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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TRUE BLUE MINE

YUMA COUNTY
Ellsworth Dist.

KAP WR 5/8/81 - Frank Largo reported that a cyanide heap leach operation has been planned for his Balif Mine, Ellsworth Dist., Yuma Co. The operation is planned to recover gold and silver. He reported the property was originally the True Blue and also the Skido. They plan to leach dump material from some old dumps, the largest of which supposedly contains 6,000 tons of gold, assaying .4 tr. oz/ton. A group of dumps, including that one, are believed to total 12-15,000 tons. The initial operation will be with a 100 ton pilot pad.

RRB WR 8/21/81: Visited the True Blue Mine and the Ballif Mine in Sec. 9, T5N R14W. Apparently Mr. Paul M. Garlock has filed claims on or near these two properties.

KAP WR 6/7/85: In the company of Hal Linder, a visit was made to the Balif Mine (True Blue Mine - file). Durring the brief moment spent on this property it was noted that prospects had been developed on a number of quartz veins (stringers) in schist. The quartz veins contain some boxwork. Two cabins (bunkhouses) in good repair are on the property along with an old headframe, generator set and other prospect development equipment.

MG WR 2/28/86: Requested Phoenix office send file information on the True Blue mine (LaPaz Co). After receiving this information, I provided it to Mr. Art Delaney, P O Box 391, Salome, Az. 85348. He now controls this mine with one unpatented claim known as the Rainbow's End.

MARCH IN VICTORY 1 & 2

YUMA

Bill Slatten, Morristwon, expressed interest in the Laxton Au property about 4 miles NE of Vicksburg, saying Mel Jones, Wickenburg, had taken a sample from there that ran $1500/ton. GW WR 8/18/75

KAP WR 6/6/80: David Laxton, 626 Walnut, Prescott, Arizona 86301, reportedly owns the MARCH IN VICTORY MINE in Yuma County.

Note Date Out Of Sequence.

Visited the March Mine 5 miles east of Vicksburg and near the Yellow Bird mine. The Roaring Charlie Mining Co. of Pennsylvania is driving an exploratory adit here (now in 200'). One of the property owners, Sam Saxton, General Delivery, Salome, is directing the work. Ike Kusisto contracted for the first part of the work and a pair of contractors will continue it. TPL WR 3-17-62.

Bureau of Mines
U. S. Department of the Interior
Eight Paseo Redono
Tuscon, Arizona

Re: TRUE BLUE MINING COMPANY
Date: Present date
Location: Salome, Arizona
California Incorporation Date: October 18, 1878

Gentlemen:

It has been called to my attention that True Blue Mining Company forfeited its rights to transact business in California on or about December of 1905 for failure to pay taxes.

I am wondering if the corporation may have been reinstated or was transferred, or if you might have some record of its being transferred or merged into another company.

In checking with Mines Register 28th edition published in 1969 regarding the above, I find True Blue Mining Company active in Salome, Arizona. There was no mailing address of principle offices listed.

Will you kindly inform me regarding any records you may have indicating True Blue Mining Company and/or True Blue Mining and Development Company including names and addresses of transfer agents, names and addresses of officers and stockholders or at least where the register books are located containing this information? Include any Articles of Incorporation, By-laws or Amendments. I would appreciate the addresses of the principle offices and any other data you have available regarding the above corporation.

Also, please give me any pertinent information as whether True Blue Mining Company and/or True Blue Mining and Development Company is in good standing and if so, names of incorporators, original directors, names of statutory agent, date of incorporation and date corporation expired.

Thank you for your attention of this matter.

Very truly yours,

William Randoll, Jr.

William Randoll, Jr.
G.P.O. Box 4418
San Francisco, California 94101
December 29, 1971

ARIZONA CORPORATION COMMISSION
STATE CAPITOL ANNEX
PHOENIX

January 17, 1972

Dept. of Mineral Resources
Room 106, State Office Bldg.
415 W. Congress
Tucson, Arizona 85701

Att: G. W. Irvin.

RE True Blue Mining

Information requested of above Corporation

NAME "True Blue Mining & Development Company"

YEAR INCORPORATED February 8, 1909

PRINCIPAL PLACE OF BUSINESS Kingman, Arizona

STATUTORY AGENT H. H. Watkins, Kingman, Arizona

PRESIDENT George Litton. (no address)

ANNUAL REPORTS FILED No reports filed.

HOW TERMINATED Charter expired

PRESENT STATUS No longer in existence in the State of Arizona.

REMARKS Capitalization: $1,000,000.00 par value $1.00 each
(Affidavit of publication filed)

NOTE: Records on above corporation filed in Department of Library & Archives,
1700 W. Washington, Capitol Bldg.
Phoenix, Ariz.
Telephone No. 271-5101.

Very truly yours,

ARIZONA CORPORATION COMMISSION

Incorporating Division

F. = Copy

Mr. Richard V. Gaines
Heron Mining Company
Madrid 21
Mexico City 4, D. F.
Republic of Mexico

Subject: True Blue Mining Claims.

Dear Mr. Gaines:

In accordance with your instructions I have inspected the land records at the United States Bureau of Land Management, Phoenix, Arizona and at the Court House, Yuma, Arizona for information on the True Blue lode mining claims, near Vicksburg, Arizona.

As stated in a previous letter to you the Bureau of Land Management has no records on unpatented mining claims and has nothing on file concerning the True Blue group. Lands in the Vicksburg area are within either the public domain of the United States and are Arizona state lands and as such are subject to mining location or relocation.

Files in the office of the County Recorder at Yuma show that Garfield Gray located the True Blue No. 1 lode mining claim in 1916 and a total of sixteen True Blue mining claims were located by Gray in the period between 1916 and 1932. He also located the Golden Orbit lode mining claim in 1932. None of the claims are recorded as relocations of previously located mining claims and the descriptions, although meeting all legal requirements as to form, are in such general terms and lack ties to known points that it is impossible to determine their situs on the ground.

Parts of the True Blue group were leased by Gray to various individuals during the 30's and by 1940, five claims, the True Blue Nos. 13, 14, 15, and 16 and the Golden Orbit had been transferred to the Verdugo Mines, Inc. N. T. Zuver as President of the Verdugo Mines, Inc. apparrently had an active part in promoting the company. Verdugo Mines did very little underground work and has no record of any production. Garfield Gray made several shipments to smelters early inthe 30's, prospected his claims actively and discovered the telluride ores in 1931 and 1934. Nagyagite was identified by W. P. Crawford in 1931 and Tetradymite in 1934. Samples submitted to Dr. M. N. Short for microscopic examination confirmed the identity of these two minerals but failed to find Petzite, Hessite or Sylvanite reported by commercial assayers. Tellurium, reported in a drill sludge collected by W. P. Crawford in December, 1960, may be from one of Gray's discoveries or may be a new discovery.

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An affidavit for assessment work totaling $500 on the True Blue Nos. 13, 14, 15 and 16 and the Golden Orbit lode mining claims was filed August 30, 1960 by N. T. Zuver at the Yuma Court House. Assessment work was listed as road repairs and repairs on mine buildings. Zuver died in September, 1960 and no record of any assessment work has been filed since.

Records in the County Assessor's office atYuma show no tax filing or tax assessment on True Blue, Verdugo Mines, Inc. or N.T.Zuver. Unpatented mining claims are not taxed and the mining equipment and buildings were apparently of too low a value to place on the tax rolls.

The ground claimed by Verdugo Mines, Inc. and by Garfield Gray is apparently forfeited or abandoned and is open for relocation. However, the failure to make or record an affidavit of assessment work does not in itself constitute forfeiture or abandonment and a physical inspection of the ground will be required to ascertain whether work has been performed since December, 1960 and whether anyone is in possession of the ground. If it is found the ground is open it may be relocated in accordance with mining regulations which require posting location notices, marking boundaries and performing location work.

You mentioned the possibility of relocating the True Blue claims without inspecting the ground, by filing location notices identical with those of Gray's, except for the dates, using Gray's monuments and discovery work. As stated earlier, Gray's location notices were legal but very vague as to the actual location. The mining laws state that the relocation of a forfeited or abandoned claim shall be made in the same manner as other mining locations. Upon relocating the new locator may use the mineral discovery of the former locator and may adopt the monuments of the prior claim. However, he may not adopt a prior location or "discovery" shaft or cut, New location work must be done by the new owner.

I recommend that the True Blue ground be inspected for the prior discovery locations; for the boundary monuments and that the dumps and mine openings be inspected for mineralization: that new location notices be posted and the claim locations to be tied to a natural object or survey monument for identification. This feature is lacking on all of Gray's locations. Inspection, sampling and claim relocation should not require more than three to five days for the preliminary work. Arrangements can be made later to place the claim monuments and to perform the newlocation work. It will be advisable to relocate part or all of the ground held by Verdugo Mines, Inc. and at least part of the ground held by Garfield Gray.

If you wish me to inspect the True Blue ground at Vicksburg and to locate mining claims on tellurium mineralization I shall be free to do so within the next two weeks. I have work pending in California which will require about ten days. It has been too hot to do anything at Vicksburg but the temperatures are lowering and by the time I finish in California the True Blue area should be livable.

Please address a carbon copy of your answer to me at 319 Madrid, San Clemente, California, care J. M. McKean.

William P. Crawford, E. M.

1823 North 40th Street
Phoenix 8, Arizona
September 3, 1962

File Copy

440 North Scottsdale Road
Scottsdale, Arizona
February 7, 1961

Mr. E. L. Whipple
P.O.Box 12345
Phoenix 34, Arizona

Dear Mr. Whipple:

Part III of the report on the Vulcan, Klondyke and True Blue mines is enclosed.

Any additional information on tellurium at the True Blue will be forwarded you as quickly as it is available.

Very truly yours,

William P. Crawford

William P. Crawford

PART III TELLURIUM AT THE TRUE BLUE GROUP, VICKSBURG, YUMA COUNTY, ARIZONA

Tellurium minerals found at the True Blue group in 1931 and 1934 were identified by thewriter as Nagyagite and Tetradymite in samples sent to Bisbee by Garfield Gray, Vicksburg, Arizona. The tellurides occurred in a highly altend limestone and calcite associated with quartz and schist. Free gold in small specks and crystals was associatd with the tellurides usually in the gangue but one specimen had gold embedded in the telluride. Nagyagite occurred as small veinlets and masses in the limestone; Tetradymite as disseminated platy masses up to ¼ mm. across. Dr. M. N. Short, University of Arizona, confirmed the identity of the two tellurides but no description of the mineral occurrence has been published.

Garfield Gray and other Yuma County prospectors for a number of years during the 30's sent ore samples to Bisbee for free determinations. No high grade material was received during this period and only Gray's samples contained tellurium minerals. None of his samples assayed more than a few dollars per ton in gold and silver except for masses of Nagyagite. Gray claimed sylvanite, calaverite, petzite and hessite in his ore but these minerals were not present in samples sent the writer

Due to the exigency of the "Depression Years" the writer was unable to visit the True Blue while active prospecting was done. Gray was a frequent writer through1936, accompanying each sample

with a long letter. He mentioned inn letter dated July 22, 193¼ that he was prospecting the upper group of ten claims; that he had found some " nice looking tellurium ore " in the bottom a 40 foot shaft; that tellurides were present on all of the claims and that the lower group of five (?) claims was under bond and lease to some Californians. The letter was with a sample which contained the Totradymite and assayed as follows:

Gold	0.04	ounce per ton
Silver	3.2¼	ounce per ton
Copper	0.53%	
Bismuth	0.44%	
Tellurium	0.83%	
Antimony	Nil	

J.E.Steele - Analyst. Copper Queen Lab., Bisbee, Arizona

Gray described his claims as being in the Harcuvar Mountains, about ten miles from Salome. He also mentioned Cunningham Pass as a landmark. His letters and ore samples stopped in the late 30's and the True Blue was forgotten until 1960 when Mr. E. L. Whipple became interested in tellurium localities. After a lapse of years Gray's description was thoroughly confusing. After considerable searching the True Blue was found to be north of Vicksburg and an old prospector was found who knew something of the property. The claims are in Winchester Wash, 3½ miles north of Vicksburg, Arizona.

A brief inspection of the property at Gray's camp was made December 26, 1960 accompanied by Harry Crouse, an old prospector who holds several claims near theTrue Blue. The mine workings at the camp consist of a shallow incline shaft (about 50 feet deep) with water at thebottom and a small

footage of stoping. Stopes have broken to the surface at the shaft. About 330 feet south of the shaft a light drill tripod marks an inclined core hole. Crouse said the hole was between 25 and 30 feet deep and that thedrilling was done as assessment work. A sludge settler had cuttings and a grab sample assayed for tellurium by Mr. E. L. Whipple returned 0.41% tellurium. Grab samples from the shaft dump contained no tellurium.

Crouse said nothing had been done at the True Blue for a long time except for core drilling; that the claimswere held by Nelson T. Zuver who died in September, 1960. Zuver's name and address at 222½ Westlake, Los Angeles, California were on a notice of assessment work for 1960 - 1961. According to Crouse, Gray died several years ago ai part of his claims were open.

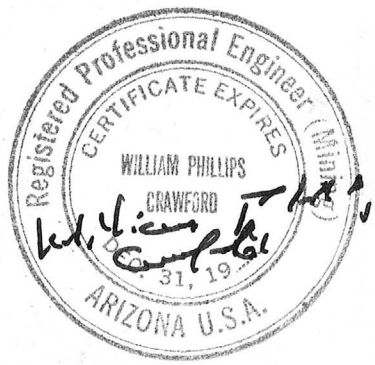
The claims are worth a more detailed investigation to ascertain where the tellurides occur. All claims in the area are unpatented and after the property is investigated location records in the Yuma Courthouse should be searched.

Total production from the Vicksburg - Winchester area is small and mining interest is at a low ebb. According to Crouse claims can be leased on a working basis.

William P. Crawford

William P. Crawford, E.M.

140 North Scottsdale Road
Scottsdale, Arizona
February 6, 1961



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Holt Copy

Mine ELLSWORTH KING Date June 14, 1943

District Ellsworth, Yuma Co., Arizona. Engineer Elgin R. Holt

Subject:

REPORT

OWNERS: Garfield Gray & Mrs. Amelia Gray, Vicksburg, Arizona.

METALS: Copper & silver; copper predominating.

AREA, LOCATION, ETC.:

This property consists of 6 unpatented mining claims known as ELLSWORTH KING Nos. 1, 2, 3, 4, 5 & 6. It is located 4.5 miles northeast of Vicksburg, a station on the Santa Fe Railroad, from which point it is reached by a fair desert road, which could be repaired and put in shape for trucking ore from mine to railroad by the expenditure of around $200.00.

EXAMINATION:

On May 29, 1943, I visited this mine in company with Mr. Gray, who informed me he had applied to RFC for a $10,000 development loan, which application was pending at that time. As the main 210-foot shaft was plugged up with waste material and ore at a depth of 25 feet, I told him, due to this fact, he would be unable to secure such a loan, and advised him to withdraw the development loan application and make an application for a $5,000 preliminary development loan with which to clean the shaft out and do a little sinking and drifting on ore, in the bottom of the said shaft. This he agreed to do. Consequently, I visited Mr. Gray again on June 10, 1943, and assisted him in drawing up a new application for a $5,000 loan, to be used as above set forth.

VEIN - GEOLOGY:

The vein is a contact fissure between rhyolite on the hanging wall side and schist on the foot wall side. Strike of vein is about North and South. Dip at surface seems to be about 45 degrees from horizontal; but Gray says vein straightens up with depth. Considerable shearing action is noted along the said contact and vein filling consists of brecciated wall rocks. Copper ore of shipping grade occurs in lenses and pay streaks ranging from 2 to 4 feet in width, per Gray; character of ore being malachite and chalcocite, the latter occuring in bunches and lenses in the oxidized zone. With greater depth the chalcocite should come in stronger, as the zone of secondary enrichment is reached. And with still greater depth, say around 400 feet vertically from surface, chalcopyrite ores should be found. This latter condition is found at the Yuma Copper mine, located about 8 miles north of the property under discussion. The said Yuma Copper mine is now being unwatered by means of an RFC loan, the main shaft thereof having an inclined depth of 500 feet and penetrates chalcopyrite ore near the bottom.

MINE WORKINGS:

A main working shaft was sunk, around 1918-19, on the vein mentioned to an inclined depth of 210 feet. This shaft, however, did not follow the dip of vein to the east. Instead of doing so, the shaft inclines in a southerly direction along the strike of vein. Per Mr. Gray, for the first 100 feet in depth, the shaft inclines at 35 degrees and for the next 110 feet its inclination is about 45 degrees.

PRODUCTION:

Per Mr. Gray, at the time when the shaft was sunk to the depth mentioned, 110 feet, 11.3 tons of ore were shipped to El Paso; said ore assaying 18.5% copper and 6 ounces silver per ton. However, the shipping returns of said lot of ore is not now available.

ASSAYS:

At the time of visit, I took no samples, as the shaft could only be entered to a depth of 25 feet where it is plugged up with waste and ore. However, just above the point where the shaft is plugged up, the vein is faced up on the north side of shaft to a width of four feet. Here Gray cut a sample across 4 feet, and had the same assayed by the Wickenburg Ore Market, per the assay certificate attached hereto, dated April 5, 1943, showing a value for copper alone of 10.4%; silver not being tested.

On the dump, adjacent to shaft, is a pile of around 3 tons of copper ore which should assay around 6% copper.

WATER WELL:

Years ago, a shaft was sunk at a point 50 feet north of shaft to a vertical depth of 150 feet in the schist formation mentioned. As this shaft did not follow the vein, of course no ore was found. Water of excellent quality now stands in this shaft at a depth of 75 feet from surface.

WORK RECOMMENDED:

In the event work should be resumed at this property, I suggest that the shaft be squared up and timbered from the surface down to a depth of 30 or 40 feet, below which point Gray states the shaft will need very little if any timbering in order to reach the bottom. Once the shaft is cleaned out and an inclined car track or skids installed to bottom, I further suggest that the shaft be sunk at least 50 feet deeper on the ore vein, and then around 100 feet of drifting be done each way on vein, more or less. Should such work prove the existence of shipping ore in quantity, the property should then be checked up by a competent engineer, for the purpose of outlining a general development plan, with the end in view of opening up an underground supply of shipping and milling ore.

CONCLUSION:

Due to the limited amount of exploratory work on this property, as well as to the fact that the shaft above mentioned can only be entered to a depth of 25 feet, no definite opinion can now be set forth as to the merits of this property. However, from what I could find out, it is believed the said contact fissure vein in undoubtedly deep-seated. Also, the vein material, so far penetrated by the 110-foot shaft, consists of oxidized and leached material, with evidence of the migration of copper values downward. This leads me to believe that deeper work should result in uncovering suplhide ore reserves of importance. And by "deeper work" I mean sinking to a vertical depth from surface of around 400 feet, as above outlined. Again, from present indications, while exploratory work isprogressing, considerable ore of shipping grade will no doubt be encountered, and the same can be marketed profitably as work progresses in the mine.

All in all, I believe the mine warrants the expenditure of at least $5,000.00, to be spent in carrying out the preliminary work, as above set forth.

Elgin B. Holt,
Field Engineer.

cc - Garfield Gray.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine ELLSWORTH KING Date June 14, 1943

District Ellsworth, Yuma Co., Arizona. Engineer Elgin B. Holt

Subject:

R E P O R T

OWNERS: Garfield Gray & Mrs. Amelia Gray, Vicksburg, Arizona.

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AREA, LOCATION, ETC.:

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EXAMINATION:

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Elgin B. Holt

Elgin B. Holt,
Field Engineer.

cc - Garfield Gray.

2 copies for docket.

June 14, 1943

ELLSWORTH KING MINE
Garfield Gray,
Vicksburg, Arizona
$5000 RFC Preliminary
Dev. Loan Application.

MEMORANDUM

To: Earl F. Hastings

From: Elgin B. Holt

I am herewith inclosing my report on the Ellsworth King mine, located near Vicksburg, Arizona, on which Garfield Gray and his mother Amelia Gray are applying for an RFC loan in the sum of $5000, they having withdrawn another application for a development loan, asking for $10,000.

As my report covers this property rather fully, there is no use to repeat what I have to say in this letter, except to say, while this property is another marginal copper mine, it has a fairly good chance to develop into a good little shipper, inasmuch as at least one small lot of ore has been shipped from this property assaying 18.5% copper and 6 ounces silver per ton. And it is reasonable that with further work more of this grade ore will be uncovered.

Within the next day or two, Gray will mail his new application to Mr. Gohring, and I presume the same will reach your desk in due time.

EBH (signed) Elgin B Holt

cc - J. S. Coupal

June 3, 1943

Ellsworth King Mine,
Garfield Gray,
Vicksburg, Arizona,
Application for RFC
Loan - $10,000

C

M E M O R A N D U M

To: J. S. Coupal

From: Elgin B. Holt

Referring to your letter of May 25, 1943, to Mr. Garfield Gray, Vicksburg, Arizona, regarding his application to RFC for a $10,000 loan with which to develop his Ellsworth King copper mine, located 4½ miles northeast of Vicksburg, and instructing me to visit Gray and his property, I am writing to advise as follows:

On May 29, 1943, I paid a visit to Gray at Vicksburg and we drove out to the said mine.

He has a very good looking oxidized copper vein on which there is an inclined shaft to a depth of 210 feet, from which, according to Gray, a car load of ore was shipped years ago averaging 18% copper. This shaft, however, can only be entered to a depth of 25 feet, at which point it is plugged up by a heap of waste left there by Gray some time ago, at which time he was doing a little drifting at that point.

I told him he would not be able to get a development loan, with the shaft in its present condition.

I advised him to make application for a $5,000 preliminary development loan, with which to collar up the shaft, clean it out and do timbering where necessary, which will be slight as the shaft walls are of hard rock, and to do a little sinking and drifting on ore in the bottom of shaft.

I also told him to write Mr. Gohring and ask for new application blanks and that when I returned to that area around the middle of this month, I would visit him again and help him with the new application, etc. This he agreed to do, so on my return to that part of the country I will give his mine the once over again, take a few samples from the surface workings and write a brief report, which he can attach to the new application.

Elgin B. Holt

cc - W. B. Gohring
Earl F. Hastings

DEPARTMENT OF MINERAL RESOURCE
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine ELLSWORTH KING. Cu., Ag. formerly the True Blue
Date June 19, 1943

District Ellsworth
Engineer Earl F. Hastings

Subject: Reconstruction Finance Corporation
Mine Loan

Docket No.	Phx C-215
Date Application Received	June 18, 1943
Date of Field Examination	June 14, 1943
Date of Report	June 19, 1943

1. Name and address of applicant (correspondent):
Garfield Gray, Vicksburg, Arizona.

2. Character of project and estimated cost thereof:
Cu., Ag. Rehabilitate 215 foot shaft, $500; sink shaft additional 50 feet, $1,500, and drift 100 feet at $2,000. Total $5,000.

3. Location of property:
Ellsworth Mining District, Yuma County, Arizona.

4. Applicant's interest in or ownership of property:
Applicant is partnership which is owner by location.

5. Loan requested:
$5,000.00.

6. Loan recommended:
None.

7. Comments:
(A) Other than one shipment of high grade ore and one sample of ore in place, plus a small dump of ore of unknown value, there is little evidence of commercial ore.

(B) There is no lateral development and the ore is described as occurring in irregular lenses with, according to the Perkins' report, the values receding with depth.

(C) While a favorable change in formation is described as appearing in the shaft bottom, there is insufficient data as a basis of anticipating commercial ore at any given horizon below the existing lowest depth attained.

The project appears one of relative blind exploration.

(D) Only $500 is requested by the applicant for rehabilitation purposes, but inasmuch as 215 feet of ~~vertical~~ WELL LINE work on the vein has only produced 11.3 tons of ore (plus 3 tons on the dump), it is considered unlikely that the workings will be found of sufficient interest to warrant the risk of even this small amount.

(E) If this type of deposition should be found of exceptional merit in the reopening of the Yuma Copper Company, which is located in the same area, the application might then warrant further consideration.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Earl F. Hastings, Projects Engineer

ELLSWORTH KING

Excerpts from Report on True Blue Group of Mines, Yuma County, Arizona, by Fred H. Perkins, Consulting Mining Engineer, October 4, 1922.

"Four (4) claims were located on a lime belt running at right angles to the general structure of the immediate vicinity. The bedding planes in the lime dip southwesterly at about 45.

In about the center of this lime belt a bedding plane which had the largest showing of copper mineralization on the surface received the most attention from the present owners, they having sunk an incline shaft 215 feet deep along the plane of mineralization. Fortunately, a sufficiently large lense of copper ore cropped on the surface from which the owners were able to get a shipment of commercial ore. On following this plane downward a highly oxidized leached zone has been traversed and the values have receded downward, but at the bottom of the incline a decided change is taking place. Limonite stain has increased in size and intensity, copper values have increased, and all signs point to an ore body ahead.

After spending four days on the examination of this property, I am convinced this ground is worthy of more development, and the cost of such work is comparatively small. The ground is not hard nor expensive to work. Little or no timber is needed. The present owners, in sinking the incline shaft on True Blue No. 1, encountered ore of which they shipped 11.3 tons to the smelter at El Paso, which ran silver 6 ounces and copper 18.5%. In my opinion, more ore of a shipping grade will be developed with depth. All indications point to a near ore body."

ME-11

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date March 27, 1940

Mine Ellsworth King

District - Ellsworth District
Yuma County

Location - Vicksburg, Arizona
Yuma County

Former Name

Owners - Mrs. A. Gray
Garfield Gray

Address - Vicksburg, Arizona

Operator

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - Gold, small amount of Bismuth and Lead

Men Employed - Two

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present - Sinking

Operations planned - Continued sinking and drifting with a view of early installation of small mill.

Number Claims, Title, etc. - This group comprises 6 claims (unpatented) held by annual work.

Description: Topography & Geography - Metamorphic combinations of schist and slate traversed by tremendous dikes system, main dike system (quartz property) with cross dikes of diabase.

Mine Workings: Amt. & Condition - Present workings consist of:
1 inclined shaft of about 200 ft.
1 vertical shaft of about 150 ft.(plenty of water)
1 vertical shaft of about 60 ft.
1 vertical shaft of about 30 ft.

Geology & Mineralization - This property is made up entirely of schist and slate intruded by igneous dikes. The ore is principally a gold telluride carrying small amounts of bismuth silver and lead.

Ore: Positive & Probable, Ore Dumps, Tailings - The veins can be traced on surface for about 2,000 ft.

Mine, Mill Equipment & Flow Sheet - No equipment at present

Road Conditions, Route - Excellent roads leading right to property, short distance of 4 miles from railroad, no grades.

Water Supply

Brief History - This property was located by myself and deceased father several years ago, and have been working continuously for the past 5 years. Shipping small batches of high-grade gold telluride ore to local market.

Special Problems, Reports Filed

Remarks - This property is adjoining another producing gold telluride property on the north. We need equipment and some financing.

If property for sale: Price, terms and address to negotiate - Would consider a lease and bond to responsible parties, or would be desirous to interesting a partner with capital to equip the property and carry out present development.

SIGNED - Garfield Gray

Vicksburg, Arizona
Member of Ellsworth Council

MT-21

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNERS REPORT

Date July 1, 1940

Mine True Blue Mine

Mining District & County - Ellsworth Dist. Yuma County

Location - Vicksburg, Arizona 3½ miles north and east.

Former Name

Owner - Verdugo Mines, Inc.

Address - 700 So. La Brea Ave. Los Angeles, California

Operator - Not operating at present

Address

President - N. T. Zuver

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - Gold, including Teleurium

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type - Gasoline

Operations: Present

Operations Planned

Number Claims, Title, etc. - 5 claims. Title vested in Co. (Not patented.)

Description: Topography & Geography - In the Harcuvar mountains at elevation of about 2000 ft., located adjoining and in a large wash and easy of access, high gear road from village to the property.

Mine Workings: Amt. & Condition - See map on file for details.

Geology & Mineralization - See report attached.

Ore: Positive & Probable, Ore Dumps, Tailings - See map on file.

Vein Width, Length, Value, etc. - An average value taken from present workings $28 per ton, ore body, as yet, undertermined, but extensive veins as shown by engineer.

Mine, Mill Equipment & Flow Sheet - 25HP Fairbanks Gas engine. Ingersoll-Rand Compressor. Air tank, water tanks, etc. Gallows frame with shive wheel 1/2 ton ore bucket, also smaller one - 1-ton ore car. Several hundred feet track. Two jackhammers, air hose, etc. 1/2 ton HP engine for blower. Essick-Wisconsin hoist; 150 ft. new cable. Blacksmith forge. Work bench, tool container, Vice, pipe wrench, dies and taps, small tools of all kinds, pick shovels, etc. In fact complete equipment for sinking shaft or for drifting. Also 1 cabin 12 x 20 and one cabin 10 x 36.

Road Conditions, Route - Very good. 3½ miles from paved highway at Vicksburg.

Water Supply - Water in shaft at 48 feet.

Brief History - See report attached.

Special Problems, Reports Filed - Yes.

Remarks - Because of the presence of Tellurides, which runs values up into thousands of dollars per ton, and the possibility of ever increasing values with depth we would prefer to lease the property on a graduated scale, and to be continuous, however, we might agree upon a stated price. We understand that this is the only mine in Arizona having tellurium.

If property for sale: Price, terms and address to negotiate - See above. For further particulars, address: Frank C. Gorham, Sec. Verdugo Mines, Inc., 700 So. La Brea Ave., Los Angeles, California.

SIGNED - Frank C. Gorham

COPY

REPORT ON TRUE BLUE GROUP OF MINING CLAIMS
YUMA COUNTY, ARIZONA
for
MESSERS GORHAM & ZUVER

Return to Frank C. Gorham
700 So. La Brea Ave.
Los Angeles, California
Phone, Whitney 9775

Clarence S. King
Santa Ana
California.

****

LETTER OF TRANSMITTAL

Santa Ana, California
March 31, 1935

Messers Gorham and Zuver
Los Angeles, California

Gentlemen:

I hand you herewith my report on the True Blue Group of Mining Claims near Vicksburg, Arizona, which property during the months of February and March, I visited twice and examined.

My first visit was in the nature of a cursory reconnaissance inspection. Two weeks later I visited the property accompanied by my son, Mr. Clarence R. King, Research engineer for the United Verde Copper Company, Jerome and Clarkdale, Arizona. Upon this occasion an extensive investigation was made. Subsequently, I spent some three weeks in sampling and opening up the property.

My conclusions resultant from these investigations are embodied in the following report.

Attached hereto and accompanying this report is a map showing the position and extent of existing shallow workings and particularly the diabase dike, with which the ore deposition apparently is associated.

This map gives a plot of the property, a horizontal plat and vertical section of workings, together with the ore values as exposed in a number of such workings and on the dump.

Very sincerely yours,

SIGNED - Clarence S. King.

(over)

Copy

TRUE BLUE GROUP OF MINING CLAIMS

LOCATION: The property is situated in the western extension of the Harcuvar Range, Ellsworth Mining District, Northern Yuma County, Arizona. It is three miles north of the station of Vicksburg on the A.T. and S. F. Ry. and about seven miles north of the U.S. Highway No. 60. Good roads with easy grades lead to both points.

HISTORY: In 1931 John Ramsey, the discoverer of the Skidoo Mine in the Panamint Range, California, while prospecting with his Ford car in this section, ran off the road at the point where the present discovery monument stands on Claim No. 13 of the group. In digging out his wheel, he uncovered "specimen" rock.

The ground was then acquired by Mrs. Amelia Gray, who has held it since the time of its original discovery. Since then the claims have been worked superficially by Garfield Gray, his son, and sundry leasers, then coming into control of Messers Gorham and Zuver.

Prior to the Gray regime, one, Charles Kaufman, now residing in Salome, Arizona, found and shipped a quantity of "black stuff" taken from the neighborhood of the discovery shaft. This was of such high grade that he realized a "grubstake" from it.

Tellurides were first recognized in June 1931 by Garfield Gray, who, suspecting their presence, forwarded samples for determination to the Colorado Assay Company, Denver, Colorado.

The Company verified by analysis and assay a gold content of $240.60 (gold at $20.67 oz.) They also found the presence of the mineral sylvanite--a telluride of gold and silver.

These facts are important only as evidence that the croppings had been recognized as comparatively high-grade gold bearing rocks for many years.

The production record, as complete as far as authoritative papers--assay certificates, smelter and mill returns, etc. are available, is settforth in accompanying appendices.

Considering the limited extent to which the main ore shoot has been opened, both laterally and vertically, the production, thus verified, indicates an unusual quantity (as hereafter explained) inherent to these ores.

GEOLOGY: The local geology is an ingenous complex in which three successive actions are determinable. The core of the Harcuvar Range at this western extension consists of true granite and grano-diorite.

On its western flank, rhyolite and diabase, and what is locally known as "schist or slate",--to which reference is hereafter made as schist--comprise the formation for a wide area.

Without microscopical determination, the so-called schist appears to be a metaigneous phyllite, derived from a fine grained ingneous rock--possibly a phonolite--by intense metamorphism, accompanied by shearing and a more or less perfect lamination.

Pressure or compression has acted in such a way as to cause partial rotation within the rock mass.

The schist appears to have been first, invaded by a massive rhyolite dike, one of the contributing agents to the schistosity noticed, and subsequently by a series of approximately parallel diabase dikes, which the ore depositions appear to closely follow, and with which they appear to be genetically related.

There is much evidence to support the conclusions that the ore deposition is directl resultant from the conditions prevailing during, and following the period of diabase intrusion.

There is sufficient continuity of ore deposition to denote the vein as a succession of connected ore bodies along both sides of this particular diabase dike. In all instances observed, the ore channels hold against, or are in juxtaposition to, the diabase dike.

MINERALOGY AND ORE OCCURRANCES: The deposition of the ore is notably that of the impregnation or replacement type, characterized by an abundance of calcite, siderite and manganese.

The diabase intrusions have shattered the schist walls, opening easily permeable channels, the mineralization extending to an undertermined limit on both sides of the dike.

The presence of scheelite--tungstate of calcium--has been qualitatively determined

There is an unusual prevalence of the telluride group in all of the samples taken, the mineral nagagite, a sulphotelluride of lead and gold, was determined under microscope: petzite, hessite, sylvanite and altaite are present in much of the ore, especially in the white calcite gangue.

The presence of free gold characterizes the high-grade ore, and when it is visible in the pan a high assay may be anticipated from the accompanying tellurides.

Ore, assaying from $3,000 to $15,000 per ton has been sorted upon the calcite criteria. From one shallow incline, where siderite and quartz predominate, the ore has been free gold, and assaying up to $900 per ton where obtained from this class of material.

The inference from these varied results is that practically all of the vein matter proper is ore, considered as a mass, with exceptionally high-grade spots and lenses, which may be selectively mined or sorted from broken material.

To the north of the prdsent operation there are at least two approximately parallel dikes, and shallow holes and trenches which have uncovered vein matter identical with that of the croppings of the ore body under exploitation. It is most probable that crosscuts from the new shaft, southerly toward the rhyolite dike and northerly toward the diabase dike, to which reference has been made, will encounter ore bodies of the same nature as that now being mined. Such assays as have beenmade from these exposures indicate a payable gold value--upon a mill basis--from the surface

The longitudinal extention of superficially determined ore bodies, along which the present openings are located, reference is made to the accompanying map.

DEVELOPMENT AND PRESENT WORKINGS: The original shaft attained a depth of 40 ft. at which point water was encountered. At 25 ft. a drift was driven westerly, from which most of the ore mined was taken.

From the same 25 ft. level a crosscut was run northerly 40 ft., into the schistose wall rock.

Most of the material--waste mingled with ore-- on the dumps came from these main workings and is claimed as "rejects" from sorting. A sample carload has just been shipped of this material, which shows it to be mill ore of good grade.

See appendix for values, ect. of this carload.

A new working shaft has been started east of the old shaft, which was in dangerous condition and at this writing has reached a depth of 20 feet.

The main underground workings from shaft to end of drift, occupies about 150 ft. of a total length of one thousand feet, along which opencuts and shallow inclines have exposed the same character of ore as has been mined from the main workings.

For further details of development, reference is made to accompanying map.

Results on samples taken from the ore exposed in these workings are listed in the appendices to this report.

ECONOMIC CONDITIONS: Proximity to rail and highway transportation, good truck roads, good all year around climate and water available.

METALLURGY: All ore taken from this property to date, with the exception of one lot, has been shipped to smelters. The exception was an undetermined quantity that Mexican Lessees shipped to a custom mill, for which they received about $100 per ton net (gold at $20.67 net oz.).

Besides the highgrade streaks and lenses to be anticipated in an ore of this character and which can be selectively mined, or sorted for special treatment or shipment to reduction works--the mine ran, or mill -grade of ore should receive careful laboratory investigation, prior to adoption to any flow sheet before the mill is designed or machinery purchased.

It should be recognized there are present, free gold, several tellurides, calcopyrite and tungsten (scheelite) the presence of the later suggests a possible

by-product that may be of considerable importance.

The recovery of the gold value and the separation of other possible commercial constituents into suitable concentrates can readily be determined by the usual laboratory methods.

DEPTH OF ORE OCCURRENCE: As the object of all mining is to derive as high a profit as possible, and as this profit is more greatly contingent upon tonnage than upon extremely high values of the ore, the most important consideration is to get this tonnage.

This tonnage can only be obtained from the permanent primary ore bodies. For this reason one of the favorable factors pertaining to this mine is that all indications point to the entering of the permanent ore body at the present horizon, and that these are large with promise of commercial value.

Due to the presence of manganese there is good reason to believe that a downward enrichment of gold values will continue to undeterminable depth.

Past experience with, and study of the type or ore deposition with which that of the True Blue property is classed, leads to the inference that the upper sulphide zone, which is just being entered, at water level, in the original shaft, and in the first incline west, is richer than at the surface and possible than at a lower level. This enrichment is accompanied by a considerable increase in sulphides and tellurides. This upper sulphide zone may extend downward a distance to be determined only by exploration It is not to be deduced from this that the lower zone is necessarily uncommercial. The terms "rich" and"richer" are relative. Both first and second sulphide zones may be profitable.

SHIPMENT OF ORE AND ASSAYS: In September 1932 a shipment of 33 tons was shipped and a net value (gold at $20.67 oz.) of $16.50 per ton was realized, freight and smelter charges having been deducted. Smelter settlement available.

A carlot of 26 tons gathers from dump materials rejected in sorting, together with some ore taken from the new shaft, was shipped as a test of the possible mill grade of the run of the mine after selective mining, assayed .38 oz. gold and returned a net of $166.32 after freight and smelter charges had been deducted.

This lot was shipped to the Magma Smelter, Magma Copper Co., Superior Arizona and their analysis was: Copper .67%, Silver 0.40 ozs. Iron 3.7%, Lime 20.8; Alumina 5.6%, Silican 42.8%, Gold 0.38 oz., and Sulphur 0.2%, moisture 1%. This material was entirely from the oxidized zone, Settlement for this shipment made March 20, 1935.

ASSAY CERTIFICATES

By John Herman Laboratory, Los Angeles, Cal., Dec. 1, 1933.

#1	Discover Shaft	3.31)	
#2	Main Shaft	6.82)	Gold at $20.67 oz.
#3	First Incline shaft, west of main shaft	69.45)	
#4	Shallow Shaft 100 ft. east of main shaft	3.52)	

By Allison J. Gunn, Long Beach, Cal.,Dec. 5, 1933

Sample taken from main shaft ,large rock $1075.80) Gold at $30 oz. or 35.86 oz. and Silver 5.60 oz.

By C. M. Davis, Salome, Arizona, Feb. 6, 1935

		Ounces	Values	
#1	Rejects,first sampling C. S. King	.84	$29.40	
#2	Dump selected from east hole.	.36	12.60	
#3	East hole Gray-Zuver broke on can	.16	5.60	
#4	Grab sample in drift By C. S. King		1.40	
#5	Grab Sample in drift by C. S. King	.10	3.50	
#6	Dump at top of incline shaft	1.22	42.70	Gold $35 oz.
#7	Dump at top of incline shaft	.24	8.40	

ASSAYS CONTINUED

		Ounces	Values	
#8	Screenings	.08	$ 2.70	
#9	Wall Rock	.03	0.70	
#10	Fines from bottom west shaft	.64	22.40	
#11	Specimen	2.52	87.20	
#12	Large sample from dump	.56	19.60	

By C. M. Davis, Salome, Arizona, Feb. 6, 1935.

#3	Large sample from dump e, shaft, by C. S. King		1.20	42.00	
#4	Sample from adjoining property marbleized	"	.08	2.80	
#5	Galena dump shallow shaft	"	.08	2.80	
#6	Side line hole Mother lode stuff				Gold
#17	Dump corresponding to #15	"	.10	3.50	at
#18	Dump Corresponding to #15	"	.16	5.60	$35
#19	Dump corresponding to #15	"	.42	14.70	oz.

By United Verde Copper Co., Clarkdale, Arizona, Feb. 8, 1935

Samples sent by C. S. King		Gold Oz.	Value Au.	Ag.Oz.
#1	Calcite specimen showing microscopic specks of petzite and calaverite with a little visible free gold	12.80	$448.00	6.8
#2	Specimen heavily stained rock	.20	7.00	2.

United Verde Copper Co., Clarkdale, Arizona
Samples taken by C. R. King, Research Engineer, Feb. 19, 1935

#9K	Dump pile #1 Approx. 5 ton	.44	15.40	
#10K	Dump pile #2 Mine run 12 ton	.84	29.40	
#11K	Dump bottom of shaft foot wall 4 ton	.34	11.90	
#12K	Opencut east of main shaft 6 ft. sampled	.50	21.00	
#13K	East side of main shaft 9 ft.	.10	3.50	
#14K	Back of small stope 10 ft. west of west of main shaft in drift 18"	.40	14.00	
#15	Face at east face of drift against 30" dike looks like kidney	.58	20.30	
#16	Bottom of winze from drift incline west of main shaft, looks like ore coming	6.60	231.00	much tellurium
#17	Bottom 3rd incline west of main shaft 18" calcite ore hanging wall side	.26	9.10	

By C. M. Davis, Salome, Arizona, Mar. 11, 1936

#2M	Representing 40' cut northerly from old shaft, see map	.16	5.60
#6M	Samples taken from sorted calcite dump	25.52	893.90

Strong reaction for Tellurium

CONCLUSIONS: All conditions favorable to the deposition of extensive bodies, and rich ores, exist upon this property and to a preliminary extent are already proved.

I conclude that you control a mining property of unusual merit and do not hesitate to recommend its exploration and development in conformity with the plans and expenditures above suggested.

SIGNED Clarence S. King.

Santa Ana, California
March, 1935.

APPENDICES

FREIGHT RATES BASED ON AD VALOREM

Ore of Gross Value per ton

Vicksburg, Ariz. to Midvale, Utah	$20.00 5.75	$30.00 6.70	$40.00 7.65	$50.00 8.00	$60.00 9.50	$70.00 10.45	$80.00 11.40
Selby, Vallejo, Cal. U.S.S.&R.Co.	5.00	5.85	6.70	7.75 (Lower rates now in effect)	8.40	9.25	10.10
El Paso, Tex. Magma Copper Co.	4.40	4.30	6.10	6.90	7.70	8.45	9.20
Superior, Ariz.	2.90	.....Small Increases.....					

SHIPMENTS OF ORE OF WHICH THERE IS AUTHORATIVE RECORD

In Sept. 1932 a lot of 33 tons returned a net value (with gold at $20.67) of $16.50 per ton--smelter settlement for this shipment available.

A mill run returned net to owner about two years ago $40 per ton (gold at $20.67 oz.) as a 10% royalty. Investigation disclosed the assay value of this lot to be fraction over $100 per ton.

A carload of 26 tons gathered from the dump rock rejected in sorting, shipped as a test of possible mill grade of the "run of the mine", after richer ore had been sorted out, assayed .38 oz. gold, and returned a net of $166.32 after freight and smelter charges had been deduced.

The Smelters Magma Copper Co., Superior, Arizona analysis of this lot was: Copper 0.67% Silver 0.40 oz.; Iron 3.7%; Lime 20.8; Alumina 5.6%; Silica 42.8% and Sulphur 0.2%.

ADENDA

Phonolite is a rock common in gold camps, in which tellurides prevail. Instance particularly Cripple Creek, Colorado, where the name "clink" stone is generally used to designate the rock that has a "cow bell" ring when moved around in the trail.

The writer has definitely checked phonolite on your claims.

The movement mentioned (see text) as due to the rhyolite intrusion, has altered the phonolite to such a degree that only microscopic examination can determine its particular classification.

Elongated phenocrysts have apparently developed from an alkaline feldspar, and would possible classify this rock as latite phonolite.

The really important fact is that we find here the same association of phonolite with telluride mineralization that has been generally observed in camps carrying high-grade telluride ore.

COPY

AMERICAN SMELTING AND REFINING COMPANY
El Paso Smelting Works

T. N. Rickard, Manager

El Paso, Texas

Nov. 19, 1937

Mr. Garfield Gray
Vicksburg,
Arizona.

Dear Sir:

Referring to your letter of November 6th, the sample mentioned has been received and assayed and we now are pleased to enclose our assay certificate. Our chemist reports that the gold content was telluride, but he has made no assay for the latter element.

However, the payments for this class of material, applying the terms of our enclosed Schedule "F", would be approximately the following.

(Incline Shaft Foot Wall)

Gold	$22.62
Silver	0.98
Total	$23.60
Deductions:	
Base Charge	$3.50
Copper Deficiency	0.23
Total Deductions	3.73
F.O.B. Hayden	$19.87

We will receive your shipments of this material in bulk or in sacks, but, referring you to Clause 3 on the reverse side of our schedule, you will note there is a charge made for sampling lots of less than ten tons.

We would suggest that you communicate with Mr. H. F. Easter at our Hayden Smelter whenever you are prepared to make shipments and he will render you any assistance that may be necessary.

Yours very truly,

(SIGNED) BEN D. ROBERTS.

enc. 2

COPY

Office of
GEORGE WELSH DANEHY, E. M.
Phone KEystone 4281
206 Patterson Building
1712 Welton Street

Mine Examinations
Mill Design
Flotation Specialist

Denver, Colorado,
Nov. 22, 1934.

Mr. Garfield Gray,
Vicksburg, Arizona.

Dear Mr. Gray:

Your letter of Nov, 17th addressed to Mr. A, R. Rhine, my business associate has been turned over to me for answer. We are interested in several large mining projects at this time, in Colorado, and of course are interested in any others with possibilities. I am looking after all of our engineering work.

Your letter is very interesting as I am experienced in Arizona having been in and out of the state since 1906. I also thoroughly experienced with the ores of tellurium, having mined several times in Cripple Creek. I had never heard of the occurrence of tellurides in Arizona in any quantity. The question arises in our minds "is your ore tellurium?" If so, you may have something new that is very valuable.

I have worked for Old Dominion, Inspiration, Magma, on many mines in the Kingman-Oatman District, and was chief engineer and metallurgist for the Tonopah-Belmont Dev. Co., at Tonopah, Nevada and later on their McNeill Mine down south of Wickenburg, in your country. I have covered practically every foot of Arizona, you might say, on geological surveys in Arizona, New Mexico, Nevada, and California.

We would be pleased to have you send us some characteristic samples of your ore that you know or believe to contain tellurides. Sylvanite, as a rule, occurs as a thin deposit in the cracks or crevices in the rocks. It occurs in beautiful silvery crystals. If you put a piece of it in an assay furnace and give it a careful roast, not too hot, the tellurium will be driven off leaving a crust of gold. Also, with the other tellurium compounds, calaverite (rather brassy in color), etc., etc. Here is one test that you might try also. viz: Place a little of the finely pulverized ore in a porcelain dish, add a little sulphuric acid and heat. If Te is present, the solution will assume a violet color. There are other tests that you can find in any good chemistry book.

Please tell us how the ore occurs and what is the formation. In Colorado, at Cripply Creek, the ores occur in or nearby intrusions of phonolite and breccia in granite and schist. Sometimes the ore runs out into the granite itself near the contact. Send some samples of the wall rocks, if possible, so that we may be able to determine the geology.

We have people looking for mines and it might be possible that we could go into the matter ourselves. However, as explained above we are tied up in several big milling undertakings that will take until next summer to get under way. We will be glad to hear from you at any time.

Yours truly

(SIGNED) Geo. W. Danehy

COPY

Office of
GEORGE WELSH DANEHY, E. M.
Phone KEystone 4281
206 Patterson Building
1712 Welton Street

Mine Examinations
Mill Design
Flotation Specialist

Denver, Colorado
Dec. 10, 1934.

Mr. Garfield Gray,
Vicksburg, Arizona.

Dear Mr. Gray:

Your letter of the 8th has just reached the office.

I had a piece of the ore sample that you sent us assayed and tested for tellurium. It showed a strong test for the latter and assayed $758.00 per ton, 21.60 ounces gold and 3.36 ounces of silver. It looks like real tellurium ores.

We are very much interested and will be able shortly to carry a deal through along the lines that you suggest. However, we should like the whole property, both groups, in considering a deal and would want your assurance that they can be had in case we decide to go into the deal. It would,take a lot of time, at least a week, to go from here down there, examine the property, and return. Also it is expensive. Therefore, we would want your word that the property would not be tied up on option at the time we decide to move.

Our deal up here, involves several hundred thousand dollars. We are right in the midst of it so of course you can see that our time is valuable. In case the people holding the present option should drop it, get in touch with us, so we can act. Keep in touch with us.

We send you the Season's Greetings.

Yours truly

(SIGNED) GEO. W. DANEHY

August 29, 1946

Mr. Ernest Ballif
1324 So. Cloverdale Avenue
Los Angeles 35, California

Dear Mr. Ballif:

The Bureau of Mines has forwarded to us your letter of August 25 regarding the Verdugo Mine.

The only thing we have in our files is an application for an R.F.C. loan of $5,000 in 1942, by G. O. Trauzettel, Route 1, Box 838, Glendale, Arizona, who was evidently lessee at that time. The loan was not recommended.

Our field engineer will not be in that district for about two months but we have asked him to make inquiry when he is.

In regard to the sale of the stock, the Arizona authorities would have no jurisdiction regarding sales in California but the Securities Exchange Commission would. You might consult their Los Angeles office. It would seem that you should have some rights as a stockholder but that is a legal matter that is beyond the scope of this department.

Yours very truly,

Chas. H. Dunning
Director

ChD:LP

1324 So. Cloverdale Avenue,
Los Angeles 35, California,
August 25, 1946.

Bureau of Mines,
Phoenix, Arizona.

Gentlemen:

From February 28, 1940 to June 18, 1940, we purchased 1400 shares in the Verdugo Mines, near Vicksburg, Arizona. These mines are located in the Ellsworth Mining District, Yuma County, Arizona, and are described in the agreement as follows:

True Blue Claim No. 13 Recorded in Book 23 of Mines Page 152
True Blue Claim No. 14 Recorded in Book 30 of Mines Page 203
True Blue Claim No. 15 Recorded in Book 30 of Mines Page 204
True Blue Claim No. 16 Recorded in Book 30 of Mines Page 205
Golden Orbit Claim Recorded in Book 31 of Mines Page 373.

At the time we bought the shares, Mr. Nelson T. Zuver was president of the Corporation, and Mr. Frank C. Gorham was secretary. About four years ago, Mr. Fred A. Therkorn was elected president by the stockholders. Since that date no meetings have been called and no information has been forthcoming from the president about the state of the mines.

On March 17, 1945, we made a trip to the Verdugo Mines, and found that all the machinery and equipment had been removed from the mine. Upon our return, we called the president, Mr. Therkorn, and questioned him as to this equipment. He stated that the mine had been leased for five years, and that the people who leased it were taking care of the machinery. Attempts have been made to correspond with this man, but we have never received an answer.

We feel that, as shareholders in this mine, we are entitled to know something of the status of the mine, and would appreciate any information that might be available from the records in your office. The question has also arisen whether or not this Arizona stock was legally sold to us in California, and any suggestions you might give us on how to go about the investigation would be appreciated.

Very truly yours,

Mr. and Mrs. Ernest Ballif

Ernest Ballif

May 25, 1943

Mr. Garfield Gray
Vicksburg, Arizona

Dear Mr. Gray:

I have your letter of May 22 and note that your application has been filed for a $10,000 loan on your copper claims. I also note Mr. Gohring's statement regarding insufficient data.

It is not necessary to spend a lot of money on an engineer's report in order to qualify for a mine loan, but it is quite necessary that you show in detailed manner the ore occurrences with sketches of the workings, assays showing widths, and complete information regarding the property so that an engineer examining your data can make a sound decision as to whether or not a loan should be granted.

I am instructing our engineer, Elgin B. Holt, to call on you the next time he is in Vicksburg and arrange to make a report which you can then submit to Mr. Gohring for reconsideration of your application.

I am sorry that you have had no direct personal assistance from the A.S.M.O.A. in disposing of your property. There has been no real demand for copper properties until the past year or two and even then a property has to meet certain requirements before anyone is interested. We have sent out several hundred lists of properties available to prospective purchasers, but evidently from the brief description of your property no one was interested enough to contact you. There is little or no private capital seeking mining properties and the best course to follow is to apply for government funds for development.

As stated, Mr. Holt will call on you the next time he is in Vicksburg and will arrange to make a report.

In regard to quartz crystals, I have been in close touch with Mr. Thayer and I am informed that he is in a position to recommend expenditure of certain money to develop good showings of quartz crystals. I would suggest that you write to Mr. Thomas P. Thayer, care of this office, and I will present your letter to him. In that letter I would set forth just what your

requirements for assistance are and ask Mr. Thayer for his advice and assistance in providing some way for you to open up the quartz crystal showing you mentioned. Mr. Thayer will be back in Phoenix within the next week.

Very truly yours,

J. S. Coupal

J. S. Coupal, Director

JSC:kk

cc - Mr. Elgin B. Holt

June 3, 1943

Ellsworth King Mine,
Garfield Gray,
Vicksburg, Arizona,
Application for RFC
Loan - $10,000

M E M O R A N D U M

To: J. B. Coupal

From: Elgin B. Holt

Referring to your letter of May 25, 1943, to Mr. Garfield Gray, Vicksburg, Arizona, regarding his application to RFC for a $10,000 loan with which to develop his Ellsworth King copper mine, located 4½ miles northeast of Vicksburg, and instructing me to visit Gray and his property, I am writing to advise as follows:

On May 29, 1943, I paid a visit to Gray at Vicksburg and we drove out to the said mine.

He has a very good looking oxidized copper vein on which there is an inclined shaft to a depth of 210 feet, from which, according to Gray, a car load of ore was shipped years ago averaging 18% copper. This shaft, however, can only be entered to a depth of 25 feet, at which point it is plugged up by a heap of waste left there by Gray some time ago, at which time he was doing a little drifting at that point.

I told him he would not be able to get a development loan, with the shaft in its present condition.

I advised him to make application for a $5,000 preliminary development loan, with which to collar up the shaft, clean it out and do timbering where necessary, which will be slight as the shaft walls are of hard rock, and to do a little sinking and drifting on ore in the bottom of shaft.

I also told him to write Mr. Gohring and ask for new application blanks and that when I returned to that area around the middle of this month, I would visit him again and help him with the new application, etc. This he agreed to do, so on my return to that part of the country I will give his mine the once over again, take a few samples from the surface workings and write a brief report, which he can attach to the new application.

cc - W. B. Gohring
Earl P. Hastings

June 14, 1943

ELLSWORTH KING MINE
Garfield Gray,
Vicksburg, Arizona
$5000 RFC Preliminary
Dev. Loan Application.

MEMORANDUM

To: Earl F. Hastings

From: Elgin B. Holt

I am herewith inclosing my report on the Ellsworth King mine, located near Vicksburg, Arizona, on which Garfield Gray and his mother Amelia Gray are applying for an RFC loan in the sum of $5000, they having withdrawn another application for a development loan, asking for $10,000.

As my report covers this property rather fully, there is no use to repeat what I have to say in this letter, except to say, while this property is another marginal copper mine, it has a fairly good chance to develop into a good little shipper, inasmuch as at least one small lot of ore has been shipped from this property assaying 18.5% copper and 6 ounces silver per ton. And it is reasonable that with further work more of this grade ore will be uncovered.

Within the next day or two, Gray will mail his new application to Mr. Gohring, and I presume the same will reach your desk in due time.

cc - J. S. Coupal

7 August 1941

Mr. Garfield Gray,
Vicksburg,
Arizona.

My dear Mr. Gray:

I am enclosing herewith for your records a copy of mine owners report which you have filed with the Department of Mineral Resources covering the ELLSWORTH KING MINE.

This makes two reports listed for you under the name of the ELLSWORTH KING. However, they carry different minerals.

I shall be glad to submit a copy of this report to anyone making inquiry for a property such as yours.

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf
encl.

15 July 1941

Mr. Garfield Gray,
Vicksburg,
Arizona.

My dear Mr. Gray:

I thank you for your letter of July 11 regarding your copper property and your bismuth deposit. I find that we have a mine owners report on the ELLSWORTH KING MINE which gives the principal metals as gold, small amount of bismuth and lead. However, I find no record of a report on your copper property.

I am enclosing herewith blank mine owners reports, which I should suggest that you fill out in detail and return to this office so that information may be available concerning your properties. Upon receipt of these reports, I shall be glad to submit them to anyone making inquiry for properties such as yours.

In the meantime, I am giving you herewith the names and addresses of parties making inquiries for bismuth and copper properties:

BISMUTH

Ben Sisco, 809 E. Elk Avenue, Glendale, California.

COPPER

I. W. Adams,
1101 Meridian Avenue, Alhambra, California

Charles W. Garland,
412 W. Sixth St., Los Angeles, California

Ben Sisco, 809 E. Elk Ave., Glendale, California

I should suggest that you communicate directly with the above parties regarding your properties, and upon receipt of mine owners reports, I shall be glad to

submit them to parties making inquiries in the future.

Assuring you of my pleasure in being able to serve you, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf

July 11 - 41. Vicksburg
Arizona

The Arizona Mineral Resource Dpt.
Phoenix, Ariz.

Dear Sirs,

I understand from various sources that there is a strong demand at present for good copper properties also for Bismuth ores. I have two properties here both having considerable development work. — one property carries Bismuth and silver (Bismuth average about 3% — silver 25 ozs). The copper property assays average around 10%. I have a large deposit of copper on the property consisting of copper glance & carbonates. I am very anxious

to contact some reliable people who are in the market for properties of this nature. If you can have any names on your list of prospects who would be interested in either Bismuth or Copper — please furnish me names & addresses of some of these people.

Thanking you very kindly,

I remain,

Yours very truly

Garfield Gray.

Member A.S.M.O.A.
Ellsworth Council.
Salome.

24 September 1941

Mr. Garfield Gray,
Vicksburg,
Arizona.

My dear Mr. Gray:

Replying to your letter of Septe ber 23, addressed to CO-1, I beg to advise that the party making inquiry for copper properties is no longer interested due to the fact that all copper production is allocated by the Priorities Division and cannot be earmarked.

Regretting my inability to be of assistance to you in this matter, and with best wishes, I am

Yours very truly,

J. S. Coupal
Director

JSC-jrf

ME-21

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date July 17, 1941

Mine - Ellsworth King Mine

District - Ellsworth Mining Dist. Location - Vicksburg, Arizona

Former Name

Owners - Mrs. A. Gray and G. Gray Address - Vicksburg, Arizona

Operator - Mrs. A.Gray - G. Gray Address

President - Mrs. A.Gray Gen. Mgr. - Garfield Gray

Mine Supt. - Garfield Gray Mill Supt.

Principal Metals - Copper, silver, gold Men Employed - Three

Production rate - Under proper conditions about 50 tons daily. Mill: Type & Cap. - None

Power: Amt. & Type

Operations: Present - Sinking inclined shaft
Present depth about 200 feet.

Operations Planned - Sinking and drifting on ore

Number Claims, Title, etc. - Group comprises 6 full unpatented claims.
Title (Mrs. A. Gray - Garfield Gray) held by annual assessment work.

Description: Topography & Geography - Principal formations consist of schists and slates cut by intrusive igneous dikes. Main copper deposit consist large rhyolite dike being shattered and healed by copper solutions.

Mine Workings: Amt. & Condition - Copper workings consist of 200-ft. inclined shaft showing a tremendous leached zone all the way from surface to the bottom of present shaft.

Geology & Mineralization - Principally metamorphic with a tremendous dike system - Rhyolite deposition with diabase across dikes.

re: Positive & Probable, Ore Dumps, Tailings - Undetermined. Have encountered several large masses calcocite (copper 27%, silver 14 ozs. Gold $5.)
Abundance of copper carbonates and limonite and hematite.

Road Conditions, Route - Excellent road. 4 miles to railroad down grade all way. Repair work - very small and infrequent.

Water Supply - Good

Brief History - This property has been held for the past 20 years by present owners under original location.

Special Problems, Reports Filed - Our only problem is lack of capital to equip and carry on development on a mine-like basis

Remarks - I sincerely believe the property will stand up under the most careful investigation.

If property for sale: Price, terms and address to negotiate - Title is clear, and will consider an outright sale or lease and bond to responsible parties only. Would consider lease and bond on a 5-year basis, royalties based on sliding scale - payments twice annually.

SIGNED - Garfield Gray

Vicksburg, Arizona

24 February 1941

Mr. F. C. Gorham,
202 Wilshire La Brea Building,
Los Angeles, California.

My dear Mr. Gorham:

I thank you for your letter of February 15 in which you enclosed a letter from Mrs. Nellie T. Bush.

I find that we have a mine owners report on the TRUE BLUE MINE and that maps were submitted with it. I shall be glad to submit this report to anyone making an inquiry for a property such as yours, and I hope that something may develop for you.

Assuring you for my appreciation of your help in contacting the legislators, and assuring you of my desire to be helpful, I am, with best wishes

Yours very truly,

J. S. Coupal
Director

JSC-jrf

Verdugo Mines
Incorporated

Owners and Operators
of
"TRUE BLUE MINE"
Vicksburg, Arizona

202 Wilshire La Brea Bldg.
WYoming 5302
Los Angeles, California

Los Angeles Calif.
February 15, 1941.

Dept. of Mineral Resources
State of Arizona.
Phoenix Ariz.

Mr. J. C. Coupal;

Dear Mr. Coupal;

As per request in last issue of "Pay Dirt" I have written to each of your State representatives and am enclosing a reply from one of them which contains information that you might like to have and use.

Also wish to ask if you cannot get some action for us on, either effecting a sale, or lease on our property at Vicksburg ?

We filed maps and complete information with you last August but have had no response from you todate and trust that you might be able to assist us in getting this property on production, especially as it is completely equipped and has two splendid cabins on it to care for help.

Owing to the illness of the President of the Corporation and to the fact that the writer's business keeps him constantly in Los Angeles we are handicapped in operating the propertyourselves.

I await with interest your reply.

Very truly yours.

Verdugo Mines.

By J. C. Gorham
Secy

NELLIE T. BUSH
PARKER, ARIZONA

COMMITTEES:
WAYS AND MEANS—CHAIRMAN
CONSTITUTIONAL AMENDMENTS AND REFERENDUM
JUDICIARY
SUFFRAGE AND ELECTIONS

House of Representatives

STATE OF ARIZONA

FIFTEENTH LEGISLATURE

(9)

February 11, 1941

Mr. F. C. Gorham, Secy.
Verdugo Mines
Vicksburg, Arizona

Dear Mr. Gorham:*

Your letter of February 5 reached me yesterday.

As a member of the Legislature, I hasten to assure you I am heartily in favor of the Small Mines Operators Association, and that the Governor of the State of Arizona has repeatedly made a similar declaration. Thus, I feel certain that no act will be passed which will be detrimental to the small mines operators' interests.

Thanking you for writing me concerning this subject, I am

Very sincerely yours,

Nellie T. Bush

Nellie T. Bush
Representative
Yuma County

NTB/pb

3 July 1940

Mr. Frank C. Gorham,
Secretary, Verdugo Mines, Inc.,
700 S. LaBrea Avenue,
Los Angeles, California.

Dear Mr. Gorham:

I am in receipt of your letter of July 1 enclosing Mine Owners Report on the KNOWN AS TRUE BLUE MINE.

I have also received the report and map which you sent under separate cover.

These reports are being placed in our files, and I shall be glad to refer any prospective purchasers to you.

Assuring you of my desire to be helpful, I am

Yours very truly,

J. S. Coupal
Director

JSC-jrf

Verdugo Mines
Incorporated

Owners and Operators
of
"TRUE BLUE MINE"
Vicksburg, Arizona

202 Wilshire La Brea Bldg.
WYoming 5302
Los Angeles, California

Los Angeles Calif.
July 1st. 1940.

Mr. J. S. Coupal, Director,
Dept. of Mineral Resources
State of Arizona
Phoenix Ariz.

Dear Mr. Coupal;

Since recieving your letter of June 8th. in which you requested detailed information regarding our mine, beg to advise that we have had an Engineer make a complete survey of the property and as he has just finished the map and the entry of some 25 assays, we are pleased to forward, under seperate cover copy of this map for your file.

Also under seperate cover we are sending you a report made some few years ago by Clarence S. King in conjunction with his Son, Clarence R. King who at that time was Research Engineer for the United Verde Copper Company.

The above information together with the report you sent us which has been filled out and enclosed herewith should give you enough information to interest any worth-while Company, who are looking for a real opportunity to take over and develop and mine a a property with splendid possibilities.

Also our mutual friend Mr. Cecil G. Fennell has spent considerable time on this property and can vouch for it.

Should you have a prospect that would like to make an immediate examination of the property, he can do so without waiting to contact the writer as Mr. Garfield Gray lives in one of the Cabins at the mine and is more familiar with the mine than any one else as he has done most of the development work on it and will be glad to show it at any time.

Assuring you of our appreciation of your desire to be helpful and with personal regards from the writer,

Very truly yours,

Verdugo Mines.
By Frank C Gorham Secy.

700 S. La Brea ave La

MT-21

(Maps in tube in shelf under counter)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

Date July 1, 1940

1. Mine True Blue Mine

2. Mining District & County Ellsworth, Yuma.Co.

3. Former name

4. Location Vicksburg, Arizona 3-1/2 miles north and east.

5. Owner Verdugo Mines, Inc.

6. Address (Owner) 700 So. LaBrea Ave., Los Angeles, California

7. Operator Not operating at present

8. Address (Operator)

9. President N. T. Zuver

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals Gold, including Teleurium

14. Men Employed

15. Production Rate

16. Mill: Type & Cap.

17. Power: Amt. & Type - Equipment as follows: 25 hp Fairbanks Gas Engine. Ingersoll-Rand Compressor. Air tank, water tanks etc. Gallows frame with shive wheel 1/2 ton ore

18. Operations: Present (bucket, also smaller one - 1 ton ore car. Several hundred)feet track. Two jack hammers, air hose etc. (1/2 ton hp Engine for blower. Essick-Wisconsin hoist; 150 ft.)ne cable. Blacksmith forge. Work bench, tool container.)Vice, pipe wrench, dies and taps, small tools of all kinds, (pick shovels, etc. In fact complete equipment for sinking)shaft or for drifting. Also 1 Cabin 12 x 20 and 1 Cabin 10x36.

19. Operations Planned

20. Number Claims, Title, etc. Five claims. Title vested in Co. (Not patented).

21. Description: Topography & Geogra

22. Mine Workings: Amt. & Condition

TRUE BLUE

Au

Yuma 14 - 3 T 5 N, R 14 W

Verdugo Mines, Inc. 700 S. LaBrea Ave., Los Angeles '40

Report returned "no such number." 8-15-46

(over)

MT-21

(Mark in safe in shelf under counter)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

Date July 1, 1940

1. Mine True Blue Mine

2. Mining District & County Ellsworth, Yuma.Co.

3. Former name

4. Location Vicksburg, Arizona
3-1/2 miles north and east.

5. Owner Verdugo Mines, Inc.

6. Address (Owner) 700 So. LaBrea Ave.,
Los Angeles, California

7. Operator Not operating at present

8. Address (Operator)

9. President N. T. Zuver

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals Gold, including Teleurium

14. Men Employed

15. Production Rate

16. Mill: Type & Cap.

17. Power: Amt. & Type - Equipment as follows: 25 hp Fairbanks Gas Engine. Ingersoll-Rand Compressor. Air tank, water tanks etc. Gallows frame with shive wheel 1/2 ton ore

18. Operations: Present (bucket, also smaller one - 1 ton ore car. Several hundred)feet track. Two jack hammers, air hose etc.
(1/2 ton hp Engine for blower. Essick-Wisconsin hoist; 150 ft.
) Blacksmith forge. Work bench, tool container
)
(
)

19. Operations Planned

20. Number Claims, Title, etc. Five

21. Description: Topography & Geography In the Harquvar Mountains at elevation of about 2,000 feet, located adjoining and in a large wash and easy of access, high gear road from village to the property.

22. Mine Workings: Amt. & Condition See map for details.

(over)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

MINE OWNER'S REPORT

Date July 1st. 1940.

1. Mine Known as the True Blue

2. Location Vicksburg Ariz.
3½ miles north and east.

3. Mining District & County Ellsworth, Yuma Co.

4. Former name

5. Owner Verdugo Mines (Inc).

6. Address (Owner) 700 So. La Brea Ave
Los Angeles Calif.

7. Operator not operating at present

8. Address (Operator) xx

9. President, Owning Co. N. T. Zuver

9A. President, Operating Co. xx

10. Gen. Mgr. xx

14. Principal Minerals GOLD
Including Teleurium

11. Mine Supt. xx

15. Production Rate

12. Mill Supt. xx

16. Mill: Type & Cap. none

13. Men Employed xx

17. Power: Amt. & Type
Equipement as follows;
25 hp Fairbanks Gas Engine
Ingersoll-Rand Compressor
Air tank, water tanks etc.
Gallows frame with shive wheel
½ ton Ore bucket. also smaller c
1 ton Ore car.
several hundred ft track
Two jack hammers, air hose etc.
½ hp engine for blower
Essick-Wisconsin hoist
150 ft ne cable
Blacksmith forge.
Work bench, tool container.
Vice, Pipe wrence, Dies & taps
Small tools of all kinds.
Picks shovels etc.

In fact complete equipement for
sinking shaft or for drifting

18. Operations: Present xx

19. Operations: Planned none at present

20. Number Claims, Title, etc. five claims
Title vested in Co. (Not patented)

21. Description: Topography & Geography
In the Harquvar Mountains
at elevation of about 2000 ft.
located adjoining and in a large wash
and easy of access, high gear road
from Village to the property.

Also 1 Cabin 12 X 20 and
1 " 10 X 36

22. Mine Workings: Amt. & Condition
Se Map for details.

23. Geology & Mineralization — See report under seperate cover.

24. Ore: Positive & Probable, Ore Dumps, Tailings — See map under seperate cover.

24A. Dimensions and Value of Ore body — Average value taken from present workings $28.00 per ton, ore body, as yet, undetermined. but extensive veins as shown by Engineer.

25. Mine, Mill Equipment & Flow-Sheet — none

26. Road Conditions, Route — Very good. 3½ miles from paved highway at Vicksburg.

27. Water Supply — Water in shaft at 48 feet.

28. Brief History — See report.

29. Special Problems, Reports Filed — yes.

30. Remarks — Because of the presence of Tellurides, which runs values up into thousnads of dollars per ton, and the possibility of ever increasing values with depth, we would prefer to lease the property on a graduated scale, and to be continuous, however we might agree upon a stated price.
We understand that this is the only mine in Arizona having Tellurium

31. If property for sale: Price, terms and address to negotiate. — see above.

For further particulars, address Frank C. Gorham Secy.
Verdugo Mines.
700 So. La Brea Ave.
Los Angeles Calif.

32. Signature: Frank C Gorham

33. Use additional sheets if necessary.

MT-21

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNERS REPORT

Date July 1, 1940

Mine True Blue Mine

Mining District & County - Ellsworth Dist.
Yuma County

Location - Vicksburg, Arizona
3½ miles north and east.

Former Name

Owner - Verdugo Mines, Inc.

Address - 700 So. La Brea Ave.
Los Angeles, California

Operator - Not operating at present

Address

President - N. T. Zuver

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - Gold, including Telcurium
Scheelite -

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type - Gasoline

Operations: Present Magma shipment

Au	Ag	Cu	FE	CA	Al	SiO2	S
0.38	0.40	0.67	3.7	20.8	5.6	42.8	0.2

Operations Planned

Number Claims, Title, etc. - 5 claims. Title vested in Co. (Not patented.)

Description: Topography & Geography - In the Harquvar mountains at elevation of about 2000 ft., located adjoining and in a large wash and easy of access, high gear road from village to the property.

Mine Workings: Amt. & Condition - See map on file for details.

Geology & Mineralization - See report attached.

Ore: Positive & Probable, Ore Dumps, Tailings - See map on file.

Vein Width, Length, Value, etc. - An average value taken from present workings $28 per ton, ore body, as yet, undertermined, but extensive veins as shown by engineer.

Mine, Mill Equipment & Flow Sheet - 25HP Fairbanks Gas engine. Ingersoll-Rand Compressor. Air tank, water tanks, etc. Gallows frame with shive wheel 1/2 ton ore bucket, also smaller one - 1-ton ore car. Several hundred feet track. Two jackhammers, air hose, etc. 1/2 ton HP engine for blower. Essick-Wisconsin hoist; 150 ft. ne cable. Blacksmith forge. Work bench, tool container, Vice, pipe wrench, dies and taps, small tools of all kinds, pick shovels, etc. In fact complete equipment for sinking shaft or for drifting. Also 1 cabin 12 x 20 and one cabin 10 x 36.

Road Conditions, Route - Very good. 3½ miles from paved highway at Vicksburg.

Water Supply - Water in shaft at 48 feet.

Brief History - See report attached.

Special Problems, Reports Filed - Yes.

Remarks - Because of the presence of Tellurides, which runs values up into thousands of dollars per ton, and the possibility of ever increasing values with depth we would prefer to lease the property on a graduated scale, and to be continuous, however, we might agree upon a stated price. We understand that this is the only mine in Arizona having tellurium.

If property for sale: Price, terms and address to negotiate - See above. For further particulars, address: Frank C. Gorham, Sec. Verdugo Mines, Inc., 700 So. La Brea Ave., Los Angeles, California.

SIGNED - Frank C. Gorham

316-322 South San Pedro Street
Los Angeles 13, California

Los [illegible] Calif. April 27/62 19

I hereby Certify that the samples described below, received from

James Reid assay as follows:

Owner's Mark and Sample	Gold Ozs. per Ton	Gold Value per Ton	Silver Ozs. per Ton	Silver Value per Ton	Total Value per Ton	Percentage Copper	Percentage Lead
75' in tunnel	.24	$ 8.40	23.28	$ 23.28	$ 106.70	12.1	
Muck pile	.05	$ 1.75	.94	$ .94	$ 2.69	trace	

GOLD U.S. [illegible] PER OZ.

SILVER @ $1.0[illegible] PER OZ.

LEAD @ ____ C.

COPPER @ 31 C

CHARGES $ 10.00

[signature] ASSAYER

Established 1916

Shop No. 4754

File No. 1310 MA

Date 14 APRIL 1962

CHAS. A. DIEHL
(Registered No. 682)

Arizona Assay Office

Phone ALpine 3-4001

815 North Firs
Phoenix, Ari
P. O. Box 1

VALUES
Latest Quotation

1 oz. Gold ....
1 oz. Silver ....
1 lb. Copper ....
1 lb. Lead ....
1 lb. Zinc ....

MR. RUDY MANCI
BOX 113
FLORENCE

Short Ton ....
Short Ton Unit .
Long Ton ....
Long Ton Unit .

THIS CERTIFIES
Samples submitted for assay contain as follows:

MARKS	Silver per Ton Ozs.	Silver per Ton Tenths	Value per Ton	Gold per Ton Ozs.	Gold per Ton 100ths	Value per Ton	Total Value per Ton of Gold & Silver	% Percentage COPPER
	16	.4	$14.84		.06	$2.10		16.50
75 ft in Tunnel								

Charges $ 5.50 PAID

Assayer [signature: Chas. A. Diehl]

THE EISENHAUER LABORATORIES
316-322 South San Pedro Street
Los Angeles 13, California

ASSAY CERTIFICATE

PHONE MADISON

Los Angeles, Calif. Feb. 8/62 19

I hereby Certify that the samples described below, received from

James Reid

assay as follows:

Owner's Mark and Sample	GOLD		SILVER		TOTAL VALUE PER TON	PERCENTAGE	
	OZS. PER TON	VALUE PER TON	OZS. PER TON	VALUE PER TON		COPPER	LEAD
Keystone #1	.04	$ 1.40	.64	$ .64	$ 2.04	trace	.30
Victory side of vein, 140'	trace		.44	$ .44	$ .44	.70	
Victory tunnel vein @ 190'	1.40	$ 49.00	17.08	$ 17.08	$117.54	8.30	
Victory tunnel--face @ 190'	.12	$ 4.20	1.00	$ 1.00	$ 5.20	trace	

GOLD @ $ 35 PER OZ.
SILVER @ $ 1.00 PER OZ.
LEAD @ ____ c.
COPPER @ 31 c.

CHARGES $ 21.00

ASSAYER

Established 1916

THE EISENHAUER LABORATORIES
316-322 South San Pedro Street
Los Angeles 13, California

ASSAY CERTIFICATE

PHONE MADISON

Los Angeles, Calif. Feb. 23/62 19

I hereby Certify that the samples described below, received from

Mr. James Reid

assay as follows:

Owner's Mark and Sample	GOLD		SILVER		TOTAL VALUE PER TON	PERCENTAGE	
	OZS. PER TON	VALUE PER TON	OZS. PER TON	VALUE PER TON		COPPER	LEAD
Victory-New find	5.02	$ 175.70	10.72	$ 10.72	$ 266.40	12.9	
Sample #1-slate contact Victory #1	.88	$ 30.80	.59	$ .59	$ 31.39	.10	

GOLD @ $ 35 PER OZ.
SILVER @ $ 1.00 PER OZ.
LEAD @ ____ c.
COPPER @ 31 c.

CHARGES $ 10.00

ASSAYER

Established 1916

D. R. Curry, Assayer

[illegible]SAY CERTIFICAT

14437 Rios Canyon Road
El Cajon, Calif. 92021
(714) 443-1754

El Cajon, Calif., 7-24 1974

I hereby Certify that the samples described below, received from Melvin Jones assay as follows:

OWNER'S MARK AND SAMPLE	GOLD Ozs. Per Ton	GOLD Value Per Ton	SILVER Ozs. Per Ton	SILVER Value Per Ton	TOTAL VALUE PER TON	PERCENTAGE OF Copper	Lead	Zinc
M.V. No 1	0 20	28 60	22 80	100 32	128.92			
M.V. No 2	0 12	17 16	0 45	2 10	19.26			
M.V. No 3	0 12	17 16	0 [illegible]	3 88	21.04			
M.V. No 4	0 24	34 32	0 56	2 33	36.65			
M.V. No 5	0 24	34 32	0 36	1 46	35.78 ~~37.18~~			
Topak	0 26	37 18	Trace		37.18			
W.K.	0 32	45 76	0 28	1 17	46.93			

D. R. Curry, Assayer

ASSAY CERTIFICATE

14437 Rios Canyon Road
El Cajon, Calif. 92021
(714) 443-1754

El Cajon, Calif., 7-28 1974

I hereby Certify that the samples described below, received from Melvin Jones assay as follows:

OWNER'S MARK AND SAMPLE	GOLD Ozs. Per Ton	GOLD Value Per Ton	SILVER Ozs. Per Ton	SILVER Value Per Ton	TOTAL VALUE PER TON	PERCENTAGE OF Copper	Lead	Zinc
M.V. No 5	20 lbs Cu @ 85¢				16.00	1.06		
Topak	36.6 "		" @ 85¢		31.11	1.8[illegible]		
WK	156.4 "		" [illegible] 85¢		132.94	7.8[illegible]		
Mv No 1						None		

GOLD at $ 157.00 per oz.

SILVER at $ 5.00 per oz.

LEAD at c

COPPER at 85............c

Charges Paid

[signature]
Assayer

Sept 23-41. Vicksburg
Yuma County
Arizona

Box CO-1,
Dept Mineral Resource, Phoenix,

Dear Sir,

I noticed your inquiry in the September "Pay Dirt" asking for a copper property of merit. I have an excellent showing of copper here, and I sincerely believe you would be interested if you could see the property and go over it thoroughly. This property is already listed with the Mineral Resource Bureau in Phoenix. On receipt of this letter

it may interest you to call at the Mineral Resources Dept & look up the file with my copper listing. It will give you a general idea of the geology etc. I have a 200 ft incline shaft on the copper, and have a nice showing of ore all the way down. This is more of a deposit than it is actually vein matter. The ore body consists of copper glance and carbonates (primary enrichment). The copper-glance carries good values in silver & gold. There is a fairly good supply of

water in a nearby shaft.—
—good road to the property—
only 3½ miles from railroad
with a slight down grade
all the way. I would
like you to see this
proposition, because I
feel sure it may be just
what you want. I'll give
you a very honest deal
on it if satisfactory.
Practically no dead work
to be done, just set up
your equipment & start
mining ore from the first
day. I am living on the
property and have been here for
5 yrs. If interested I would
appreciate a letter from you.

Yours very truly,
J. Garfield Gray.

ECONOMIC GEOLOGY

ALAN MARA BATEMAN, EDITOR

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Office of the Editor,
Yale University.

Yale Station,
New Haven, Connecticut.

Feb. 6, 1934.

Mr. William P. Crawford,
Phelps Dodge Corporation,
Box 1853, Bisbee, Aria .

Dear Sir:

I am in receipt of your letter of January 29 and the enclosed manuscript, which I have read over.

Inasmuch as this manuscript is mineralogical rather than ggeological, it seems to me it would be better to submit it to the Mineralogical Society rather than to ECONOMIC GEOLOGY. Unfortunately it contains practically no geology, nor is the identity of the tellluride established. Really all that is shown is the establishment of a new occurrance of an unidentified telluride mineral.

Perahsp it might be better still to withhold its publication until you have opportunity to make a more comprehensive study of the material accomapnied by a microscopic examination.

I regret that the maniscript does not happen to be of a character thar we can accept for publication in our Journal, and am returning it herewith.

Very truly yours,

Alan Bateman

Encl-Mss.

Alan M. Bateman.

CC to BSB-

A NEW TELLURIDE OCCURRENCE IN YUMA COUNTY, ARIZONA.

W. P. Crawford and Garfield Gray

No Arizona locality is famous for beautiful telluride specimens but telluride minerals have been recorded from several districts.

F. A. Genth has reported tetradymite [1] from a locality two miles south of Bradshaw City, Yavaipai County, and states that it " occurs in xline masses implanted in imperfectly crystallized, slightly ferruginous quartz, associated with pyrite." Dana records tetradymite [2] from the Montgomery Mine at Minnehaha, in the Hassayampa District, Yavaipai County. These two localities may be identical. The geological collections of New York University contain a specimen of gold telluride [3] from Groom Creek, near Prescott. Kemp states it " gives excellent tests for tellurium, is a silvery white mineral, in very narrow veinlets, in a compact bluish white quartz gangue. It contains no bismuth and is probably a telluride of gold."

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[1] F. A. Genth: Contributions to Mineralogy. Amer. Jour. Sci. No 48, p. 114, Aug, 1890.

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[2] E. S. Dana: System of Mineralogy. p. 1093, 6th Ed. 1892.

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[3] J. F. Kemp: Geol. Occurrence and Assoc. of the Telluride Gold ores. Mineral Industry, Vol. VI, p. 304, 1898.

A gold -silver telluride[4] was one of the primary ore minerals

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[4] F. C. Schrader: Geol. and Ore Dep. of Mohave County, Arizona. Trans. A. I. M. E. , VOL. LVI, p. 199, 1917.

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of the ore deposits of the Cerbat Mountains, Mohave County and a gold telluride[5] occured in several mines in the Black Mountains, Mohave

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[5] F. C. Schrader: op. cit., p. 207.

County. The tellurides were unidentified and were probably unimportant. No mines are listed in Schrader's paper.

Tellurium[6] was present in both matte and flue dust from the

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[6] Waldemar Lindgren: Copper Deposits of the Clifton-Morenci Dist. U. S. G. S. Prof. Paper No. 48, p. 39, 1905.

Detroit Copper Company's smelter at Morenci. Hessite[7] is reported from the

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[7] E. S. Dana: op. cit. p. 1094.

West Side Mine, Tombstone, Cochise County and has been identified in ore from the Silver Thread Mine. F. H. Soderstrom[8] states that tellurium, in small amounts, was found in rich ore from leases on the Tough Nut and other claims of the Bunker Hill property. It was probably present as hessite. Emmonsite[9],

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[8] F. H. Soderstrom: oral communication.

[9] W. F. Hillebrand: Emmonsite, a Ferric Tellurite. Colo. Sci. Soc. Proc., Vol 2, pp. 20 - 23, 1886. Amer. Jour. Sci. p. 81, July, 1890.

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ferric tellurite, was first described in ore from Tombstone. The occurrence was very limited. A gold silver telluride [10] was reported in small

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[10] W. E. Hawley: oral communication.

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amount in ores from the Night Hawk Mine, Bisbee, Cochise County. The occurrence of rickardite [11] from the Briggs Mine, Bisbee has been

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[11] Wm. P. Crawford: Notes on rickardite, a new occurrence. Amer. Miner. Vol. 15, No. 7, pp. 272 - 273, July, 1930.

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described and tellurium is present in flue dust from the C & A smelter, Douglas, Cochise County.

A specimen in the Los Angeles Museum is labeled Petzite, Summitt Mine, Gila County. Wm. A. Bryan [12], Director, suggests that it is presumably

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[12] Wm. A. Bryan: personal communication.

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from the Summit Mine, near Globe, but no additional information is given on the catalog card. Data concerning the property are very meager - it produced high grade copper ore - and an opportunity to confirm the identity of the specimen was not afforded.

None of these occurrences were important; in several instances being confined to a single specimen. Therefore, the discovery of a telluride mineral on the True Blue group, near Vicksburg, Yuma County, in sufficient quantity to be mined as gold ore is of economic, as well of mineralogical, importance. It is also the first occurrence of a telluride mineral to be recorded from Yuma County.

The True Blue mine is situated about three miles north-east of Vicksburg, in the Ellsworth Mining District. The area is included in a reconnaissance of the northern Yuma County ore deposits made by Bancroft [14],

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[14] Howland Bancroft: Reconnaissance of the Ore Deposits of Northern Yuma County, Arizona. U. S. G. S. Bull. 451, 1911.

---

who, at the same time mapped the surface geology (Fig. 1). Bancroft described the Harcuvar Mountains as a pre-Cambrian complex of fine grained slates and quartz-mica schists, with intercalated limestone and amphibolite. Diabase intrusives are common and a granite intrusion of Mesozioc age outcrops several miles to the north of the True Blue. The amphibolite was probably formed through the alteration of basic rocks like diabase, diorite, or gabbro. The rocks, in the immediate vicinity of the True Blue, according to Gray, are quartz-mica schists, slates, and limestones, intruded by diabase dikes.

The property consists of five claims, located on a vein of quartz and calcite, which has been traced on the surface for more than 1,000 feet. Insufficient work has been done to prove whether it is a continous vein or a series of lenses. The vein strikes northeast - southwest and dips steeply to the north, conforming with the schistosity of the country rock. The hanging wall of the vein is a quartz-mica schist, the footwall is crystalline limestone and schist. Several igneous dikes intersect the vein at steep angles and one of these was crosscut for twenty two feet. The rock was fine grained with phenocrysts of quartz and a dark mineral, hornblende (?). A calcareous material, effervescing slightly in dilute HCl, occured along fractures and there was a meager dissemination of fine pyrite. (Rock No. 1)

A drift driven to the north of the shaft intersected an igneous dike parallel to the vein and crosscut it for 30 feet. Hand specimens of the rock resembled No. 1. It is finer grained, almost felsitic, contains considerable visible quartz and hornblende(?) and a very little pyrite. A partial analysis was made of the two rocks:

		Rock No. 1	Rock No. 2 (Ed. Steele, analyist)
Au	Au. oz	Trace	Trace
	Ag. oz	0.10	0.10
	Cu %	.10	.10
	SiO_2 %	66.80	73.20
	Al_2O_3 %	8.70	5.20
	Fe %	3.60	5.20

The rocks were of no interest as ore and apparently had no influence on the ore deposit. No thin sections were made and hand specimens were called a silicified andesite.

The first gold ore mined was from a surface outcrop and was soon exhausted. Two railroad cars of ore, netting about $16.00 per ton, were shipped from the outcrop. Furthur development work showed native gold and the telluride mineral in the limestone footwall of the vein. A vertical shaft was sunk to a depth of 50 feet. At this point sinking was discontinued because of a flow of water too great to be handled by windlass. The ore extended to a depth of 25 feet and was cut off by a flat fault. The ore shoot was crosscut at this depth and had a width of about 7 feet. Stoping was begun and 33 tons of ore were shipped in 1931. This ore netted $19.00 a ton and in addition to gold averaged about 1% copper and 3½ ounces silver.

The ore minerals are native gold and a gold telluride, in a gangue of crystalline limestone occurring as intercalated bands of varying thickness in mica schist. Much of the limestone is considerably stained by limonite and is traversed by quartz veinlets. The unstained limestone resembles dolomite but a partial analysis showed very little magnesia.

(Ed. Steele, analyist.)

Cu.	Trace
CaO	30.90 %
MgO	0.70 %
Fe	3.20 %

The telluride mineral was first observed in the unstained limestone but, on treating specimens with dilute HCl, areas stained by limonite showed considerable native gold and telluride. The mica schist is only meagerly mineralized by the gold minerals and the quartz veinlets are barren.

The presence of tellurium in the ore was noticed by Gray and because of the high gold content, the mineral was called calaverite. The telluride showed perfect cleavage and it was later believed that it might be tetradymite, similar to ore from Hatchita, New Mexico. Tetradymite from Hatchita often occurred interlaminated with native gold.

Specimens of the unstained limestone containing patches of the telluride were examined under a binocular microscope and showed small areas of the telluride associated with native gold. The gold occured as separate grains and as imperfect crystals in the limestone; also as intergrowths with the telluride. Grains of gold surrounded by the telluride were common. The gold is a bright yellow, is not " rusty" and was not formed through oxidation of the telluride, but is primary and deposited contemporaneously with the telluride. Associated with the gold minerals were occasional grains of pyrite and chalcopyrite. Limestone, stained by limonite and associated with mica schist shows considerable gold and telluride, and one specimen showed a small patch of a yellowish - green mineral which may be a ferric tellurite. Galena was not observed in any of the specimens.

Specimens showing no sulphide minerals were crushed and panned. The concentrate was examined under the binocular microscope and showed native gold and telluride. The larger grains of the telluride, showing no gold, were picked out for examination.

The telluride mineral is a bright lead gray, with a splendent, metallic luster. It occurs in folitaed grains and masses, which can be separated into thin laminae with a needle. It shows one perfect cleavage. It is soft, having a hardness of about 2.

On charcoal, B. B., the mineral gives a characteristic tellurium flame and sublimate and yields a gold bead. Treatment with concentrated

sulphuric acid gave the reddish color of tellurium sulphate and dilution with water gave a black ppt. of elemental tellurium. A nitric acid solution yields a ball of sulphur and the filtrate, upon the addition of sulphuric acid, gives a white ppt. of lead sulphate.

On a plaster tablet, with Von Kobell's flux, it gives an orange sublimate near the assay and a brownish ring far from the assay. The orange sublimate disappears in strong ammonia fumes - characteristic of antimony. In open tube it gave a white non-volatile sublimate on the under side of the tube. No bismuth was observed in this material.

These tests indicated that the mineral contained gold, tellurium, antimony, lead, and sulphur and that it was probably nagyagite.

Another specimen of ore was crushed and concentrated. The concentrate showed grains of quartz, telluride and gold. The gold was removed by amalgamation with mercury and the telluride was tested for antimony. It gave a positive reaction for this element. Dissolving it in aqua-regia and adding sulphuric acid gave a ppt. of lead sulphate. The filtrate was tested for bismuth and gave a positive reaction.

Hand specimens of the ore show the telluride mineral to have a perfect cleavge and that some grains are slightly darker in color than others. Facilities for polishing and examining the mineral under polarized light were not available, therefore, no positive statement can be made regarding the purity of the material. However, no minerals other than gold and the telluride were observed in the concentrate and it is possible that both tetradymite and nagyagite are present.

Quantitative analyses of nagyagite vary considerably and W. E. Ford [15] states that the antimony may be due to impurities.

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[15] E. S. Dana: Textbook of Mineralogy. 4th Ed. p. 442, 1932.

F. C. Stilwell[16] examined nagyagite from Kalgoorlie, Western Australia, and writes: " Nagyagite is a complex telluride with a variable composition which has been represented empirically by Boldirew [17] in the above

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[16] F. C. Stilwell: The occurrence of Telluride Minerals at Kalgoorlie. Proc. Aus. I. M. M. (Inc) N. S. No. 84, p. 159, 1931.

[17] A. K. Boldirew: Die Chemischen Formeln des Nagyagits. Centralblatt fur Min. p. 198, 1924.

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formula ($(PbAu)(STeSb)_{1-2}$) in which the ratio of Au to Pb varies from 1/9 to 1/5, and the ratio of Sb to Sb + Te from 0 to 1/8. Boldirew has developed the above formula by a comparitive examination of 12 analyses and shown that Sb, Te, and S are not in combination but replace one another, that Au takes an important part in the chemical structure and is probably combined with Te and that gold and lead probably do not isomorphously replace each other."

Until more work is done on the ore the telluride mineral or minerals cannot be named definitely. However, the ore contains tellurium, which is probably combined as nagyagite, the gold sulpho-telluride and as tetradymite, the bismuth telluride, and it is a new locality for tellurides in Arizona.

Wm. P. Crawford,
Bisbee, Arizona