

0450 0054

Notes on the

ARISTA PROSPECT, BEATTY, NEVADA.

*Blueprint available*

**ITEM  
56**

By Augustus Locke

October 19, 1931

(228)

Refer to map for numbers.

- (1) Thin quartzites and shales.
- (2) Strong pure quartzite, beds 2 to 10 feet thick.
- (3) Same as (1) except less quartzite and some limestone or dolomite.
- (3a) Buff-weathered dolomite (siderite or ankerite-bearing).
- (4) Shaly rock.
- (10) 2 foot white quartz. Pans a little gold at entrance of tunnel. At 60 feet in, two veins 4 feet apart, 1 to 2 feet of quartz. Cut into east wall exposes 4 foot quartz and silicified rock. Samples by A.L.:  
S.1, 2 ft. oxidized 0.025 oz. Au;  
S.2, 6 in. unoxidized, fine grained quartz with pyrite replacing shale, 0.34 oz. Au. Most of the material here oxidized and unoxidized shows a little gold in panning.
- (11) 4 foot white quartz.
- (12) 6 inch to 12 inch white quartz opened by tranching 1 foot deep and by hole 6 feet deep in middle and at southwest end. Has yielded two spots of picture rock, one at each hole and pans here and there throughout.



I saw no picture rock in place. My sample S.3 at southwest end, 1 foot across vein, has 0.48 oz. Au. Cut off by fault at southwest end and not for certain picked up again.

- (13) Unprospected continuation of vein to north. All I saw was quartz stringers. Evidently weaker in this direction for there is for some distance no cover to prevent exposure.
- (14) Many stringers of quartz between and sometimes to west of main veins. Stringers especially noted south as far as divide.
- (15) Two main quartz veins taper southward. But they show strongly again further south.
- (16) Deep wash. For 800 feet south from mouth of tunnel, the wash 50 to 100 feet wide covers everything east of 4-foot vein. Evidently the vein stuck up as a wall 5 to 15 feet.
- (17) 4 foot wide white quartz. The trench shown near divide cuts many stringers to west of vein, and these pan a little gold, says the owner, Collocott. To east of vein in trench nothing but wash.
- (18) 4 foot wide white quartz. Not prospected.
- (19) Hanging wall of heavy quartzite.
- (20) Footwall of heavy quartzite.
- (21) 1 foot wide quartz vein with a little copper stain.



(22) Strong crack in quartzite.

(23) Flat hole 30 feet long going down on quartzite bed.

shows dabs of ore. My sample 3.4, from 2 feet across bed in bottom, shows 0.79 oz. Au. 0.61 oz. Ag.

Surface shows steep quartz stringers similar to those at (#14.) Evidently Au enrichment where such stringers hit bed. The adjacent Ace (Beatty Mines CO.) shows rather extensive enrichment of this kind, though not yet proved mineable. How far it spreads here, there is no information. One-fourth of dump looks like ore.

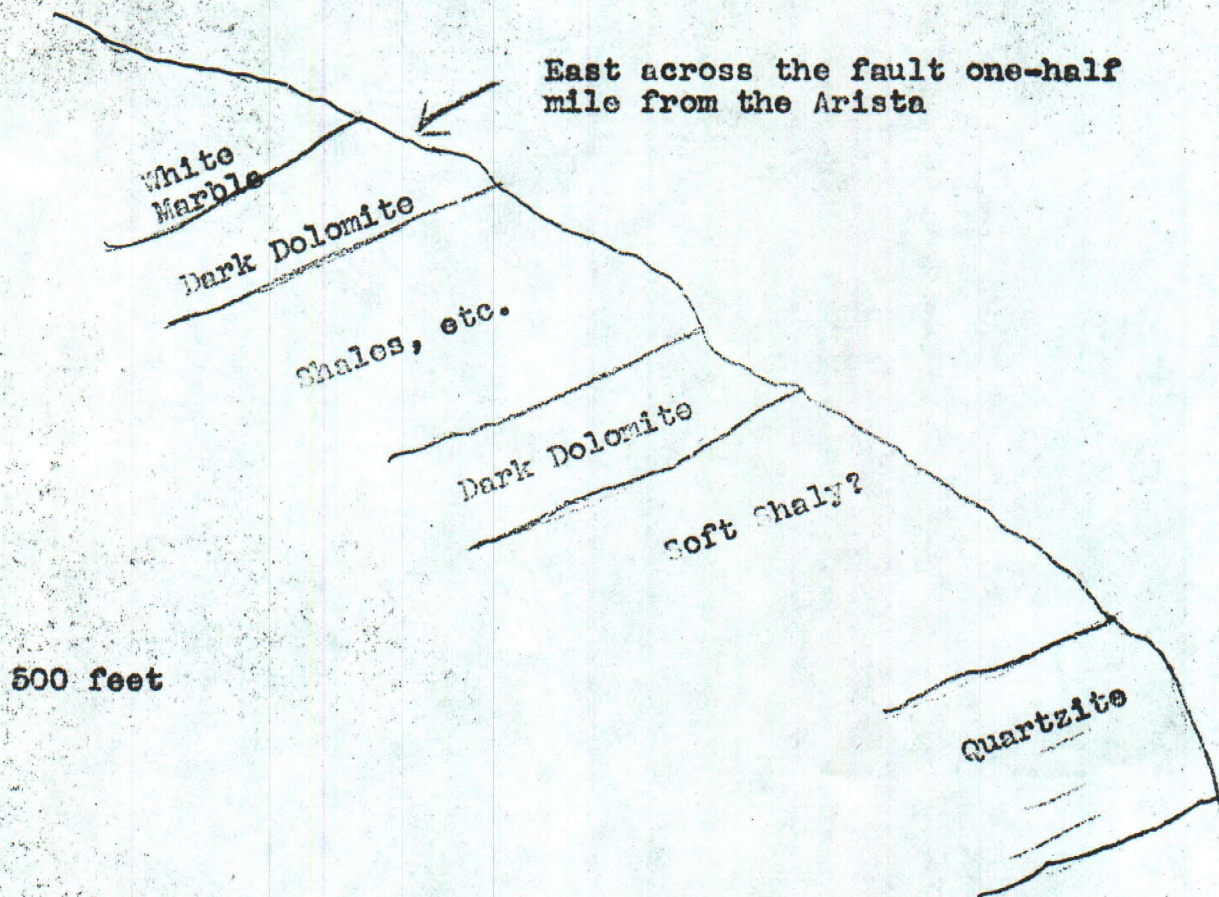
(24) A little quartz in stringers over width of 30 feet.

A few small colors, says Collocott.

(25)-(26) A steep fault, shifting the west side northward, at least one mile; the section east of the fault is somewhat as follows:

(See page 4)





This bottom quartzite west of the fault is at least a mile north of the Arista. The stratigraphic position of the Arista west of the fault is a good distance below the section. Apparent drag of east beds to south not explained. The horizontal displacement is certainly to north on the west side.

(27) Marble.

(28) Dark dolomite (in marble?).

(29) Marble on dark dolomite. Near bottom of marble.



Main known opportunities as follows:

- (A) The known oxidized values are in soft, pulverulent limonite, made from quartz, pyrite and siderite or some other carbonate. A good deal of this material in one place would weather low. The natural trench (16) is therefore a good place to get into.
- (B) The quartzite shale contact near which the hole (23) is located has a good chance for a "spread". So also have some of the individual beds. The veins cut a variety of beds and rocks at rather flat intersections. The strongest parts of the veins have not been explored at their intersections with the top and bottom of the main quartzite.

Method of exploration

Trenching, costing \$5,000 to \$10,000.

Terms

Wilfred Collecott of Beatty and associates have 750,000 shares. Have sold about 180,000 and have about 570,000 in treasury. Offer 100,000 at 10¢, and think one of owners would sell his share, or 187,500. I have suggested that in some way they contrive to deliver option on control, for example, as follows:



Now, 100,000 at 10 cents

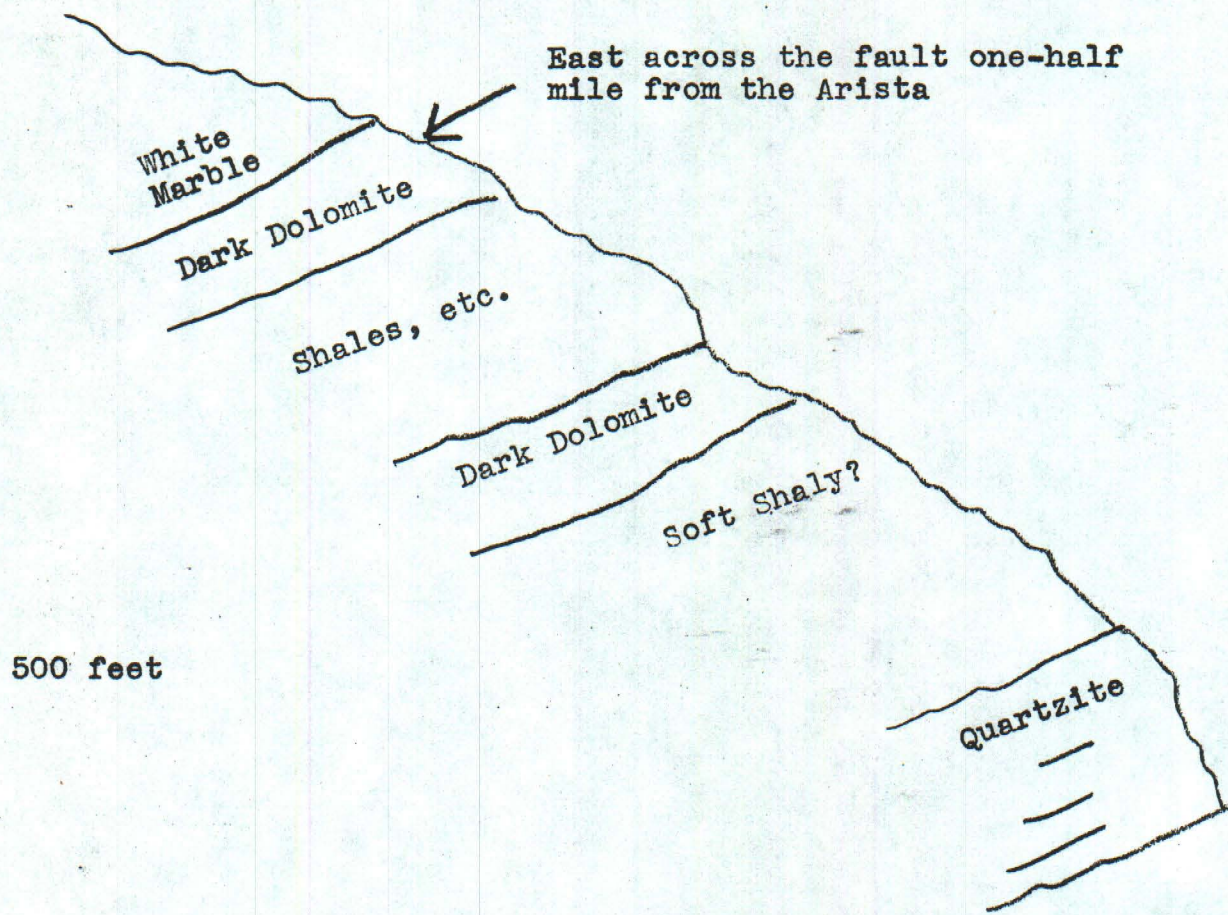
In six months, 100,000 at 15 (?)

In one year, 100,000 at 20 (?)

In three years, 451,000 at ? " the proceeds to  
be used in development and equipment.

The record of the district is not such as to encourage  
any sacrifice to get this property. Were it not in  
sediments and therefore, perhaps, a different affair  
from the Montgomery-Shoshone etc., there would be a  
very hard prejudice against it.





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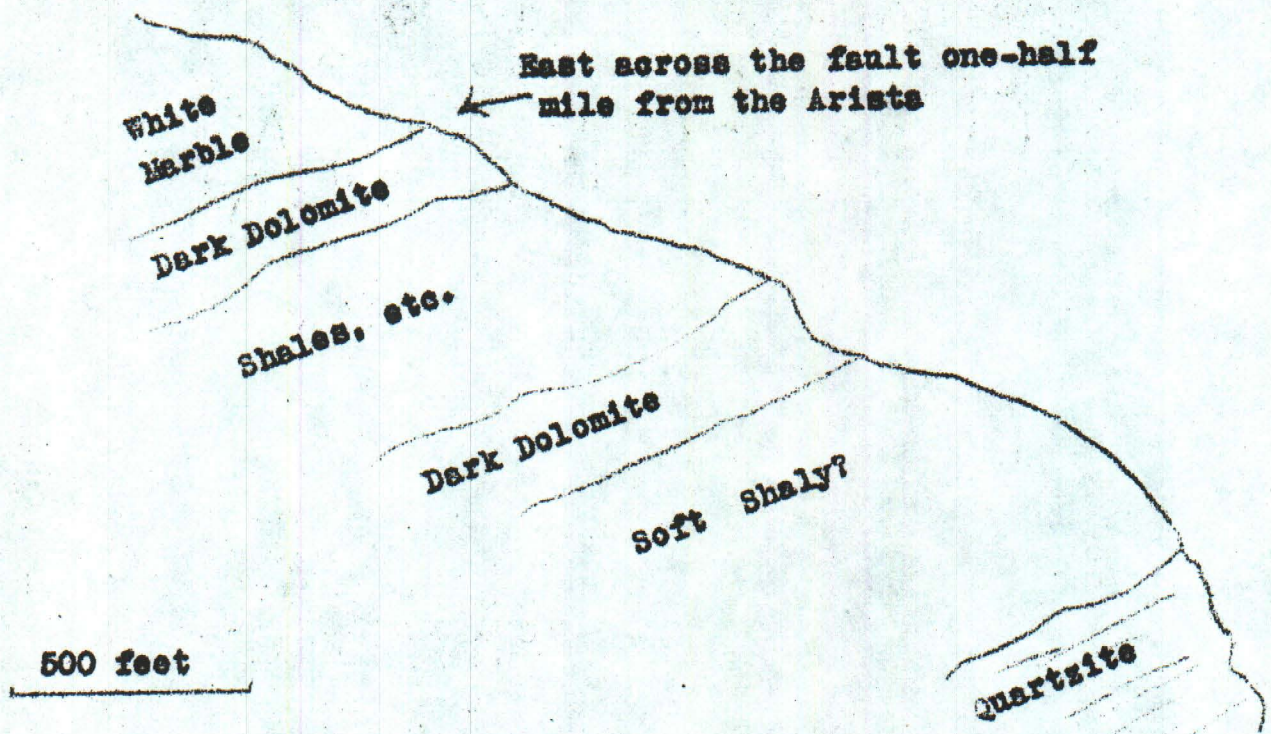
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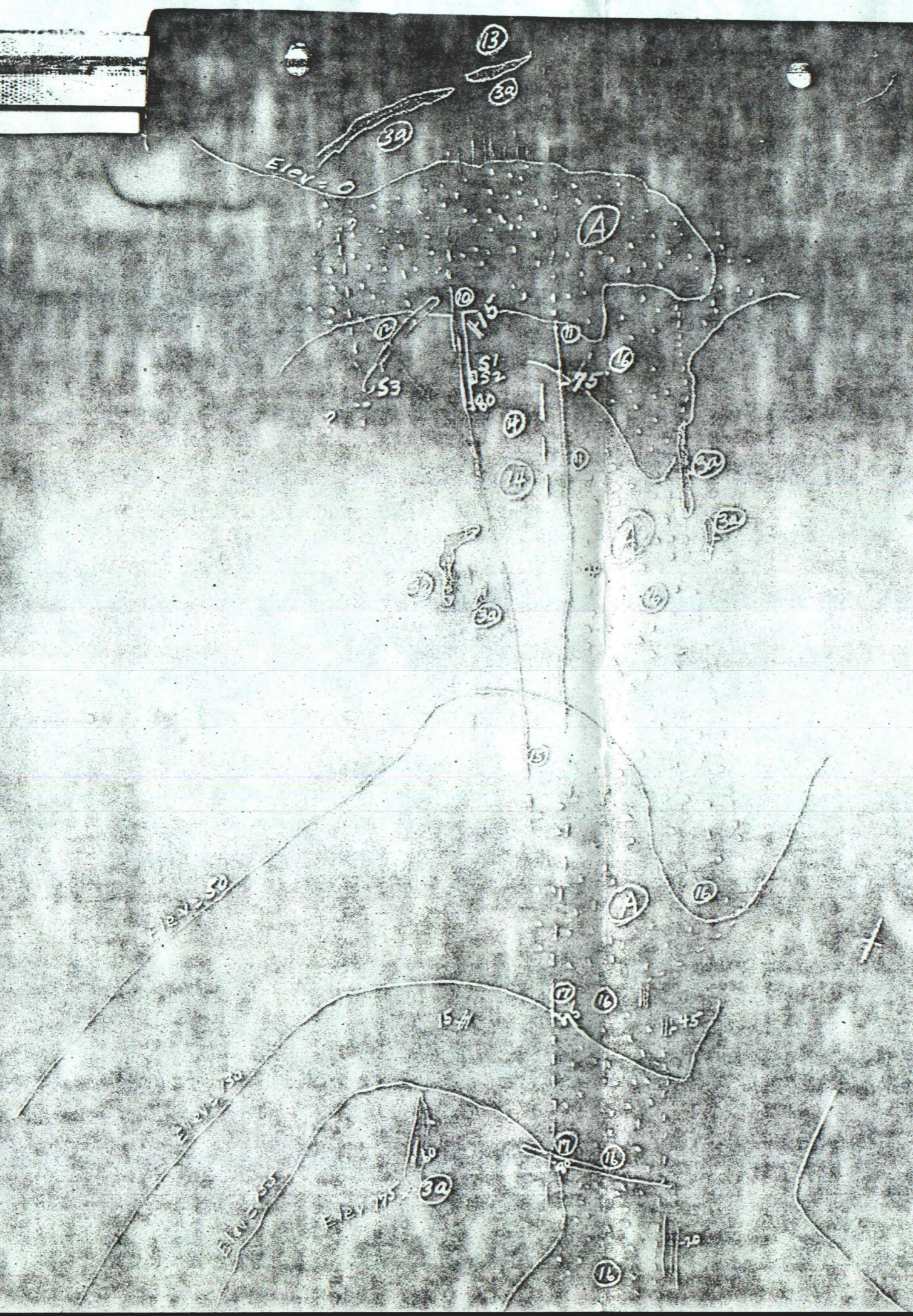
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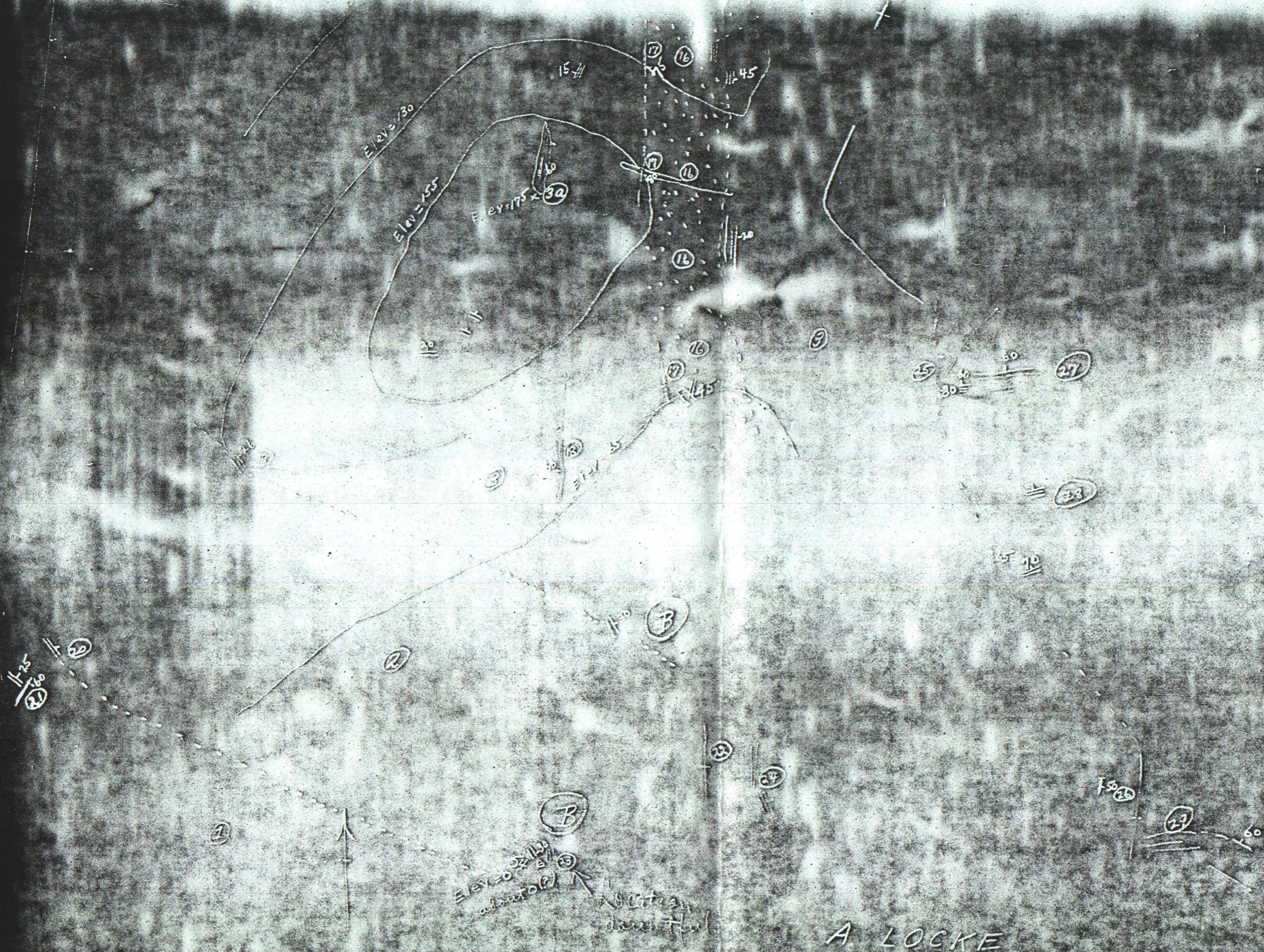
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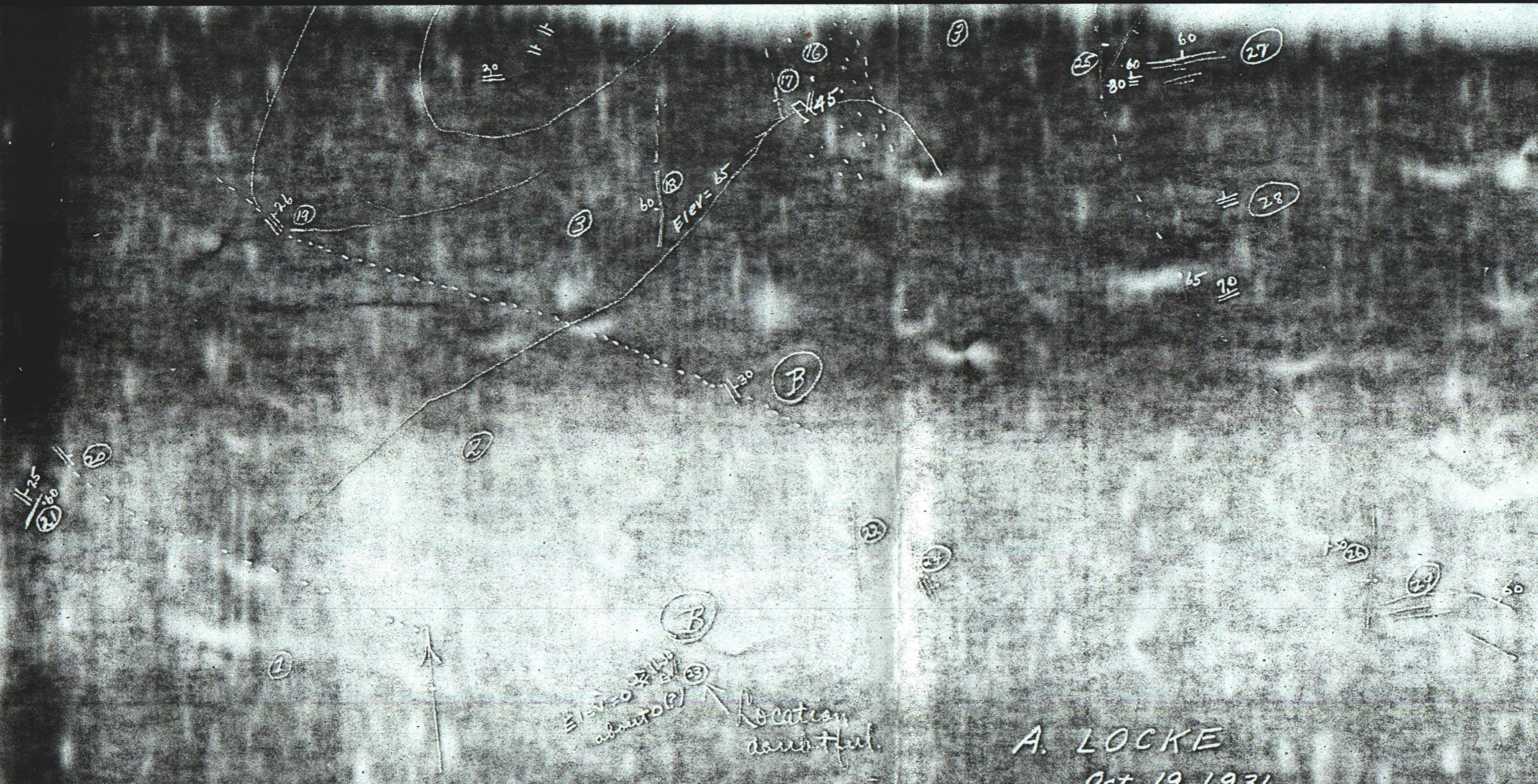






A LOCKE  
 Oct 19 1900





Scale 1" = 100'

Elev = 20  
alt. 200 ft  
Location doubtful

A. LOCKE  
Oct. 19, 1931  
(From visit Oct. 12 & 13, 1931)



REPORT  
ON THE ARISTA GOLD MINING COMPANY  
MADE BY BYRON N. JACKSON  
FOR THE ARNOLD EXPLORATION COMPANY

INTRODUCTION

This property lies about eight miles south of Beatty, Nye County, Nevada, in a spur of the southwest slope of Bare Mountain, and consists of thirteen claims and two fractions, unpatented.

GEOLOGY

A north-south fault, dipping easterly, lies almost along the side of the Paymaster and Contact claims. West of the fault are interbedded limestones, limey shales and quartzites. The general dip, where undisturbed by the fault, is N. 17° E. 25°; but in the vicinity of the break these beds have been caught in the drag and bent, the combined effect of drag, dip of beds and contour of the country bringing the outcrops almost parallel with the main fault, as is shown by three beds of limestone, called locally "buckskin lime" which serve as markers. These beds are well defined just north of the property and the highest is faulted out in the canyon wash in the north end of the Paymaster claim.

An east-west fault zone determines the course of the main canyon in the northern section of the Paymaster and cuts across the Star and Fairweather claims.

A northeast-southwest series of faults is well defined, especially in the Gold Ace ground, which lies to the west of the Arista, and is represented by two faults in the northern part



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of the property. A weaker, rather poorly marked northwest-southeast series is perhaps indicated by the gully at the entrance of the Paymaster tunnel. At this point a fault of the northeast-southwest series is occupied by a narrow vein. This vein is cut off by a break more or less parallel to the main fault and displaced about 25 feet down hill. No attempt was made to work out these faults in detail.

The Arista vein is probably a stock work in a shear zone lying between a series of faults west of and in general parallel to the big fault at about 600 feet distant. This shattered zone is from 75 to perhaps 200 feet wide and is full of quartz veins varying in thickness from a knife-edge to 15 or 20 feet. The shales and quartzites lying within this area have been altered to a great extent, the shales in many cases being completely replaced by silica. The gold occurs in the quartz veins, the metamorphosed shales and quartzites, none being noted in the unaltered rock.

The silicification of the mineral-bearing zone causes it to outcrop strongly above the softer surrounding strata. At about the center of the common side line of the Link and Contact claims the zone appears to branch. The main zone keeps its general direction, the branch bearing westerly at a slight angle.

The most common minerals are calcite, magnetite, hematite, limonite and pyrite with small amounts of aragonite and traces of copper minerals.

About 1500 feet to the west and 300 feet lower down are the mineral-bearing beds of the Gold Ace outcrop. These beds should encounter the sheared zone at a moderate depth and,



the mineralization being similar, the ore-bearing solutions that mineralize the Gold Ace probably filtered out along the soluble limestone beds from the same source where the main channel appears to be the shear zone on the Arista.

#### EXISTING WORKINGS

The zone sampled contains, besides a number of small cuts, two prospect holes about eight feet deep, a short tunnel, prospect shaft, and surface workings on the Paymaster claim and the "high grade shaft" on the southern part of the Link. All samples are either cropping samples or from shallow cuts a foot or two in depth with the exception of six as shown by the descriptions listed. Samples Nos. 1, 13 and 15 show sulphides. All samples were panned and the estimates checked against assay results as a basis for estimating the content of other samples which were panned but not assayed, the samples assayed being between one-third and one-fourth of the total. All of the panned samples are now shown on the assay map.

The ore in the high grade shaft follows a shale bed downward along a small fissure. The shale bed has been replaced in part by silica, and in this the ore occurs in small pockets and seams. Narrow, short stringers of quartz drop from the replaced bed. There is no ore left on the east side of the shaft except near the bottom. At the end is a slip cutting off the ore which is again coming in beyond and apparently in a lower bed. A surface cut in the same or a similar bed is further toward the west. The tunnel on the north side is driven partly in the replaced zone and at 65 feet is turned out of this area into the softer shales. At this point a 5-foot winze shows



the ore widening downward. The ore in the winze pans about the same as that taken at the tunnel level for assay. The shales, where not completely replaced, carry quartz stringers from a knife-edge to two feet thick.

Under the big fault on the crest of the ridge there is about 20 feet of quartzite.

#### SAMPLING

Due to the lack of systematic working sampling is very difficult, and no accurate estimate of the value per ton can be made. Any calculation of the proportion of the replaced and possible gold-bearing areas to the unaltered part is equally impossible. It seems reasonable to expect that the altered rock will contain from \$2.00 to \$3.00 per ton with enough of the richer seams to make about a \$4.00 or \$5.00 mill grade, and that large areas of the altered silicified material will be found.

#### EQUIPMENT

The equipment on the property consists of a blacksmith shop and a few tools on the Paymaster together with a mine car and about 100 feet of track in the tunnel. A compressor house with a compressor and West Coast gas engine, both probably in poor condition, and another small building are located on the south end of the Link. About 2000 feet of three-inch pipe have been laid from the compressor to the tunnel on the north side. The compressor might be made to serve, but the gas engine will probably have to be replaced.

#### DEVELOPMENT

The best way to carry on preliminary development work would be to let a contract to some one who had his own



equipment. Failing in this, a portable outfit should be rented and the work contracted on the basis of power and drills furnished by the company. A light truck for hauling water and supplies will be necessary.

Development work should be done by surface cuts cross-cutting the shear zone, followed by tunnels driven as low down as the nature of the ground will permit. Cross cuts would then be made from the tunnels across the ore-bearing zone. The surface cuts should cost about \$5.00 per linear foot and the underground work \$10.00 per foot. Five hundred feet of surface cuts together with 500 feet of tunnel and 800 feet of cross cuts would be sufficient for the preliminary work.

The alternative methods of diamond drilling and churn drilling would not be satisfactory because of the alternate hard and soft layers and the presence of high grade seams and pockets, the extent of which could not be determined.

#### CONCLUSIONS

The general distribution of the values in the shear zone and its area of some 1700 feet long by 100 to 200 feet wide point to the possibility of a sufficiently large tonnage of mill ore to warrant the risk taken in developing the property. The high grade ore occurrences are interesting, but the speculative value of the prospect lies in the possibilities of a large tonnage of low grade ore.

The working plan should be as follows: Surface trenching for the selection of a tunnel site, the driving of 500 feet of tunnel and 800 feet of cross-cuts; further procedure to be



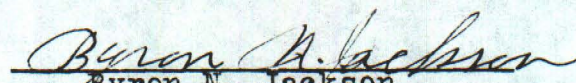
determined by results.

If the north side should be selected, advantage could be taken of the existing workings.

This work would be undertaken with the expectation of blocking out extensive areas of ore averaging \$2.00 per ton or better. Conditions on the property are such that open-cut or glory-hole methods could be used permitting large scale operations at very low working costs.

Should it be found that the average gold content over large areas is insufficient to warrant such operations, there still remain the bunches, seams, and small veins of high grade ore known to exist on the ground; If a sufficient number of these were opened up to allow of selective mining, ore of a good milling grade could be secured for operation on a smaller scale.

Respectfully submitted,

  
Byron N. Jackson  
Associate Engineer  
ARNOLD EXPLORATION COMPANY

Los Angeles, Calif.

July 21, 1933.



ASSAYS

<u>Description</u>	<u>Value per ton</u>
No. 1, Cropping sample just off Contact claim south end 5 ft. cut	\$3.20
No. 2, Cropping sample south end Contact, 5 ft. cut	44.00
No. 3, Cropping sample south end Contact, 5 ft. cut	2.40
No. 4, Small cut east of powder magazine, 4 ft. cut	2.40
No. 5, Surface cut east of shaft cropping sample 5' "	3.40
No. 6, High grade shaft half way down west side, 3½' "	78.00
No. 7, " " " at end, east side 2' "	10.40
No. 8, W 1/2 open cut north of shaft, half way up hill, 6' cut	2.20
No. 9, E 1/2 same cut, 6' cut	1.60
No. 10, Cut just south of crest 5' face	2.20
No. 11, Pit on crest cropping sample south side 10' cut	2.60
No. 12, " " " " " north " 4' "	3.20
No. 13, Bottom 8 ft. pit on Paymaster, 18" cut	53.60
No. 14, Same pit south side 4' cut west of #13	2.20
No. 15, Paymaster tunnel 65 ft. in 2-1/2 ft. cut	5.17
No. 16, Same place as No. 13, 3 ft. higher up	4.55
No. 17, 20 ft. of quartz under fault in crest, cropping sample	.21
No. 18, Cut just north of crest 50 ft. west of Nos. 11 and 13 -	5.17

*an - 20, 11 Aug.*



**PAYMASTER CLAIM #1**  
 Looking south at Callicott's  
 blacksmith shop, showing portal  
 of tunnel and air line  
 from compressor. High grade  
 ore has been taken from side  
 vein at portal of tunnel.  
 "A" Outcrop of Arista shear  
 zone. "B" Main fault.  
 "C" Cut on eastern limit of  
 Arista shear zone.



**PAYMASTER CLAIM #2.**  
 Looking south from hill just north of blacksmith shop,  
 showing outcrop of Arista shear zone and its eastern  
 limit. "A" Outcrop Arista shear zone. "B" Eastern  
 limit. "C" Cut on eastern limit of shear zone.



hood  
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"G"  
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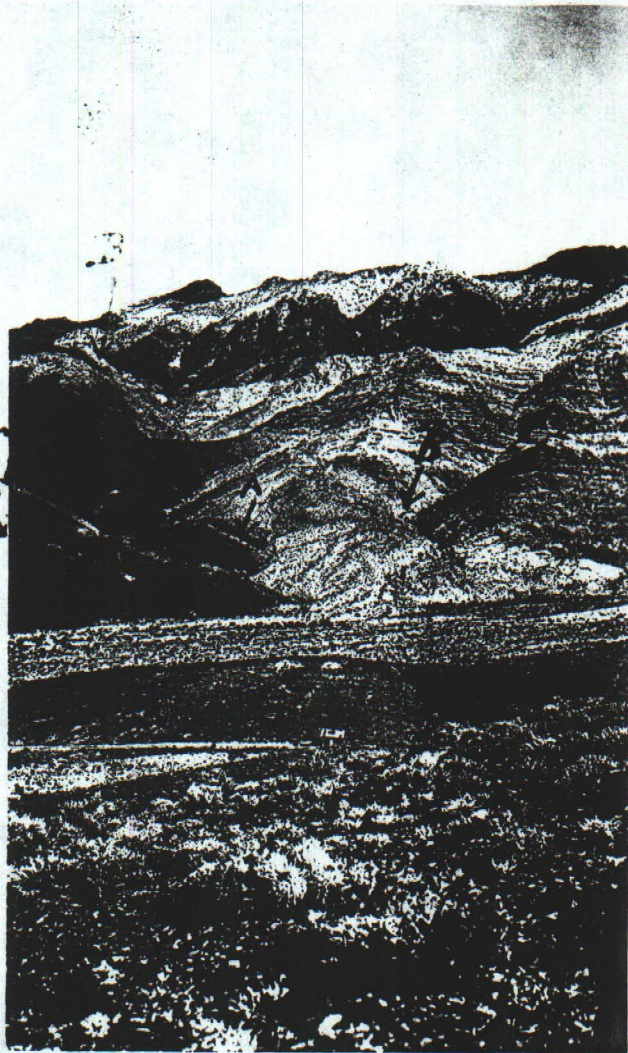


PAYMASTER CLAIM  
Side vein and prospect hole  
shown in photo #1 just west  
of portal of tunnel.

CONTACT CLAIM  
Hade of main fault



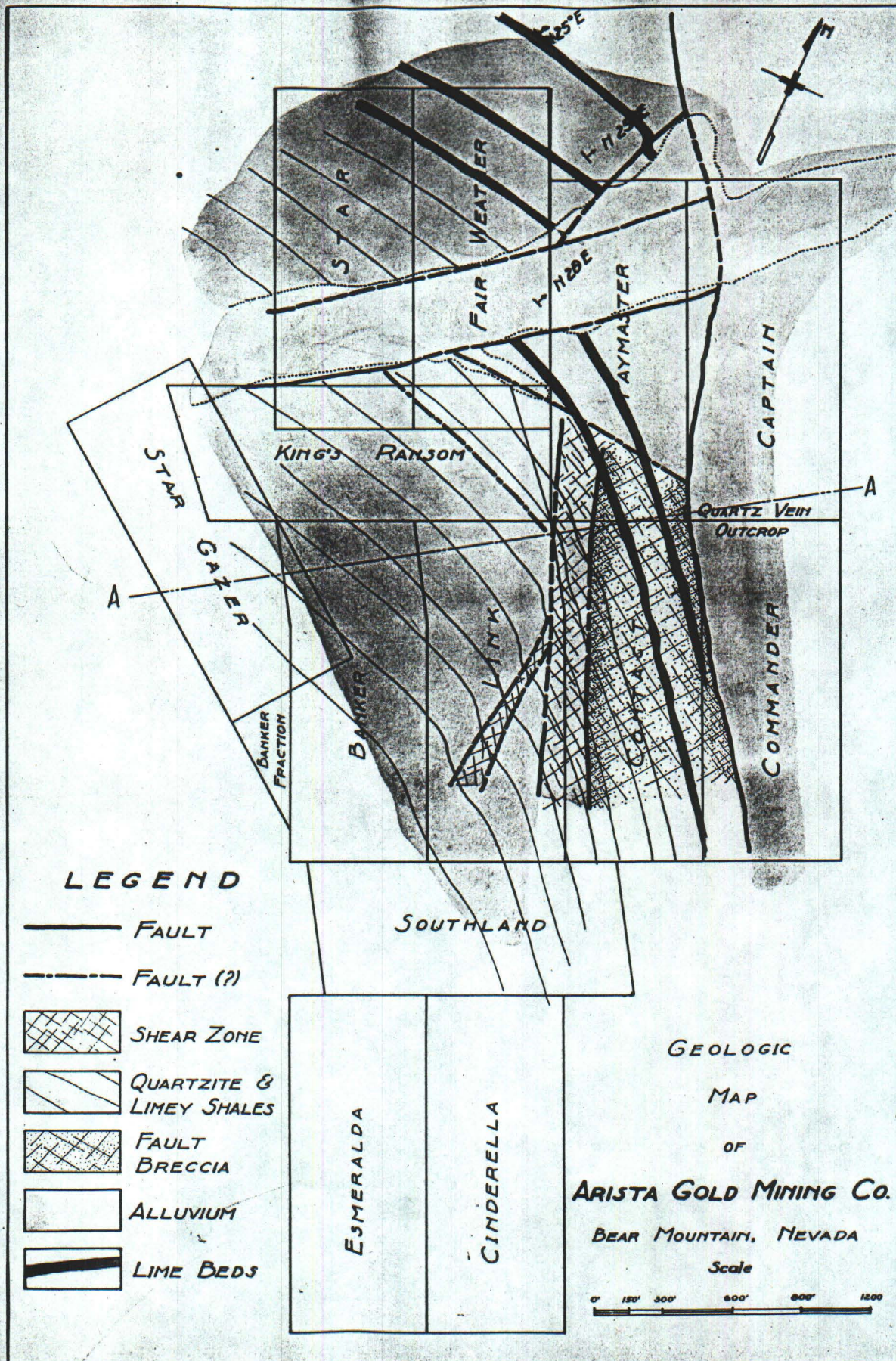




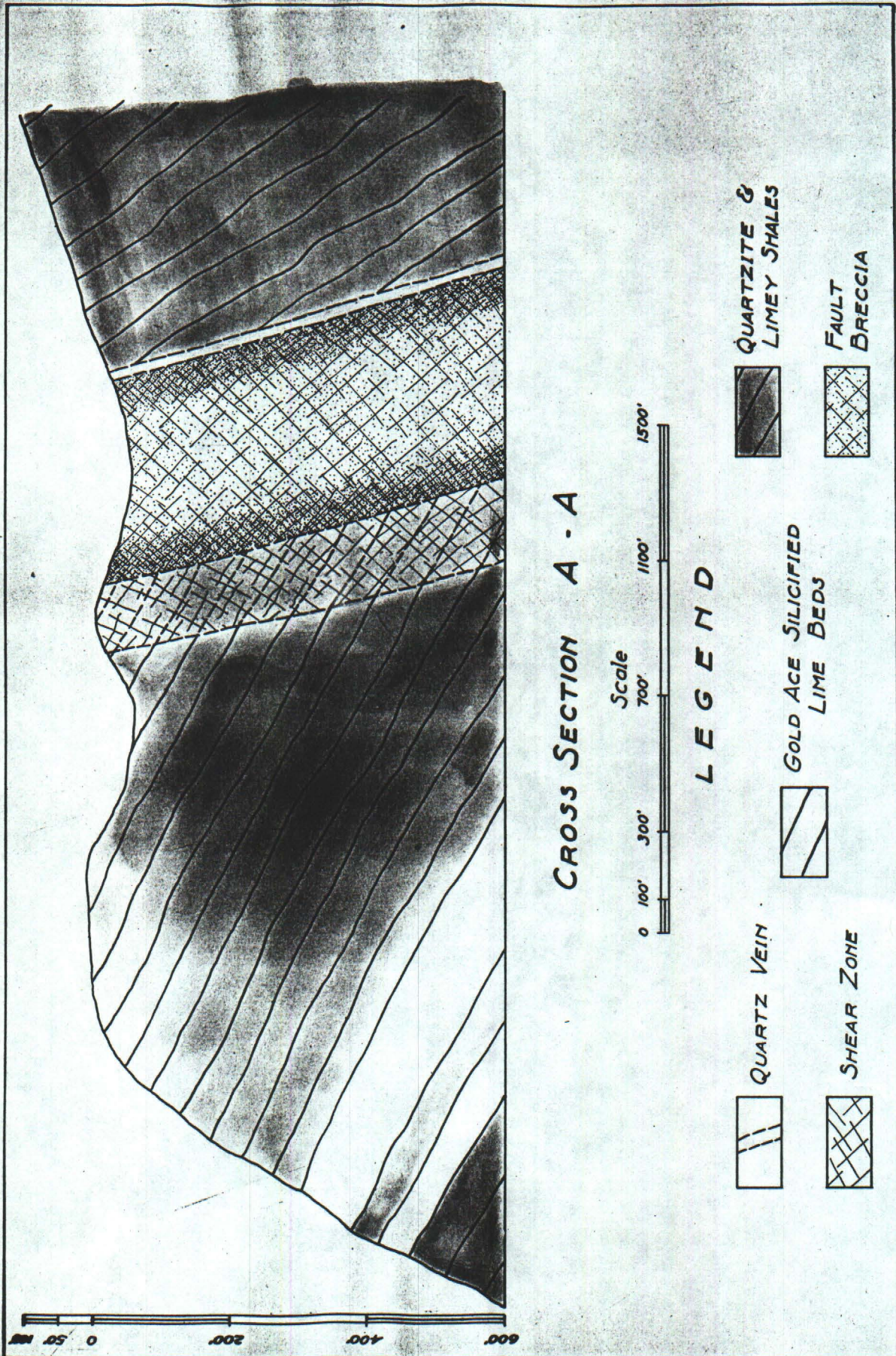
#### PAYMASTER CLAIM

Looking north from near top of hill;  
blacksmith shop on Paymaster claim in  
foreground. "A-A-A" Beds of "buckskin  
lime" markers. "B-B" Outcrop of main  
fault.









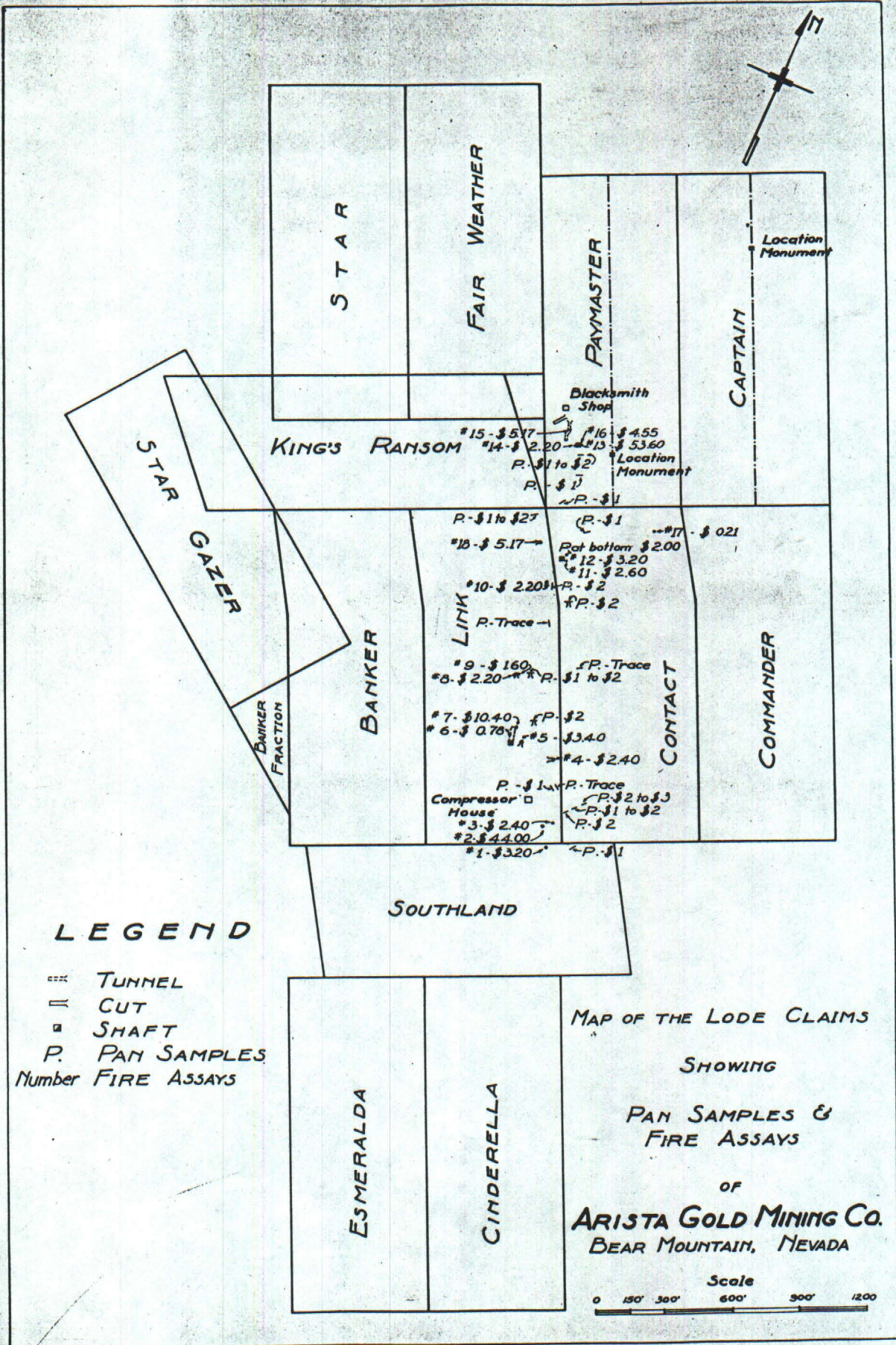
CROSS SECTION A - A

Scale  
0 100' 300' 700' 1100' 1500'

LEGEND

- QUARTZ VEIN
- QUARTZITE & LIMEY SHALES
- GOLD AGE SILICIFIED LIME BEDS
- SHEAR ZONE
- FAULT BRECCIA







5

MEMORANDUM REGARDING ARISTA GOLD MINING COMPANY

The geological structure of the ARISTA property is perfect for the formation of huge ore bodies. The existence of such bodies is confirmed by the development work carried on since 1928 by Mr. Wilfrid Callicott, a practical miner, with the concurrence of Mr. J. D. O'Brien, a mining engineer of high reputation and ability.

Extensive surface digging, tunneling, and shaft work have disclosed bodies of ore of FREE MILLING character assaying as high as \$35 gold per ton. In addition, very rich masses of HIGH GRADE gold ore have been uncovered.

It is believed that a cross-cut tunnel driven from a point on the hill beneath the high grade shaft will probably cut a number of parallel veins or deposits within the ore bearing zone, which will give the final proof on the investment value of the property.

It is believed that the initial work will extract considerable smelting ore. Any ore indicating a value of #25 per ton or more should be sent directly to the smelter. Costs of producing, shipping and smelting smelter grade ore will be approximately \$15 per ton on material running from #25 to around \$50 in gold.

A thirty ton mill (ten stamps) may be purchased for about \$2500 (good second hand) , and set up on the property ready for operation for an additional \$2500. It is estimated that it will cost around \$15000 to place water at the property sufficient for a fifty stamp mill.

Mining and milling costs on a thirty ton (per day) mill basis will not exceed \$4½ per ton. About eighty per cent of the gold will be saved by amalgamation; the balance will go into the tailings which will later require a cyanide plant.

Mr. Wilfrid Callicott who staked this property of about 240 acres in 1928 and 1929 has a heritage of six hundred years of mining experience. His father, twenty-five years ago, studied this area and believed in its value. In the meantime other claims were entered. Five years ago it became possible for Mr. Callicott to locate this ground. He invited three other men to work with him. Their interests were divided equally. Unified management proved im-

The key to the present situation is cohesive control. The door is now open through a voting trust agreement, to place the affairs of the company in the hands of a competent, cooperative group of men whose sole purpose will be to manage the property as a business institution.

June 2, 1933  
H. W. Moorhouse/r  
Approved:  
J. D. O'Brien.



Observations Concerning the Property of  
THE ARISTA GOLD MINING COMPANY

Situated upon the Western slope of the Bare Mountains, Nye County, Nev.

----- \* -----

The Arista Gold Mining Company includes within its boundaries fourteen lode mining claims embracing approximately 240 acres of territory. These claims were located by Mr. Wilfrid Callicott in the latter part of 1928 and in the beginning of 1929. The claims are unpatented at the present time.

The gold bearing zone upon this property was discovered and fully appreciated as to its possibilities by Mr. Samuel Callicott in the years 1905 and 1906. Mr. Samuel Callicott was a gentleman who possessed great competence as a miner and prospector, having had a lifetime's experience, which involved extensive travel, work and development under varying conditions in many parts of the world. His acquaintance with, and knowledge of, this particular area was based upon and involved his vast experience as a practical miner. He fully appreciated its magnitude but unfortunately did not live to realize its actual value.

Immediately after Mr. Samuel Callicott's demise a number of men who had some knowledge of Mr. Callicott's discoveries of gold bearing ore on this ground took up the claims and held them for a period of years: They however, were possessed of little or no knowledge of mining geology or development. In consequence of which they found nothing worthy of note and were not sufficiently competent to understand the actual nature of the occurrences or perform any effective development. They however continued to hold the property for a period of years thereby preventing any other person or persons from taking possession of it. Meanwhile an extensive period of mining inactivity followed and little or nothing from a development viewpoint was being initiated throughout the West.

His son, Mr. Wilfrid Callicott, in view of his knowledge of his father's concepts and his personal experience in the mining business devoted considerable time and energy to the discovery of the actual source of emanation of the enrichments



of various ore occurrences on this ground and after several years of hard work and preliminary development succeeded in demonstrating beyond contravertability the great importance of the ore bearing structure within the confines of these mining claims. In view of the mineral possibilities of this property it may be reasonably inquired why it has lain practically idle: it was due to the fact that on or about the beginning of the year 1929 a corporation known as the Arista Gold Mining Company was formed which took over the property. Unfortunately, as in most corporations the institution was not sufficiently cohesive or cooperative to finance the property on a commendable or desirable basis. In view of the fact that the Corporation was formed upon a 1,500,000 share basis of which 750,000 shares were placed in the treasury and of which 750,000 shares were divided among the incorporators. The result of the division of the stock became more or less chaotic as is usually the case in companies where care had not been taken to preserve the stock or the interest of the parties concerned under business-like pooling agreements or voting trusts.

Notwithstanding the difficulties encountered by Mr. Callicott as a result of the inefficiency of the corporation he proceeded, with little or no assistance, to carry on the important surface development work which the property required. The results speak for themselves.

As soon as the possibilities of legitimate gold mining became manifest in the year 1928, Mr. Callicott perceived the great importance of staking this ground if it were open to location. Subsequent events proved that it was.

#### STRUCTURAL GEOLOGY

It is a notorious fact that many of the most permanent and most important ore bodies, or the greater majority of them throughout the West are found in the limestones, provided, however, an intrusive rock of some character is found in close proximity, or adjacent to, the fault structures or fissures in the limestone, created by the stresses emanating from the intrusive. Thereby hangs a tale concern-



int the Arista Property. At a point about 2550 feet immediately North of the Arista property a large mass of monzonite-porphry intrudes the limestones thereby causing a major fault which traverses the limestone in a Northerly and Southerly direction.

The porphyry in its turn created a brecciated or crushed condition of the lime, and converted it to shale; the mineral-bearing silicious solutions readily found access to the crushed zone. Torsional stresses in turn created a number of stress or transverse faults in the mineralized zone on the Easterly side of this major fault: The country rock — the original limestone — has been converted into marmerized limestone or dolomite on the East side of the fault. This condition occurred in view of the affinity of limestone for the magnesian solutions which emanated from the eruptive rocks. The mineral bearing silicious solutions, which in all probability succeeded the magnesian solutions, contributed the mineralization now exposed upon the property to the shales and to the brecciated material. Replacement of the original limestone, of which the shale is composed, — by quartz, occurred as a consequence. In view of the number of contact faults, stress faults, fissures, and crevices existing in this great mineral bearing zone; and the fact that they occur in close proximity to each other and almost in parallel position; together with the additional fact that the circulation of mineral bearing solutions had ready access to the brecciated material: it may be reasonably inferred that replacement of vast bodies of the shales by gold bearing quartz may be expected with depth and development of the property.

Adjoining the shale and upon the West side of it, a mass of quartzite is found in contact with the shale, and soluble limestone which lies on the West side of the quartzite. The shales, and the quartzite which comprise the filling of the great fault have been tilted to an angle of from 60 to 80 degrees, that is to say to an almost vertical position; and that condition prevails throughout the length of the property for a distance of approximately 4550 feet. In other words, the mineralized area is visible, prominently outstanding, and can not be mistaken.



The quartzite has also been brecciated and in places shows definite enrichment and very important gold bearing masses of ore. The mineralized zone upon the property is several hundred feet in width and within which several important ore bodies have been disclosed by surface work. Perhaps one of the most important statements that may be legitimately made concerning this property is the fact that all of the ore discovered and exposed by Mr. Callicott to this date has been of a free milling character. In view of the mining history of such occurrences as this, reasonable dependance can be placed upon the expectation of the ore bodies existing upon the Arista ground descending to considerable depth, thereby assuring a great commercial future for the property.

#### DEVELOPMENT

All the development accomplished up to date upon the Arista property by Mr. Callicott justifies the statement that no more inviting gold bearing territory can be found in the Southern part of the state of Nevada. The various tunnels, cuts, trenches and shafts which were sunk by Mr. Callicott or under his direction and in accordance with his knowledge of the ground confirm the statements herein made. The ore bodies exposed by him indicate continuity, permanence, great size and give promise of enormous capacity from a milling viewpoint. Incidentally, he has discovered, opened up and demonstrated the existence upon the ground of inconceivably rich gold ore in a few places. Here it may be stated that while the occurrences are essentially of milling character, it is nevertheless true, that very rich masses of high grade "gold ore" have been found and opened by Mr. Callicott which will probably be treated as smelting ore. And it is reasonable to infer in view of the extensive mineralization upon the property; and upon adjacent property, that important bodies of shipping or smelter ore will be encountered during the course of development.

Mr. Callicott has driven a tunnel approximately 100 feet in length on the



solutions having had access to the shale through various channels were probably concentrated to greater and more advantageous effect in close proximity to the faults. Appreciating the mineral possibilities of a fault structure of this character; and in view of the amenability of the brecciated materials, within the crushed zone to replacement and enrichment; it may be reasonably inferred that a cross-cut tunnel driven from a point on the hill beneath the "high grade" shaft (as suggested by Mr. Callicott) will probably cut a number of parallel veins or deposits within the ore bearing zone and that sufficient depth can be obtained thereon to justify the statements herein made; and the further prosecution of development work and investment on a large scale.

#### EQUIPMENT

The property at the present time is equipped with gasoline engine, compressor, a half mile compressed air line and considerable mining impediments. The necessary buildings, roads and various tools now upon the property can be used to advantage.

#### SUMMARY

After a period of over forty-five years technical and practical mining experience covering various parts of Western America and Mexico the writer believes that the property herein alluded to is one of the most desirable, one of the most advantageous and one of the most dependable gold mining properties I have ever seen. Personal study and observation over a period of years of the Arista property and opinions and statements hereinbefore made are largely based upon the observations made of mining properties throughout Western America by the U. S. Geological Survey. The deductions and conclusions of that learned organization with reference to similar mineral occurrences in the U. S. are analogous to my own; and therefore, I realize and appreciate the fact that the milling possibilities of this property may be classified as enormous.



Fairweather claim following a vein adjacent to the shale and in close proximity to the quartzite herein alluded to. Along the course of that tunnel and for some distance in the tunnel, upon the vein, some excellent ore has been encountered from which some assays running as high as \$35 in gold were obtained. At a point approximately 90 feet further than the present breast the tunnel will encounter an intersection of another vein with the tunnel vein, at which point it is quite possible that a very important ore body may be encountered. This statement is made in view of the fact that Mr. Callicott has obtained some exceedingly important values on the surface of the ground at or around the point of intersection of those veins; meanwhile cross-cutting the ore body from the breast of the tunnel may be prosecuted to advantage; inasmuch as the vein system at that point and in that vicinity is approximately 80 feet in width and also in view of the fact that sufficient depth can be obtained upon the occurrence to ascertain the general character of the ore body and thus secure a practical and definite demonstration of the advisability of further procedure at this point.

In close proximity to a contact fault between the shale and quartzite on the claim known as the Link Mr. Callicott sunk a shaft which has now attained a depth of approximately 50 feet upon what appeared to be a small stringer of very high grade gold ore upon the surface. At the present depth the ore shows many evidences of continuity, but virtue of its silicious character, or the replacement of the original limestone or shale in the occurrence. This high grade ore in its turn is found in close proximity to a large mass of silicified shale which in many places by panning shows fair surface values in gold. At a short distance from this shaft in a Southerly direction the ore bearing zone shows a small displacement by a by a cross fault, which was probably one of the agents which caused the great enrichment encountered in the shaft alluded to; and likewise had considerable effect in the enrichment of the adjoining masses of shale. In other words the mineral bearing