyday was early in this century"

"The old Avalon, Azul, and Nightingale claims on Turquoise Ridge have produced the best material so far. The mines consist of cuts, pits, adits, and open stopes. The turquoise is usually light to dark blue, dense, with a hardness in excess of 6. The color is generally permanent. The material cuts and polished very well, and the associated quartzite matrix also cuts and polishes well. Good gem-quality turquoise has been found from the surface down to depths in excess of 70 feet."

LAPIDARY JOURNAL. February 1990

"Eternal Sky" by June Culp Zeitner

"The search for turquoise, often called the sky stone, figures prominently in North America from Pre-Columbian through contemporary times."

"The Turquoise of Arizona: (The discovery by Tani Bahti of the clay bowl and turquoise items is detailed here) Another significant find near Tucson was made in the Catalina Mountains in the early '60s. Some 90,000 beads made of turquoise and several other materials were accompanied by handmade Mexican copper bells. A third discovery near Tucson was made by the operator of a road machine on a construction project.

"The Tucson area turquoise finds may have come from neighboring Cochise County Turquoise Mountain. In 1890 when archaeologists were examining the remnants of prehistoric mines, they discovered a large deposit of gem turquoise nuggets and stringers in granite and quartzite. The location is not far from historic Tombstone. This turquoise is hard and has a rich blue color that could have survived the centuries of desert atmosphere that also preserved the Santa Rita Pottery."

EVOLVING DESIGNS Jewelry by Southwest American Indians
1990 by Nancy N. Schiffer

"C.G. Wallace/Zuni:
He obtained for Zuni craftsmen turquoise from a shop in Denver, and eventually from mines at Lone Mountain, Nevada; Villa Grove, Colorado; copper mines in Arizona, and the Last Chance in Arizona which he owned." (Last Chance Mine, Turquoise Mountain)

THE ROCKHOUND GUIDE TO ARIZONA. 1992
by Jerry Blair

"Site 13: Courtland-Gleeson Area Mines:
Many mines and prospects are scattered among this mostly contiguous area. Courtland may be best known because of the turquoise found here. Evidence shows that prehistoric Native Americans worked surface outcrops of turquoise. More modern Native Americans, the Apaches, fought to protect their area with fierce determination; thus, the area developed slowly."

THE GRAN CHICHIMECA: ESSAYS ON THE ARCHAEOLOGY AND ETHNOHISTORY OF NORTHERN MESOAMERICA 1995
"Value in Mesoamerican-Southwestern Trade"
by Jonathan E. Reyman

"The inhabitants of the Colorado river shores, the Seri's of Sonora exchanged the bivalves for the turquoises of Zuni...The same took place with parrot feathers. The large green parrot is very common...and Cabeza de Vaca tells us that the Jovas...exchanged its plumes for green stones farther north."

"The Opatas obtained turquoise and turquoise ornaments from the Zuni, to whom they traded parrot skins and feathers."

"There existed, in 1539, and prior to it, quite an intercourse between Zuni and the land-tilling aborigines south of the Gila River. That intercourse took the form

of journeys made by the Opatas, the Southern and Northern Pimas, and possible Endeves and Jovas, to Cibola-Zuni for the purpose of acquiring turquoises and buffalo hides, in exchange for which they gave parrots' feathers, and probably sea shells, or which they earned by working for the Indians of Zuni."

"For items such as turquoise and macaws, value and not gross weight or number of specimens, is the more important criterion...Turquoise was highly valued both prehistorically and historically; it still is. It was the "godstone" among many Mesoamerican and southwestern cultures, especially among the Pueblo peoples."

"The quality of turquoise was much greater than generally reported or recognized, and so was its corresponding value. It is not unreasonable to assume that those who mined and distributed southwestern turquoise tried to control the amount of turquoise produced and exchanged in order to maintain its high value, in much the same way that today's diamond production and distribution are controlled."

"Macaw feathers, by weight, are at least as valuable as cocaine and more valuable than either heroin or marijuana, similarly illegal commodities (when the comparison is made to macaw feathers that have been smuggled into the U.S.). Macaw feathers, by weight, are also more valuable than gold at gold's current market price of about \$372 per Troy ounce."

"As with turquoise, it is fair to assume that, because of their value, traders could have profitably carried a few birds or several thousand feathers, neither of which would have weighed much nor would have required more than one or two porters."

"The inability of the prehistoric peoples in the American Southwest to establish viable breeding colonies or even sizable populations meant that constant supplies of birds and feathers were needed. Profitable trade was thus ensured, trade that continued late into the historic period.

"Value, not weight, then, is the more important criterion for determining whether certain economic activities such as long-distance trade were profitable, specifically trade in precious commodities. Turquoise and macaws were precious, and it seems likely that the same was true for other exotic items such as mosaic mirrors, copper bells, shell trumpets, and certain marine shells."

Patrick J. Goosherst
P.O. Box 1123
416C Perley
Bisbee, Arizona 85603

February 28, 1996

Governor Fife Symington
c/o Mr. Joe Lane
1700 W. Washington Street
Phoenix, Arizona 85007



Dear Governor Symington:

Once again we are writing to appeal to you and the State of Arizona for assistance in the development of Turquoise Mountain Park. At this time we are currently engaged with the Department of the Interior in a Notice of Real Estate Action (NORA) which has segregated all available property adjoining and surrounding Turquoise Mountain.

This is the only time in history since the days of the Indians that Turquoise Mountain and the land surrounding it has been put together in its entirety. Our aspired effort of 14 years time has been forever enduring and extremely complex.

We have put together what seemed virtually impossible and have brought the situation to light. For years during our time of acquisition and gaining control of the ground we pledged to contain a low profile of the significant value of what we owned. This was widely discussed with all the noted colleagues and friends associated with our project. For obvious security measures and protection. It wasn't until last year when faced with a definite encroachment by a developer from our west flank that we found it necessary to reveal the secrets of our project. (Please see letter of Oct. 2, 1995, to Gov. Symington)

Now is a rare opportunity for the State of Arizona to create an exhibit that most formally represents a complete and comprehensive understanding of turquoise-ARIZONA'S STATE GEM. Try to imagine if this was the last Sahuaro Cactus-what might you do to save it? Turquoise Mountain is vital to our STATE HERITAGE. It is the closest connection to the heart and soul of all its native peoples as well as their ancestors.

To insure containment of the area we would like to collaborate and bridge an agreement with the State of Arizona to create a multi-faceted park. The Bureau of Land Management has informed us that under the Recreation and Public Purposes Act this could be done.



FIFE SYMINGTON
GOVERNOR

Arizona
State Land Department

1616 WEST ADAMS
PHOENIX, ARIZONA 85007



M.J. HASSELL
STATE LAND COMMISSIONER

January 19, 1996

Phil C. Weigand, Ph.D.
Museum of Northern Arizona
Route 4, Box 720
Flagstaff, Arizona 86001

Dear Dr. Weigand:

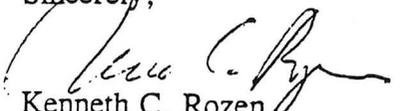
Thank you for your December 27, 1995 letter to State Land Commissioner M. Jean Hassell in support of Mr. and Mrs. Goosherst's efforts to preserve important archaeological evidence of ancient turquoise mining at Turquoise Mountain in Cochise County, Arizona. I read with great interest the *Scientific American* article which accompanied your letter, and found that it establishes the broad temporal, geographic and anthropological contexts that are essential to a full appreciation of the significance of the site with which you, the Gooshersts, and others are concerned.

Your letter suggests that Turquoise Mountain is located in Section 19, T19S R25E and Section 13, T19S R24E, which are entirely or partially comprised of Arizona State Trust land administered by the Arizona State Land Department (ASLD). However, after reviewing ASLD land ownership maps and Arizona State Museum (ASM) archaeological site records, it appears to me that Turquoise Mountain, which is recorded at the ASM as AZ FF:1:28(ASM), is located on Bureau of Land Management (BLM) and private land in Sections 17 and 20, T19S R25E. Therefore, to the best of my information, no portion of the site is on State Trust land.

Although the treatment of cultural resources on State Trust land and BLM land is prescribed by state and federal historic preservation laws, private property owners are in most cases without any obligation to preserve significant archaeological remains on their land. For that reason, ASLD joins you in support of the Goosherst's efforts to preserve all of the site, including those portions lying on private property.

I hope that you will call me at (602) 542-2684 if you have any questions regarding this matter.

Sincerely,


Kenneth C. Rozen
Cultural Resources Manager

C: John Madsen, ASM
Mr. and Mrs Goosherst
Joe Lane, Office of the Governor
M.J. Hassell, Commissioner
Dennis C. Wells, Deputy Commissioner



MUSEUM of NORTHERN ARIZONA

11 May 1993

To Whom It May Concern:

Patrick and Judy Goosherst are gemologists and mineralogists interested in the conservation of the Turquoise Mountain of Cochise County, Arizona. They have recognized the value of preserving, as an archaeological district, the prehispanic and historic mining remains of that locality. I have surveyed these localities, recording the ancient mining sites and collecting samples for an archaeological project that studies ancient turquoise mining techniques and trade routes. February's issue (1992) of Scientific American has an article that summarizes the activities of our project. The Gooshersts have been highly valued collaborators in this work, showing me the sincerity of their commitment to the preservation of the ancient remains of this district.

The mining operations that they have in mind would avoid all damage to the ancient and historic remains of Turquoise Mountain and its immediate environs. It would involve underground chambering which would not disturb the aforementioned remains in any fashion whatsoever. I cannot stress too much the importance of this commitment to preservation. In the 41 turquoise outcrop zones that we have studied in the Southwest and northwestern Mexico, some of which have as many as 100 individual outcrops, none are actually protected as archaeological sites, even though many are located on Federally or State held lands. Contemporary mining operations have taken precedence over the archaeological remains of ancient miners, to the point of destroying most traces of the older activities. This pattern has obscured an important archaeological component and/or site category and thus affected our abilities to understand the cultures from the past. The Goosherst's commitment to preservation, using mining techniques that would not alter these older traces, is to be encouraged. They fully recognize the value of the past at Turquoise Mountain, a heritage that all of us should value, as well.

Sincerely,

Phil C. Weigand, PhD
Archaeologist



DR. AMY CAMPBELL

ASSOCIATE FACULTY,
COCHISE COLLEGE
(ANTHROPOLOGY, GEOLOGY)

PHONE: (520) 378-0810 / MESSAGES: (520) 458-7440
515-0500

To: Governor Fife Symington
Re: Turquoise Mountain project
Date: 29 February 1996
From: Amy Campbell, Ph.D., archaeologist

I support the preservation and development efforts of Mr. Patrick Goosherst with respect to the Turquoise Mountain locale. His stance with regards to sharing information with professional archaeologists and historians has convinced me that he truly wishes to preserve and present the historic value of the site.

My understanding is that Mr. Goosherst wishes to gain the support of state and federal agencies in this project, including the purchase of land immediately adjacent to the site. The ultimate goal is to protect and administer the area as part of a privately-run heritage tourism park.

Given that turquoise is the state gemstone, it is a shame that so few residents or tourists appreciate it beyond its use in contemporary American Indian silver jewelry. Prehistorically it had, to native Americans, a spiritual and trade value far beyond most precious stones that our society values. Turquoise Mountain represents one of the few major, intact turquoise mines whose use demonstrably stretches back to prehistoric times.

I urge that his plans for the surrounding lands be facilitated, in order to protect this site; and to promote heritage tourism in the southeastern portion of Arizona.

Sincerely,

Amy Campbell



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Safford District Office
711 14th Avenue
Safford, AZ 85546



In reply refer to:

(520) 428-4040 2710 AZA 29330 (046)

February 22, 1996

Mr. Patrick Goosherst
P. O. Box 1123
Bisbee, Arizona 85603

Dear Mr Goosherst:

In response to your letter dated February 16, 1996, I will attempt to answer your questions.

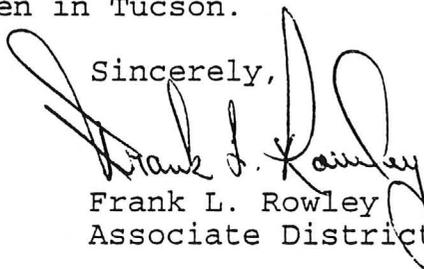
1. The Notice of Realty Action (NORA) closes the land to location under the Mining Law for 270 days after publication, which in this case was on November 30, 1995.
2. Although we are under no mandatory time deadlines, beside the expiration of the 270 days allowed in the NORA, we would prefer to proceed as soon as all parties are able. The other half of the land sale is the residential property in the City of Bisbee. The homeowners involved in this part of the sale are desirous to complete the sale. Once all the pieces are in place to call for the bids and complete the sale, we can call an informal meeting of interested parties or just check with everyone by telephone to see where everyone stands regarding their readiness to proceed. We do have some flexibility here.
3. We would have to republish a new NORA to change the terms of the sale. I do not understand how collaboration with the State in your project might affect the sale. Any entity, whether local government, corporate, or private may participate in a public sale.
4. There are two obstacles which would preclude consideration of an exchange with the State. First and most important is that the State can no longer enter into land exchanges with anyone due to a recent court decision. This decision put an end to an active land exchange program that the BLM had with the State. Second, BLM rarely processes this type of land exchange with private parties anymore because of their expense and complexity.
5. If the State or an instrument of any local government applied for the land under the Recreation and Public Purposes (R&PP) Act to acquire it for a public purpose, BLM can then sell the land to them for no cost or reduced cost, depending on the use. Under

this law, the local government who takes title to the land will always remain responsible for the operation of the public facility, whatever it is. Title can revert to the United States should the land no longer be used for what it was patented for. Local governments are familiar with this law. This R&PP process is altogether different to the public sale we are in the middle of.

6. Regarding a partnership with the BLM, I am not in a position to say. You would have to discuss this with Jesse Juen, the Area Manager of the Tucson Resource Area. In any event, it is my opinion that we should proceed with the sale that is in process. Any changes in our direction on this case would have to come from the Area Manager.

I hope this answers your questions. If you care to discuss the sale in further detail, feel free to call me or make an appointment to discuss it with Mr. Juen in Tucson.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank L. Rowley". The signature is stylized with large, sweeping loops and is positioned above the typed name and title.

Frank L. Rowley
Associate District Manager

February 16, 1996

Thomas D. Terry
Resource Advisor
Safford District Office
Bureau of Land Management
711 14th Avenue
Safford, AZ 85546

Dear Tom:

I am still focused on the long term idea of Turquoise Mountain Park, preferably joining hands with the state to help bring the end result.

As you're aware, I called and spoke to Amy Rogers regarding influences affecting the appraisal and questions she had pertaining to the area.

The Arizona State Land Department is slowly responding to the issue and leaning in our direction. As for the last eleven months, Chuck Hudson's last communique via telephone was that they were holding their ground on the right of way issue, Conaway/Transamerica Title vs. Arizona State Land Department. This pertains to our D.O.I. west boundary in section 20, bordering the east side of Arizona Trust Land, section 19.

Enclosed is a copy of a letter sent to the State Land Department and the Governor's office by Phil C. Weigand, PhD, Archaeologist, and the response from the State's Cultural Resources Manager, Kenneth C. Rozen.

John A. MacKinnon, from the Cochise County Attorney's office and Cindy Cartwright, Right of Way Agent, Highway & Floodplain Dept. for the county, both made a personal visit to examine the ground. The purpose being to protect and control our north entrance from being run over by the developer and kept private for us and the Buzembarks. We currently have filed for abandonment of the Hergert Mine Road to further secure the road. Enclosed is a copy of our request.

My purpose of this letter is to keep you abreast of our activity with the county and state as it has a direct influence regarding Turquoise Mountain Park. I also have the following questions that only you can help me with:

- 1) Will our NORA keep the area "closed for entry" for a period of two years and from what date does this start?

- 2) Is it possible to slow our process to enable us to acquire more time to come up with the initial 20% down on our appraisal?
- 3) Can the type of NORA be changed or altered in midstream if the state is willing to collaborate with us?
- 4) Can BLM accept a land trade with the state in lieu of dollars if we collaborate?
- 5) Is it still possible to transfer the land without purchase if we can come to terms with the Arizona State government?
- 6) Is there still the chance to engage in some type of partnership with BLM if the state does not pursue this venture with us?

I'm attempting to explore other avenues with the state and send a letter to the governor's office being very direct regarding our idea for a respective park for Arizona's State Gem-Turquoise. As you can see with potential negotiation, I am in no hurry to rush this NORA.

The answers to the above questions will help me determine what possible routes I need to pursue to accomplish this project.

Sincerely,



Patrick J. Goosherst

March 3, 1996

Unanimous decision today by Cochise County Board of Supervisors to abandon county responsibility of Herget Turquoise Mine Road, County Resolution #96-23.

This decision will help establish control of the mine road from uncontrolled development west of our DOI property, Sections 17 and 20. This development is occurring on three sides of Section 19, Arizona Trust Land, which is contiguous with Section 20 (DOI). These three sections of ground comprise the area that we would like to see protected by the establishment of Turquoise Mountain Park in conjunction with the State of Arizona.

MAP 7
10

MAP 8

ARIZ ROAD

W. LIGHTNING
ARIZ

ARIZ.

**ENCROACHMENT
CONCERN**

④ 12 9

ARIZ MAP ④

7

①

8 BUZENBARK

9

①

⑨

①

USA
PATENT

MAP 36

①

ARIZ.

④

MAP 11

MAP 12

PATENTED

15

14

13

OAKDALE RANCHES II

MAP 35

MAP 34

ARIZ

ARIZ

MAPS 48 & 49
COURTLAN
TOWNSITE

MAP 13 1/4

OAKDALE

19

20 SANTA FE
Goosherst
aw 17 18
20

MAPS 38 & 39

③

③

22

23

24

MAP 13 1/4

ARIZ

MAP 37

ARIZ.

RANCHES

SPLIT
ESTATE AZ/BLM
160 acres
Minerals -
Goosherst

⑥

OAK MOUNTAIN

MAP 13 1/4

MAP 46

27

26

RANCHES

OAK MOUNTAIN RANCHES

OAKDALE

29

28

ARIZ

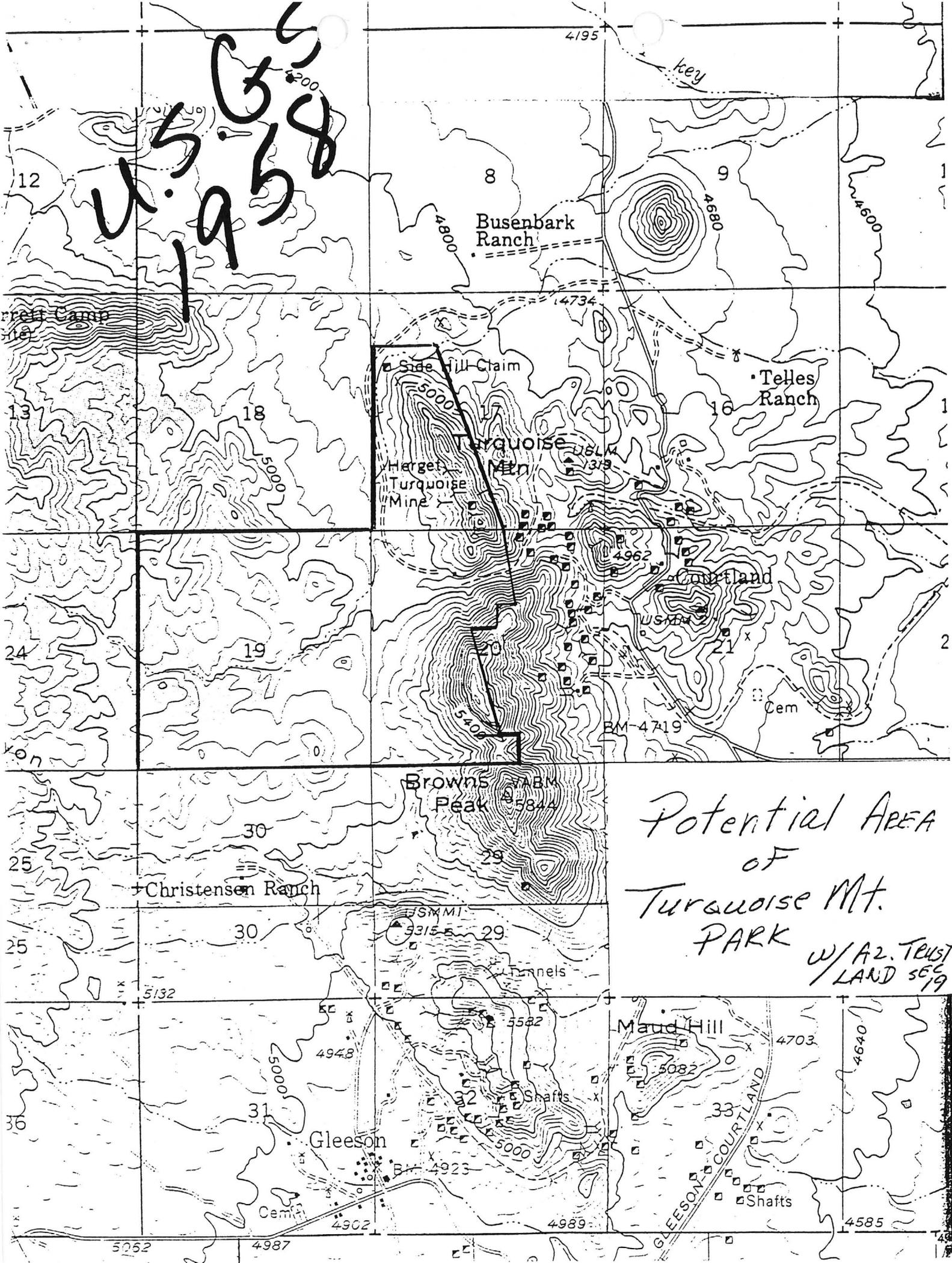
②A

RANCHES II

MAP 45

MAP 44

U.S.G.S
1958



MUSEUM OF NORTHERN ARIZONA



Mr. M. Jean Hassell, Commissioner
Arizona State Land Department
1616 West Adams, Phoenix, Arizona

27-XII-1995
85007

Dear Commissioner Hassell:

I am writing in support of the efforts of Mr. Patrick Goosherst to secure the integrity of the Arizona State Historical Landmark at Turquoise Mountain in Cochise County (Township 19 South, Range 25 East, Sections 19 and 13).

Protection of this unique area for Arizona's historical legacy is essential for a balanced view of the Native American archaeological societies for this area. With the exception of the Canyon Creek turquoise mines, protected by the San Carlos Apaches, this is the **only** ancient mining site left that has not suffered major modification or has not been demolished by contemporary mines for copper. The ancient mines at Bisbee, Morenci, Mineral Park, Bagdad, Superior, and Sleeping Beauty have either been completely demolished or severely damaged. The Canyon Creek mines are small in comparison to the complexes located at Turquoise Mountain.

I have spent two decades surveying ancient mining sites through out the Southwest and northern Mexico. The goals of this archaeological and historical study have been an attempt to reconstruct the cultural and social patterns of mining for the Native American period, showing the importance that mining had for these societies, as they do for our own today. The experience has been frustrating because preservation is so poor due to modern mining. Attached is a copy of an article that appeared in Scientific American several years ago that outlines in more detail the nature of our research.

The ancient mines at Turquoise Mountain are historical well as archaeological, as both Zunis and Navajos have utilized these outcrops in recent centuries. The mines at Turquoise Mountain probably were first systematically exploited around 1200-1300 A.D., though it is very likely that the outcrops were used more casually as early as 700 A.D. The preservation is excellent, and these are among the very few ancient mines that are still largely undamaged.

Mr. and Mrs. Goosherst should be congratulated for their community leadership in this important preservation effort. I believe that their efforts should be supported by the State Land Department.

Sincerely,

Phil C. Weigand, PhD

cc. J. Lane, Office of the Governor
The Gooshersts ✓

Deborah Christine Slaney
1815 N. 11th Avenue
Phoenix, Arizona 85007

November 14, 1995

To Whom It May Concern,

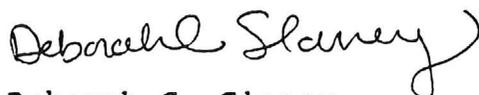
I am writing on behalf of Patrick and Judy Goosherst, who are the owners and conservators of several significant turquoise mines located on Turquoise Mountain in Cochise County, Arizona.

It is my belief that as much as possible needs to be done to protect the mines, and the lands surrounding them, from development. My understanding is that there is evidence that the mines were worked prehistorically and that turquoise from the mines, through prehistoric trade networks, may have been traded into Mexico, the Four Corners area, and possibly even into the Midwest and Southeast. Also, this area is the most significant of two prehistoric mines which remain the only two unimpacted mine sites in Arizona.

In addition, the mine sites are important from a historic perspective. At least one of the mines was leased by the Tiffany Company, and three of the mines were owned by well-known trader C.G. Wallace. Tiffany and Wallace brought significant amounts of turquoise into Zuni Pueblo, where lapidarists and silversmiths converted it into some of the finest examples of Zuni jewelry found in public collections in the present day. In the past several years, research into the significance of C.G. Wallace and Turquoise Mountain turquoise has been conducted by at least 2 independent scholars, and three museums (including the Heard Museum, where I am employed as Registrar) have recently opened or will open exhibits which address the subject of Zuni jewelry, C.G. Wallace, and/or Turquoise Mountain turquoise.

In conclusion, there is no doubt that the Goosherst family is doing a service to the state of Arizona by seeking to protect the Turquoise Mountain mines. Any action that can be taken to facilitate their ability to preserve these archaeological and historic sites for the public is appropriate and commendable.

Sincerely,


Deborah C. Slaney

October 2, 1995

Patrick J. Goosherst
P.O. Box 1123
416C Perley
Bisbee, Arizona 85603

Governor Fife Symington
c/o Mr. Joe Lane
1700 W. Washington Street
Phoenix, Arizona 85007

Dear Governor Symington:

We are writing you in regards to a crucial decision that may be made this week by the Arizona Land Department, which will affect an Arizona Historical Landmark, Turquoise Mountain, in Cochise County. We have had difficulties with a land developer who has vandalized and violated Arizona Trust Land. This land is situated in Township 19 South, Range 25 East, Sections 19 and 13, south of Cochise Stronghold in the Dragoon Mountains.

We are the proud owners of Turquoise Mountain and have been working closely with the Arizona State Museum, Northern Arizona Museum, The Heard Museum and the Department of Interior to preserve and create a Turquoise Mountain Park. This park would be the first of its kind to exhibit Arizona's State Gem, turquoise.

Turquoise Mountain is the single most important location of prehistoric turquoise mining in the western hemisphere. The mountain is directly related to all the indigenous peoples of Mesoamerica and the Southwest.

The proposed right of way thru section 19 will gravely impact the historical integrity of the area and Turquoise Mountain. We are appealing to you for help because we would like to collaborate with the State of Arizona with this project. We are highly interested in a lease of Section 19 to adjoin our property and Turquoise Mountain which are contiguous.

Arizona would greatly benefit in mutual cooperation to conserve this ancient heritage; The Source of Arizona's State Gem.

Thank you for your immediate attention to this matter.

Sincerely



Patrick J. Goosherst

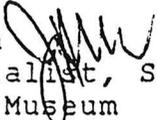


Arizona State Museum

THE UNIVERSITY OF
ARIZONA
TUCSON ARIZONA

Tucson, Arizona 85721
(602) 621-6281
FAX (602) 621-2976

TO: The U.S. Department of Interior
Bureau of Land Management
To Whom It May Concern

FROM: John H. Madsen 
Research Specialist, Senior
Arizona State Museum
University of Arizona

DATE: July 20, 1993

RE: Non-mining buffer around Turquoise Mountain, Cochise
County, Arizona.

Patrick and Judy Goosherst are owners of the Avalon Turquoise Mine located on Turquoise Mountain in Southeastern, Arizona. Their patented property contains Turquoise deposits that display evidence of both historic and prehistoric mining activity. Modern mining activities in Arizona today have unfortunately eliminated many such mining sites from the archaeological record. During a brief visit to Turquoise Mountain with the Goosherst family, I quickly recognized the importance of this subtle, but obvious prehistoric mine. Scattered about the hillside are several adits and pits which display evidence of some antiquity and among the tailings are prehistoric tools. It is my opinion that the prehistoric site is eligible for the National Register of Historic Places under criteria D of 36 CFR Part 60.6. With the permission of the Goosherst family I assigned the property a permanent State archaeological site number.

While the Goosherst's plan to continue a limited Turquoise mining operation on their patented lands, they are committed to the preservation and protection of all historic and prehistoric surface remain on their property and in the vicinity. They have been open to suggestions on how to preserve the site and are also enthusiastic about continued scientific study of the prehistoric and historic Turquoise mines by professional archaeologists and historians.

The integrity of this archaeological site must be protected and a non-mining buffer zone would be a tremendous step forward in protecting the site. I support the attempt by the Goosherst family to acquire BLM properties around the prehistoric mines as a buffer zone against modern exploration and mining activities and other types of encroachment that would threaten the integrity of these important archaeological deposits. Please feel free to call me if you desire further information. I can be reached at the Arizona State Museum between 7 am and 4 pm daily at (602) 621-2096.

Schedule of Current and Long-Term Plans

Phase I

Continue to compile geological, historical, archeological and anthropological information.

Continue research collaboration with Museum of Northern Arizona, Heard Museum, Arizona State Museum and Crow Canyon Archeological Center.

Develop engineering plans to notch out top of Avalon on Turquoise Mountain.

Obtain remaining claims encompassing BLM lots for the purpose of controlling the balance of the southwest quarter of Section 17.

Establish precedence on patented and unpatented area.

Minimize liability with fencing and warning signs.

Reestablish gated position for security of equipment and personnel.

Phase II

Document and photograph related artifacts and safely store for visitors' center (see Phase III).

Continue mining notch to completion.

Clean out and construct 1880s mining exhibit in Gem II or Last Chance mine.

Reevaluate cost of electrical service to property. Investigate alternative electrical sources. Status change from temporary to permanent to avoid up-down costs of lines.

Start construction of safe trails to view Indian sites. All tours/visitors restricted to guided tours only.

Phase III

Begin construction of visitors' center in notched out area of mountain.

Utilize waste dump for parking lot for visitors' center sufficient for 20-30 vehicles.

Establish pathway up road to visitors' center for pedestrians who drive to exhibit in RV vehicles or by bus.

Pray I win the lottery.

TURQUOISE MOUNTAIN PARK SUPPLEMENT

March 15, 1996

To: *Mr. Coggins,*

Please add the additional materials enclosed to the original Turquoise Mountain Park information packet sent February 28.

- 1) Archaeological sites of ancient mining digs, two sided color plates.
- 2) Park Ideas for Turquoise Mountain.
- 3) Schedule of Current and Long Term Plans, sent to DOI-BLM with historical prospectus 1993.

"As you delve into the past a higher meaning and understanding evolves to create a greater importance of its reality"

PARK IDEAS FOR TURQUOISE MOUNTAIN

- 1) Ceremonial Blessings; Yearly invitations to all Indian tribes in the southwest and Mexico to give ceremonial blessings both private and to the public. Spread out requests and reservations as bi-monthly events. Fee required for visitors, all exhibitors will be exempt. Special funds set aside for tribes who need assistance to make their journey. This event will lend itself especially to the Zuni Tribe as this mountain is "The Lost Mine of The Zuni".
- 2) Visitor Center situated on top of Turquoise Mountain at old Avalon site. This area will be notched out to accommodate east and west viewing from top of mountain and will also accommodate cross sectional exhibit of ancient digs and 1880's mining. This exhibit will show lenticular lenses, veins, and clusters of nuggets of turquoise in place.
- 3) Museum; The museum will be located at the visitors center.

Artifact Exhibit; tools used for ancient mining, turquoise finds of pre-historic excavations, carvings, beads, etc.

Photo Exhibit; collection of photos related to Turquoise Mountain previous mining operations, owners, jewelry and artifacts from museums and collections around the world. Such as British Museum, London, museum in Madrid, Spain, the Vatican Collection, Arizona State Museum, etc.

Map Exhibit (Cartography); Showing the numerous mining claims placed on Turquoise Mountain by previous prospectors, including claim jumpers. Education in surveying, magnetic declination and mining law.

History Exhibit; Excerpts from historical articles, newspapers, and well known published books.

Mining Exhibit; Examples and displays of ancient mining, 1880's mining and contemporary mining methods.

Hydrology Exhibit; Turquoise Mountain has water at four different levels. Water exists at the very top, filling an ancient adit. We believe this to be the source of water for an ancient mining method utilizing fire and water. The geothermal pressure under Turquoise Mountain is directly responsible for depositing turquoise to the very top of the mountain. The mountain is still alive and turquoise is still forming today.

Gemology and Mineral Exhibit; Prime turquoise specimens to be featured as well as high grade cut gemstones.

Anthropology Exhibit; Featured trade route map showing cultures and societies that used turquoise directly from Turquoise Mountain for trade and religious purposes.

- 4) Museum Gift Shop; Ongoing exhibit of jewelry and art pieces, such as sand paintings and carvings, etc., made with authentic turquoise from Turquoise Mountain. Museum gift shop, located at visitor's center, will carry items and literature, and souvenirs related to Turquoise Mountain.
- 5) Food Concession; Cafe/Snack Bar to be located in or near visitors center.
- 6) Educational Research Center; Open invitation to all schools, colleges and universities to utilize accommodations at the research camp. Proposed idea to construct a seven cabin encampment, private and isolated, in Copper Canyon. Controlled by reservations only. Study of turquoise in areas such as: archeology, anthropology, geology, mineralogy, mining and hydrology, etc. Fees will be required for use of this facility.
- 7) Hiking and Tours; Low impact, both self-guided and guided on designated trails.
- 8) Turquoise Field; Controlled level area to allow visitors to pick a piece of turquoise--"Pick as many pieces as you like, but you can only keep one"--the rest will be placed back. "To be given and to give back" ceremonial practice to enhance the keeper with greater protection.
- 9) Recreation; Designated campsites and picnic areas. Required entrance fee and overnight camping fee.
- 10) 1880's Underground Mine Exhibit; C.G. Wallace's "Last Chance Mine", aka; "Shattuck Tunnel", "Tanner Tunnel", "Azure Mine". This mine shows actual veins and nuggets in place as well as turquoise crystals still forming.
- 11) Ancient Mines and Mining Exhibit; Over the mountain or possibly through the mountain to visit prehistoric mine sites of what we feel were major Aztec excavations. The actual insides are rough and crude, only to have been mined by "fire and water" and stone tools.

SCHEDULE OF CURRENT AND LONG-TERM PLANS

Sent to BLM with Historical Prospectus 1993

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Pray I win the lottery.

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

COCHISE COUNTY

AREA BETWEEN COURTLAND
AND GLEESON

MILS #220

Turquoise mine (F)

3-AXR's

MM 3317 Turquoise

MM 3318 Turquoise

MM 634 Aragonite Xtals on Matrix

MM 4585 Turquoise (7 cabs)

6590 Turquoise

905 Turquoise(Chalk)

MM 7869 Chrysocolla & Malachite

MM-9434 Chrysocolla pseudo

MM-9435 Chrysocolla pseudo

A - S - M - O - A
TURQUOISE COUNCIL
PEARCE, ARIZONA

Department of Mineral Resources

August 17th, 40.

J. S. Coupal Director

Phoenix Arizona.

Dear Sir:

Mr. L. D. Shattuck came to see me yesterday, regarding some property he owns. This consists of 6 claims sometimes called the TURQUOISE mine, the mine from which this district takes its name.

A short description would be about as follows. Six claims, has payed it way for fifty years and hardly scratched, 43 cars shipped from one claim; Copper, gold, silver. Hoist, 200' shaft, 220' drift, air and water lines in.

In the Turquoise part of the mine there has been some 2,000' of work done in five openings. A good description geologically can be found in U. of A. bulletin #123 by Eldrid D. Wilson.

Due to age and ill health the owner will consider most any kind of a deal, and with the Turquoise as a drawing card I believe it would be comparatively easy to turn this property. The owner has one piece of Turquoise valued at \$300.00 that he will present to the Department for their cabinet if and when he disposes of the property.

If Mr. Carpenter has a day that he can spare I believe it would pay to give this the once over. Shattuck wanted me to make out the report on it, I told him that one made by one of your field men would not only be more complete but have much more weight in a selling argument.

H. N. Carleton

Secretary

H. N. Carleton

5 September 1940

Mr. L. D. Shattuck,
Box U,
Courtland, Arizona.

My dear Mr. Shattuck:

In the absence of Mr. J. S. Coupal, I am taking the liberty of acknowledging receipt of your letter of August 25.

Mr. H. N. Carleton of Pearce, Arizona, sent us in a brief report on the Turquoise Mine, but it is not enough information for us to help you in disposing of it.

Mr. Carleton does not give us the location of the property - neither does he give us any price or terms.

I am enclosing herewith a blank mine owners report, which I should suggest that you fill out in detail and return to this office so that information may be available in as much detail as possible.

We have received a sample of your ore and also a map.

Any additional information you may be able to give us will be appreciated.

Yours very truly,

Jess R. Fickas
Secretary to Mr. Coupal

jrf

cc-H.N.Carleton, Pearce

CC-Miles M. Carpenter

P. S. We also note that you would like to have the engineer make a report on this as soon as convenient.

Courtland Aug. 25 - 1940,
Mr J. S. Coupal.

Capitol Bldg.
Phoenix Ariz.

Dear Mr Coupal I am
sending you underseparate
cover a few Turquoise
specimens

I trust you received the
Description of my property
sent a week ago
any assistance you can
give me in disposing of
my property I assure you
will be greatly appreciated
it was imposdable for me
to go to Globe but I was
listening in

Thanking you for past
favours and anything
you can do for me in
future.

I bed to remain very

Sincerely yours,

J. L. Shattuck.

Box U. Courtland.

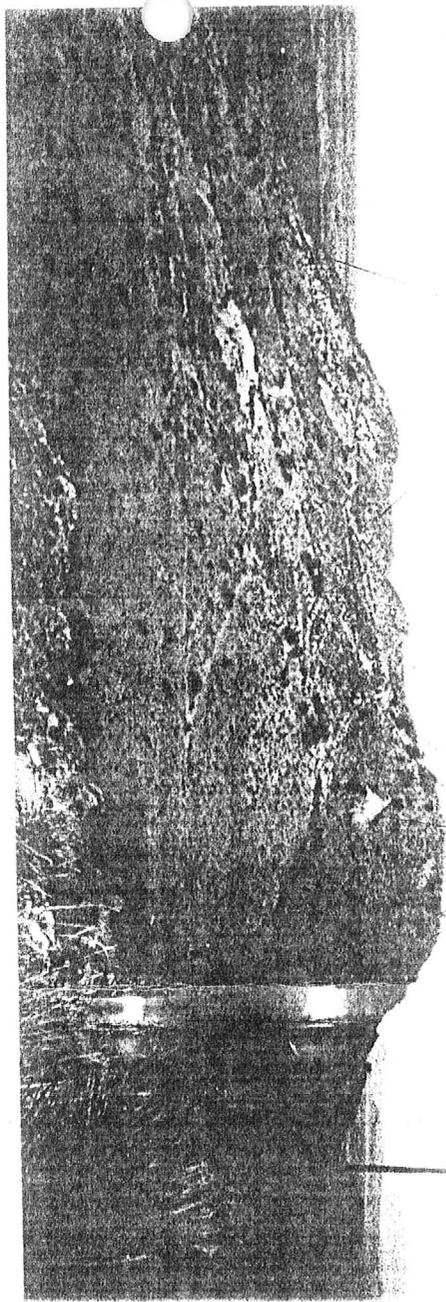
Ariz.



ancient mining digs

WEST SIDE

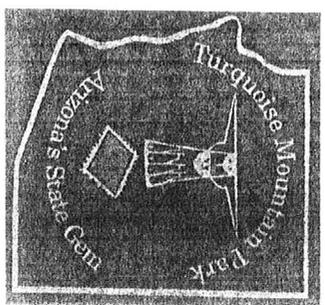
ancient mining digs



ancient mining digs

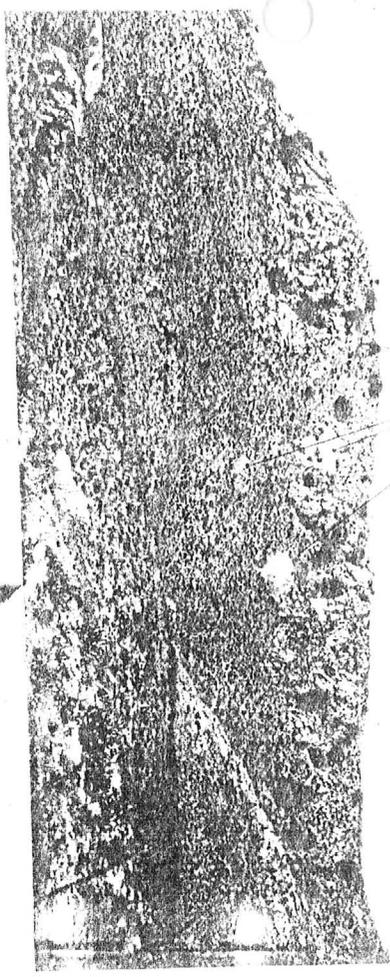
ancient mining digs

From South looking NORTH

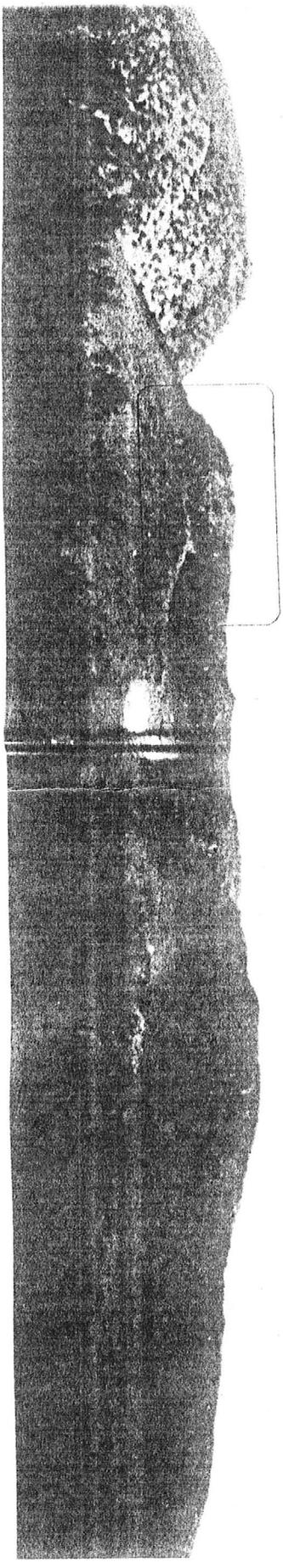


EAST FACE

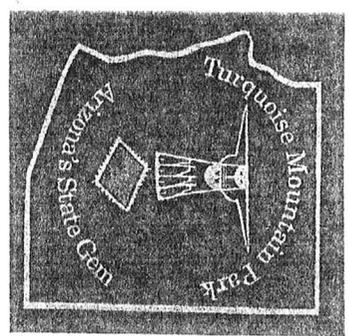
ancient mining dugs

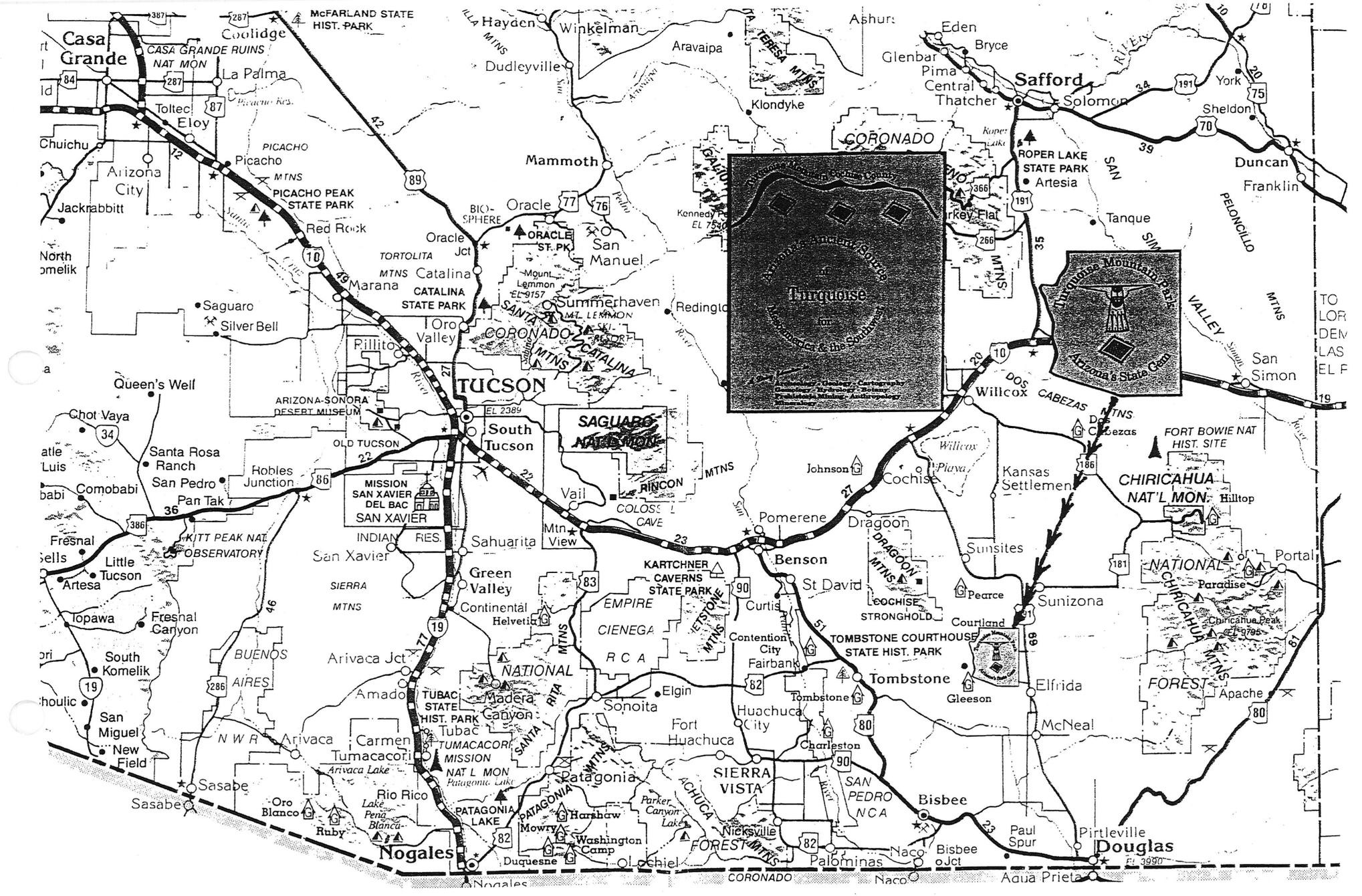


AREA INLARGED



EAST SIDE





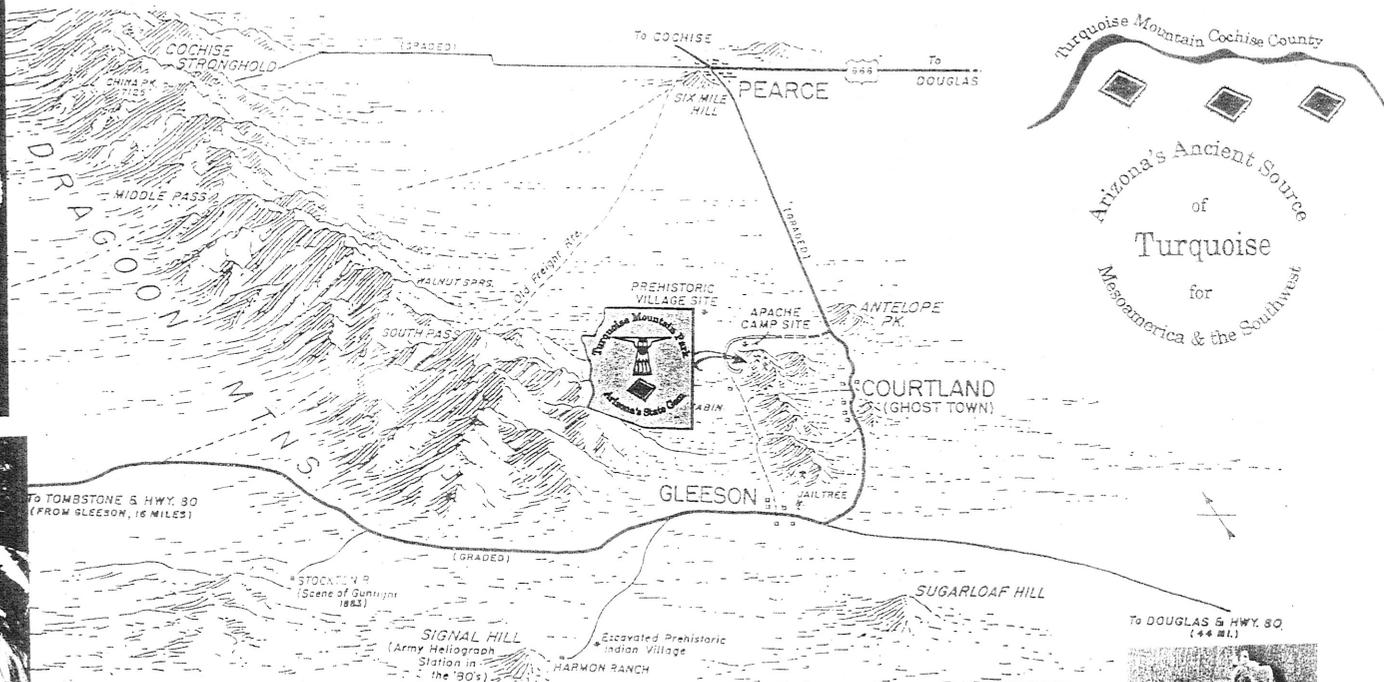
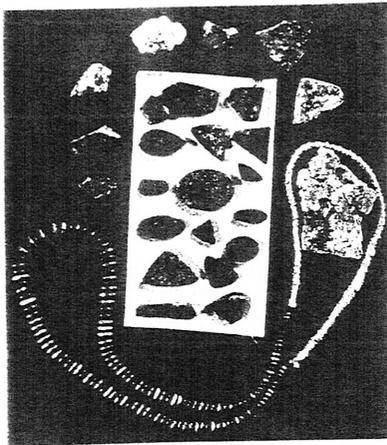
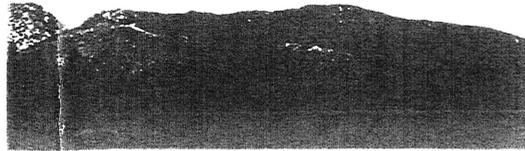
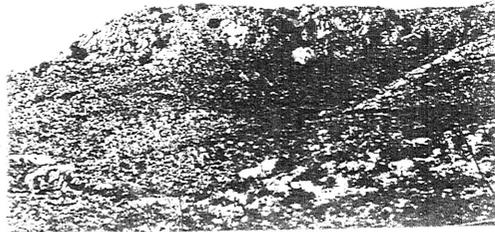
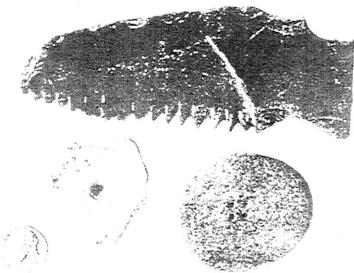
Carquise

THE CARQUISE MOUNTAIN RANGE
Catalina Mountains & the Southwest

Geology, Geomorphology, Paleontology, Botany, Paleobotany, Mineralogy, Anthropology

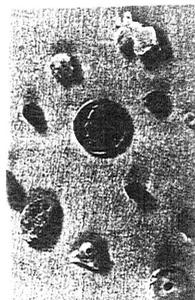


TO
LOR
DEM
LAS
EL F



Turquoise Mountain Cochise County

Arizona's Ancient Source
of
Turquoise
for
Mesamerica & the Southwest



Living Education in

Archeology - Geology - Cartography
Gemology - Hydrology - Botany
Prehistoric Mining - Anthropology
Mineralogy

THE GRAN CHICHIMECA ESSAYS ON THE ARCHAEOLOGY AND
ETHNOHISTORY OF NORTHERN MESOAMERICA 1995

"Value in Mesoamerican-Southwestern Trade"

by Jonathan E. Reyman

"The inhabitants of the Colorado river shores, the Seris of Sonora exchanged the bivalves for the turquoises of Zuni...The same took place with parrot feathers. The large green parrot is very common...and Cabeza de Vaca tells us that the Jovas...exchanged its plumes for green stones farther north."

"The Opatas obtained turquoise and turquoise ornaments from the Zuni, to whom they traded parrot skins and feathers."

"For items such as turquoise and macaws, value and not gross weight or number of specimens, is the more important criterion...Turquoise was highly valued both prehistorically and historically; it still is. It was the "godstone" among many Mesoamerican and southwestern cultures, especially among the Pueblo peoples."

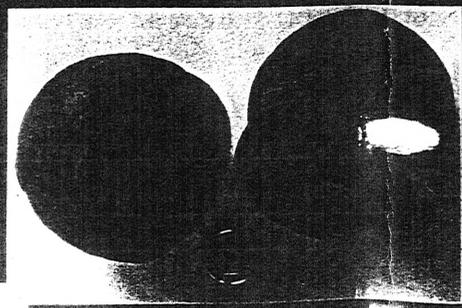
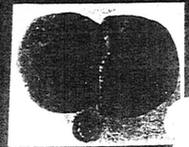
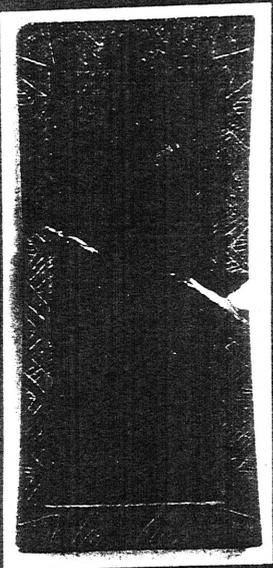
"The quality of turquoise was much greater than generally reported or recognized, and so was its corresponding value. It is not unreasonable to assume that those who mined and distributed southwestern turquoise tried to control the amount of turquoise produced and exchanged in order to maintain its high value, in much the same way that today's diamond production and distribution are controlled."

"Macaw feathers, by weight, are at least as valuable as cocaine and more valuable than either heroin or marijuana, similarly illegal commodities (when the comparison is made to macaw feathers that have been smuggled into the U.S.) Macaw feathers, by weight, are also more valuable than gold at gold's current market price of about \$372 per Troy ounce."

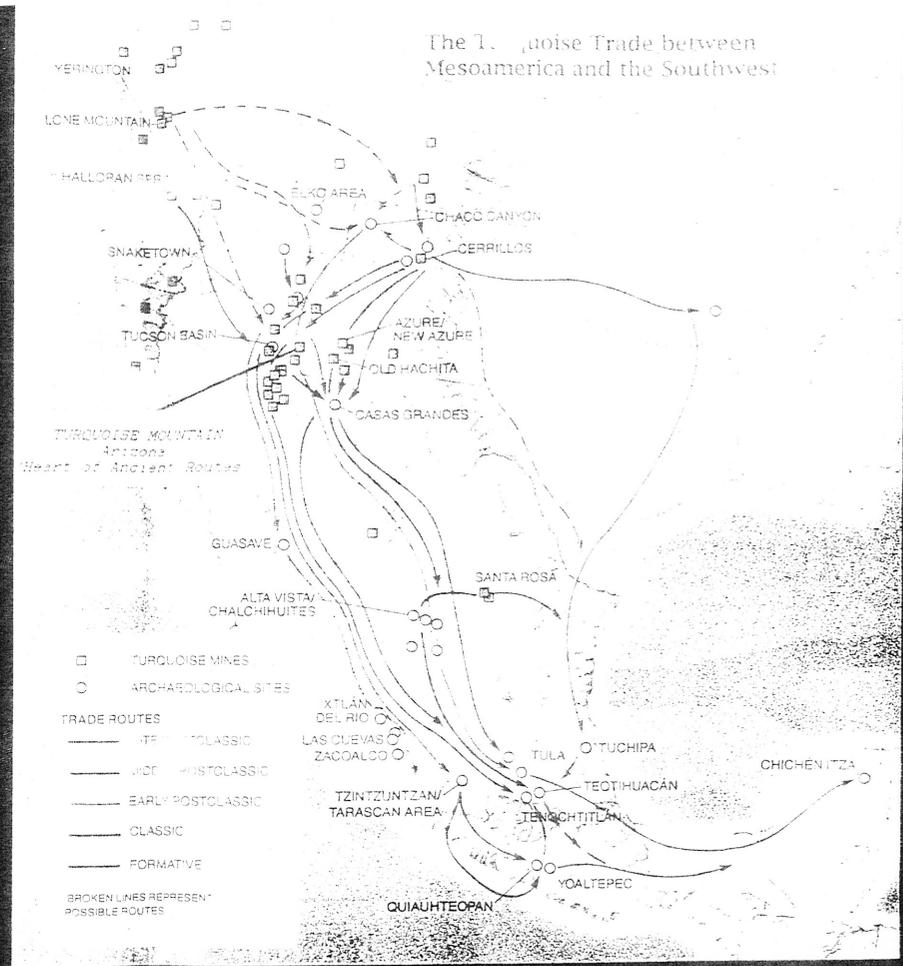
"As with turquoise, it is fair to assume that, because of their value, traders could have profitably carried a few birds or several thousand feathers, neither of which would have weighed much nor would have required more than one or two porters."

"Value, not weight, then, is the more important criterion for determining whether certain economic activities such as long-distance trade were profitable, specifically trade in precious commodities. Turquoise and macaws were precious, and it seems likely that the same was true for other exotic items such as mosaic mirrors, copper bells, shell trumpets, and certain marine shells."

Turquoise in Pre-Columbian America



The Turquoise Trade between
Mesoamerica and the Southwest



TURQUOISE MOUNTAIN
 TURQUOISE MINING DISTRICT
 COCHISE COUNTY, ARIZONA

EXPLANATION

- QUATERNARY
 Gravel, sand, etc.
- CRETACEOUS
 Shales, sandstones, etc.
- CARBONIFEROUS
 Limestones
- CAMBRIAN
 Abrigo limestone
 Balsa quartzite
 Pre-Cambrian
 Pinal schist

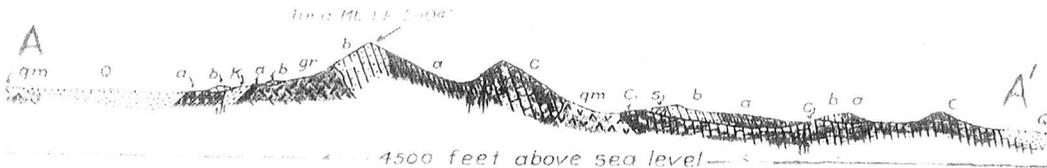
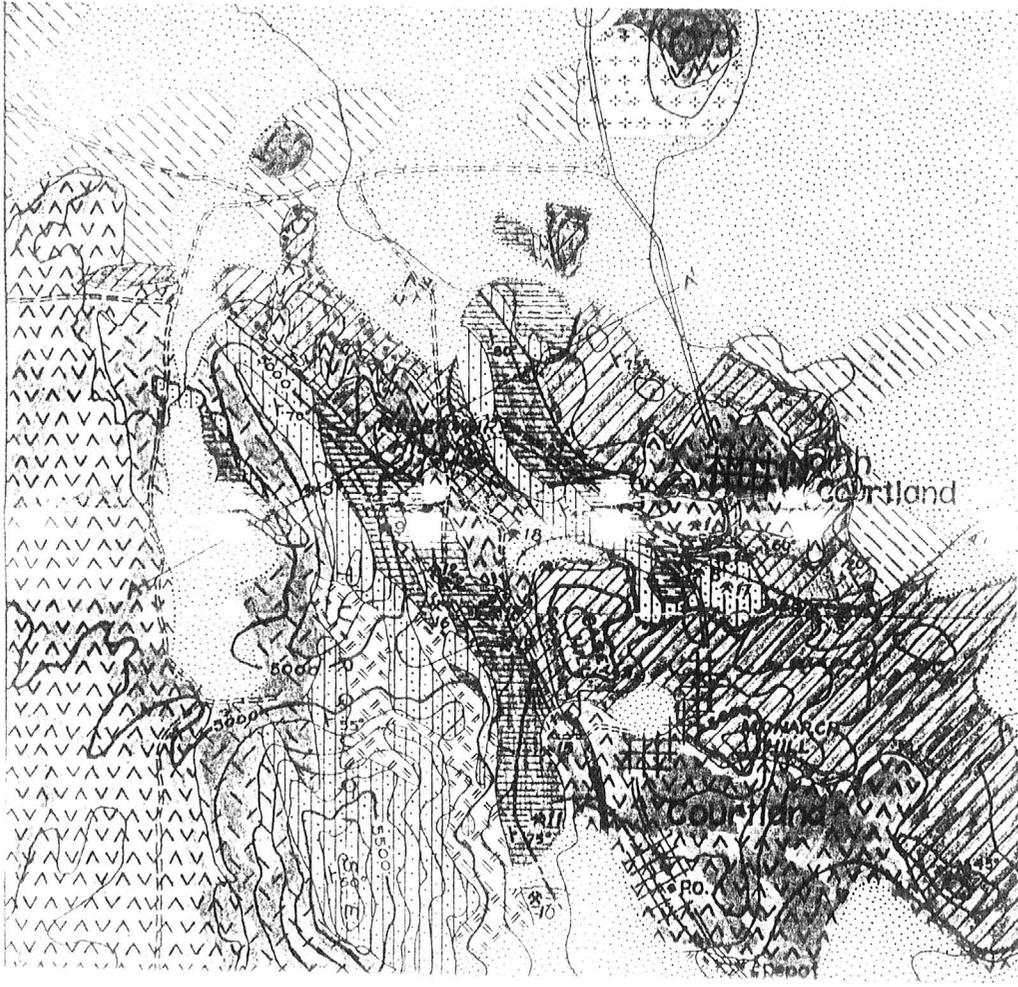
SANDSTONE & ROCKS

- Strike and dip
 Fault
 Mine or prospect

- TERTIARY
 Lavas, chiefly rhyolites
- POST-LOWER CRETACEOUS
 Granite
- POST-LOWER CRETACEOUS?
 Felsite
- PRE-LOWER CRETACEOUS?
 Quartz monzonite porphyry
- PRE-LOWER CRETACEOUS
 Quartz monzonite

JANUARY ROCKS

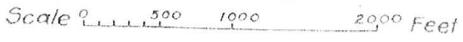
Geology by
 Eldred D. Wilson
 1924-25



SECTION A-A'

LEGEND

- Q - Quaternary
 gr - granite
 K - Cretaceous
- qmp - quartz monzonite porphyry
 qm - quartz monzonite
 C - Carboniferous
- a - Abrigo
 b - Balsa
 s - schist





Typical Turquoise mine - Courtland, Arizona *TURQUOISE MOUNTAIN* (Western Ways)



1939

© W. HOODMAN
Staircase of turquoise shown in the mine

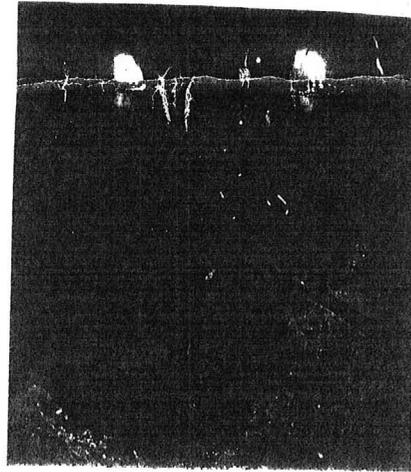
1952



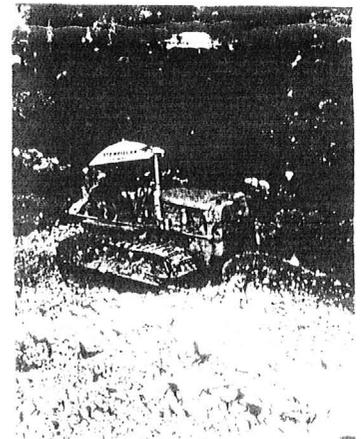
Navajo belt by Roger Skeet, 1948, Last Chance Mine (C.G. Wallace Collection)



Modern methods boost production in C. G. Wallace "Last Chance" turquoise mine



1988



1959



Fig. 17. Entrance Mine on Apache chain. Back face is Bobs quartzite

1912



1946

Above - Jail was in a Gilson. On its walled trunk may be seen marks of the log chain once used to shackle those who disturbed the peace.
Below - Entrance to the mine

To: Jon F. Sceman

BLM - S. Ford District Office

7:00 AM
Turquoise Mine
Mar. 31st 1986

Pg. 1

AZ-040-6-MN-22

Plan of Operation For unpatented mining claims:

Diamond Back #6 — AMC 97995

Diamond Back #7 — AMC 97996

Diamond Back #8 — AMC 97997

This plan is contained to the northerly 500 Feet by the width of the three described unpatented mining claims above.

The general plan is to sort through the old mine dump for turquoise bearing material.

Our intentions are to dig trenches 6' wide x 20'-30' long, scraping 6"-1ft. per pass until a depth of 3' deep is reached at which time a new trench will be started to continue through the dump. All waste material after sorting, will be pushed down over existing dump. Land disturbance at bottom of dump will be approximately 3-4 acres.

Equipment used will be a small D4 Catapillar for digging trenches, truck for hauling water, and a classifier to sort size of material. (cont. pg. 2)

Pg. 2
Plan of Operation { AMC #97995
AMC #97996
AMC #97997

The number of personnel
will be minimal, 2 to 3 people will
be working on site to operate equip.,
spray water and sort material.

if needed for any further questions
or information please contact:

Patrick Goosherst

P.O. Box 1133

Bisbee, Az. 85603

call tele. # 432-5961

Thank you

RECEIVED
SAFFORD DISTRICT OFFICE
ELLN

APR 02 1986

SAFFORD, ARIZONA

BE LISTED ON THIS REPORT. NAMES AND ADDRESSES ARE ENTERED AS SPACE; THEREFORE THEY MAY NOT APPEAR IN THE EXPECTED SEQUENCE. ABANDONED CLAIM.

DISCLOSURE ALL INFORMATION RECEIVED IN THIS OFFICE MAY NOT YET BE LISTED ON THIS REPORT. NAMES AND ADDRESSES ARE ENTERED AS THEY APPEAR ON THE LOCATION NOTICE OR ARE ABBREVIATED TO FIT LIMITED SPACE; THEREFORE THEY MAY NOT APPEAR IN THE EXPECTED SEQUENCE. A BLANK LATEST ASSESSMENT YEAR IN THIS REPORT DOES NOT CONSTITUTE AN ABANDONED CLAIM.

INDEX TABLE with columns: SECTION, GEO BLM LEAD, COUNTY, LOCATION, LATEST CASE. Includes entries for various sections like W 26 NW, W 29 SE, E 6 NE, etc.

SERIAL NUMBER INDEX TABLE with columns: SERIAL CASE NO., TYPE, CLAIM NAME/NUMBER, CLAIMANT(S), PER TOWNSHIP, RANGE, SEC, SUBDV, CTY, DST, FILE, BOOK/PAGE, LOCATION, LATEST CASE. Includes entries for cases 97985 through 98002.

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LAPIS

CORAL

TURQUOISE

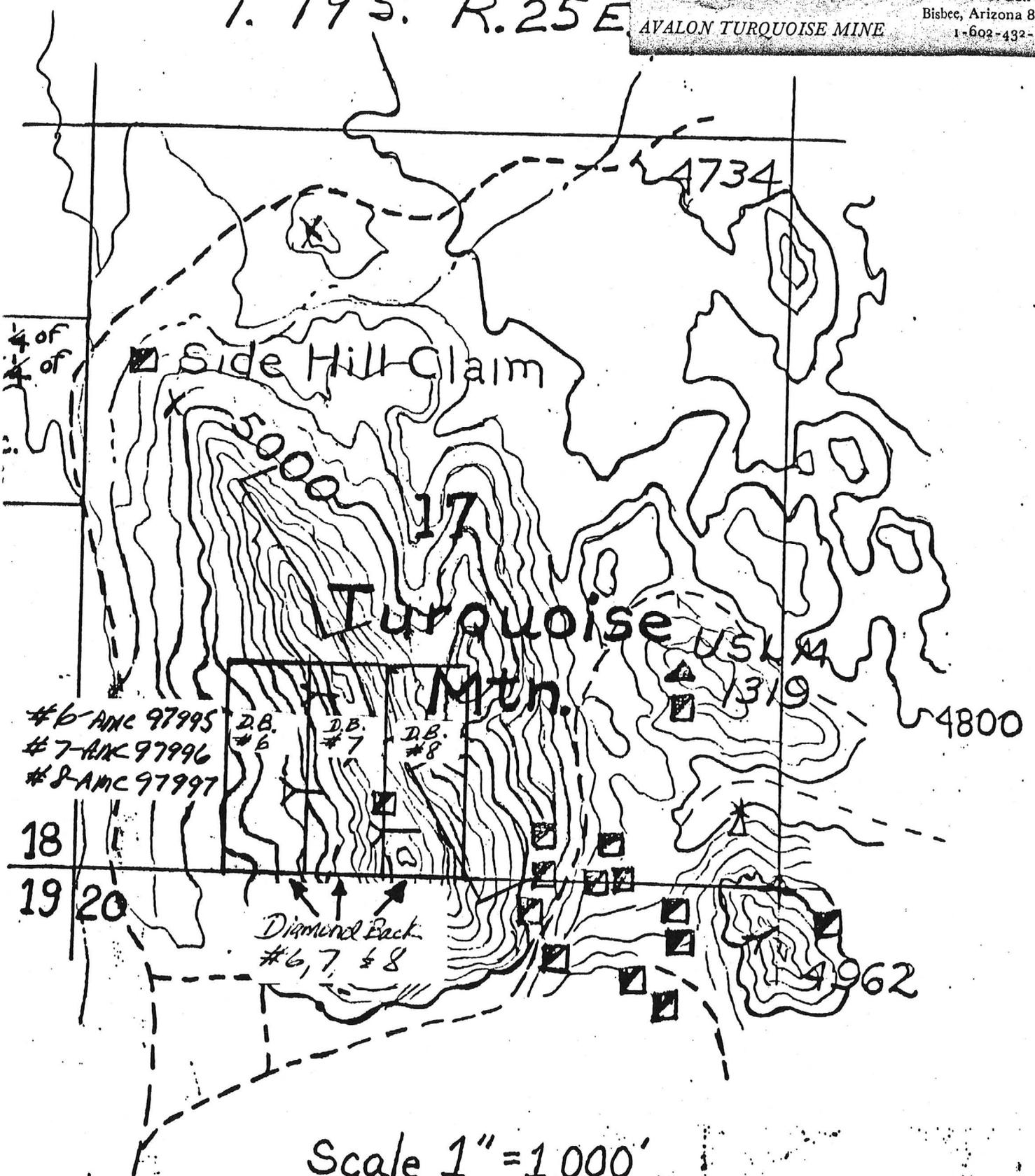
Patrick & Judy Goosherst

Designers of Lapidary Art

AVALON TURQUOISE MINE

P.O. Box 1133
Bisbee, Arizona 85603
1-602-432-5961

T. 19 S. R. 25 E



4 of
4 of

- #6-AMC 97995
- #7-AMC 97996
- #8-AMC 97997

D.B. #6
D.B. #7
D.B. #8

Diamond Back
#6, 7, & 8

Scale 1" = 1,000'

Mine visit. Herget Turquoise mine. Mr. Herget reports that he found some Turquoise in the area south of the old Tiffany workings but that they lost the stringer again. He reports that good Turquoise now sells for \$150 per pound as compared with a price of \$50 last spring. He is unable to find good men to do any work. He did have a large dozer doing some work at \$36 per hour. GWI WR 9/14/72

Herget Turquoise - Mr. Herget says that he is unable to men to work that will follow directions or exhibit a skill in turquoise mining. They overshoot, destroy and cover up the turquoise faster than they open it up. He had a bull dozer rip up some of the area at a cost of 36 dollars per hour. The claims are unpatented and present work is confined to the southern area as opposed to the northern area that Tiffany mined years ago. Good turquoise is now \$150 per pound according to Mr. Herget and he could sell \$200,000 worth if he had it. GWI Note 10/2/72

At Courtland the Herget Turquoise mine is still inactive in spite of the high prices. GWI AR 73-74

Mine visit at Courtland with Herget Turquoise. Mr. Herget not mining and is selling off his turquoise and silver. GWI WR 11/25/74

CJH WR 8/22/86: Visitor: Patrick Goosherst, Commercial Lapidary, P O Box 1133, Bisbee, Az. 85603. Holds the Diamond Back mining claims in sec 17, T19S R25E, Turquoise District, Cochise County. In the absence of any Mine Inspectors, I called Eddie Martin in Phoenix who authorized me to supply him with three "Warning - Dangerous Conditions" signs that he requested. Took them from the Mine Inspectors office. Claim map attached.

TURQUOISE MINE

COCHISE COUNTY

Active Mine List Feb. 1962 - 2 men working
Active Mine List Oct. 1962 - 2 men working

Mine visit - No one around. GWI WR 11-16-68

Phone: L. Forkum says drilling well about 4-69, not operating. JHS 6-25-69

Mine visit to Herget Turquoise mine - will open up new turquoise pit. GWI WR 4-11-70

Mine visit - Turquoise mine - planning on \$3500 development work soon. GWI WR 12-5-70

Mr. Herget of the Herget Turquoise mine reports that he is planning some more work on a vein showing in his south pit. The turquoise appears to be of good quality, the question being as to the quantity that can be developed. He reports the present price for good turquoise is approximately \$50 pound. GWI QR 12-31-70

Mine visit - Herget Turquoise mine - planning on some work in the south pit. GWI WR 2-8-71

Courtland-Gleeson: Mr. Herget plans on a little development project at the south pit of his turquoise mine. He reports that good turquoise brings \$50 per pound. GWI QR 4-1-71

Mine visit - Herget Turquoise mine - Mr. Herget in Vets Hospital. GWI WR 4-12-71

Mine visit - Herget Turquoise Mine. Mr. Herget back from hospital. GWI WR 6-7-71

Mr. Herget spent two months of this quarter in the hospital in Tucson. He has made an agreement with two men to do some prospecting and development for turquoise in or near his south pit. GWI QR 6-30-71

Mr. Herget has a couple of men doing some work at his Turquoise Mine at Courtland.
GWI QE 9/71

Mr. Herget has had a small amount of work done in the south pit of his turquoise mine.
GWI QR Oct-Dec '71

Herget Turquoise, no one around. GWI WR 2/8/72

Mr. Herget still is doing a little work at the Turquoise mine. GWI QR Jan.-March '72

Mr. Herget continues having a little work done at his Turquoise mine. There appears to be a renewed interest in turquoise. GWI 4 1/2 '72

Date Printed: 12/07/94

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

Information from: **Rolf Luetcke**

Company: Sunshine Gallery & Gifts

Address: Rt. 1, Box 50B

City, State ZIP: St. David, Arizona

Phone: 602-720-4792

MINE: Tiffiny Mine

ADMMR Mine File: Turquoise Mine

County: Cochise

AzMILS Number: 220

SUMMARY

Mr. Luetcke reported having sent a family to the old Tiffiny Turquoise Mine to collect. The family later returned and told him they were asked to leave the property by someone reporting to be the owner of claims covering the property.

Ken A. Phillips, Chief Engineer

Date: November 28, 1994 ✓

ENGINEERS REPORT

Mine Turquoise Mine Date November 16, 1961
District Turquoise District - Cochise County Engineer Axel L. Johnson
Subject: Field Engineer's Report. Information from Mrs. Lionel Herget

Location: Sec. 20, T19S, R25E. Starting from Courtland, drive about 2 miles north, turn left and drive about 2.3 miles to the mine.

Number of Claims: 5 claims

Owner: Lionel Herget, Star Route #2, Elfrida, Arizona

Mr. Herget has given the Bear Creek Mining Co. an option to purchase the claims, but retains the right to mine turquoise from the claims until such time the option is exercised by Bear Creek. Option was given some time last summer and is for 5 years.

Principal Minerals: Turquoise

Present Activity: Mining turquoise with 2 men working part time. Mr. Herget has been assisted in his mining operations by a Sgt. James Brown from Ft. Huachuca who works there on his time off, obtaining turquoise as payment for his work.

Prospective Lessees: Some parties from Gallup, New Mexico explored the property some time ago, with intentions to lease same for turquoise mining. The turquoise mined would be used in the manufacture of Indian jewelry which they would sell at their store in Gallup, New Mexico. Negotiations for the lease is still pending.

OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date September 13, 1940

1. Mine Turquoise
2. Mining District & County Turquoise District
Cochise County
3. Former name None. Always known as "Turquoise Camp"
4. Location 1 mile west from Courtland
5. Owner Lynn D. Shattuck *(deceased)*
6. Address (Owner) Courtland, Arizona
7. Operator Same
8. Address (Operator)
9. President No Corporation
10. Gen. Mgr.
11. Mineral: Turquoise Matrix
~~Miner Supt.~~
12. Mill Supt.
13. Principal Metals Gold, Silver, Copper
14. Men Employed
15. Production Rate Not established
16. Mill: Type & Cap.
17. Power: Amt. & Type 9 HP hoist on Triangle Claim.
18. Operations: Present Idle

19. Operations Planned

TURQUOISE

Turquoise

Cochise

2 - 4

T 19 S, R 25 E

Lynn D. Shattuck, Courtland *(deceased)*

'40

20. Number Claims, Title, etc. Six unpatented lode claims on public domain.

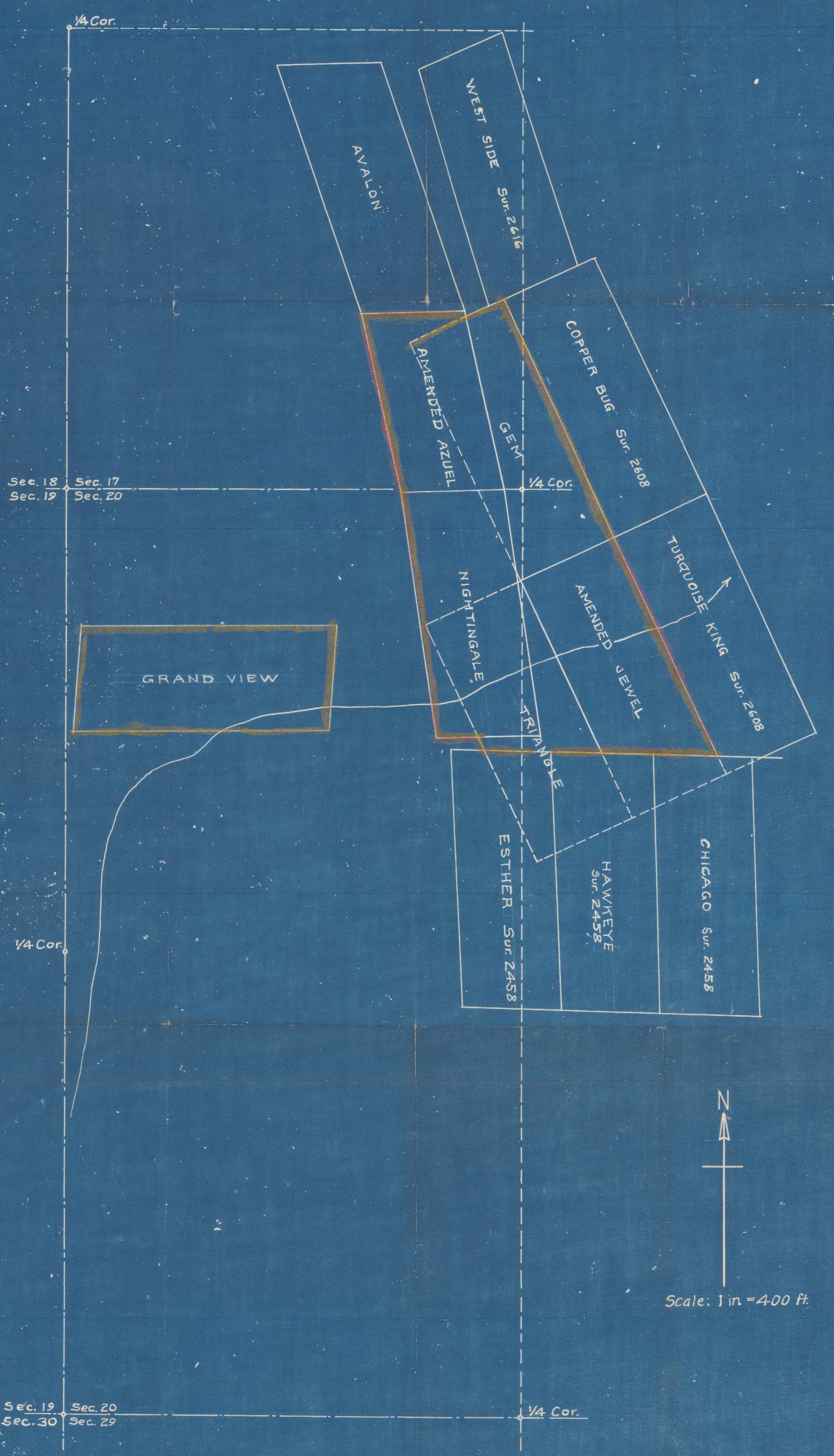
21. Description: Topography & Geography On crest of Turquoise Ridge, a rising about 500 ft. above the rolling mesa on the west. Elevation of principal workings 5100 ft. Elevation of Triangle shaft 4900 feet.

22. Mine Workings: Amt. & Condition 4 open cuts - 25 ft. Drifts 1000 ft. Depth average 100 ft. below surface.

23. Geology & Mineralization Country rock quartzite porphyry. Turquoise occurs in pockets in a vein varying in width from stringer to 6 inches or more.
24. Ore: Positive & Probable, Ore Dumps, Tailings None blocked out or in sight. Taken out as opened. Big pocket had 75%, all gem grade. No record of production.
- 24-A Vein Width, Length, Value, etc.
25. Mine, Mill Equipment & Flow Sheet None
26. Road Conditions, Route Road to mine leads off Courtland-Pearce County highway about two miles north from P.O. Then around north end of mountain and back on west side, $2\frac{1}{2}$ miles to camp. Road passable but not fast.
27. Water Supply Good well on Grand View Claim, 40 ft. depth. Plenty of water for camp purposes. Shaft has 700 gal. per day.
28. Brief History Turquoise was worked by Indians with stone hammers before days of white man. Held by Americans 50 years. Located 1890 by Herman Duran and sold to Nick C. Roscom. Sold to Geo. H. Good 1904. Good put up cutting plant. Good died. Located by L. D. Shattuck Jan. 1, 1913 with partner. Bought out partner 1914.
29. Special Problems, Reports Filed See Bulletin Arizona Bureau of Mines.
30. Remarks Owner has held property since location. Produced from 1 lb. to 30 lbs per day. 1 specimen weighing 1 lb. 6 oz. valued at \$500.00. Extra fine piece. Price has varied from \$1.00 to \$100.00 per lb. Much sold for \$50.00 per lb.
31. If property for sale: Price, terms and address to negotiate. Price \$6000.00 with at least \$1000.00 cash and balance on terms. Amount would depend on working agreement.

32. Signed.....L. D. Shattuck.....

33. Use additional sheets if necessary.



MAP OF THE
 SHATTUCK GROUP OF MINES
 AND ADJOINING CLAIMS
 IN SEC. 17 AND 20, T. 19S., R. 25E.
 COCHISE CO., ARIZONA
 Drawn by Emmet R. Marx, U.S. Min. Surveyor
 2025 East Third St., Tucson, Ariz.
 Feb. 20, 1940.