

CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey 1520 West Adams St. Phoenix, AZ 85007

602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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Arizona Department of Mines and Mineral Resources Mining Collection

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## ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

## PRIMARY NAME: SULTAN GROUP

ALTERNATE NAMES:
ALEC LUCY'S
YAVAPAI COUNTY MILS NUMBER: ..... 24
LOCATION: TOWNSHIP 13 N RANGE 9 W SECTION 24 QUARTER S2LATITUDE: N 34DEG 26MIN 51SEC LONGITUDE: W 113DEG 08MIN 48SECTOPO MAP NAME: THORN PEAK - 7.5 MIN
CURRENT STATUS: DEVEL DEPOSIT
COMMODITY:
GOLD
SILVER
CLAY ..... KAOLIN
BIBLIOGRAPHY:
BLM MINING DISTRICT SHEET ..... 332
USGS THORN PEAK QUAD
ADMMR SULTAN MINE GROUP FILE
see：－ALEC LUCY＇S GOID CLAIMS－YAVAPAI COUNTY
Rëferencei：Mini USci：Press，vol． 87 ，p． $319,2 \frac{1}{4}$ colunns I．

$$
\text { by CiE. Bunki=r Vol. 87, p.335, } 3 \text { columns, } 工 \text {. }
$$

Not in office.

$$
\begin{aligned}
& \text { 各 } \\
& \therefore \cdots=
\end{aligned}
$$SULTAN MLNE GROUPYAVAPAI COUNTYEUREKA DIST.

Dead - no recent activity and no reliable info. TRAVIS P. LANE, ..... 3-62
Records in Prescott show this property listed under name of DORA L. HAYNESand EUGENE 'TRACEY.E. G. WILLIAMS, 11-1962


U.S. CRIB-SITE FORM

RECORD IDENTIFICATION


LOCATION


CADASTRAL


POSTION FROM NEAREST PROMINENT LOCAITY AE2 2.2 MUES NORTHEAST OF THORN PEAK
LOCATON COMMENTSAES <LOCRTION MEASUREA TO CENTER OE GROAP OF THREE ADUTS


Sultan Mine

$$
\begin{aligned}
& \text { Sec } 24, T .13 \mathrm{~N}, R .9 \omega \\
& \text { Tavapal County }
\end{aligned}
$$

reference: Arizona Dept. of Mineral Resources Sultan Mine Group Yavapai County (file) Alec Lucy's Gold Clans Yavapar county (file)
minerals:
present owner:
history of the area:
there visas some production proa to 1907 but there are no recondo. Production ceased in 1905. Apparently It 80,000 was produced from 10,000 tons of tailings When were cyanide. In 1962 the property,
lelongedte Dora L. Haynes and eugene Velongutto Dora L. Haynes and Eugene tracey. Propentiy wrap unactue.
geology of the circa:
medilem coarse grained granite, puca schist, ana some pegmatite. The ore comtaina nearly pure gold with a small portion of silver.
property consists of fur patented lade clam m

## Grover Duff - Tucson Office

John W. Chandler - Miami Office
subject: Exploration Work

## Dear Grover:

We are presently compiling a record of all the mines and prospects which we have examined for the Company during the past 10 years.

Starting with 1940, and listing the work done by years, such as 1940, 1941, 1942, etc., we would like to have the following information tabulated:

1. Name of property
2. Location - (State and County)
3. Who it was submitted by
4. Who made the examination
5. Time spent on the examination
6. Metals involved
7. General conclusions drawn from examination
8. Remarks - Under this heading could be shown whether we have done drilling or any other work in addition to the examination. Give brief outline. If the property subsequently became a mine unit and was operated so state.
We do not have a complete file in this office on all properties examined by the Company and we will combine your report with the one being made up from our files to make the final report complete. I would appreciate it if you could put someone on this work until it is completed, sending me three copies of your tabulation.

Best regards,


JWC/ jp
4-25-51 - Mr. Chandler will send us a list of the properties on which they have reports in their files, and we will then send him the information on the others.

## 1. Sultan Mine

8. Karapal Couneys -rizona
9. 
10. E. A. Stone
11. Sometim in Decomber, 1945
12. Cold chiexty
13. 
14. 

To WHOM IT MAY CONCERN:-
Belng recently engaged by Mr. Carl A. Nelson of Prescott to make an inspeotion of the SULTAN MINE and report to him our observations, and deductions we derived from their considoration, we visited the camp accompanied by Mr. W.J.Martin. Registered Professional Engineer, Assayer and Chemist of Prescott, and herewith present our finding. The tyip was a brief one due to the fact that, at this time. there is litile ocoasion to make a more prolonged visit. It was not, and is not, clalmed thet there are any extengive reserves of ore to measure up and sample: what ore was formerly developed was taken out although, it is alleged, that considerable quantities still remaln in developed teryitory, but to positively locate such bodies would involve considerable time and, preferably an assay outift on the ground. It would involve a complete survey, underground, requiring mach time. The purpose of our visit was to form an opinion as to warrant existing existing for re-opening this property and reequipping it with adequate machinery and applianoes.

IOCATION and AREA
The SULTAN MINE Group comprises five petented lode mining claims, Survey \#1677, and we were furaished with a blue print thereof by the Surveyer General's Office in Phoenix, Arizona, hereto attached. They are named, the "Alierton", "Jack". "Sulitan," "Dougine," and "Navarre." They are all contiguous and embrace Seventy-ifve and a third (75.328) acres. Practically all the development work and production in the past has been on and from the sultan clalm. It la not clalmed that any of the others over were productive. The property is situlated on the northern bank of the Santa Maria River, in the southwestern portion of Yavapai County, arizona, It ls some ifiteen miles westerly from Hillaide, a station on the Santa F\& R.R., ia by aly line, but
by wagon road is some twenty-five miles.

## ACCESSI BILITY

From the foregoing it will be seen that the property is within easy reach of the rallroad and to agyiculture districts. The wagon-road from Hillside is down grade and near the mine follows the southman alde of the river. At the time of our visit, on account of anprecedented drought, the river was practioally dried up, so much so that we crosed it with no more than the wetting of the soles of our shoes, But there are times when high water makes it impaselble for sometime three or four weeks at a time. This simply requires foresight to combat. It would not be impracticable to arrange an antomatic ferry to come into play when there is water flowing. But the road is used by the ranch people with their motor cars to go to town.

ALTITUDE AND CLIMATE
The property 11 es at about 2,000 feet abore sea-level. In this southern latitude it is a splendid olimate, save that in July and August it is very hot; but outdoor wort can be carried on all the year round. Snow practically unknown.

## TOPOGRA PHY

Dt is a mountainous country but not a precipitous and rugged one but rather, in appearance, resembling a "foot-h111" section.

## GEOLOGY

The formation is primarily a medium coarsepgrained Grainite associated with which are patches of mica achist, more recent form of intruded granite known as Pegmatitie, very coaree in structure, and porphyry. Any man of experience would be apt to agree with us that the formation ls excellent. Granite was formed at enormous depths in the earth and oxistod in a molten state; its great depth was slowly but surely yeduced by the wearing away, or "erosion", of the surface. The porphyry was
met in ranning a tunnel from the western side line of the Sultan claim, in a northeasterly direction. Ne will have later occesion to explain our views as to the origin and effect of this porphyry and request attention be given to a aketch intended to illustrate our ideas, at the end hereof.

ORE and MODE OF OCCURRENCE
The ore has hitherto been a pare gold ore carrying a small proportion of silver. It does not show any copper or other base metal content. It was found in a zone of granite, dipping at a low angle to the horizontal. It is not a true vein quartz at all. It has been highly decomposed and presents a white appearance from the kaolin, china-clay, resulting from decomposition of the feldapar, the principal constituent of granite. In ranaing the tannel they started at a point far enough to the east of the supposed position of this depotit, which had previously been opened by ginking on the western side of the hill, it being, evidentiy the intention to catoh thls deposit on its dip to the west and they gtarted their tunnel so the $t$, at some flity feet in, they found the deposit which can be seen coming in on the S.E. wall. It was followed several hunared feet and rich bodies of ore were discovered and extracted, apparentiy a number of pockets, or bodies of ore, resulting from segregation of low-grade values, at one time diffused throughout the zone. A close examination of over a dozen bags of aamples, we brought away from these workings, showed the true nature of the ore depogit; not vein quartz but granitio matter. They all assayed something in both gold and allver but not of a pay grade; had it zê̂ú, fis former operating company, known as the gola Link Mining Company. would not have left it. But it shows, as also the old stopes, that it ranges all the way from thirty inches to seven feet, or even more, in thickness. At a point 2 for feet in from the tunnel portal, they ran into a great formation of por-
phyry and ran straight ahead into it for twenty feet and at the point of contact, ran fifteen feet to the left, or westeriy, into it but not finding any limit to it so far. They, also we learn on excellent authority, imagined that they had case of fault. that is a fracture in their deposit beyond which they supposed that their ore was at an edn. But at the last, after they had concluded to close the operations, a winze was sunk a total depth of 28 feet right against the lowe, or foot wall, of the porphyry dyke and an old miner still lizes who flred the last blast in the bottom and informed Mr. Martin that it was fall of gold visible to the naked eyes. It was too late as the company had given up already. At the time of our visit this winge was apparently but 15 feet or so in depth, this arose from rocks falling into it, and possibly waste being thrown down it. Phere was no rppe or lader available, but dangerons looking overhanging roaks in evidence. Had we gone into it there was no way to get out again, but a chance for a catastrophe from falling rock. But we could listinotiy see the deposit rapidy inoreseed ine its dip to the horizontal and pitohed right down that winge ageings the wall of porphyry. This gave rise in our minds to the view that at the ime, deep down in the eartht crust, an immense apheaval occurred when this mass porphyry, then in a molten state, was forced upwards, leading to the splitting of the granite rock mase, and that mineralized waters had come up with the porphyry, and continued for ages ofrculating in suoh orevioes, or orsoks, decomposing the granite and depositing the gold through it. Then during an eternity of past time. this diffased gold gradually eccumulated into irregalar bodies as before mentioned as being our view. ive belleve it quite possible that it will be found that. Instead of any "fanit", they had reached the maln deposit and failed to recognize it. Our sketch at end hereof may make this view clearer than verbal explanation can do. To some thla abetoh
may appear to be fanciful but it is entirely consistent with well known geological knowledge, that volcanoes are fed with flowing lava from below and the mass from which such lava is derived, when cold and solidified, ultimately appears on the surface or below it, within human reach, by exosion of the pre-existing surface. Ne do not propose here to dilate on the ocourrences of gold in nature but it frequently occurs in rook formations and this SULTAN MINE is such a case. Cripple Creet has no epecial vein formation, but the phonolite dykes carry rioh gold valuea in combination with fellurium. The formations of andegite there are rich in gold at times. On the Ortiz Grant in New Mexloo is a formation of porphyry six hundred feet in thickness, gold bearing, and with which we were personally connected years ago. Below that dyke are great placer deposits once operated by the Spaniards, above it, even in the same galch, no gold whatever. Not very long ago we were examining a eimilar occurrence in the Santa Cruz country of Arizona, in which the gold was concentrated in minute cracks, and oome larger ones, in the formation of rhyolite, filled with kaolinised decomposed rock matter: - the rock 1 tself is either entirely barren or too low grade to work. We also a couple of yeare ago investigated profeselonally a great volcanic mountain and endorsed it as a very promising gold deposit, the best ore eeemingly a red endesite. We could cite other cases. Therefore we are of the opinion that it is quite likely, if not certain, that the SULTAN MINE main deposit will be found to be gold bearing "contact" lying between the porphyry intrasion and the granitic formation into which it was protruad by the immense forces of nature in the interior of mother eark.

## THE WOFIKINGS

These may be briefly described as levels run in from the surface, as in the case already mentioned, an adt
level; or subordinate drifts run out from upraises to the surface either from this adit or from workings aunk following the deposit down its flat-lying dip, from the eastern side of the hill. Then whenever good pay-ore was found it was stoped out, either overhead or "under-hand" style, in the latter case such stopes being used, mpre or less, as depositories for waste from other workings.

## TIMBERI NG

Even though the deposit, so far worted, 11 es 80 flat, the formation is so solid that very little imber was ever. needed and even now, perhaps twenty years after operations cessed, posts to be seen here and there, put in to hold up a possible weak spot, are there today sound as when put in. This is fortunate becasse it is desert country and mine imbers will have to be shipped in.

## PAST PRODUCTION

It is exceedingly difficult, if not impossible, to ascertain in any authoritative manner as to what this property produoed in the past and for the reason that prior to 1904 no Government records, in detall, were kept. We have investigated the County recorde and therefrom have the names of the officers of the Gold Link Mining Company, but not their addresses; we are etill in pursuit of information. We wrote to Director of the Mint at San Francisco but could get no information save that no bullion was ahipped there direct; it might have been sent through a bank, or possibly to some other mint than San Francisco. We slso asked Mr. Victor C. Heikes, Statistician of the Geological Survey, af Salt Lake City, for information and a copy of hia letter 18 attached. In 1 t he says no recorde were kept prior to 1904; and this property ceased production 1n 1906. But he says that some $\$ 80,000.00$ was produced from 10,000 tons of tallings whioh were cyanided. At thls rate if cyanide saved ALL there was in those tallinge, they must have ran Eight dollars per ton. But all the valuep was surely not saved and the mill tallinge
after alamgamation by stamp-mill process, must have run higher than olght dollars. Now it is not often that amalgamation that way will save over sixty per cent. of the grose value in mill feed; - now calculating on this basis, the ore lilled may have averaged twenty dollars (\$20.00) per ton; twelve dollars belag saved and eight going into tailings afterwards re-treated by the cyanide process.

## FORMER EGUTPMENT

From a stady of the great concrete foundations and retalning walls, fresh as though constructed a year ago, and the anchor bolts left there, it was a very fine plant erected "without regard to cost." It seems that twenty stamps pounded away on the ore and amalgamation followed but no reoord can now, so far, be found in Prescott, of the bullion produced. As ahown above, at a saving of sixty per cent. of the grose, or twelve dollars per ton, it may bave amounted to Two Hundred Thougand Dollara gross $(\$ 200,000.00), \$ 120,000.00$ from amalgamation, and $\$ 80,000.00$ from cyanidation. As in a computation of this Eind one must not be too exacting on the person making $1 t$, and it can only be taken as an indication of the possible past production. If we are correct in our view, that the main source of future ore-supply has been untouched, only perhaps discovered, we feel that no one cam hastily accuse us of being visionary when we thus indicate the immense possibilities existing in this old property. No guch an elaborate plant would every have been installed there. had there been a lack of ground for it, and if ten thousand tons of tallings yielded such a sum as EIghty Thousand Dollars, it surely mast warrant our views as to future brilliant possibilities.

## PAST ERRORS

It is well known that it is easy to 800 where mistakes have been made, even in ceses where careful thought has been taken in advance of any operation, whether of mine or business
concern handing merchandise. But it is difficult to see why the operators of this mine went to the expense of building a road and maintalning it, no small matter in a country subject every year to torrential rains during the summer, or rainy season, ingtead of building their milling plant close down to the river and sending the ore to it over a gravity wire iramway, eliminating a heavy haul on all supplies and material entering into the plant: the initial cost of animals and all teaming means, wagons, harness, constant repalr work, sad shoeing, when a tramway world not have cost more to install perhaps. Then the 1dea of pumping water up to the mill all the tlme, in great volume and at heavy expense. It is really auggestive of the leas that money was more plentiful than brain power. In mining and milling "a dollar saved is a dollar made" and far better to spend money to attain low per-ton costs than to save at the gtart and pay for such false economy all the time and at a high rate. It is quite probable that within the bounds of ground already opened up there exiata a great tonnage of ore of a grade to gleld a profit today, with improved methods of ore-winning, transportation and of milling. Detalls of such arrangement w111 better be gone into later.

## CONC IUS ION

We were asled by Mr. Nelson to advise as to the possibility of re-opening this property resulting, in our judgment, satisfactorily to those who might undertake it. We certainly bed Ileve that the prospects of 1 ts 80 proving areliret olass. It has manleatiy been a heavy producer in the past, although only a mall nronorston ex the growxic atvoloped wee atopedg and we have no certain knowledge as yet as to whother there are, or are not, other deposits of similar nature below the one so far worked: this is a matter of first importance but can only be dotermined by further investigation. In a northerly direction ap
(Sultan Mine 9)
the gulch on the eestern side of the hill, were dumps of other workings, their aature should be investigated. If it proves correct that there is surely a contact deposit againat the porphyry, as hereinbefore euggested, or that there axe other more or less parallel deposits of similar nature, the resources of the property have been acarcely more than touched. If operations are re-commenced here, let us hope that it will be under more conservative management than seems to have been the case heretofore, more cold-blooded business and less hilarity.

We estimate that an expenditure of not more than
Five Thousand Dollars $(\$ 5,000.00)$ will demonstrate the possibilities of the ground and prove, or disporve, the geological theory of acontact deposit being the main source of ore as hereinbefore advanced. Thisestimate does not include any organization or prof motion expenses but applies solely to actual intelligently directed exploration mostly, if not all, of an underground nature.

Respectiully submitted by
(Signed) Herbert Strickland

Associate of Royal Sohool of Mines, London

Post-Graduate Royal Mining Academy of Frelberg. Saxony.

Registered Profeseional Engineer \#242

COPY
DEPARTNENT OF THE INTERIOR UNITED S'TATES GEOLOGICAL SURVEY

Division of Mineral Resources 512 U. S. Poet Office Eldg.


Mr. Herbert Starickland, 507 S.Marina Street, Prescott, Arizona.

My dear Mr. Starickland:
In reply to your letter of October $15 t h$, requesting information regarding production of gold bullion from the Sultan Mine, Eureka Mining District, Yavapai County, our re-



Yavapai County MILS Index \#24
AKA: Sultan; Alec Lucy's
BLM mining district sheet 332
Sultan Mine Group (file)
Thorn Peak 7.5' Top (included in file)
Pocohontas Mine (file)
Turnbeaugh Mine (file)

NJN WR 8/3/84: Jim Weatherby (c) brought in sample descriptions and assay results of sampling done $7 / 27 / 84$ on the Anarchist and Turnbeaugh Claims of the Alec Lucy Gold Claims (f) Yavapai County.

KAP WR 5/24/85: In the company of Harold Linder a visit was made to the Turnbaugh (Alec Lucys Gold Mine - file) Yavapai County. Dr. Linder felt the flat lying mineralized structure has characteristics of both the detachment surface type deposits and for the Congress type vein deposit. He further suggested a localized wash sediment geochemical survey to find or rule out additional sources of gold not already discovered on the property. Since my last visit to this property considerable road improvements have been made and a number of trenches and pits have been cut on the vein. The old road to the Turnbaugh has been repaired which required considerable work and the portal of the old workings can now again be reached by vehicle. The portal has continued to cave and is extremely dangerous.

KAP WR 2/26/88: Géne Disselbret (card) reported he plans to do some sampling on the Norma Claims (file) and the Alec Lucy Gold Claims (file) Yavapai County.

Sample, M: 34 Jim weaitarbi o. $7 / 27 / 34$
at anarbli,t and juendetuon cams
72884-1 4 foot chip sample across working face of $35^{\prime}$ turace, $60^{\prime} \mathrm{NW}$ of eard of rodd coustructed by JB, Nead of Aadrchist $\# 4 \quad .105 \mathrm{Au} .695 \mathrm{Ag}$

72884-2 Grab sample fnom ore pile of portal of 72884-1, 213 Au .477 Ag

72884-3 Chawael sample across $45^{\prime \prime}$, cut ctright cagle to dip of vein, in prospeot pit immediately west, at ead of rood coustructed by JB. . 034 Au .206 Ag

72884-4 Chip sample tallew across tumael back, $30^{\prime}$ ia from portal of 170'tuwael. Brecciated moterial cemeated by a soady substace. Nead of Aaorchist \#4.004A-.04 A

72884-5 Large breccia fragmewts from 72884-4 minus ceneartiong moteriol. Niltato. Ag

72884-6 Chip sample across 15 "of fractured * itow-staiwed quartz. Hoagiag wall side of Tunabeaugh veia. Takew betweew the portals at $125^{\prime}$ iacliae shaft. This quantz hos aumerous covities from weathered sulfides. Tura beaugh patewted claim. . 696 Au 1.03 Ag

72884-7 Chip somple across 48" of veny soft materid in ceater portion of Turwbeaugh vein. Takew below $+6^{\prime}$ to the right of $72884-6$ This portion of the veiw appears to canay little or wo silica $d$ is heazily stained with linowite. .017 Au. 37 Ay

72884-8 Chip sample dross 49"of highly fooctured quart2 from footwall portion of Jurabeaugh veiw, imanediately below 72884-8 This portion of the veio may extewd down forther, but was covered up with coved material from above. . 023 Au .43 Ag

72884-9, Rawdom grob somple fnom damp ot $125^{\prime}$ iacliwe o Turwbedugh potented cloim .007 Au .12 Ag
22884-10 Chip sample across. 50" of Tarabeangh veiw ia tuawel west of $125^{\prime}$ iacliwe. Takew at iatersection of tuawel t drift ruawiog at right aagles.cbout $30^{\prime}$ ia from portal. .416 Au 1.60 Ag

Silver Systems Inc.
2114 W. DESERT COVE PHOENIX, ARIZONA 85029 602-861-2138


Address
City $\qquad$ State $\qquad$ Zip $\qquad$
ASSA
MELT
BOTH
OTHER
Type of Material:
Assay For:
$A \otimes$
Pt
Pd
Other___
Date Due: $\qquad$ Date Complete: $\qquad$


I hereby certify that I have the authorization to release the materials listed above for assay and/or melting. I further certify that I hold true and lawful title to all materials listed above and have met all state and federal requirements concerning these.

RELEASED BY: $\qquad$
RECEIVED BY:

Silver Systems lac.
2114 W. DESERT COVE PHOENIX, ARIZONA 85029 602-861-2138


Type of Material:
Assay For:
(AD)
(45)

Pt
Pd
Other $\qquad$
Date Due: $\qquad$ Date Complete: $\qquad$


I hereby certify that I have the authorization to release the materials listed above for ass and/or melting. I further certify that I hold true and lawful title to all materials listed abol and have met all state and federal requirements concerning these.

RELEASED BY: $\qquad$
RECEIVED BY:

KP/WR 1/20/80 - The Turnbaugh is located at the end of a now impassible 4-wheel drive road. The remains of the road makes a good pack trail. There has been no activity at the mine since the last visit in the Spring 1979. A newly built sluice box was hidden behind some timber posts just in from the portal. A $1^{\prime \prime} \times 2^{\prime \prime}$ stake similar to a few others scattered around the region was driven in the ground near the portal. Although not identified nor of sufficient height, it may be someone's idea of a claim post. BLM and Yavapai Co. records show the Turnbaugh as patented.

KAP WR 4/29/83: Maynard F. Ayler, 1315 Normanday, Golden, Colorado 80401, reported he has optioned the Gold Standard, Silver Belt and Lucy Group of three patented claims from Pat Sayre, P.0. Box 33, Skull Valley, Arizona 86338. Mr. Ayler exhibited samples and has plans to do more sampling. The property is located primarily in Sec. 3, T12N R9W. As the properties are being pursued as a distinct group a separate file should be created. Previous information has been included in a "catch-a11" file known as Alec Lucy's Gold Claims. The Gold Standard, Silver Belt and Lucy Patents are M.S. 1637, - Eureka District, Yavapai County. An earlier mineral survey M.S. 1574 had the same three claims mislocated.

KAP WR 4/29/83: Maynard F. Ayler, Golden Colorado reported he has taken some preliminary samples at the Gold Standard Mine, Eureka District, Yavapai County. Preliminary samples are reported to be favorabie ( 0.01 to i. 6 tr. oz Au/ton) with an average of 0.2 tr/oz/ton. Widths vary from a few inches to about 5 feet. He plans some metallurgical testing, geologic mapping and maybe some drilling. He feels the vein (s?) may not be the same as the Norma-Turnbaugh Ledge vein. He further feels that low angle thrust faulting, high angle cross faults and tertiary volcanics may all have played a part in the mineralization.

KAP WR 9/30/83: Mr. Ayler reported he has blocked out about 5,000 tons of gold ore in a vein-like deposit $3 \frac{1}{2}$ feet in width assaying a minimum of 0.2 tr . oz Au/ton at the Gold Standard Mine, Eureka District, Yavapai County. He explained a gravity processing test yielded less than $50 \%$ recovery. A cyanide test is currently being conducted at the Colorado School of Mines research center. His best sample so far is 0.41 Tr . oz Au/ton across a 5 foot width.


OTHER MINE OWNERS

$$
200-16-3 \text { PARA } 3
$$

POCAHONTAS ELAN IA 38
ERNEST F KOSHINZ
5144 N dOTh $P L$
SCOTTSDALE, ARIZ 85253

200-16-4 PAR \#4
GOODCN LE \# 39

FeLix Fischer
3724 EUCLIDAUE
SAN DIEGO, CALI 92105
200-16-3 PAR 5
River bend \#40
GOLDEN EAGLE +41
Ray Daniel olmsteato Jr.
1601 DOve ST SUIT 138
New PORT BeACh, CALIF 92660
200-16-6 PARH 6
GOLD STANDARD $\# 43$
SILVER BELT $\quad 42$
Lucy \# 44

PAT E, SAYRE $\qquad$
PO. BOX 33
SKULL VAllEY, ARIZ 86338
200-16-7 PAR \#7.7A
WATERS \# 45
Sunset \#46
WATERS $\# 47$
DRUID JONES
509 ACequrl MADRE
SANTA Fe, NeW Mexico 87501

1601 SANOHILI RD. 36 LAS VEGAS. NEV. 89104 (702) 457.2175

WICXENBURG. AZ. 89398
(602) 684.2767 June 7, 1081.
RECONNAISSANCE GEOLOGY INIESTIGATION OF THE TURNBEAUGH MINING CIAIM (Patented), EUREKA MINING DISTRICT, YAVAEAI CCTNTY,ARIZONA, ON MAY $21,1981$.

On May 21,1081 , the undersigned, accompanied by (and assisted by) Mr. Kennith A Phillios, and Mr. Richard Beard, Fiold Engineers, Arizona Denartment of Mineral Resources, Phoenix, Ariz., examined and sampled the Turnbeaugh mining claim (patented), as described above. More soecifically, it is in Sections 2 and 11 , T-12-N,R-9-W, SR B\$M. To get there, one should tace US Hwy 93 to the bridge over the Santa Maria River, 40 miles NE of Nickenburg, Arizona. Then turn Right (East), and generally follow the river about $2 \frac{1}{2}$ miles to the old mine on the property. (See Exnibit $A$, attached).

The undersigned was authorized to make this goologic investigation by Mr. Lawrence A. Bark, jr, 2241 Thorley Pace, Palos Verdes Estates, CA, 90274. Mr. Bark is owner of one-half interest in the Turnbeaugh property.

The Enaineers from the Derartment of Mineral hesources have been examining the many old mines in the Eureka Mining Jistrict, for future mining notentialities. The Turnbeaugh rronerty was only examined on the surface, as it was impractical (if not impossible) to go underground, as the old shaft collars were badly caved in. All of the old mining headrrames, buildings, t'nks, machinery, etc., were removed years ago. The last ournorted operations nere in io3 38 ? The last oortion of the road to the nrooerty is now imnassable for motor vehicles.
GECLOGY.
The Arizona Geologic Map (U. of A.-Az. Eur. O" Mines, 1; 69) shows the general area of the Turnbeaurh claim to b: PreCamoriare granitic intrusive rocks. However, a recent study $Y$ Ariz. jeol. Society - Western Arizona - VoI XII, dated May 1980, gives detailed and up to date information with K.-Ar. Geochronolog.: Petrology, fistorical Geology, and discuses the Larimide alter tions, in which the writer concurs. Thusly, the basic rocks at the ournbeaurh are Flutonic of the Yavapai series, and are arimarily FreCambrian quarcz Monsonites, with some Granodirites, and fuartz Biotites, all afe dated at aoproximately 1.6 Billion years. The Hual nai mountains to the NW are granitics of 1.3 billion years in age 'Rb.-Sr. tests on the biotítes therein).

The so called "Turnbeaugh ledze", wich ooes Thru the Tumbeaugh mine, and other adjoining mines in the orea, should be called the Tumbeaugh vein. (All of the old correspondence calls it a ledze, This contains the... gold bearing ore that was mi"ed in the nast. It is mostly a silicious (vartz) vein that also carries foldspars and some iron (Hematites and Limonites), and in olaces, mica. This vein, is more than a mile in lenoth, as can be verisied from outsror oncurances in many localisies. Also coexistent vith tnis quarta ormation is a naraliè vein of rylonitic chyllite raterial containing Au.

The Tumbeaurn vein vas Comed durinz tre Laranide onorony,
ahout 70 million years ago, which include $u$ uplifts, volcanics, compressive deformation, faulting, and plutonic emanations. It is orobable that a fault line occured in the ancient granitics, where the Turnbeaugh vein is now present, and winch later became filled and mineralized from emanations from the denths (from gases and solutions of a super-heated highly silicious content (includes the Au). This fault line was originally vertical, and is now tifted to almost horizontal with a few more million years. The Turnheaugh Enclined shaft No.l collar area shows the vein strikes North-South with a dip 38 deg. to the East.

In the adjoining region are also found thin Ancesite and Rhyolite flows (extrusives)(Iook Itke ole lava beds)They areofrom the Mid-Tertiary orogony in the Oligocene and Miocene ( 25 to 30 Million years ago. This was a magmatic and Tectonic transition period,also. In the Eureka Mining District, there can be noted a reriod of extreme surface erosion, which included tilting and metamorphism. This was during the Eocene.
DISCUSSION.
In corder to determine the "Status Quo" of the Turnbeauzh pronerty, it is necessary to examine and study old records on the mining onerations of the nast, as well as to make the surface investiration. Some of the records were presented to the writer b; the o:mer, Mr. Bark. Others were in the old files of the Dedartmont of Mineral Resources. This information is not comolete, as there are certain "gaps" in the redords. Comoletely missing are production records. Also, current exploration activities on ad,ioining claims are taken into consideration by the undersigned.

The Tumbeaugh mine was found in 1895 by Turnbeaugh and Eeckman, who sold it to other individuals in 1898. Thru-out the years a series of owners are on the records. In the early days, an inclined shaft bad a denth of 125 feet. The surface is renorted as "lean", but at a depth of about 70 feet, there was a good orebody. The Eocahontus, Goodenuff, and other claims, were taken out on the"mumbeaugh lecige" to the North, a short time later. To the South, in those early days, were five (5) Anarchist claims, on the same rold bearing iein. The Turnbeaugh claim was patented in 290.

The Turnbaugh pronerty, as mentioned previously, is located on the Santa Maria river (which has a tiny flow most of the year). The river is at the bottom of a steen, rueged, mountrinous canyon. The mentioned inclined shafts and dumps are on the E-st side of the canyon; about 200 feet up from the river bottom. As one looks to the North, four (4) large dumps (or tailing niles) can be seen on the Pocahontus oronerty.

At this noint, I ould like to emphasize a ver: serious pooblem. It is impossible now to drive any kind of a vehicle to the Turnbeaugh property, even a 4 wheel drive vehicle. Akout the last half mile lown the mountainside, is now only a very steep rac! trail. At blaces the road passes over the side of rugged, cliff like rock formations, that are now imnassable. Engineer Philliss walket down this now impassable radi in 1979. He found a newly constructer sluice box at the mine, hidden benind one of the cortals. Also there were some "ill advised" new claim bosts scattered around.

Sometime in 1938, a Company calling itself the "Santa Maria Mining Cory", made a man of what they called the underground $\because o r k-$ ings of the Turnbeaurh mine. (See Exhibit C) This shows three (3) inclined shafts with a maximum denth in excess of 250 feet. Cre values are not indicated. but the map show "nined out " area and

## SAMPIING.

Samnles taken on May 21, 1981, by the writer, and Dest. of Minoral Resources Engineers, are as follows. These were chip channel cuts (See Exhibit F):


These sam•les make a relatively poor showing. Somehrw, we did not fird the 15 inch wide ore material reported by Mr.Lucy. However, the samnles were too limited to prove, or disprove, he values of others in the past. The values found in the phyllonite were a s:1rorise to the undersigned. This could also be called a phyllitic mrionite. The above silver values are also very pcor,but expected.

## CONCLUSIONS.

1. Reouilding the road to the Turnbeaugh prorert: is an immediate and serious problem. To re-open the mine, or to do necessary additional exploration work, will require a suitable access. The writer is no construction ensineer, but has the opinion that it will cost at least $\$ 25,000.00$ to make the road suitable for truck travel.
2. To the South of the Tumbeaugh pronerty are a series of claims now called "Norma". Apparently the old Anarchist claims are no'v part of the Norma group. Recent drilling orerations have been accomplished on this property.
3. The Turnbeaugh property merits further exploration and sambling. After the road is re-ouilt, several old time, and comnetant miners, should be hired to clean out the portals and collars, and to carefully examine and sam"le the old inderground mining vorks. It is possible that there :ave been some underground cave ins. They should also re-map the mine. Following this, and if suported by sampling and assays from underground, drilling should be accomplished to outline ore reserves and vilues. All of this, of course, will require capital investment.
4. In the opinion of the undersigned, this mininz property has value, especiaily if gold prices continue to spiral, as tiney have done in the past recent years.

MELVIN K. JONES
Minine Goologist.
remainine ore nillars. It also shows remaining ore codies. The trouble with this map is that it shows the shafts heading to the West, which couldn't be correct. The remains of the old shafts, as seen by the writer, go down in an Easterly direction. Ferhaps, all that is wrong with this map is that the draftsmen put the North direction on incorrectly ? Then again, the writer saw only tiwo(2) shafts on his visit. Perhans there is another nearby shaft now covered by debris or talus ?

Now, to $\%$ into the matter of reported ore values on the Turnbeaugh property from old reports. These values vere put in writing in 1926 and/or 1927. It is weil to recollect that the value of gold in those days was $\$ 20.67$ an oz. If the old timers were able to mine the Turnbeaugh in those days, and make a profit, it is something to think about? Everyone is aware that in these recent times gold has been in the $\$ 500.00$ an oz. range (or hisher). As of the date of this report, it is down to $\$ 450.00$.

In one old unsigned letter, dated July ?, 1927 (Exhibit D) there is a descriotion of the "Turnbeaugh Ledge", where it states 'he hest rold showings are on the North side of the Jurnbeaurh claim. In another letter entitled "Turnbeaugh Ledge", undated (but assumed to be in 1926-27), sioned by Mr. Alec Iucy, he gives the values' at various depths (at the $\$ 20.67$ orice). It appears that Mr. Lucy omed or controled the Turnbeaugh promerty (olus other adjoining claims, at the time. He states:
(1) On the surface, the ore is 7 feet vide and low grade, but 15 inches on the hanring wall runs $\$ 96.00$. This would be $4.640 z$. of tu ner ton. The undersignedscomments on this, (assuming it to be true assay) would be that the Lucy value would have to he converted into a mining width (about 5 feet), and this :ould bring the value down to a little less than 1.0 oz . of Au per ton. T:is of course, would be excellent ore.
(2) At 70 feet (down the shaft) the ore is 6 feet wide and runs .44 oz . of $\mathrm{Au} \mathrm{p} / \mathrm{t}$.
(3) Bejow 70 feet (down the inclined snaft) the ore body continlues to be 6 feet wide, and is valued at . 33 oz . Au $\mathrm{r} / \mathrm{t}$.
(14) At the bottom of the shaft ( 125 feet ?) the ore is ? feet vide and runs .07 oz . Au $\mathrm{p} / \mathrm{t}$.
(5) To the North of the shaft is a pit, near the surface, s'owing a 4 feet width of zold ore running l. 2 oz . Au $r / t$.
(6) Further North on the surface (from the shaft) the ore is 5 feet wide and runs . 62 oz. Au n.t.
(7) Beyond the above samning (to the Jorth), the bein is covered vith talus.

Another old drawing of the Turnbeauzh Au vein, apoarently shows some surface samoling values. This was in the old files of the Dent. of Mineral Resources (Az). These values hrie zlso been changed to $A u$ ounces and claced on the map, by the undersigned. (Based on the old $\$ 20.57$ rate). (See Exhibit E). As the differen: indicated locations, they are:


## Hillstace, Arise, July 7,1957。

Dear rre meloharit:
Your letter of tho pirast just roceived, and I rill try to ansmor your questions.

Pinst you want tix bistory of the gold clains: The Tumbeauigh ledge mas Found about 34 yoarm ago and one of the finst ongineers to oxamine it was agen arotin, who wantod it for an nglish company, and it was thru him that I camp into tie camp. But 5 . ${ }^{\text {B }}$ Dougine of Chicago got control of it, and in a quarel mith one of the omers he lost half interest in the Turnboaugh claim and since that it has been'dog eat dogemeither one roula do anything the other manted. But now Dougherty is old and anciouss to sely, altio in you wonla approach him on the suluject I thinis he would try to run a bluff and demand a big price-m mobably about bisoon-tho he told me trice that he mould take the anomt he was out-mbout hat,000. But he and I are not on good terms, and I am not the right one to hanclie hime $J$.? ? ooore is his ?rescott agent, and I thinit might do the jobs

Whe other half was soza by Jourine to the Goid Ifink Mining Co, and later on, it and tie sultan rronp of sis patented claims, wore sold to the Big'Thick Lining Cog LoC. ${ }^{\circ}$ laynes of Los Hycles was president of the company. He died about a year past, and his wife is administrator of the estate. She holus the ground at bs, DOO, but I think she is bluffinc, as some tinc post maynes offered if for $500-m$ and the purchaser pay the back taxes which amounted to about $\}, 000$. It seems nov as if the tarses had been paid and the price raisda.

The Bultan had one oreshoot about 400 feet lonc and $\mathbf{3} 1 / 2$ Boet wide that averaged hos.00. Sam Allerton of Chicago omed the ground. Harry fia Nontagnc mas superintendent. It paid no disidends; and in the end he sold it to the Big'sticin Co.

If you mill look at the map jou will see a break in the ledge caused jy a diorite dyke cutting it. The lodge on the west side of the dyle nent dom 100 reet. The lodge goes on the same in size and charactor belon the dyise as abowe. I ax drivince a tunnel In on the 3 edwe and expect to stivine the first ore shoot withen 100 foet, and the ore shoot dug out at about son feet. inis is simply an estimate made fron simeace indications.

This second ore shoot was overloozed by the gola inis Coos (the nome the fult n ront by) int it looles as bix add inith grade as tho one dug out.

The strong point wic: I Tant to emphasiae is: we lenove that bhe ore shoot mont above tie fantit, and we lenov there is no reason to dount that it will 700 the same when fown bolow it, and there are no Purtior fant ta showhe on the surface, so it looiss lile clear aailing to sinis on the ore as scon as it is sufficintly oxplored, and jewe is where I want one mill built, as there is enouga ore here and on my romal adjoining it on the Forst, to man a rill (5o ton)

openct up and there will be no further ore shortage.
On the Mamoth gronis-located by ne in Februars 1399-there ie one ore sloot 175 foet Iong $31 / 2$ feet wide that muns b25.00. I lost this ore, but it can be fond again by a little hand worin.

On the rimbeaugi Lodge the beat shouring is near the north end of the 'immbeaugh clanm. I thank tivero is onough ore in sight here to start a wil. On tise suriace showing is about 500 feet in Length, and the inclined shart shows good ore for 100 fect. Below this the ledge romains fieet ride, but is low grade. By using rhat ore isin sight nere and drowing on the No. 2 shaft on the Anorchist, there vould be no trouble keeping a 100 ton mill muning. On these claims the shoft is dom 300 feet and there is a drift 250 feet on the rootwall ore body. On the supface this ore body is 500 seet long mhere is a cro $a$ cut from the bottom of the shaft to the hanging pat wall ore body. Were the lage is six feet wide-but low grade. By spa opening this ore body-mwich shows for about 1000 feet-mso you can count on neariy 75,000 tons of ore.

This shaft has a 25 fong hoist in good shape, but I mould prefermoving this iolst to the fumbeargla and putting in one big onough to hoist the mack and rm two drills.

On the zocanontus there is a fairiy contimous ore body wifeh is two reet wide on the hanging wall and a swell 15 feet rilue on the footwall that muns 3.00 .

On the Goodenurf there is one dump of 120 tons averaging $\% 40.0$ on and a gool deal of ore in sight, but the ore forms in bitg lenges and there has been no systematic mork done to derelope them.

The Gold standard iroup of 7 matented claims lie north west of the Goodenuri and are mostly on the north side of the rifer. The first ciaim is the River Bend wich shows a big lense of ore that will run th.00 or ha.00. Follo:ing this is a jarren zonemor perlaps it would be more axact to call it unemplored. When you strite the Gold Standard proper. There are thece tumels on it. One about of fy another soo and one 50 , which has an upraise and some crosscuts, and a 40 封, inze。

The corpany jauled 2,000 tons to the Jaters mill-wis milesand it milled 14.00 . There is considerable ore in sight, but I coula not maise any estimata, tho on the lowest level some of the crosscuts shoy high gradcore.

Johing tice fold stadard on the northwest there are four more clains which trere formeriy held by Ton donherry. Ie is now dead and I an not sure irio holds them.

If I were buying I mould leave out the Gold Standard group,because it will be high riced and it would require separate camp, and is not as rood prope.ty as the south end. Toris done on the south ond rill venorit tie Goid Stundard but not to any graat extent, as it Hill call for a tro mile road from the other clains to connect them.
is to the cost or the milis, I must rafor you to Frod. He is Jest postot? But it will cost $\mathrm{G}_{5}, 000$ to put a good roal into either
camp. The rood from Hillside to the mutan group will be 13 miles, ard Trom Congress Junction to the mmaneang is 30 miles-mint over a level comery, The niver mill fumish water for miling and might Tumine a lituted sumby of power for stis months of the year.

The minin: timbos 7ould have to be hauler in, but as the Frome st dis Tory weli, little vorla be needod.

The ore anli an ahout 40,2 of it's valus. The rest cyanides rondily.

The thombedss are distance sron railroad and the cost of putting rood in condition Por use. This would be overcome by the use of tivucte.

To give you an idea of the prices of the different claims, I wili gire you to prices pald.

The first sond was the fold 3tandam-m-men,000
Ghen the GuFtan - - 425
Dougine deroloped the sultan for tro years. Sa⿺ illerton Pumished the noney und allowed ougine $1 / 3$ for is trouble. Then de paid क 45,000 for the $1 / 3$ interest and ${ }^{3} 5,000$ for the Jyandotte Giri, an mjotming ciaine gougine paid bo, 000 for half of the
 bought the otier haif for i, 4,000 . Bougine tendered him 310,000 for it and he refused. Thas is what caused the hard peolings and
 Illinois, for $\$ 30,000$ aixl the company spent 960,000 and split ing, so I got it back.

The Tannoth clains I onded once Por 1 , 000 when first found. Then for $\$ 40,000$ and rebonded them for 660,000 , but Por the past rifteen years, I have not been able to do anything*om-only iold my titiegand sometines that was hard to do:

Now as to the nev iind near the Rudinins clains, I Has over of
the pomd once witi jee. Fe had mate a dozen cuts along it fer half
a mile, and as near as I oould tell, it lay along your south end Eas lines. I thot it crossed the Boomerang, and perhaps missed the nightBe, but hadlins was peeling so weak, we could not locato the ends accuratoly. Lifter crossing your lines it continued Fest for about 2,600 Pect crossing sone othe Mround held by Angie, see and others, zater on see toll me tiat it scomed to comect with the Nullholland lead clains, mich hay a mile mest. Any way I would cali it a good surface shoving- I an sending you a samie or what I call the pay ore The sample assayed included dverythinio-goed and poor.

The ting has daveloped a million and a hilf dollars morth on ore that rums whout sof and it looks as in the company was about to suy tic pinnafore groun and phobably the Corboy clajms. They are also about to build a wili, That morries them is lack of water. The Ting shaft is hom soo foot wat is ncarzy try, whio the Comoy makes 10 inches.

I Till send jour lettor to Fred.
Eeaving out my elaims and the fold standare group, the total mico mould e aiout he0,000.

to Iinish developenent.
The income would be: : Sultan Claims-mintons per day of $\$ 15.00$ ore- $-1 / 2$ profit Turnbeaugh "-100" 8.00 䉪.00

These figutes will allow a margin for c arrying on developenent work.
 also if the report was satisiactory?

Fill send a copy of tiaws letter to Fred and have him send his comments on it to you.

## THE TURNBEAUGH LEDGE

The Turnbeaugh mine was found in 1805 by Turnbeaugh and Beckman, who sold it; one half to J. T. Dougine and the other half to John W. Daugherty in 1898.

The Pocahontus, Goodenuff, and other claims were found shortly after.
The principal work on the Turnbeaugh was a shaft 125 feet sunk at an $30 \%$ pitch. This shaft did not start on the ore but about 15 below it and run on a smaller pitch, catching the ore body at 70 feet.

On the surface the ore was 7 feet wide and low grade with 15 inches on the hanging wall that runs about $\$ 96$. At 70 feet the ore is 6 feet wide and runs $\$ 9.20$, below this point it continues to be about 6 feet wide and runs about $\$ 7$ to near the bottom where it is 7 feet wide and runs about $\$ 7$ to near the bottom where it is 7 feet wide and runs $\$ 7.50$, north of this shaft there is an open cut showing 4 feet of $\$ 25$ rock, and further north 5 feet of $\$ 13$ ore, beyond this it is covered by wash from the mountain.

Joining the Turnbeaugh on the north lies the fraction 400 feet long, the lowest point on the ledge and the place the tunnel should be driven from.

The next claim is the Pocahontus, which shows a fairly regular ore sheet along the hanging wahl but this sheet is not opened up and it is hard to tell much about it. Near the north end there is a shoot about 200 feet long that runs from 4 to 10 feet in width and will assay about $\$ 6$. Below this shoot and near the footwall there is a blow out 35 feet wide said to run $\$ 5$.

The next claim is the Goodenuff which has a lot of mismanaged work and shows one shoot where there is 75 tons piled out that runs $\$ 25$, then some low grade material and a face 13 feet of $\$ 12$ ore.

The Gold Standard joins this on the north west and consists of 7 patented claims not all on the ledge. The principal work here is a tunnel 400 feet long. Most of the ore above this is stoped out and averaged \$14. Below this is another tunnel 400 feet long, not driven on the ore but on the gouge below it. There are several crosscuts driven to the ore, some show good ore and the others medium.

West of this lies the Kruso and Brown claims, 5 in length along the ledge but not so well opened up but there is at least one shoot from 1000 to 1500 feet long that shows about 3 feet of $\$ 6$ ore.

Joining the Turnbeaugh on the south lies the 5 anarchist claims with one shaft 450 feet deep and another 500 , showing a large quantity of about $\$ 7$ ore.

There is water in the river at all seasons and as the ground stands well it will not need much timber.

The ore cyanides well but don't plate much.
；
The Tumbeang lodge，called after the discoveror，is formed by an andeite dyke cutting the country rock in a northmestoryy di－ rection．The ore comes sometimes alon马hanging vall，and some－ times thore will be a parallel shoot along the foot wall，or lying below the haneins wall ore body．these ore shoots are low rrade
 A50 Rot deop there is no onrionent exeent at the hotton where it is suid to rim on ．Wis is 16 feetwide．At the next work
 to ho，hat faded out and did not come in a sain．The noxt ore shoot is arout $\Omega 1 / \Omega r$ ot wide me rums 13.00 －This is on tho hanging wall wile on the foot wall thore is 2 reet ruming 解．Whis shart lost tho ore and continued down th the 500 root level rollowing the crushed pranite．On the son root level thore is a drift following the root wall ore noo rect showing above $\mathcal{N}$ rect or aon ore．$A$ crosscut lor poct ent；the lanmine wall ore which is six fect wide
 and is exposed by a numer of open cuts．Following thas there is a harren soot fyod foot lons．The next shoot lies on the foot wall and is irregular and some of it runs as hig！as $\$ 300$ ． 00 ，but the main ore body lies further north，and on the hangins wall this ore
 inches of 6175.00 rock，and below this there is 5 feet of 6.00 ore and still lower two feet that rens hio．oo．An incline shaft on this starts below tle ore and cuts it at ry Peet．Here the ore is $31 /$ ： Cot wide and mus on ．Lowere down the ledge loosed walue，the botton troo foct runine fre on，and at tho botton of the shart ther is 7 Seet muming i． tino for boo root when it sudhonly crops ont showing a root or so one。

There is arairly continues ore shoot along the hancing wall thrount the praction 40 foet long，and the Pocahontis 150 fect， varryins Srom 3 to 9 rect in width and runs as hish as 10.00

The old fulton mine is situated on the Santa Maria river, and was developed by J.T. Dougine of Chicago about 25 years ago. The ore was formed in lenses along a dyke about 20 feet in width one lenses fading out and another one starting in either above or below it. The ore shoot was 400 feet long . The ore cut clean averaged $1 / 2$ feet in width and asayed $\$ 22.00$ - This ore was cut off by a diorite dyke at a depth of about 40 feet, and the mill was moved away.

There was another ore shoot overlooked by the company that looks as good as the one dug out, which would be cut off by the dyke at about 50D Pet. This is all the pay ore that $I$ know of on the 3 ult on ground.

The ore was cut off and faulted by a dyke about 40 feet in width and thrown down the mountain 400 feet where the ledge continues on again butwewarmater A tunnel driven 100 feet below this fault would cut the first ore shoot, and 500 feet would cut the one dug out.

The ledge below the fault is held by Alec Lucy, also the claims joining the group on the south

The fe are three claims along che dyke that is 35 feet wide and
 On the summit of the mountain there is one shoot 175 feet long that will average $31 / 2$ feet in width and runs $\$ 25.00$,but this become lowgrade and disappeared at 25 feet. One the som bs side of the mountain there is one time 130 feet showing this low grade ore, and on the south side another about 700 feet with one crosscut 150 feet, and another 65 Beet. This was intended to cut the ledge at a depth of 200 feet but failed to find it.

There is enough or on these two groups to supply a 20 ton mill, and theybwill pay for their own development.


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In the Goodenuff the hanging wall ore does not show, and the foot wall ore frons in lenses for fool? to 12 feet in width. There is one dump of 100 tons piled up that runs ob o.00. There is one tunnel mon Peat lowry on this ground, and two mines ?ut they don ot look Parorambe. They follow the ore mill it gives out and then discontinue. There is not enough continues work done to determine if these good ore shoots come hack again. The dee vest working is the 50 root shaft, and the foot wall ore" heing rood and continuthooks iavornile. The balance of the ledge focseren claims is patented and held at a him price by C.D. Clark of Los Angeles.

The country rock is cyanite and the Jed se bitches northeast at about $30^{\circ}$. The rocs stands well with timbering.

The prices on the claims will oo about\%
1

The marchist_---------------------205,000

merest in the hurnibeaugh

Bumister of mascot
Lucy's claims joining\% the sulton----क15,000
The Qoodenne is held By Sr. Bates of Mew York and 1 don't know





