MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE Contract No. _____ Docket No. 6841

Application
- [x] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) 4/7/71
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____: Reports
- [ ] Analysis of Semiannual Inspection Reports
- [ ] Project Summary (Interim) by MME Engineers

Right Side

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with Transmittal, Narrative and Maps

Folders No. _____: Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty Material

72195-65

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

February 26, 1971

COPY
C. M. E.
RECEIVED
MAR 1 1971
INITIALS | CODE

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: New Application (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

Enclosed is one copy of an application received in the Field Office on February 10, 1971. We requested a copy of the lease which was received February 22, 1971. A duplicate copy of the completed application is retained in our file. The Applicant requests the return of one set of the supporting documents.

The following numbered items in the application require supplementing. Additional information could be obtained at the time of a field examination if you so prefer.

2(c). Lien and Subordination Agreements were not submitted, but the owner has given us oral assurance that they will be furnished if needed.

3(f). Geological reasons for expecting to find ore are not clear. The proposed work may be either exploration or prospecting, depending on whether ore can be inferred or only suspected. In reply to this question the Applicant refers to reports by Bert C. Austin (1941) and W. P. Miller (1898). Without the maps that accompanied these reports it may not be possible to infer ore in specific locations, or to be sure that the area is not already explored.

5(a). The reason for crosscutting both ways from the proposed drift, which is on the most easterly of three known east-dipping veins, is not explained. This question as well as 3(f) may require a field examination.

7. The Applicant's concept of OME procedure in sharing the costs is evidently inaccurate. His estimate of $75 per foot average for both (?) sinking and drifting is probably too low, since he includes all costs whatsoever. A detailed estimate at this time, however, may be premature, as the type and amount of work may be revised considerably. In any case, bids for diamond drilling would be required. Specifications probably contain typographical errors; e.g., an Eimco 12B mucking machine is probably intended, which would require a 5 x 7 drift.

R. M. Smith

for H. K. Stager

Enclosures

MME Form 40
(Revised Nov. 68)

Budget Bureau No. 42-R1368
Approval expires Dec. 1971

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Pursuant to Public Law 85—701 (72 Stat. 700; 30 U.S.C. 641)

NAME OF APPLICANT *(Full legal name and mailing address as they should appear on contract if one is executed.)*

FRED W. MITCHELL
P.O. BOX 115
JAMESTOWN, CALIFORNIA, 95327

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER 6847

DATE RECEIVED 3-1-71

REGION 11

DIVISION CODE

BUSINESS ORGANIZATION *(Check one)*

- INDIVIDUAL [X]
- CORPORATION [ ]
- PARTNERSHIP [ ]
- OTHER *(Specify)* [ ]

STATE IN WHICH FIRM IS ORGANIZED

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: GOLD

ESTIMATED COST OF PROJECT: $150,000.00

PROPERTY NAME	LOCATION COUNTY	STATE
Golden Rule Mine Jumper/New Era Mines	Tuolumne	California

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. II). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit two copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Department of the Interior, U.S. Geological Survey, Office of Minerals Exploration, Washington, D. C., 20242, or with the nearest OME Field Office.*

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief, and that he would not ordinarily undertake the proposed exploration under current conditions and circumstances at his sole expense.

Jan. 27, 1971
DATED

Fred W. Mitchell
BY *(Signature)*

Lease-holder
TITLE

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include (1) true copies of your letters to credit sources which show date of loan request, amount and terms requested, and proposed use of loan funds and (2) true copies of replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

(b) List names and addresses of affiliated, parent, or controlling companies or organizations and state extent and nature of their interest.

(c) State how you propose to furnish your share of the cost of the exploration work.

2. Applicant's Rights in Land:

(a) State your interest in the land and mineral rights, whether owner, lessee, purchaser under contract, or other. If you are not the owner, submit one true copy of the lease, contract, or other document (with address of owner) under which you control the property. Describe all liens, mortgages, or other encumbrances on the land and state book and page number and official place where recorded.

(b) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all adjacent land which you own or control. Describe any part of the land or workings which should not be subject to Government royalty and liens. If the land consists of unpatented claims, state book and page number for each recorded location notice, including amended locations, and official place where recorded. State all the names by which you know the property.

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements signed by owner on MME Form 52. If the agreements cannot be obtained, state reasons and whether you can furnish a performance bond.

3. Physical Description:

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the land. Include existing mine workings and all production facilities.

(b) State your interest, if any, in operations described in (a)

(c) State, if you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves, giving quantities and grades.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) If you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates. State your reasons for expecting to find ore.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you have, indicating whether you require their return.

4. Accessibility of Property:

(a) To aid the OME representative who may examine the property state name, address, and telephone number of person who will meet him; give directions for reaching the property; and describe accessibility of property and of any mine workings.

(b) Name the shipping and supply points and state the distances to the property.

5. Exploration Work:

(a) Describe fully the proposed exploration work giving individual footages and sizes of openings *for each item of work*. Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

(b) If an access road must be built, show the proposed location on the property map and state the length, type and construction methods proposed.

(c) If an OME contract is executed, state how soon thereafter work would be started and finished. State your anticipated average daily or monthly rate of progress for each type of work.

6. Experience:

State your operating experience and background to conduct this exploration work and also that of the person who will supervise the work.

7. Estimate of Costs:

Furnish detailed estimates of the necessary costs for time and materials *for each item of the work proposed in 5(a)* under the headings listed below with a total for each heading and the estimated total cost of the work. Costs for any work to be performed by an independent contractor should be listed separately under category (a) below. Costs for any work that is not to be performed by an independent contractor should be listed under categories (b) through (g).

(a) Independent contracts. State the total cost of any proposed independent contract for all or any part of the work, and the number of units and the unit cost for each type of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, or per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. (*Note*—If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. The cost of supervision, engineering and geological services, outside consultants, and labor should be itemized by numbers and classes of employees; rates of wages, salaries or fees; and periods of employment. State whether these services are available.

(c) Operating materials and supplies. List items of material and supplies giving quantity and price of each. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of equipment and tools costing $50 or more per unit. Give specifications and indicate how each item is to be acquired—i. e., rented, purchased or provided by the applicant. If rented or purchased, state the estimated rental or purchase price. If furnished by the applicant, state condition and present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant which will be used in the exploration work.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration work, stating specifications and cost including labor, materials, and supervision.

(g) Miscellaneous. Describe the type and estimate the cost of repairs and maintenance of the operating equipment listed in 7(d). Do not repeat initial repairs listed in 7(e). Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories. [*Note*—The Government will not contribute to costs incurred before the date of the contract, or to costs of or incident to: (1) acquiring, using, or possessing land and any existing improvements, facilities, buildings, installations, and appurtenances, or the depreciation and depletion thereof; (2) general overhead, corporate management, interest and taxes (other than payroll and sales taxes); (3) insurance (other than employees' liability insurance); and (4) damages to persons or property (other than authorized repair to or replacement of equipment or other property used in the work).]

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Jan. 27, 1971

Fred W. Mitchell
P.O. Box 115
Jamestown, Calif.

ITEMS OF INFORMATION REQUIREMENT

1. Financial Eligibility
   a-Enclosed are two Letters of Application addressed to two Local Banking Institutions. The Letters marked "A" include the Application and Denial from the Wells Fargo Bank, in which I have an Account. The Letters marked "B" include the Application and Denial from the Bank of America in which I have not an Account.
   b-Not Applicable.
   c-My proposed Share would include Equipment and Money.
2. Applicant's Rights to Land
   a- I am the sole Lessee of the Property in question, ie; the Golden Rule Mine and the Jumper/New Era Mines and Properties. Lease was obtained from the Jumper Lands Inc. of California. See true copy of Lease marked "C". There are no Encumbrances against any of the Properties.
   b- See true copies of Official Maps and Documents enclosed marked "D".
   c-Not Applicable.
3. Physical Description
   a-See Plate #1 for old Workings; however, there has not been any Mining or Exploration work performed upon the Section of Land that is involved in this Application.
   b- I have been the Lessee for 20 years. I have worked both Properties on a very limited scale.
   c- See Detailed Report marked "E" (Report on Jumper Mine) and Detailed Report marked "F" (Report on the Golden Rule Mine);
   d- No true Evidence of Ore at this Time.
   e- See Reports mentioned in section "c" Items marked "E" and "F".
   f- No detailed Sampling done in the proposed Exploration Area as there are no Underground Workings in the Area and a true Geological Report can not be obtained from the Surface as the desired Formations do not appear on the Surface. The expectation of finding another valuable Ore Body is based upon the detailed Reports marked "E" and "F". The Property to be Explored is located between the Golden Rule Mine on the North and the Jumper/New Era Mines on the South. Both Mines are located upon what is known as the "Mother Lode" of California and both Mines have produced Millions of Dollars in return. As the enclosed Reports indicate, the Geological Structure appears to be the same in each Mine, therefore, giving good reason to assume that there could be another large Ore Body lying in that Area to be Explored. The fact that two World Wars contrubuted to the closing of these Mines and that when they were Producing large amounts of Gold little thought was given to that Area lying between them. As indicated by the Narratives in Reports "E" and F, the Properties were turned over to the Leasers who were only after the easy to get Values that required no amount of Exploration work.
   g-Enclosed is all the Data available at this time. Would appreciate at least one Copy to be returned to sender.
4. Accessibility of Property
   a- Contact Applicant, FRED W, MITCHELL//P.O. Box 115, Jamestown, California, 95327//Home Tel. 9845446 area 209//Can be contacted at the Tuolumne County Sheriff's Department, Sonora, California//Tel. Area 209 532-7401. There are 2 Shafts and 2 Tunnels open to examination at this time.
   b-The Shipping and Supply Points would be Jamestown, California. Served by good paved roads and Railroad. The distance is about 3 Miles to Mining Property by good Paved County Road.

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Jan. 27. 1971

Fred W. Mitchell
P.O. Box 115
Jamestown, Calif.

ITEMS OF INFORMATION REQUIREMENTS

5. EXPLORATION WORK

a-The proposed Exploration Work will be conducted according to Bureau of Mines Standards of Safety and Requirements. A Summary of the Work is as follows: Referamce to Plate #1; Work would began at Shaft #3 located on the Golden Rule Mine Property South of the Main Golden Rule Shaft (#1). Shaft #3 which is 80 ft in depth would be extended to a total depth of 140 ft. The Shaft would consist of 2 Compartments. One for hoisting and one for a manway and Service Facilities (ventilation, working Air, water, electrical service, and comunications). There are 3 known Veins called the West Vein, Middle Vein, and the Slate Vein that traverse in a North-South direction. These Veins appear in both the Golden Rule Mine on the North and the Jumper/New Era Mines on the South. These Veins coupled with the intrusion of Grey Slate, Black Slate, and Diabase and Diorite Dikes form the Gold producing Ore Bodies that were discovered in the Mine on the North and the Mines on the South. These Ore Bodies are of various Widths and Lenghts dip to the North. They were very rich in both Mines and produced their greatest values from the 500 ft. level to the surface. It is therefore logical to assume that another valuable ore body could be formed within the area of about 1300 ft. that lays between the two Mines; thereby, forming the bases for this Exploration Project.

All of the Shafts on the Golden Rule Mine were sunk in the Slate Vein. Shaft #3, where the Exploration Work will start, is also in the Slate Vein. As this Shaft will be increased in depth from 80 ft. to 140 ft. it will require a new Hoist, new Headframe, new rails, new Skip, and complete Timbering to the bottom. The Collar of the Shaft will have to be constructedof reinforced concrete. All the above Operations are required by the Bureau of Mines Standards. 440 3 Phase Electric Power has to be installed to Operate the Equipment. A Loading Shute will be installed near the Bottom of the Shaft to speed up the Hoisting of Rock to the Surface. All Exploration Work will be performed on a 1 Shift bases. Under normal conditions, at least 6 ft. per shift can be accomplished in sinking the Shaft.

At the 120 ft Level a Drift will be driven South to a distance of 900 ft. There will be 3 Crosscuts from the 900 ft. Drift. These Crosscuts will be East and West of the Drift; spaced about 175 ft apart; crossing the Drift to a total length of about 200 ft for Exploration purposes. The Drift will 5? 9' X 7' opening to allow for a Mucking Machine. Size will be made smaller if a smaller Mucking Machine is available. Crosscuts will be of same size except the last portion of footage will be done with Diamond Drills. Refer to Plate #1 and Plate #2. Under normal conditions 8 to 10 foot per Shift can accomplished.

b-No access Road needed.

c-Work would start in 60 days. Work could be completed in less than 2 years. Sinking Shaft at the rate of 6 ft per day. Drifting and Crosscutting at the Rate of 8 to 10 feet per day. //

6. EXPERIENCE

a-I have worked in all phases of Mining for the past 30 years, ~~xxxx~~ within this County of Tuolumne. Have knowledge of Milling Processes, Electronics, Machinery, and Underground Operations. I plan to Supervise the whole Operation.

Jan. 27, 1971

Fred W. Mitchell
P.O. Box 115
Jamestown, Calif.

7. ESTIMATE OF COSTS:

a-The original request of $150,000.00 is based upon research locally, Union wage scales, cost of Materials, cost of Services, and consulting with several Mine Operators and Contractors. The nature of the small size of this Exploration Project warrant the Maximum Price of $75.00 Per Foot. This includes all costs of Labor, Machinery, Materials, and Services. Conditions and fluctuating Costs could result in some phases of the Exploration Project to be less than the $75.00 per foot Maximum. All this is also based upon the Maximum 2 year Contract allowed by the Federal Government. Naturally, if the Project could be completed in less than 2 years and the cost would average less than $75.00 per foot, it would be of benifit to the Federal Government and myself; as a surplus in Money would exist and I would be able to plan on the next phase of the Operation.

Taking in to consideration Conditions and Costs, below are projected estimates of Major costs and work Operations; based on local rates:

Based on a maximum Government Contract of 2 years, there would be 480 working days. At the rate of 4 ft. per day for Shaft work, an estimate of 35 days would be required to sink to a depth of 140 ft. At the 120 ft. Level a Station would have to be constructed requiring another 10 days. Based on the Rate of 6 ft. per dayfor Drift and Crosscut and Diamond Drill work at a total distance of 1500 ft. would require an estimate of 250 days. This makes a total of 295 working days for the Exploration work. Out of a total of 480 working days allowed under the Government Contract, this would leave a balance of 185 days to be applied to the Surface Plant. This of course would be more than ample time to install the Hoist, Headframe, Compressor, and Operating Power. An estimated number of persons to be employed for the complete project would be 12. This would include Supervision, Accounting, Miners, Chuck Tenders, Top and Bottom Man, Timber Man, Hoist Man, Skip Tender, and Shift Boss. An estimate of 4 part time Persons would be Employed during the Project; ie, Outside Consultant, Engineering and Geological Personal.

A few Examples of cost of Labor based on Union Rates are listed below:

Shifter--$8.10 Per Hr. Miner $7.35½ Per Hr. Chuck Tender$7.22½ Per hr. Timberman $7.35½ Per hr. Top Man and Bottom Man $7.22½ Per hr. Miner (Shaft) $7.62½ Per hr.

Examples of Machinery and Materials:

Compressor (Rented) 450 cu ft $1.92 Per hr plus Tax and Transportation
12 B? Mucking Machine #12-D (Air Operated) $8.65 Per Hr. plus Tax and Transportation.
Ventilating Unit .36 per hr.
Explosives $18.40 per 50lbs
Detonators $3.40 per box of 100
Timber $185.00 per 1000ft.
Rails .8 per pound
Diamond Drill work $10.00 per foot

Careful consideration by Professional Consultants and myself warrant the Estimate of the quoted Rate of $75.00 per foot for the projected Exploration Project. There will be no Racial discrimination in the Employment of Persons on this Exploration Project..

No. 424

UNITED STATES DEPARTMENT OF THE INTERIOR
HAROLD L. ICKES, Secretary
BUREAU OF MINES
JOHN W. FINCH, Director

Bulletin 424

MINERAL INDUSTRIES SURVEY OF THE UNITED STATES

CALIFORNIA

TUOLUMNE AND MARIPOSA COUNTIES
MOTHER LODE DISTRICT (SOUTH)

MINES OF THE SOUTHERN MOTHER LODE REGION

Part II—TUOLUMNE AND MARIPOSA COUNTIES

BY
C. E. JULIHN and F. W. HORTON

U.S. GEOLOGICAL SURVEY
MENLO PARK
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GOVERNMENT PRINTING OFFICE
WASHINGTON : 1940

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it to the mill by cable haulage. The ore is crushed to minus 1½ inches in a jaw crusher and then ground in a 5- by 4-foot Straub ribbed-cone ball mill. A homemade trap that receives the discharge of the ball mill catches coarse free gold and discharges it to a Dorr-type, single-rake classifier in closed circuit with the ball mill. The overflow from the classifier goes to a Wilfley table, the tailings from which go to flotation cells. A shipping concentrate is taken from No. 1 cell, and concentrates from the remaining three cells are returned for cleaning. Concentrates are shipped to the smelter at Selby, Calif., and the bullion to the mint. About 25 percent of the gold is free. No. 1 cell is a Fagergren, and a Kraut cell is used for cleaning. Flotation reagents are American Cyanamid 301 and pine oil. There is a small single-drum hoist, a small Ingersoll-Rand air compressor, and a blacksmith and machine shop. When the mine was visited, nine men were employed underground, two men on the surface, and seven men in the mill.

SANTA YSABEL

The Santa Ysabel mine is on the southeast slope of Quartz Mountain about 2½ miles south of Jamestown. It comprises the Knox & Boyle, Miller & Holmes, Gray Eagle, and Nyman claims, embracing 100 acres immediately south of the Hitchcock and Heslep claims of the Dutch-App group of mines. (See Nos. 91 and 92, fig. 5.)

The geology of the Mother Lode is here almost identical with that of the Dutch-App property already described. There are stringer veins of quartz in the Calaveras slates on both sides of a low-grade ankerite-mariposite zone of alteration, which at the Miller & Holmes claim is 170 feet wide. The stringer veins strike N. 16° W. and dip about 65° NE. They were developed by three shafts 830, 800, and 600 feet deep, respectively, and by several thousand feet of crosscuts and drifts. When the property was most active it was equipped with a 40-stamp mill, and concentrates were saved by four Frue vanners. Although it is credited with a total output of $1,500,000, this group of mines has been idle for many years.

JUMPER AND GOLDEN RULE

The Jumper and Golden Rule property is about 4 miles south of Jamestown in secs. 27 and 35, T. 1 N., R. 14 E. (See No. 95, fig. 5.) It is a consolidation of the Jumper, Golden Rule, and New Era properties, each of which was operated previously as a separate mine, with the Mark Bogan ranch, an agricultural patent on the east of the claims, which covers the dip of the vein system with increasing depth. The property is owned by J. W. Schiffman of Jamestown, Calif., and associates. The total production of the group is estimated at about $5,000,000.

In this property the Mother Lode is represented by three parallel veins striking about N. 16° W. and dipping 70° NE. Of these, the most easterly or hanging-wall vein is known as the Jumper. It is followed to the west by the Middle vein and the West or Footwall vein at intervals of 150 to 200 feet, the distance between the veins increasing slightly along their strike to the north. The hanging wall of the vein system is amphibolite schist and the foot wall is diorite.

The same pattern of primary mineralization characteristic of most of the Mother Lode properties in Tuolumne County exists here. The schist near the contact was dolomitized with the formation of ankerite and became veined or interlaminated with quartz and impregnated with pyrite. This mineralized zone was intruded subsequently by a diabase dike, and, still later, mineralization deposited silica, calcite, and gold in minor fissures opened by slight movements. This late mineralization seems reponsible for the rich pockets of free gold for which the mines of the group, particularly the Jumper, are noted.

The main ore bodies, which range from 5 to 50 feet in width, are present in the schist on the hanging wall of the ankerite, although some large quartz lenses carrying a little free gold and auriferous pyrite are found in the ankerite. There is a narrow vein of quartz and calcite on the footwall of a silicified zone in the schist, and this vein has frequently been rich in free gold. The diabase dike also is often shattered, the resulting small fissures within it being filled with quartz and calcite, which carry enough gold in some places to convert the dike as a whole into ore. The rich pockets of free gold in the vein have always been found associated with the late seams of calcite, which cut through it and generally dip to the north; and, as in many of the pocket mines of the county, the free gold often is accompanied by petzite. Although famous for their rich pockets, the average ore taken from these mines has been low grade, average recovery for all years for which tonnage statistics are available being $5.25 per ton, corresponding to 0.245 ounce of gold.

The Golden Rule mine probably was the first of the group to be worked. Mining by means of open-cuts and a 200-foot vertical shaft was carried on in the 1860 decade, and the property is reported to have produced about $50,000 in 1870 and 1871. About 1895 a crosscut adit 528 feet long was driven from the west side of Golden Rule Hill or footwall side of the vein system, which intersected the Jumper vein at a depth of only 80 feet. From this intersection, the Jumper vein was drifted on for 800 feet north and about 100 feet south and was stoped to the surface throughout the entire length of the drift. The vein material here was schist impregnated with auriferous sulfides, and on its footwall were narrow veinlets of quartz and calcite that are said to have been rich in gold. The Golden Rule shaft was deepened subsequently to 530 feet, crosscuts having been driven east on the 300- and 400-foot levels and both east and west on the 500-foot level to cut all three veins. An inclined winze 800 feet deep was sunk on the Jumper vein from the 500-foot level. From 1899 to 1902 about $90,000 was produced from the Golden Rule, but there is no record of its total output before its consolidation with the Jumper.

The Jumper mine was developed originally by an inclined shaft 320 feet deep on the Jumper vein with drifts both north and south on the 100-, 200-, and 300-foot levels. In its lower levels, however, it was developed through the New Era shaft about 150 feet north of the Jumper shaft. The New Era shaft follows the inclination of the vein and is 1,400 feet deep, with levels at 200, 400, 500, 600, 700, 800, 1,000, 1,100, 1,200, 1,300, and 1,400 feet. A winze north of the shaft, on the 1,400 level extends the workings 400 feet deeper, with levels at 100-foot intervals, to 1,800 feet. Almost all stopes in the mines are above the 800-foot level. The ground above this level has been largely mined out through a length of 600 feet to within 100 feet of the surface. There are several miles of underground workings in the group. The 500-foot level alone is 2,900 feet long and connects the New Era workings with those of the Golden Rule.

In 1890 the Jumper mine had a 20-stamp mill, but this was increased later to 40 stamps. No concentrators were used, as the sulfides were considered to be too low grade to save. From 1896 to 1904, its most active period, the property was worked by the Jumper Californian Gold Mines Co. Subsequent operations were conducted by various lessees, all working above the 500-foot level. Their maximum annual output is reported as $85,000. Milling at the property ceased in 1919, and only a few thousand dollars worth of gold has been produced since.

It is reported that when the mine was closed the existence of large bodies of low-grade material in the West vein had been proved, but these evidently did not contain enough gold to be classed as ore at that time. However, at the present price of gold and with highly developed flotation methods available for cheap concentration, it is possible that much of the ore left in the mine is now better than marginal in grade.

MAZEPPA

The Mazeppa mine is 1 mile southwest of Stent in sec. 35, T. 1 N., R. 14 E. (See No. 96, fig. 5.) It adjoins the Jumper mine on the south and contains a continuation of the Jumper vein-system, which has been described and which has been drifted on at the 700-foot level in the Jumper ground to within 300 feet of the north endline of the Mazeppa.

The vein on which the Mazeppa shaft is sunk is 5 to 20 feet wide, strikes N. 16° W., and dips 65° NE. The vein material as a whole is not ore, but the shoots seem to be confined to a 4- to 6-foot width adjoining the hanging wall, which is Calaveras slate. The foot wall is metadiorite and serpentine. No record of the total production of this mine is available. The ore was treated in a 10-stamp mill at the property. Operations were not profitable, however, and the mine has not been worked for many years.

EAGLE-SHAWMUT

The Eagle-Shawmut mine is on the east side of Woods Creek, 2½ miles above its junction with the Tuolumne River and about 2 miles northwest of Jacksonville, in secs. 11 and 12, T. 1 S., R. 14 E. (See No. 118, fig. 5.) It is owned and operated by a partnership consisting of H. G. Miller and Geo. W. Clemson, both of Los Angeles. F. H. Mitchell, of Eagle-Shawmut, is general manager.

This property includes 365 acres and represents a consolidation of a number of mines that once were operated individually, some of them a long time ago. The Eagle-Shawmut Gold Mining Co. operated from 1896 to 1916. In the latter year the Belmont-Shawmut Mining Co., a subsidiary of the Tonopah Belmont Development Co., succeeded it and operated the property until 1923.

170559°—40——4

JUMPER MINE

FRED W. MITCHELL

P. O. Box 115 Jamestown, California

Date Jan. 27, 1971

Mr. R. Smith
345 Middlefield Road
Menlo Park, California

Dear Mr. Smith:

Enclosed for your consideration are documented copies of reports and maps compiled by by several Mining Engineers who have made extensive Evaluations of the Jumper, New Era, and Golden Rule Gold Mining Properties. Their Reports plus my own experience of working these Properties for the past 20 years, has prompted me to apply for Federal Funds to Explore that Area between the Golden Rule Mine and the Jumper/New Era Mines for the purpose of locating a new Ore Body. Enclosed you will find Maps and my proposed plan for this Prodject.
Thanking you for your consideration on this Matter.

Very truly yours,

Fred W. Mitchell

Fred W. Mitchell

JUMPER MINE

FRED W. MITCHELL

P. O. Box 115 Jamestown, California

Bank of America NT&SA
Sonora Branch
180 S. Washington Street
Sonora, California 95370

Attn: Ben Briley, Mgr.

Date November 1, 1970

Dear Mr. Briley:

I wish to obtain an application for a loan of $150,000. Purpose of said loan is for exploration work to be performed on the properties of the Jumper and Golden Rule Mines located near Stent, California, eight miles southwest of Sonora, Calif. County of Tuolumne. Terms of loan would be repayment plus Interest over a period of two to five years.

The exploration work would consist of rehabilitating an existing shaft on the Jumper Mine to a depth of 200 feet. From this shaft drifting and cross-cutting would be done in an effort to locate new ore bodies.

The past production of these two mines more than warrant this exploration work.

Thanking you for your consideration of this request.

Very truly yours,

Fred W. Mitchell

Fred W. Mitchell
Jumper Mine Supertintendent

Cable Address — BANKAMER CA

Bank of America
NATIONAL TRUST AND SAVINGS ASSOCIATION

SONORA BRANCH • 180 SOUTH WASHINGTON STREET • SONORA, CALIFORNIA 95370

December 3, 1970

Mr. Fred W. Mitchell
P.O. Box 115
Jamestown, California

Dear Mr. Mitchell:

We wish to advise we would be unable to advance the loan requested in your application of November 1, 1970. Our decision is based on present bank policies and requirements, and is in no way a reflection on your very good credit and character standing.

Sincerely yours,

Ben B. Briley
Manager

BBB:pm

JUMPER MINE
FRED W. MITCHELL
P. O. Box 115 Jamestown, California

Wells Fargo Bank
Sonora Branch
172 S. Stockton Road
Sonora, California 95370

Attn: Ben Hickey, Mgr.

Date November 1, 1970

Dear Mr. Hickey:

I wish to obtain an application for a loan of $150,000. Purpose of said loan is for exploration work to be performed on the properties of the Jumper and Golden Rule Mines located near Stent, California, eight miles southwest of Sonora, Calif. County of Tuolumne. Terms of loan would be repayment plus Interest over a period of two to five years.

The exploration work would consist of rehabilitating an existing shaft on the Jumper Mine to a depth of 200 feet. From this shaft drifting and cross-cutting would be done in an effort to locate new ore bodies.

The past production of these two mines more than warrant this exploration work.

Thanking you for your consideration of this request.

Very truly yours,

Fred W. Mitchell

Fred W. Mitchell
Jumper Mine Supertintendent

Since 1852

WELLS FARGO BANK

Jan. 5, 1970

SONORA OFFICE
172 WEST STOCKTON STREET
SONORA, CALIFORNIA 95370

Jumper Mine
Fred W. Mitchell, Supertintendent
P. O. Box 115
Jamestown, Ca. 95327

Dear Mr. Mitchell:

Thank you for your inquiry regarding a loan of $150,000. for exploration and rehabilitation of the Jumper Mine. This letter is to inform you that our bank is not currently considering loans for this purpose and we must decline your request.

Sincerely,

B. C. Hickey,
Asst. Vice President and Manager

BCH:md

AGREEMENT OF LEASE

THIS AGREEMENT made and entered into this 18th day of February 1971, by and between JUMPER LANDS INC., a corporation, organized and existing under the laws of the State of California, hereinafter referred to as the "Lessor", and FRED W. MITCHELL, hereinafter referred to as the "Lessee".

W I T N E S S E T H

That in consideration of the monies payable hereunder and other good and valuable consideration the parties agree as follows:

1. The lessor hereby leases to the lessee and lessee agrees to accept said lease under the terms and conditions herein provided of that certain property situated in the County of Tuolumne, State of California, consisting of mines known as the GOLDEN RULE MINE and the JUMPER MINE, under the terms and conditions hereinafter set forth.

2. The lessee shall have the right to conduct a mining operation for the extraction of gold in said mines and remove and sell the gold resulting therefrom. The lessee agrees that he will conduct himself at all times in a minerlike manner and assume all risks and obligations pertinent to said mining operations. For this purpose the lessee shall during the existence of this lease have the right of possession of said mines and lessor agrees that it will not grant such right to any other person or corporation.

3. The lessee shall also have the right to use such mining equipment as is now located upon the mining properties belonging to the lessor which is necessary or convenient for use in connection with said operation except, however, the mill located on the property owned or leased by the lessor. Lessee agrees to be responsible for the maintneance of all equipment used by him and will return the same to the lessor at the termination of this lease in good order and condition, reasonable wear and tear excepted.

4. Lessor retains the right to have its agent or representative enter upon said premises at all times and to inspect and supervise the operations conducted by the lessee in accordance with the terms of this lease.

5. It is expressly agreed that the lessor shall not be responsible for any debts, obligations or other liabilities of whatsoever kind and nature (including claims of any kind for personal injury or death made by any person) which may arise directly or indirectly out of the conditions of said mines or the operation thereof by the lessee. The lessee agrees to keep the lessor harmless and indemnify it against any and all claims or demands which might thereafter be made by any person against it.

6. The rental payable by the lessee for the rights and privileges herein granted shall be twenty (20) per cent of the gross mint returns which sum shall be due and payable immediately upon receipt by the lessee of monies obtained from the sale of gold or other mineral extracted from the said mines.

7. Lessee agrees to give to the lessor five (5) days notice of all cleanups and to permit the representative of lessor to be present and to supervise all shipments and sales of gold and gold ore.

8. The term of this lease shall be from February 18, 1971 to March 1, 1973 and thereafter is at the will of the parties hereto and may be terminated at any time by either party upon delivery to the other of a written ninety (90) days notice to terminate or vacate.

9. Unless otherwise specifically designated the following persons shall be deemed the representatives of the respective parties hereto for the purpose of giving or receiving all notices or the fulfillment of any of the requirements herein specified:

For the lessor RALPH E. FITZGERALD, address Suite 905, 209 Post Street, San Francisco, California, % Dr. E. C. Hartwell; for the lessee FRED W. MITCHELL, address Jamestown, Tuolumne County, California.

10. This lease is not transferable or assignable except with the written consent of the lessor.

11. This lease shall not be recorded.

12. This agreement shall be substituted for and take the place of any and all contracts or agreements heretofore existing between the parties hereto by assignment or otherwise.

13. All tools, machinery, and equipment placed upon the premises by the lessee shall be deemed to be and shall be the personal property of the lessee, and he shall promptly pay any and all personal property taxes levied or assessed against the same. Lessee shall have the right to remove from the premises any and all such tools, machinery or equipment within ninety (90) days after the expiration, abandoment or sooner termination of this agreement, provided that said lease has not be assigned, and provided that there is no default in the payment of any royalties due. In the event said lease is assigned, lessee shall have an additional twenty (20) days beyond the said ninety (90) days period within which to remove all tools, machinery and equipment placed upon said premises by lessee, provided that there is no default in the payment of royalties due.

IN WITNESS WHEREOF, the parties hereto have signed their names the day and year first written above.

JUMPER LANDS INC.

BY: R. E. Fitzgerald

LESSOR

Fred W. Mitchell

FRED W. MITCHELL
LESSEE

CHAS. L. GILMORE
ATTORNEY AT LAW
CAPITAL NATIONAL BANK BUILDING
SACRAMENTO, 14, CALIFORNIA

December 18, 1953

Mr. Ralph E. Fitzgerald
1466 - 31st Avenue
San Francisco, California

Dear Mr. Fitzgerald:

I have your letter of December 10 and must apologize for not having written you before. The plain truth of the matter is that I overlooked it entirely under the stress of other work.

My memory is rather hazy as to the time I worked in the Golden Rule shaft, but it must have been either in the latter part of 1902 or the early part of 1903. As to the exact depth where I worked, that I would be unable to verify. The level on which I worked was known as the 1400-foot level of the Golden Rule winze. Whether it was 1400 feet in depth or whether it was just called the 1400-foot level for want of a better name, I do not know.

There was a drift from that station on the vein toward the Jumper; and as I recollect the setup about 150 feet from the shaft, we started this raise and at that point we broke into an ore shoot and a large part of that was "picture" rock. I worked there but a short time. Air conditions were very bad and no apparent effort was being made to cure them, so I quit. I doubt if you would find anyone who worked there at that level very long. The management had three shifts—one going, one coming, and one at work.

On the sketch you sent me, apparently the last station is the 12 level, but of that level I have no knowledge.

Whether this will be of any benefit to you, I do not know; but I have given you the matter to the best of my recollection.

I am returning herewith the sketch map which you enclosed and trust that you may be successful in your enterprise.

Very truly yours

Chas. L. Gilmore

Chas. L. Gilmore

CLG:ah

March 25, 1947

Mr. R. E. Fitzgerald
Jumper Mines, Inc.
Jamestown, California

Dear Mr. Fitzgerald:

In November and December, 1946, I received considerable data from you and from the Marian Gold Mining Corporation concerning the Jumper, Golden Rule, and California Standard mines. In December, 1946 and February, 1947, I examined the surface and accessible workings of the Golden Rule and California Standard Mines. Adding together my own observations and the information available in the maps, notes, and reports received from you I am able to make some suggestions concerning exploration work at the Golden Rule mine that may lead to ore shoots without extensive expenditure and work, and with no great financial risk. The program outlined in this letter involves three main areas as follows:

1. Connecting with the old main shaft workings at the 262 level Golden Rule mine in the area where the really good ore is supposed to have been mined just above the 262 level. The main purpose of this work is to verify the position of the old better grade ore shoot and to learn what its geological setting was so that intelligent exploration can be carried on when looking for other ore in the slate vein zone with the additional possibility of finding unmined ore in this area. It is believed that a connection with the old workings can be made for about $500 worth of work. Details are explained farther along in this letter.

2. Advancing the Golden Rule 400 level north drift which assays $24.00 per ton across 18" of gouge, slate and quartz at the present face. (2-12-47). Geological reasoning, explained in detail elsewhere in this letter, suggests advancing the drift along the slate vein for at least 200 feet to see what happens. The rock from this heading should be milled or elaborately sampled. Present belief is that the heading will run into an ore shoot. The advancing of this level also puts the mine in a better position to do the exploration and development described in the next paragraph.

3. Exploring the so-called middle vein zone near the north end of the Golden Rule property. Geological information indicated that there may be considerable middle vein ore between the middle vein stopes on the Golden Rule 500 level and the stope and ore shoot at the north end line

of the Golden Rule in the adjoining property. There has been no substantial exploration in this area and what has been done so far indicates ore shoot possibilities. The exploration in this area can be done by diamond drill core drilling from the north face of the Rule 400 level after it has been advanced as described in (2) above, and by core drilling from the surface to test the area farther north and nearer to the known ore in the adjoing property. It might be possible to explore the area by using the 200 and 400 levels of the adjoing property and working through the Marian Gold Mining Corporation's shaft.

While the above work is in progress it may be advisable to mill test certain areas in the Golden Rule Mine. In order to properly mill test any of the headings a jig should be installed in the mill at the ball mill discharge. Considerable of the gold obtained from any part of the mines in the Jumper area is certain to be coarse gold and a large percentage of it would become trapped in the ball mill or in the classifier and make mill tests of 100 ton samples almost futile. The jig will remove from the circuit almost all the coarse gold that comes out of the ball mill.

It is estimated that all the above program can be carried out for less than $20,000. By the end of the proposed work the mine may be in ore in two headings or have an ore body proved by the core drilling.

The following part of this letter is an elaboration on the geology and gives some of the details concerning the proposed work outlined above.

The map attached to this letter is a composit plan map and vertical longitudinal projection of the Golden Rule and California Standard Marian Mines. Several notes and assays on the map show some of the information involved in reaching the conclusions in this letter. The flat fault drawn on the map is exposed in the 80 level adit and in the 400 level shaft cross cut. It is a fault type common to mines of the Mother Lode and is one of the structure controlling the size, shape, and location of ore shoots. It is my belief that such faults in the Jumper-Golden Rule mines were an important influence on the ore shoots. The fault probably does not cross the main slate vein and fault, it is really a part of the faulting along the slate vein zone. Even so it may very well be near the top or bottoms of ore shoots. Other structural factors such as physical differences between the interlaminated rock layers, the strike and dip of the schist and fault planes were also involved in the control of the ore shoots. It appears to me that certain formations have been offset by the flat fault so that the main stoped out ore body may repeat again as to size and grade of ore beyond the present north face of the 400 level. The old ore shoot extended down to the old 262 level but not importantly below that level-probably because the area immediately above the flat fault was protected from mineralization by the conditions associated with the flat fault. For the same reason I would expect ore to be found below the fault at a place where other geological conditions are similar to those associated with the known ore (or stopes). Such a condition is indicated to exist north of the present face of the 400 level. By projecting the fault as seen in the 400 level shaft cross cut it is seen that the fault should be near or join the slate vein zone about at the present north face. So it is proposed

that the 400 north drift be advanced about 200 feet to see what happens. My sample of 18 inches of gouge, slate, and quartz at the present north face of the 400 level assayed $24.15 per ton.

The proposal to connect with and mildly explore the old 262 level is partly to gain additional geological knowledge to better formulate such ideas as expressed above. Ore might also be found in the course of the connection project. One of the stories is that the 262 level was in high grade production when the stope above it caved and work was stopped. I am inclined to believe that the bottom of the shoot was close at hand and no effort to rehabilitate was justified. However there is still a good chance that exploration close to the old stope will find ore. A cross section of the slate vein zone at the old stope indicates that the old stope mined a band of slate about 10 or 15 feet in the footwall of the slate vein drifted on at the 300 level. If so then the 262 level is in the footwall of the 300 level stopes, some of which reach high enough to encounter the 262 level or old stope if they were on the same slate or gouge band. I believe that in the course of following downward on the ore it was found that the ore left the slate vein fault which dips about 60 to 65 degrees and followed down on a steeper dipping contact between slate and a harder more brittle rock. Under such conditions the ore should decrease in value and amount as distances in increased from the slate-fault zone. The problem now is to find another similar condition where there is a steep fault zone in the slate with a hard brittle foot wall rock immediately on the footwall of the slate band. Therefore it is proposed that the old works be seen to vertify or enlarge on the geological hypotesis and to also explore northward on the 400 level where it is believed the right combination will be found.

The connection to the old works should be done near the top of one of the stopes on the 300 level. By using the manway at 210 feet south of the shaft crosscut the job is very simple. A good spot is at the top of the stope at 25 to 30 feet north of the center of the manway. The rock from the crosscut can be dropped into the stope and left there. Anywhere between the manway is good enough. Choose an elevation for the top of the cross cut about the same as the top of the stope at 30 feet north of the manway. About 20 feet of crosscut should find the old 262 drift which may be slightly above or below the cross cut.

Advance of the 400 level north drift should be done along the gouge exposed in the present face. It is advisable to cross cut each way about 5 feet before starting (or just after starting) the advance. If no other promising gouge or vein is found then keep the present gouge and vein in about the center of the face and advance about 200 feet. Then 10 foot cross cuts should be run each way at the end. I really think there is a good chance of finding ore in this piece of work. All the rock from this drifting should be milled when the mill is equipped with a jig. No other rock should be milled at same time.

Upon completion of the above drifting and cross cutting two diamond drill core drill holes should be run westerly to explore the middle vein zone about as indicated on the map herewith. The holes should be run nearly level and be about 250 to 300 feet long each. They should be aimed so as to cut the middle vein zone at about 100 feet apart. The middle vein should also be explored farther north. This can be done by drilling from the surface or by exploration thru the Marian shaft working at the California Standard mine. If drilling is done from the surface the holes could be run about as indicated on the map. They should be aimed to hit the middle vein just above or below the Marian 200 level in order to attempt to establish continuity with the already known ore developed by working from the adjoining property. Three holes from the surface should be 350 to 400 feet each. If work is done thru the Marian shaft workings then the Marian 200 level should be reopened into the Golden Rule property or a new drift run in ore if possible in the footwall of the old drift. The ore assaying 10 feet at $6.65 on the Marian 400 level just in the Golden Rule property should be followed southerly into the Golden Rule. The sampling done by C. W. Terry in the Marian property between the 200 level and 90 level shows possibilities of an ore body of considerable size and extending into both properties. Terry estimates probable tonnage at 17,000 tons of ore at about $6.40 per ton. The tonnage may be much greater because not enough work has been done on the 200 and 400 levels to test the real possibilities on those levels. Samples to date indicate that the ore shoot lies in the footwall (west) of the present drifts. If the ore should extend down to the Marian 400 level and is only as long as the sampling indicates on the 90 level there would be between 50,000 and 100,000 tons in the block. Samples ranged in grade from $420 to $18.00. Part of the block above the 200 level will probably average around $7.50 per ton. The old stoping averaged between $8 and $11 per ton and is part of the same ore body. Thus it is reasonable to expect considerable tonnage of ore in the area that will average anywhere from $6.00 to $10.00 per ton.

There has been no exploration in the Golden Rule property on the middle vein between the shaft corsscuts and the north end line except on the 90 level in one place and on the 500 level in the drift from the shaft cross cut. Both of these areas have been stoped. The 500 level is below the flat fault and is reported to have been successfully stoped. The 90 level work is well above the flat fault and is also reported to have been successfully stoped. The only other work done on the middle vein is at the north property line where a substantial amount of ore is developed. The work proposed here is to explore the zone in what appears to be a promising area under the flat fault.

The same flat fault that is seen on the Golden Rule 400 level probably at one time capped the California Standard or Marian mine ore foot above the present surface. The drilling outlined would explore the middle vein zone below the same fault in the Golden Rule ground.

It is interesting to note that the ore shoots in all the mines in this area (Jumper, Golden Rule, California Standard) are all said to rake

down to the north, and that the vein crossings are higrade when they rake down to the north ("the north pitchers") - then to realize that the downward north rake is about at right angles to the flat dipping fault. This suggests that the individual shoots or part of the shoots might rake down to the north whereas the main trend of ore shoots might be in some other direction. It also suggests that the ore shoots appear to rake north because of the control due to the flat faults - that the ore tapers out downward away from the flat faults and therefore roughly at right angles to the flat faults. Under other flat faults in these mines there may be ore shoots that have not been exposed by surface erosion or mine levels. When such structural conditions exist it is clear that the ore shoots are not continuous and therefore need not crop out at the surface nor appear on every mine level. When new work is done at the nime it would be adviaable to watch closely for re-mineral fault conditions that may lead to ore in areas that have been explored only at wide intervals laterally and vertically.

Yours truly,

Francis H. Frederick

F
H
F
h

MAPS IN FIRST DRAWER

Standard Form 63 (rev.)
March 1959
63-103

MEMORANDUM OF CALL

Date	Time

TO—

☐ YOU WERE CALLED BY— ☐ YOU WERE VISITED BY—

TELEPHONE:	Number or code	Extension

☐ PLEASE CALL
☐ WILL CALL AGAIN
☐ RETURNING YOUR CALL
☐ IS REFERRED TO YOU BY:

☐ WAITING TO SEE YOU
☐ WISHES AN APPOINTMENT

LEFT THIS MESSAGE: _____

	Received By—

U.S. GOVERNMENT PRINTING OFFICE: 1959 OF—512919

OFFICIAL FILE COPY

Date	Surname	Code
4/16/71	Emerick	120
	Kirkemo	120
4/22	Kirkemo	
		220

AIRMAIL

Mr. Fred W. Mitchell
Post Office Box 115
Jamestown, California 95327

Re: OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

Dear Mr. Mitchell:

A careful review of your application for financial assistance to explore the subject property and other information available to us indicates that the probability of disclosing significant reserves of gold on your property is not sufficiently promising to justify Government participation in the proposed exploration. Accordingly, we regret to inform you that your application for assistance is denied.

We wish to thank you for your interest in the minerals exploration program and for bringing your property to our attention.

Sincerely yours,

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
OME Region II
Mr. Emerick

WLEmerick/bsl 4/16/71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/23/71	Emerick	120
	(on leave)	120
		220

April 23, 1971

Memorandum

To: The File

From: William L. Emerick
Office of Minerals Exploration

Subject: OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

Justification for Denial of Application

The Applicant proposed to explore a wide zone between mines for gold-bearing ore shoots or pockets by shaft sinking, drifting, and cross-cutting. Total estimated cost of the work amounted to $150,000.

The Applicant hoped to find the ore shoots or pockets at unpredictable locations by the above methods which might be successful if enough drifts and crosscuts are driven. There is no geologic evidence on which the locations of ore shoots or pockets could be inferred or suspected.

The Field Examiner concluded, as a result of his field examination and from all the available information in the application, that the probability for a significant ore discovery by the proposed exploration was not favorable. He recommended that the application be denied and the Field Officer concurred with the recommendation. After reviewing the application and the Field Examiners Application Report I concur with the recommendations.

William L. Emerick

William L. Emerick

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
Mr. Emerick

WLEmerick/bsl 4/23/71

ROUTING AND TRANSMITTAL SLIP

1 TO (Name, office symbol or location) T. H. ~~Kiilsgaard~~ ~~Room 4224, GS Bldg.~~	INITIALS DATE	ACTION CIRCULATE COORDINATION
2 H. Kirkemo Room 4461, Interior Bldg.	INITIALS DATE	FILE INFORMATION
3	INITIALS DATE	NOTE AND RETURN PER CONVERSATION
4	INITIALS DATE	SEE ME SIGNATURE

REMARKS

OME-6841 Fred W. Mitchel

(Denial of application for surnaming)

Kirk:
Sets redo the memo justification and stress the respected lack of a significant discovery rather than the fact that the name would appear to be propaling ☺
Thos

Do NOT use this form as a RECORD of approvals, concurrences, disapprovals, clearances, and similar actions.

FROM (Name, office symbol or location) H.Kirkemo, Chief, OME	DATE 4/16/71 PHONE X-5371

OPTIONAL FORM 41
AUGUST 1967
GSA FPMR (41CFR) 100-11.206

GPO : 1967 O—300-455 (8-H) 5041-101

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/16/71	Emerick	120
4/16/71	Kisberna	120
4/22	Kilsgaard	
		220

April 16, 1971

Memorandum

To: The File

From: William L. Emerick
Office of Minerals Exploration

Subject: OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

Justification for Denial of Application

The Applicant proposed to explore a wide zone between mines for gold-bearing ore shoots or pockets by shaft sinking, drifting, and crosscutting. Total estimated cost of the work amounted to $150,000.

The Applicant hoped to find the ore shoots or pockets at unpredictable locations by the above methods which might be successful if enough drifts and crosscuts are driven. There is no geologic evidence on which the locations of ore shoots or pockets could be inferred or suspected.

Insert

The Field Examiner concluded, because there are no reserves of any type and the search for suspected reserves is prospecting, that the project was not eligible for OME assistance and, therefore, the application should be denied. The Field Officer concurred with the recommendation. After reviewing the application report I concur that the application should be denied.

William L. Emerick

William L. Emerick

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File - Mr. Emerick - 1

WLEmerick/bsl 4/16/71

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

April 7, 1971

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

Enclosed is an Application Report by R. M. Smith on the subject property recommending that the application be denied on the basis that the proposed work is prospecting.

It appears to me that this is a borderline case. If the Mother Lode were a quartz vein 500 feet wide, mineralized generally along the hanging wall but in places also along the footwall and between the walls, and if long hole drilling were feasible, the project might be eligible under our regulations. Ore could be inferred within the vein, even though its exact position could not. A vein 500 feet wide, however, is a substantial portion of the county. Reluctantly, I concur in the recommendation.

H. K. Stager

Enclosure

UNITED STATES

DEPARTMENT OF THE INTERIOR

ROGERS C.B. MORTON, SECRETARY

GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION

REGION II

Report of Exam

APPLICATION REPORT

OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

By

R. M. Smith
Geologist
OME, Region II

April 7, 1971

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Figure 1. Index map of Tuolumne County, California.

INTRODUCTION

Fred W. Mitchell, P. O. Box 115, Jamestown, California 95327, applied to the Office of Minerals Exploration for financial assistance in a $150,000 project, Docket OME-6841, to explore for gold on the New Era and Golden Rule claims, Tuolumne County, California. A field examination was requested by OME, Washington, D. C., and was made on March 31, 1971, by R. M. Smith, U. S. Geological Survey, accompanied by Fred W. Mitchell and R. E. Fitzgerald, the owner. Surface and underground exposures in the claim area were examined and compared with the Applicant's maps and with published geologic maps and reports on this section of the Mother Lode. No samples were taken because the "lode" is virtually barren between high-grade ore shoots or "pockets," none of which are exposed.

SUMMARY, CONCLUSIONS, AND RECOMMENDATION

The Jumper-New Era and Golden Rule Mines yielded $3,000,000 and $1,000,000, respectively, in gold and may have a total combined production between $5,000,000 and $10,000,000. They have not been actively worked since the 1920's. The workings are about 1,200 feet apart along a section of the Mother Lode fault zone which is 3,000 to 5,000 feet wide in this area. Individual layers of diverse rock types bounded by contacts or planes of schistosity a few inches to several tens of feet apart are randomly mineralized throughout the zone. Three such layers in a schistose portion of the lode 500 feet wide are called the Slate or East vein, the Middle vein, and the West vein. Most of the production came from the Slate vein but some came from each, and also from a shallow workings about 400 feet east of the East vein.

The two mines are connected on the 500 level by a drift along the Slate vein. No ore was found and no stoping was done. The Applicant considers that exploration of the walls would have revealed ore in other stratigraphic positions within the schistose portion of the lode.

Based on professional reports and his own observations of the two mines, the Applicant hopes to find other ore shoots at unpredictable locations in the unexplored area 1,200 feet long and 500 feet wide between the mines. He proposes to explore the area at a depth of 120 feet by shaft sinking, drifting 900 feet on the Slate vein, and crosscutting both ways from the vein at 300-foot intervals. He considers that core drilling beyond the ends of the crosscuts may or may not be warranted.

The proposed work is in a specified parcel of ground where geologic conditions favor the occurrence of new and unexplored gold deposits. A discovery, if made, would probably be directly significant (profitable) to the Applicant and indirectly to the county, since it would stimulate interest in other properties.

The OME examiner concludes that it is reasonable to suspect that additional ore shoots or pockets may be found in the favorable zone of schistose rocks if enough drifts and crosscuts are driven. The location within the zone, however, cannot be inferred from geologic evidence. Since there are no measured, indicated, or inferred reserves, and because the search for suspected reserves is prospecting, I conclude that the project is not eligible for OME assistance. I recommend, therefore, that the application be denied.

LOCATION, ACCESSIBILITY

The Jumper, New Era, and Golden Rule claims are in secs. 26, 27, 34, and 35, T. 1 N., R. 14 E., MDB&M, at altitudes of 1,350 to 1,400 feet, Jamestown mining district, Tuolumne County, California, 3 to 4 miles due south of Jamestown, which is 3 miles southwest of Sonora, the County Seat. The claims cover a portion of the Mother Lode fault zone in the foothills along the west base of the Sierra Nevada Range. An all-weather paved road runs through the property.

PROPERTY

History and production

The Golden Rule mine was probably the first of the group to be worked (USBM Bull. 424, p. 42). It was mined by open cuts, inclined shafts, and winzes from 1859 to about 1902 and through a vertical shaft and crosscuts at later dates. About 1895 the Jumper deposit was discovered, the two mines were consolidated, and in 1903 were connected on the 500-foot level by a drift 1,200 feet long on the Slate vein. Deeper levels of the Jumper were explored through the New Era inclined shaft--to the 1,400-foot level--and winze to the 1,800-foot level, but nearly all the stoping was above the 800-foot level.

On the map accompanying Special Report 41 of the California Division of Mines, the shaft labeled "New Era" is a vertical shaft started in the hanging wall of the Slate vein but never finished.

The most active period was 1896 to 1904 and maximum annual output reported was $85,000. Milling at the property ceased in 1919, but some ore was produced in the 1920's by leasers.

Total production of the group has been variously estimated at $5,000,000 (Spec. Rept. 41, p. 26) to $10,000,000 (Jones' report, 1939, p. 1).

Ownership

The Jumper, New Era, and Golden Rule patented claims are owned by Jumper Lands, Inc., 209 Post Street, Room 905, San Francisco, California 94108. Mr. R. E. Fitzgerald is the only stockholder. He requests that an OME project, if approved, be restricted to the New Era and Golden Rule claims so that the rest of the property could be sold if necessary to meet expenses.

Development

Mine workings total about 27,000 feet of shafts, winzes, drifts, and raises. They are inaccessible except for No. 3 inclined shaft which is open to a depth of 80 feet. It is equipped with a wooden headframe and small hoist not acceptable to the California Industrial Safety Division.

GEOLOGY

Geologic setting

The country rocks in the mine area are metavolcanics and slates of the Cosumnes Formation (Jurassic) in fault contact with phyllite and green schist (greenstone) of Carboniferous(?) or Jurassic(?) age intruded by serpentine and gabbro of Jurassic or Cretaceous age (Calif. Div. Mines Spec. Rept. 41, pl. 2). All the rock units are wedge shaped or lenticular along faults of the Mother Lode fault system. The strata and the foliation dip steeply east or are vertical; faults and shear surfaces dip eastward less steeply.

Host rocks of the ore bodies are thin, overlapping wedges of schistose metavolcanics, sericite schist, metadiorite (diabase dike?) gray slate, and black slate that form a zone 300-500 feet thick between greenstone (amphibolite schist) on the east (hanging wall) and serpentine (or gabbro)

on the west (footwall). The wedge-like strata are as much as 50 feet thick but 2 to 8 feet is more common.

Ore deposits

The gold-bearing ore bodies of the Mother Lode were classified by Knopf (USGS Prof. Paper 157, p. 23) into two main groups--quartz veins and mineralized country rock. The vein-type ore is more prevalent in the northern, more productive, part of the lode, and the mineralized country rock in the part from Angels Camp southward. Country rock is mineralized by two processes--replacement and stockworks. Greenstone is replaced by ankerite, sulfides, and gold near barren quartz veins to form "gray ore." Schists are altered and laced with auriferous veinlets of quartz or ankerite generally transverse to the foliation.

In the Jumper-New Era and Golden Rule mine area the ore bodies are in schists cut by quartz veinlets. Neither the greenstone (hanging wall) nor the serpentine is ore bearing.

Within the schistose zone three roughly parallel layers of diverse rock types are called veins. The Slate or East vein is near the greenstone hanging wall, the Middle vein is about 150 feet west, and the West vein another 200 feet west along or near the serpentine footwall. The West vein was explored only on the Mazeppa claim south of the Jumper. The veins are recognized by the predominant rock type in which ore has been found--slate in the East vein, diabase in the Middle vein, and any schistose rock in contact with the serpentine footwall in the West vein.

Most of the ore came from the Slate vein. The vein consists of overlapping wedges of black slate and various metavolcanic rocks in a layer a

few inches to about 40 feet thick between contacts. The rocks within the layer are cut by four sets of quartz veinlets from a knife edge to a foot thick, and a few inches to perhaps several tens of feet long. One set of veinlets is parallel with the schistosity; i.e., along the vein, but the others are nearly at right angles to the vein and terminate abruptly at the contacts. One set of cross veinlets is horizontal, another dips south, and the third dips gently north. Gold and auriferous sulfides occur in and along the north-dipping veinlets only, according to most reports. These north-dipping veinlets, called "floors," are the targets of the proposed exploration. Vertical veinlets may also be mineralized in some ore shoots, judging from the Jones report (1939, p. 2) on the Jumper mine, where "... they claim one continuous sheet of gold twenty seven feet long by five feet high and from 1" to 3" in thickness ... equal to $108,000.00 in value."

The ore shoots are segments of a schistose layer where north-dipping veinlets are spaced so closely that the entire layer will average $2 to $8 per ton (gold at $20.67 per ounce). The size of an ore shoot is defined by the length and distribution of the north-dipping cross veinlets, and ranges from a few inches to perhaps 40 feet wide, 10 to 970 feet long, and from a few feet to 800 feet down the dip.

The structural control that localized the ore shoots is not understood. Some control by rock type is evident in the Middle vein where a "diabase" dike is commonly recognizable, and in the Slate vein where slate may have influenced its location. Changes in strike and dip of faults may explain why ore shoots are where they are, but faults were not mapped underground and cannot now be mapped in detail from surface exposures. No ore control

is evident for ore bodies outside the main "veins," other than they are in the schistose rocks.

EXPLORATION

The Applicant proposes to sink the No. 3 inclined shaft to a depth of 140 feet, drift south on the Slate vein at the 120-foot level for 900 feet, crosscut both ways from the drift a total of 600 feet, and diamond drill from the ends of the crosscuts, if warranted, far enough to cut the greenstone "hanging wall" and serpentine "footwall," which are about 500 feet apart.

This proposal would effectively prospect the most favorable part of the favorable zone by drift and crosscuts. Diamond drilling is of doubtful value because the holes would parallel the strike of north-dipping veinlets, and ore shoots are not identifiable by inspection of barren rock.

The Applicant estimates the costs of sinking, drifting, and crosscutting would average $75.00 per foot. Unit cost for each type of work has not been estimated except diamond drilling at $10.00 per foot. Rates are quoted, however, for time and materials, from which a detailed cost estimate could be prepared for all items except new construction and rehabilitation of the shaft.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OME-6841
(Gold)

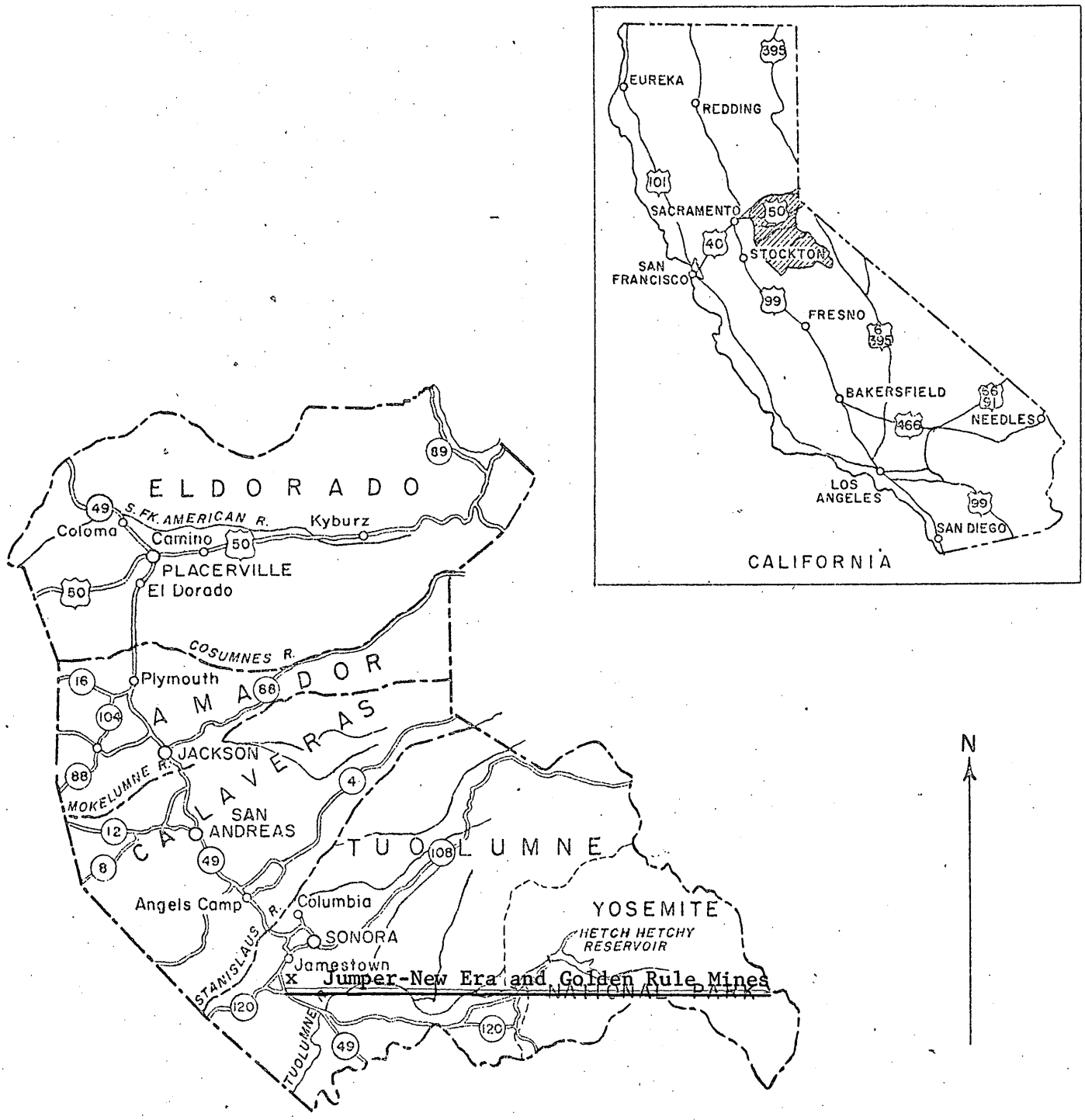

Figure 1. INDEX MAP OF ELDORADO, AMADOR, CALAVERAS, AND TUOLUMNE COUNTIES, CALIFORNIA

0 20 40 60 Miles

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/12/71	Emerick	120E
		120
3/12	Coe	220
		120M

AIRMAIL

Mr. Fred W. Mitchell
Post Office Box 115
Jamestown, California 95327

MAR 12 1971

Re: OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

Gentlemen:

The application for assistance in exploring the subject property has been reviewed by the Washington office and referred to Mr. H. K. Stager, Field Officer, Region II, Office of Minerals Exploration, U. S. Geological Survey, Building 2, 345 Middlefield Road, Menlo Park, California 94025.

Mr. Stager will notify you if he requires additional information concerning the application and possibly to make arrangements for an on-site examination of the property.

Sincerely yours,

Harold Kirkemo
gla

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading file
Mineral Resources
OME docket
OME Reading File
OME Region II
Mr. Emerick

WLEmerick/gla 3-12-71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/12/71	Emerick	120E
		120
		220
		120M

MAR 12 1971

AIRMAIL

To: Field Officer, Region II

From: Chief, Office of Minerals Exploration

Subject: OME-6841 (Gold)
Fred W. Mitchell
Jumper-New Era and Golden Rule Mines
Tuolumne County, California

The subject application is referred to you for further study, a field examination if warranted, and recommendations.

The information submitted with the application has been reviewed and we agree that a field examination would furnish much of the information lacking in the application under items 2(c), 3(f), 5(a), and 7. As you point out, the estimate of costs and the type and amount of work would need revision if the field examination is favorable. The estimated cost of the proposed work in the application is certainly beyond our means.

Harold Kirkemo
gla

Harold Kirkemo

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading file
Mr. Emerick
130

WLEmerick/gla 3-12-71

March 1, 1971

Mr. Fred W. Mitchell
Post Office Box 115
Jamestown, California 95327

Subject: OME-6841

Dear Mr. Mitchell:

Your application for exploration assistance, dated January 27, 1971, submitted to our office at Menlo Park, California, has been assigned Docket No. OME-6841.

Please identify all future correspondence relating to your application by this docket number.

Sincerely yours,

William E. Emerick
Assistance Chief
Office of Minerals Exploration

Copy to Region II