DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4739

Application (Denied
(Withdrawn
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
Owner's Consent to Lien
Subordination Agreement
Leases and assignments of leases
Application and attachments
(3) Envelope for maps

Right Side

Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) Interim Summary Reports by W. O. Engineers

Right Side

Operator's Semi-Annual Report for Certified Project, Field Team Interim Reports, Operator's Monthly Report with transmittal, narrative, maps, and Field Team review.

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9776

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

May 6, 1957

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 8 1957

DATE	INITIALS	COD.

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Application for DMEA Aid, (Mercury) Jack G. Fisher (Cinnabar Claims) Yuma County, Arizona

Enclosed are the original and two copies of the subject application. One copy of the application is being retained in our file.

The Applicant proposes mainly to dewater and rehabilitate an old mine. An incidental amount of exploration is proposed which consists of 38 hours of dozer work digging test pits. The total estimated project cost is $75,710.54, 90 percent of which is for rehabilitation.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED MAY 8 1957 D.M.E.A.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 4739
Metal or Mineral Mercury
Date Received 5-8-57
Estimated Cost $75,710.54
Participation (Government %)

INSTRUCTIONS

DMEA
DEPARTMENT OF THE INTERIOR
MAY 6 - 1957
REGION III
DENVER, COLORADO

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you wish to contract, and your mailing address: Jack G. Fisher, 805 19th St. Yuma, Arizona

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Cinnabar No.1, 2, 3, 4 & 5. Lode Mining Claims, Lot 2123, Weaver Mining District U.S. Patent Recorded Nov. 23, 1906, Book 23 of Deeds, Page 139 Records of Yuma County Arizona

(*b*) State any mine name by which the property is known. Old Cinnabar Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise ½ half Owner

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it none

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore _____

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 60 days and be completed within 8 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

[X] Money [X] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

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.

Dated May 4, 1957

Jack Fisher
(Applicant)

By Jack Fisher

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

805 NINETEENTH STREET

TELEPHONE SU 3-4804

JACK FISHER

Land Leveling Specialists

YUMA. - - - ARIZONA

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 8 1957

DATE	INITIALS	CODE

PHUSICAL DESCRIPTION

4A

This property was worked from 1906 to 1908. A vertical shaft 5 ft by 8 ft. was dug to 640 ft. starting on the vein at the surface it leaves the vein at about 135 feet. The vein is off the vertical about 10 ft. for every hundred feet of depth. At 640 a drift for 60 ft. was made to intercept the vein. The shaft today is filled with water to about 130 to 150 ft. of the surface, depending on rainfall conditions. Any information below this level was obtained from people who worked in the mine at that time. There is a drift at about the 65 foot level that follows the vein for 300 feet. About 50 ft. from the shaft in this drift there is a crosscut extending about 50 ft each direction, 100 ft. from the shaft is a timbered ore shute going down to the drift at the 140 ft level. This shute is too dangerous to inspect. Above the drift is a stope about 4 ft. to 8 ft. wide and 40 ft. long dipping down the vein at about 45 degrees and extending up about 80 ft. above the floor of the drift, coming out along the vein on the surface. From the stope the drift is 8 ft. wide and 20 ft. high for 75 ft. after which it returns to 4 ft. by 7 ft. diminsions. 200 foot from the shaft is a wyns that penetrates the roof of the stope from the 140 ft level. This stope is too dangerous to inspect but by hanging from a rope ladder through the wyns it appears to be 15 ft. wide, 70 ft. high and can be seen for about 100 ft. length before curving out of sight. This stope is full of fill material up to about 8 ft. of the top except directly under the wyns where it has been removed down to the drift which is under water.

250 ft in from the shaft is a raise about 60 ft high. Samples taken in this drift, assayed from .41% to .03% mercury. The 140 ft level is the only working drift in the mine, all the ore was shooted down from the drift above or stoped directly into this drift. It is periodicity under water and too dangerous to inspect. The shaft timber has settled down due to lack of hangers and will have to be replaced. Four sets have caved in at the water level at 135 ft. A sounding line lowered in the water stopped at about 20 ft below the surface. The nature of the obstruction is unknown.

-4B-

No more than 10,000 tons of rock have been removed from the mine measured in the dumps and waste from the retorts.

There is an old 30 ton tile furnace on the property. About 2000 tons of ore were put through this in a run that lasted about 60 days as reported by old-timers and supported by the waste dump of about 1500 to 2000 tons. The recovery was reported 113 flasks. These furnaces have to be run at least six months, I am told, before maximum recovery can be expected. The loss being mostly in absorbtion by the brick in the cooling towers. The inner course of bricks have been removed from these towers and retorted in later years for their mercury content. This furnace was fired by mesquite wood. Around about 1914 a Johnson Mackay 3 ton retort was constructed to hygrade the dump and mine. About 300 tons measured by the waste was put through this retort. Hygrading at this time plus the action of the fluctuating water level was responsible for the shaft failure at the 135 foot level.

About $150,000 is estimated to have been spent on the property. Surface samples of the dump assayed .50 mercury. This dump contains about 2000 minimum up to a possible 6000 tons of ore. Test holes will have to be dug to get an accurate estimate of the quantity and value of this ore.

-4C-

This vein occupies a fault fracture that can be traced for many miles on the surface and clearly stands out from the air. This part of the Dome Rock Mountains consists of sericitic, quartizitic, conglomeritic, and chloritic schists of precambrian age. These rocks are invaded by granite and by pegmatite dykes also by younger ryolite flows and tuffs. The bedding of the schists dips at about 45° degree toward the south-east which is also the strike of the vein. The dip of the vein is almost vertical. The vein material consists of iron stained breccisted quartz traversed by veinlets of calcite and siderite. Ore minerals consist of cinnabar locally coated with metacinnabar, together with malachite and chrysocolla and some gold and silver. Outcrops of cinnabar occur mainly on the intersection of cross faults. The vein ranges from 2 to 15 feet in width. We feel that economic conditions were largely responsible for the closing down of the mine originally rather than depletion of the ore. As no authentic record of the original development are available we do not feel justified in putting up a mill without further explorations.

-4D-

This mine is accessible over an eight mile jeep trail to a point on a gravel county road 3 miles from pavement, 4 miles of pavement to Blythe, California, a town of about 5000 population, also a railroad station.

-5A-

THE EXPLORATION PROJECT: We wish to explore for Cinnabar and free Mercury.

-5B-

We propose to--

(1) Dewater and repair the old shaft which is reportedly 640 ft. deep. As this shaft is fifty years old it will be necessary to build a collar on the surface and re-timber it to the bottom, backfilling caved in portions.

(2) To repair present drifts for sampling purposes.

(3) To thoroughly test dump by digging holes with dozers to determine quantity and values.

(4) To dig test holes with dozers on other outcrops.

(5) Drill outcrops for testing.

-5C-

Manpower, materials, supplies, equipment are available at Blythe, California, and water can be developed at the mine.

-5D-

We are general contractors specializing in heavy excavation, roads, dams, levees, leveling land, etc. In contracts involving other specialties we have found it best in most cases to sublet these items out to firms specializing in the work involved. That is what we intend to do with the shaft. We will build the roads and make the dozer test pits with our own equipment

ESTIMATE OF COSTS

(6A) Independent Contracts

Rehabilitating shafts and headworks		$ 67,823.54

(6B) Labor, Supervision, Consultants

Labor on Jeep road	180 hrs @ 2.18 per hr	392.40
Labor on vein access road		
Labor on test pits	30 hrs @ 2.18 per hr	65.40
	40 hrs @ 2.18 per hr	87.20
Foreman one month		600.00
Geological Consultant		400.00

(6C) Operating materials and supplies

Included in rental of equipment listed below

(6D) Operating Equipment

Test pits in dump	- Cat 8-Dozer	8 hrs @ 14.00 per hr	112.00
Digging test pits on vein	- Cat 8-Dozer	30 hrs @ 14.00 per hr	420.00
Access roads to vein	- Cat 8-Dozer	30 hrs @ 14.00 per hr	420.00
Rebuilding 8 mile of Jeep road from mine to county road to haul materials, men, etc., from Blythe, California.			
	- Cat 8-Dozer	90 hrs @ 14.00 per hr	1260.00
	DW 21 Motor Scraper	180 hrs @ 16.00 per hr	2880.00
½ Ton Pickup truck & hand tools for one month fro transportation of men			150.00

I will furnish, transport, operate, and maintenance all the above equipment.

(6E) Rehabilitation and Repairs

Contracted (refer to 6A)

(6F) New Buildings, Improvements, Installations

Contracted (refer to 6A)

(6G) Miscellaneous

Accounting Compensation Insurance Etc.	$ 100.00
(6H) Contingencies	1000.00
TOTAL --	$ 75,710.54

(7A) I am prepared to furnish my share of the cost of the proposed project in accordance with the regulations on Government participation, Sec. 7 D.M.E.A. No. 1

(7B) I propose to furnish all operating equipment listed under (6D) $5,242.00 Total Cost

I propose to furnish the rest in cash to total 25% of cost. $13,685.64

Total $75,710.54

Tate MINE CONTRACTING & DEVELOPMENT CO.

INVESTIGATE THE ADVANTAGES OF CONTRACTING

3438 NORTH KELVIN
RT. 5 — BOX 91
PHONE EAst 6-8348

TUCSON, ARIZONA

IF NO ANSWER
PHONE EAst 5-5417

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 8 1957
CODE
DATE | INITIALS

DMEA
DEPARTMENT OF THE INTERIOR
MAY 6 - 1957
REGION III
DENVER, COLORADO

Jan. 18th, 1957

Mr. Jack Fisher
805 - 19th St.
Yuma, Arizona

Dear Mr. Fisher:

We are herewith submitting to you a bid and cost analysis as per our conversation some time ago.

We understand that you have a cinnabar property located in Arizona, near Blythe, California, on which is located an old shaft of 640 ft. depth which is caved and nearly full of water. We have figured for you the cost of de-watering, reconditioning and re-timbering this shaft to put same in good mining condition and to make it possible to hoist 100 tons per day.

We understand the mine makes approximately 300 gallons of water per day, so we have figured the cost of a permanent pump jack complete with pipe, etc., to keep this water out, as well as de-water the present accumulation. Also enclosed are the material and labor costs of a suitable head-frame, hoist and hoist building for a permanent installation.

We hope the enclosed flow-sheet system constitutes an understandable break-down on the figures, time element, etc. We hereby submit to you a total cost of the job completed and guaranteed, as per the requirements discussed in our earlier conversation and the figures on the flow-sheet, of $67,823.54. The prices quoted for materials are subject to change without notice.

We herewith give you some references of work that we have done for other companies for your inspection and consideration, one of them being considerable surface and underground development done for the Duval Potash and Sulphur Company, located at Twin Buttes, Arizona, south of Tucson. We also did considerable work for the Bear Creek Mining Company, a direct subsidiary of the Kennecott Copper Corporation, on their project located near Safford, Arizona. One phase of the work in this particular case consisted of de-watering, reconditioning and timbering six shafts of approximately the same size and catagory that you have in mind.

Also for reference we include the name of the Banner Mining Co., for whom we have completed considerable work at their Mineral Hill property located south of Tucson, Arizona, and we are at the present time working for the Banner Mining Co. driving an unlimited amount of drift at their Lordsburg, New Mexico, property. Other companies, references, locations, etc., we will be happy to disclose to you at your request.

We would also like to make a stipulation regarding the enclosed cost analysis on

Tate MINE CONTRACTING & DEVELOPMENT CO.

INVESTIGATE THE ADVANTAGES OF CONTRACTING

3438 NORTH KELVIN
RT. 5 — BOX 911
PHONE EAst 6-8348

IF NO ANSWER
PHONE EAst 5-5417

TUCSON, ARIZONA

Jan. 18th, 1957

Mr. Jack Fisher

your property, among others, that if the 640 ft. shaft be caved so badly as to require much more work timbering, spiling, etc., then, of course, the present figures will not be adequate.

Respectfully yours,

TATE MINE CONTRACTING & DEVELOPMENT CO.

By M. L. Tate

M. L. Tate, President

MLT/hp
encls.

UNDERGROUND - OPEN PIT - ASSESSMENT WORK - ROADS - LOCATION PITS
AERIAL SERVICES & DEVELOPMENT - RADIO EQUIPPED TRUCKS
No Job Too Large or Too Small — We Go Anywhere
Also featuring — Mining and Construction Equipment and Supplies
NEW - USED - SALES - RENTALS - SERVICE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/26	[illegible]	400
7/29	Martin	400
7/29	Lamb	130
7/29	Gillsgaard	130
7/29	Johnson	110
"	Mittendorf	100
7/30	P.K.	

JUL 29 1957

Mr. Jack G. Fisher
805 - 19th Street
Yuma, Arizona

Re: Docket No. DMEA 4739 - Mercury
Old Cinnabar mine
Yuma County, Arizona

Dear Mr. Fisher:

Your application for aid for an exploration project and other data available to us in Washington relative to the above-named property have been carefully reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of our information indicates that, although mercury mineralization occurs on the property, the probability of disclosing minable ore reserves is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

Your interest in the Defense Mineral Exploration Administration program is greatly appreciated. Thank you for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

WSMartin/esf - 7/26/57
cc to: Docket
Code 400
Adm. R. File
Oper. Comm.
FT. REG. III
Messrs. J. W. Pennington, USBM
T. H. Gillsgaard, USGS

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/26	Hopper	400
	Martin	400
		110
		100
		225

July 26, 1957

MEMORANDUM

To: Administrator

From: Division of Iron and Ferro-Alloys

Subject: Denial of the subject application for exploration assistance in the amount of $75,710.54
Docket No. DMEA 4739 - Mercury
Jack G. Fisher
Old Cinnabar Mine
Yuma County, Arizona

Denial of the subject application is recommended by this Division based on the following information:

The applicant, Jack G. Fisher, requested exploration assistance in the amount of $75,710.54 on May 8, 1957. The work requested was for (1) dewatering and extensive repairing of an old reported 640-foot deep shaft, (2) repairing present drifts for sampling, (3) digging test holes in dump and outcrops for sampling, and (4) drilling outcrops. A field examination of the property was made on June 18, 1957, by T. M. Romslo, mining engineer, U.S. Bureau of Mines, and W. L. Emerick, geologist, U. S. Geological Survey. They were accompanied by the applicant, Jack G. Fisher.

Applicant: Jack G. Fisher
805 19th Street
Yuma, Arizona

Property Ownership:
The property consists of five patented mining claims located near the common corner of sections 3, 4, 9 and 10 of the unsurveyed T. 2 N., R. 20 W., La Cholla Mining District, Yuma County, Arizona.

The claims are as follows:

Cinnabar No. 1	All patented under Lot 2123
Cinnabar No. 2	Weaver Mining District
Cinnabar No. 3	Recorded November 26, 1906, Book 23 of Deeds
Cinnabar No. 4	Page 139 Records of Yuma County, Arizona
Cinnabar No. 5	

Owned by Jack G. Fisher and Alton B. Carter, each having one-half interest.

Geology: The Cinnabar group of claims are in a part of the Dome Rock Mountains underlain by extensive masses of Pre-cambrian schist. Veinlets and veins of milky-white quartz crosscut the schist in random directions. Considerable faulting has taken place in the mass.

The vein from which the Cinnabar was mined occupies a fault trending S. 47° E., with dips ranging from vertical to about 88° N.E. in the mine area.

The widest portions of the vein are in the mine area where it averages 2½ to 3 feet in width. It reached its maximum width of 5 feet near the shaft and has been stoped to the surface along a drift length of 35 feet. The ore occurred in the hanging wall side in a narrow and more quartzitic band separated from the footwall by limonite and hematite stained gouge.

Cinnabar occurs disseminated in the vein material associated with copper oxides and some gold and silver. Bancroft (U.S.G.S. Bull. 451) believed that the cinnabar was derived from mercurial tetrahedrite.

Development:
The mine is reported to be developed and extensively worked down to the 600 level. It is inaccessible below the first level.

Ore Values and Tonnage: Two check samples, one at the face of the drift and one in the back of the drift on the 1st level were taken and gave the following results:

Sample No. 13433 0.00 percent Hg
Sample No. 13434 0.01 percent Hg

There are no showings of minable ore and therefore there are no reserves.

Past Production:
There are no accurate records of production. The examiners state that it seems reasonable that production did not exceed 160 flasks or 12000 pounds of mercury from 3000 tons indicating a recoverable content of 4 pounds per ton.

Comments and Conclusions:
Chausen and E. D. Gardner, University of Arizona Bull. No. 122, 1927, page 111, state "The only deposit (Old Cinnabar Mine) in the Dome Rock Mountain district is apparently exhausted and any further production from the field is doubtful."

The Field Team recommends denial of the application based on the following observations:

1. The cinnabar ore appears too erratic and spotty in occurrence and grade.

2. The vein pinches laterally and probably at depth.

3. The geological probability of finding additional ore shoots of significant size and grade along the vein to the southeast by exploratory drilling is unfavorable.

4. The mine is apparently worked out and probably contains no significant amount of ore.

The Commodity Divisions of the Geological Survey and Bureau of Mines concur in the conclusions and recommendations of the Field Team.

W. S. Martin, Director
Division of Iron and Ferro-Alloys

WSMartin/esf - 7/26/57
cc to: Docket
Code 400
Admr. Read. File

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

July 24, 1957

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Base Metals

Subject: Review of Report of Examination, Docket No. DMEA 4739, (Mercury), Jack G. Fisher, Old Cinnabar Mine, Yuma County, Arizona. 75,710.54

An inspection of the subject property by the field examiners, their review of previous reports, and check-sampling locations stated by the applicant as having values led the examiners to conclude that the mine is apparently worked out and the geological probability of finding significant ore shoots along the vein to the southeast by exploratory drilling in unfavorable. Accordingly, they recommend denial of the application.

I concur with that recommendation.

A. D. McMahon

A. D. McMahon

Copy to: Division of Minerals
Branch of Base Metals (2)
F i l e s

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 25 1957

DATE	INITIALS	CODE
7/24	P.K.	220
7/24	WSM	400

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 23 1957

DATE	INITIALS	CODE
7/23	P.K.	220
7/23	WSM	400

July 22, 1957
Re: DMEA 4739
Jack G. Fisher
Old Cinnebar Mine
Yuma County, Ariz.
$75,710.54 - Mercury

Memorandum

To: W. S. ~~Martin,~~ Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report

The applicant requested assistance in rehabilitating a 640-foot shaft, dewatering the mine, sampling the workings and dumps and drilling in search of other shoots of mercury -bearing material.

The vein which occupies a fault in schist, appears to have been traced for over a mile and contains, as known, only one short, 35-foot, ore shoot, from which an estimated 160 flasks, or 12,000 pounds of mercury has been produced. A 640-foot shaft has been sunk, presumedly on the vein. Information concerning the results of the deep work are lacking and it was, in part, to re-develop the information that the assistance was requested.

In the opinion of the examiners, the history and the observable and inferred conditions promise little as for other ore shoots and they recommend that the application be denied.

I concur with their opinion and recommendation.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

July 17, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 19 1957

DATE	INITIALS	CODE
7/19	C	220
		130
7/23	C	220
7/23	WSM	400

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 4739 (Mercury) Jack G. Fisher (Old Cinnabar Mine) Yuma County, Arizona - Joint Report of Examination

Enclosed are the original and two copies of the Joint Report of Examination on the subject property by T. M. Romslo, USBM, and W. L. Emerick, USGS.

The field examiners conclude that the probability for making a significant discovery is not sufficiently promising to justify Government participation. Accordingly, they recommend that the Applicant's work proposal be denied in which the Field Team concurs.

W. H. King
W. H. King
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
7-22-57
(date)

ON SITE EXAM

DMEA
DEPARTMENT OF THE INTERIOR
JUL 16 1957
REGION III
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona July 10, 1957

Memorandum

To: W. H. King, Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo
W. L. Emerick Through: E. N. Harshman

Subject: Docket DMEA-4739 (Mercury), Jack G. Fisher (Old Cinnabar Mine), Yuma County, Arizona

TRANSMITTED
JUL 17 1957

Enclosed is the joint field examiners' report on the above subject property, recommending denial of the application.

Also enclosed is the Survey copy of the docket for Mr. Harshman's extraction, and the DMEA/TUC Routing Sheet.

Original signed by
T. M. Romslo

T. M. Romslo
Mining Engineer, U. S. Bureau of Mines

W L Emerick

W. L. Emerick
Geologist, U. S. Geological Survey

Enclosures
TMR:WLE:ms

cc: King (8)
Harshman
DMEA/TUC
Emerick

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 19 1957

DATE	INITIALS	CODE
		130
		220

Reviewed by
DMEA OPERATING COMMITTEE
7-22-57
(Date)

FOR UNITED STATES GOVERNMENT USE ONLY

TRANSMITTED

JUL 17 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

ORIGINAL FILE COPY
DMEA
RECEIVED JUL 2 7
DATE | INITIALS | REF.
130
220

DMEA-4739 (Mercury), Jack G. Fisher

(Old Cinnabar Mine)

Yuma County, Arizona

W. L. Emerick, Geologist
U. S. Geological Survey

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

July 1957

Reviewed by
DMEA OPERATING COMMITTEE
7-22-57

SUMMARY, CONCLUSIONS AND RECOMMENDATION

Jack G. Fisher applied to the Defense Minerals Exploration Administration for assistance in exploring the Old Cinnabar Mine and claims for mercury. The examination, made under docket DMEA-4739, included the accessible part of the mine and the surface outcrop of the vein. The applicant proposed to explore by dewatering and repairing a shaft, repairing drifts, sampling dumps and outcrop, and by drilling the outcrop at a total estimated cost of $75,710.54.

The Old Cinnabar Mine was probably first worked for mercury about 1903 or 1904 and continuously from then to 1914. There is no record of work beyond 1914. One Johnson-McKay retort and one Scott furnace were installed and operated during the early operations. Total production from the property probably did not exceed 160 flasks, or 12,000 pounds of mercury. At present the property is inactive, the retort and furnace in ruins, and only the 1st level of the mine accessible.

Cinnabar was mined from a vein occupying a steeply-dipping southeasterly trending fault. The ore occurred in a shoot with a width of 5 or 6 feet, a drift length of 35 feet, and pitching to the southeast. Average width of the vein in the mine area, which pinches to the northwest, southeast, and probably at depth, is about 2½ to 3 feet. The vein is composed principally of an iron-stained gouge with the ore occurring on the hanging wall side in a thin quartzitic zone. Occurrences of cinnabar in the vein are spotty and erratic, and exploration along the

"siliceous" would be more accurate

vein to discover other ore shoots does not appear favorable. A sample across the vein at the drift face ran nil per cent mercury, and a second one across the back of the drift ran 0.01 per cent mercury. The mine appears to be exhausted.

Denial of the requested aid is recommended because geological conditions for finding significant reserves of mercury in the mine or along the vein are unfavorable.

DMEA-4739 (MERCURY), JACK G. FISHER
(OLD CINNABAR MINE)
YUMA COUNTY, ARIZONA

CONTENTS

	Page
Introduction	1
Location and Accessibility	1
Physical Features and Climate	2
History and Production	4
Extent and Ownership of the Property	5
Present Status	5
Geology	6
Conclusion and Recommendation	10

ILLUSTRATIONS

	Following page
Figure 1. Location map	1
" 2. Claim and Geology map	2
" 3. Plan and Section	5

INTRODUCTION

The Defense Minerals Exploration Administration received an application from Jack G. Fisher on May 8, 1957 for aid in an exploration project for mercury in the Old Cinnabar Mine, Yuma County, Arizona. The application was assigned docket number DMEA-4739. It was reviewed and referred to the Field Team, Region III for a field examination of the property and recommendations.

The proposed project involved, (1) dewatering and extensive repairing of an old reported 640-foot deep shaft, (2) repairing present drifts for sampling, (3) digging test holes in dump and outcrops for sampling and (4) drilling outcrops. Total cost of the work was estimated at $75,710.54, of which $67,823.54 was for the work of item 1. The property was examined for the DMEA June 18, 1957 by T. M. Romslo, mining engineer, U. S. Bureau of Mines, and W. L. Emerick, geologist, U. S. Geological Survey. They were accompanied by the applicant.

LOCATION AND ACCESSIBILITY

The Old Cinnabar mine is about 17 air-miles southeast of Blythe, California, near the common corner of secs. 3, 4, 9 and 10 of the unsurveyed T. 2 N., R. 20 W., La Cholla Mining District, Yuma County, Arizona (fig. 1). Blythe, the largest nearby town, is located on U. S. Highway 60-70.

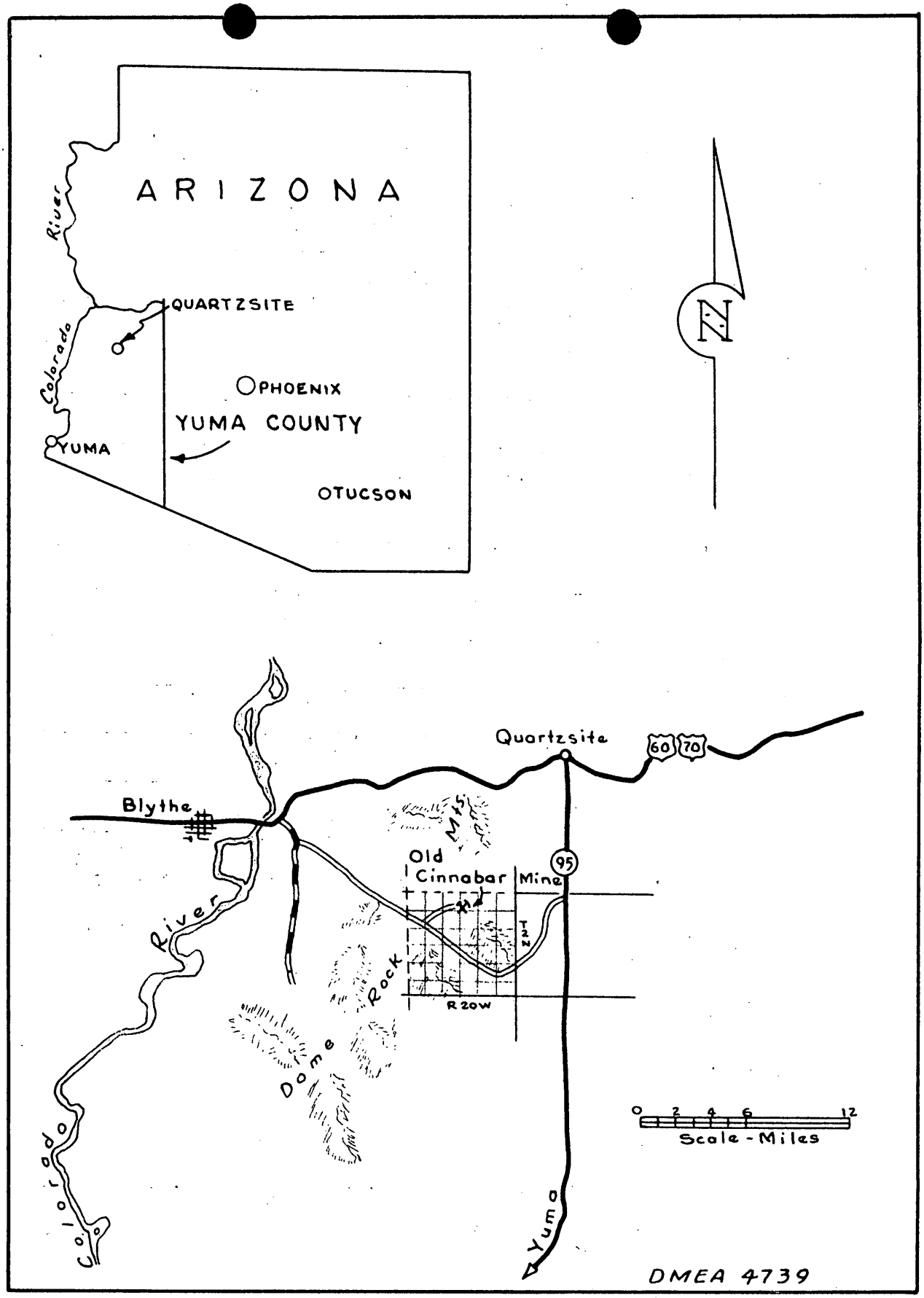


Fig-1-Location map, Jack G. Fisher, Yuma County, Arizona

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 10 1957

DATE	INITIALS	CO...

The mine may be reached from Blythe by traveling about 3 miles east on U. S. Highway 60-70 to the bridge across the Colorado River. Proceed easterly on the highway to a right turn onto a graded dirt road at 1.2 miles from the bridge. Follow the graded road 1.6 miles to the south and then turn left onto an unimproved desert road. Continue 11.4 miles southeasterly on the desert road that terminates at the mine.

The trip to the mine should be made with a 4-wheel drive vehicle and a guide, as the desert road is rather rough and contains numerous unmarked turnoffs.

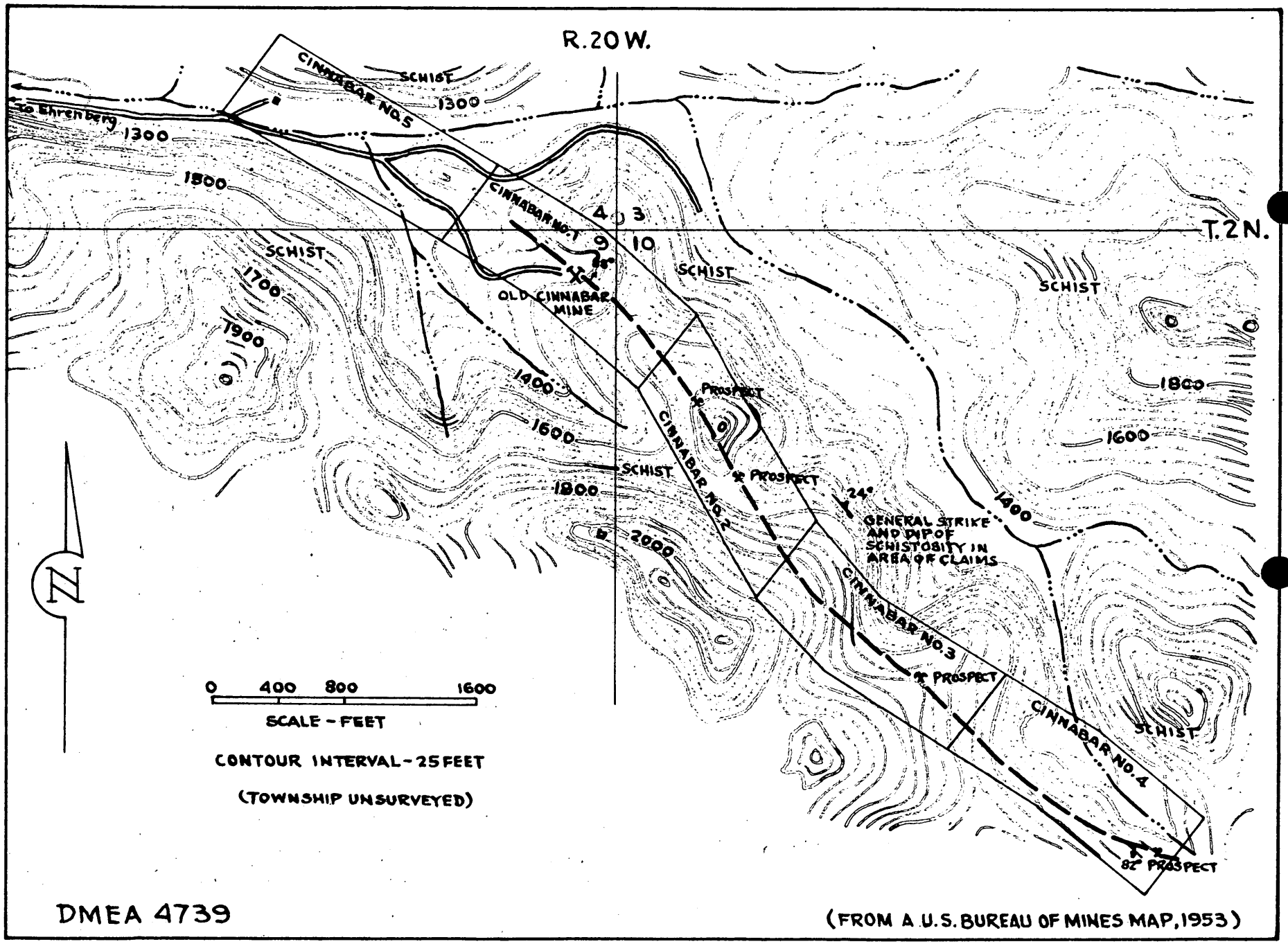
The mine also may be reached from Quartzsite, Arizona, a village on U. S. Highway 60-70 at about 23 miles east of Blythe. Soulé[1/] in describing a 24.4 mile trip to the mine from Quartzsite said that a 4-wheel drive vehicle is necessary and indicated that the services of a guide would be advisable.

PHYSICAL FEATURES AND CLIMATE

Soulé said[2/]:

> "The Cinnabar mercury mine is situated in the east center of the south half of Dome Rock Mountains. These mountains rise abruptly from the surrounding plains at altitudes from 900 to 1,200 feet. Many of the mountain peaks exceed 2,000 feet and some reach altitudes in excess of 2,800 feet. Cunningham Mountain, the highest peak in the range and about 3 miles northwest of the mine, reaches an altitude of 3,314 feet. The collars of the mine shafts are at an altitude of nearly 1,400 feet. The vein profile reaches a maximum of 400 feet above the shaft collars southeast of the mine and drops to over 125 feet below the collars to the northwest as shown in figure 2.

1/ Soulé, John H., Project 328, Cinnabar Mercury Mine, Dome Rock Mountains, Yuma County, Arizona. Supplemental Examination Report, May 1953.
2/ Op. cit.



DMEA 4739

(FROM A U.S. BUREAU OF MINES MAP, 1953)

FIGURE 2.- CLAIM AND GEOLOGY MAP, JACK G. FISHER (OLD CINNABAR MINE), YUMA CO., ARIZ.

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 19 1957

DATE	INITIALS	CODE

"The mountain range trends north and south, but serrated spurs generally trend northwest-southeast. The terrain is rugged, rising from boulder-filled washes, up steep slopes to the jagged peaks.

The climate is extremely arid and precipitation averages only about 6 inches per year. Most of the rainfall occurs as heavy summer thunder showers that damage the primitive roads in the area. Snowfall is rare, averaging about 0.2 inches per year.

Winter temperatures are mild, while the summer temperatures are extremely hot, often exceeding 100 degrees for extended periods of time. Freezing temperatures are a rarity.

There are no permanent streams in the area and water constitutes a problem. Industrial water may be obtained from the Colorado River, about 15 miles by road to the west. Drinking water from Blythe, Calif., about 17 miles by road to the northwest, or from Quartzsite, Ariz., nearly 25 miles by road to the northeast. It is possible that some road construction and rerouting would reduce the distance to Quartzsite. Water was reported at the 200-foot level of the mine but this could not be verified.

The vegetation is typical of the desert and consists of many varieties of cactus, mesquite, ironwood, palo verde trees, ocotillo, and various small shrubs. There is no timber suitable for mining purposes.

There are no living accommodations at the mine. Limited accommodations may be obtained at Blythe, depending upon the criticalness of the housing situation. Rail, telegraphy, telephone, and other services are obtainable at Blythe. Mining equipment probably is obtainable no closer than Phoenix, Ariz., about 170 miles east of the mine. Electric power is available at Quartzsite and a highline passes about 6 miles east of the mine."

HISTORY AND PRODUCTION

Soulé reported[3/] :

"Little is known of the early history of the mercury deposits in the Dome Rock Mountains. Development was in progress in the early 1900's as the mining claims were patented in 1904, and one shaft was reported to have reached a depth of 180 feet in 1905. It is probable that the deposits were discovered shortly after the Civil War when many prospectors roamed the hills in search of the lode source of the gold placers that surround the mountains.

The mine was reportedly operated to 1908 by the Colonial Mining Co., then to 1914 by the Cinnabar Development Co. There is no record of work since 1914 until 1942-1943 when R. W. Waterman acquired control of the property, applied for a Reconstruction Finance Corporation loan, as well as an access road. The loan was denied, hence no action was taken on the application for the access road. Interest in the property was lost and no further work was done.

One Johnson McKay retort and one Scott furnace were installed on the property during the early operations, and ore was treated in both of them. Both were well constructed. The retort seems to have been remodeled since 1926 or 1927, possibly in 1942 when Waterman was interested in the mine. The Scott furnace has gradually fallen apart and now is in a poor state of repair. The furnace was reported to have been made of local brick and the absorption of mercury was high. This seems true as the dark staining of mercury is visible in the remaining brickwork at the top of the furnace.

There are no accurate records of production from the Cinnabar mine. Production figures for 1908 are included with those of Oregon, and the 1914 figures are included with "Other States". Gardner and Lauson in Arizona Bureau of Mines Bulletin 122 were told that the production during 1914 was 16 flasks. It seems reasonable that production did not exceed 160 flasks, or 12,000 pounds of mercury. If this was obtained from an estimated 3,000 tons of ore treated, the ore treated would seem to have contained 4 pounds of recoverable mercury."

3/ Op. cit.

During the latter part of 1953, Alton B. Carter of Young, Arizona acquired the property through payment of delinquent taxes. In 1954, he transferred 1/2 interest to Jack G. Fisher, the applicant. Mr. Fisher reported that since then he has spent about $5,000.00 on repairing roads to the property, on worthless reports of examinations by so-called mining engineers, and on assays of samples taken by him and his brother.

EXTENT AND OWNERSHIP OF THE PROPERTY

The property of the proposed exploration comprises a group of 5 lode mining claims (fig. 2).

The 2 owners of the property, each having a half interest, are Alton B. Carter and Jack G. Fisher of Yuma, Arizona.

PRESENT STATUS

The Old Cinnabar mine is inactive and equipment on the property is confined to the previously described Johnson McKay retort and Scott furnace.

The principal mine workings are shown on figure 3. The shaft is in a poor state of repair and the first level, the sole accessible part of the mine, may be reached only by climbing down the west end of the open stope.

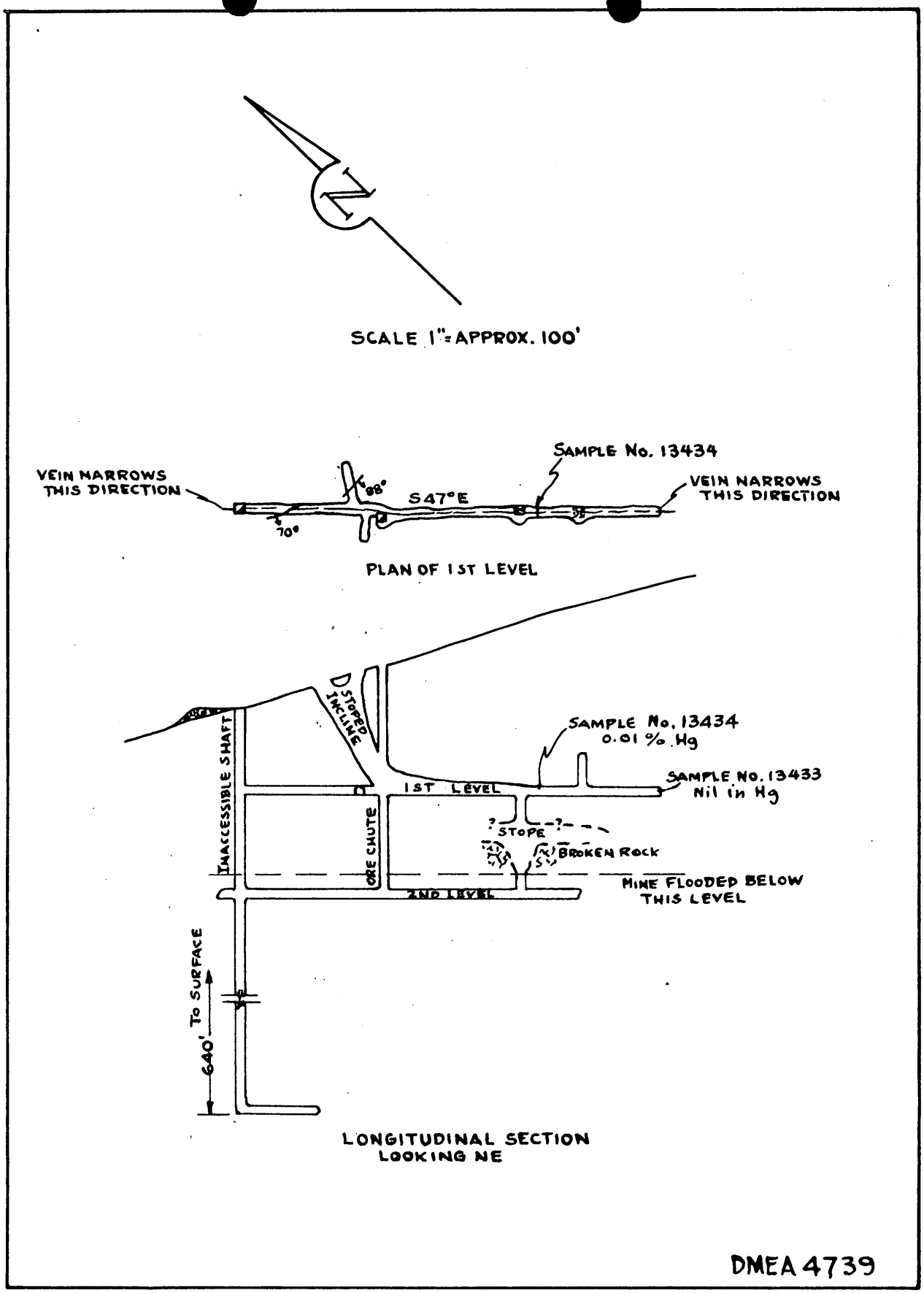


FIGURE 3.- PLAN AND SECTION, JACK G. FISHER (OLD CINNABAR MINE), YUMA COUNTY, ARIZONA.

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 1957

DATE	INITIALS	CODE

The accessible workings are dry, unsupported by timbers and relatively free of fallen rock. However, as the vein zone contains a high percentage of clayey material it is reasonable to expect that any workings below the present water level would require close timbering.

GEOLOGY

The Cinnabar group of claims (Fig. 2) lie in a part of the Dome Rock Mountains underlain by extensive masses of Precambrian schist. Granite and rhyolite flows and tuffs have been reported[4/] several miles away in the southern end of the mountains. The Precambrian schist was probably a sedimentary series deposited as interbedded and interlensed fine sandstones, siltstones and conglomerates. In general, the schistosity strikes northwesterly and dips to the northeast (Fig.2). Considerable faulting occurred in the mass and in places distortion and folding of the beds is apparent. Veinlets and veins of milky-white quartz crosscut the schist in random directions.

The vein, from which the cinnabar on the property was mined, occupies a fault trending about S. 47° E., with dips ranging from vertical to about 88° NE in the mine area. On the far southeast end of the property, on the Cinnabar No. 4 claim, the fault dips to the southwest at a steep angle. The fault is obscure in most places along

---

4/ Lausen, C., and Gardner, E. D., Quicksilver Resources of Arizona: Univ. of Arizona Bull. No. 122, 1927, pp. 25-26.

its strike owing to a cover of surface debris, but it has been exposed in several places by shallow pits and trenches. Pinching or narrowing of the vein takes place on the northwest and to the southeast on the property. On the Cinnabar No. 4 claim to the southeast, the only other place applicant has found mercury, the vein is only about 1 foot wide and consists principally of iron-stained clayey material, with a 2-inch quartzitic band on the hanging wall side of the fault. Occasional isolated occurrences of cinnabar can be picked up with the hand lens in the quartzitic material.

The widest portions of the vein, ranging on the average from 2-1/2 to 3 feet, are found in the mine area. Near the shaft and incline (Fig. 3) on the 1st level, the vein appeared to reach its maximum width. Here the vein was stoped to the surface along the widest part of an oreshoot which Lausen and Gardner[5/] stated had a width of 5 or 6 feet, a drift length of 35 feet, and pitched to the southeast. The ore occurred on the hanging wall side of the vein, probably in a narrow and more quartzitic band separated from the footwall side by limonite and hematite stained gouge. It is believed that movement along the fault plane was both pre-mineral and post-mineral. The fact that some dissemination of mercury occurred in the crushed vein material probably accounts for the width of

---

5/ Lausen, C., and Gardner, E. D., op. cit., 1927, p. 30.

the stope and drift on the 1st level near the shaft. Lausen and Gardner[6/] also state that the ore shoot was probably larger at the surface than at depth, or on the 600-foot level to which the mine was reputedly driven. Because of inaccessibility of the workings below the 1st level, conditions of the vein at depth are uncertain. However, there is the implication that the vein pinches out in size and quality with depth, as it also does laterally.

Cinnabar is the principal sulphide ore mineral although metacinnabarite has also been found. Associated mineralization includes the copper oxides malachite and chrysocolla, along with some gold and silver. Quartz, limonite, hematite and kaolin are the gangue minerals. The 1st level of the mine is in the oxidized zone, and no sulphides of either mercury or copper were found by the field examiners on this level. If sulphides are present they may be found at depth below the oxidized zone. Presence of the oxidized copper minerals in the ore led to a suggestion by Bancroft[7/] that the cinnabar may have been derived from mercurial tetrahedrite. The field examiners gained the impression that the cinnabar occurrences in the mine along the vein were probably erratic and spotty. Occurrences of significant amounts of cinnabar along the outcrop of the vein southeast of the mined area do not appear to be present.

6/ Lausen, C., and Gardner, E. D., op. cit., 1927, p. 35.

7/ Bancroft, H., Reconnaissance of the Ore Deposits in Northern Yuma County, Arizona: U. S. Geol. Survey Bull. 451, 1911, p. 84.

The applicant apparently conducted a fairly thorough and systematic sampling program on the 1st level of the mine, the results of which were requested by the field examiners but never received. Applicant orally stated that his sampling gave 0.12 per cent mercury at the face of the drift, 0.41 per cent mercury at the winze, and a 0.36 per cent mercury assay at the shaft. All of the applicant's samples, except at the 1st level drift face, were taken across the floor. The low assay obtained by the field examiners from a sample (No. 13434) in the back of the drift at the winze (Fig. 3) suggests that the applicant's higher assay results on the floor of the drift may be due to previously broken ore, although he claimed to have carefully removed much of it before taking a sample. Because the shaft and lower levels were inaccessible sampling was impossible.

Two check samples, one at the drift face just above applicant's sample point and a second in the back of the drift near the winze (Fig. 3), were taken by the field examiners. Results of these samples were:

Sample No. 13433 nil percent Hg

Sample No. 13434 0.01 percent Hg

The applicant's sampling, from his oral statement of grades along the 1st level, would indicate an average 0.30 percent Hg or 6.0 pounds of mercury to the ton. According to Lausen and Gardner[8/]

8/ Lausen, C., and Gardner, E. D., op. cit., 1927, p. 33.

it is doubtful if the ore from the mine in 1913 averaged as high as 0.5 per cent mercury and that the ore in 1914 contained about 0.36 per cent, or 7.2 pounds, of mercury per ton. These same authors, on page 111 of their report, state that "the only deposit (Old Cinnabar Mine) in the Dome Rock Mountain district is apparently exhausted and any further production from that field is doubtful."

CONCLUSION AND RECOMMENDATION

Based on a field examination of the property the following pertinent facts are concluded: (1) the cinnabar ore appears to be erratic and spotty in occurrence and grade; (2) the vein pinches laterally and probably at depth; (3) the geological probability of finding additional ore shoots of significant size and grade along the vein to the southeast by exploratory drilling is unfavorable; and (4) the mine is apparently worked out and probably contains no significant amounts of ore. We therefore recommend denial of the application.

OFFICIAL FILE COPY DMEA RECEIVED MAY 27 1957		
DATE	INITIALS	CODE
5/27	C	220
5/27	WSM	400

May 22, 1957

Memorandum

To: W. R. Storms

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4739 (Mercury) Jack G. Fisher (Old Cinnabar Mine) Yuma County, Ariz.

Enclosed please find the application for Jack G. Fisher, Docket DMEA 4739, in the amount of $75,710.54 which was received in this office on May 22.

A field examination should be made and suitable report prepared. The completed report should be forwarded to the Acting Executive Officer, with a copy of the memorandum of transmittal to this office.

W. H. KING
W. H. King

Enclosure

cc: Acting Executive Officer (3)
E. N. Harshman
W. L. Emerick

DMEA
DEPARTMENT OF THE INTERIOR
MAY 23 1957
REGION III
DENVER, COLORADO

WO-2

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE
5/24	C	220
5/27	WSM	400

224 New Customhouse
Denver 2, Colorado

May 21, 1957

Memorandum

To: W. L. Emerick) W/enclosures, Items 1-5 Below
W. H. King)

From: DMEA Field Team, Region III

Subject: Docket DMEA 4739 (Mercury) Jack G. Fisher (Old Cinnabar Mine) Yuma County, Arizona

Enclosed is the following material relating to the subject docket.

1. Copy of application for Government assistance in exploration work under the DMEA program.
2. Memorandum of Review by J. W. Pennington, USBM.
3. Memorandum of Review by N. E. Nelson, USGS.
4. Letter of transmittal of the foregoing to this office, dated May 17, 1957, from the Chairman, Operating Committee, DMEA.
5. Routing Control Sheet.

A field examination of the property and a joint report of findings and recommendations pertaining to the Applicant's work proposal are requested.

The field examiners will note that the Applicant proposes to do extensive rehabilitation with only an incidental amount of exploration. If the field examiners believe that the property has merit, a more realistic exploration program can then be discussed with the Applicant.

Twelve extra copies of each map used in the joint report which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries, should be submitted if Government participation is recommended.

The Bureau of Mines' copy of the application should be returned to this office with the joint report of examination. The Survey's copy of the application is to be returned to Mr. Harshman's office.

Original signed by
E. N. HARSHMAN

E. N. Harshman
Acting Executive Officer

Enclosures

MHM:eh

cc: Sec. Op. Comm. (2)
Harshman w/enclosures 2-4
King
Docket
Carom.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5-15	Hopkins	400
5-15	Martin	400
5/17	Selfridge	130
"	Johnson	110
"	Patterson	100
5/20	JWG	220
		400

MAY 17 1957

Mr. E. N. Harshman, Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4739 - Mercury
Jack G. Fisher
Old Cinnabar mine
Yuma County, Arizona

cc to: Oper. Comm.
FT. REG. III
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

Dear Mr. Harshman:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Copies of memoranda dated May 9, 1957, by Mr. N. E. Nelson, Geological Survey, and Mr. J. W. Pennington, Bureau of Mines, relating to the project are enclosed. Also enclosed are extra copies of the application with copies of a bid for rehabilitation work.

We note that the applicant's proposed work consists of extensive rehabilitation, sampling of underground workings and drilling, with the cost of rehabilitation comprising 90 percent of the total cost of the project. It is our opinion that such undue emphasis on rehabilitation work does not constitute sound or effective exploration work.

If the examiners find, during the field examination, that an exploration project is warranted, it may be that a program embodying sound exploration work with a minimum amount of rehabilitation can be worked out with the applicant.

The applicant is owner of a one-half interest in the property. If a contract is recommended please advise the applicant that a Consent to Lien and Subordination Agreement from the owner of the other one-half interest will be required.

JHOPKINS:foc 5/15/57
cc to: Docket
Code 400
Admr. R. File

Sincerely yours,

George C. Selfridge

(By ls)

Chairman, Operating Committee

APPROVED:

Frank D. Lamb (By ls)
Member, Bureau of Mines

Thor H. Kiilsgaard (By ls)
Member, Geological Survey

Enclosures

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5-15	Hopkins	400
5-15	Martin	400
5/17	Selbridge	130
"	Johnson	110
"	Mittendorf	100
		220
	Kilsgaard	
	Fisher	

MAY 17 1957

Mr. Jack G. Fisher
805 - 19th Street
Yuma, Arizona

Re: Docket No. DMEA 4739 - Mercury
Old Cinnabar mine
Yuma County, Arizona

Dear Mr. Fisher:

The above-docketed application for exploration assistance for mercury ores has been reviewed by the Washington office of the Defense Minerals Exploration Administration and referred to Mr. E. N. Marshman, Acting Executive Officer, DMEA Field Team, Region III, 224 New Customhouse, Denver 2, Colorado, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

JHOPKINS:foc
5/15/57
cc to: Docket
Code 400
Admr. R. File
Oper. Comm.
FT. REG. III
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

May 9, 1957
Re: DMEA 4739
Jack G. Fisher
Old Cinnabar Mine
Yuma County, Arizona
$75,710.54 - Mercury

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application

The applicant requests assistance in rehabilitating a 640-foot shaft, dewatering the mine, sampling the underground workings, and dump, and drilling.

Except for the depth of shaft, the description of the mine given by the applicant fits reasonably well the work at the Colonial Mining Company property as noted by Howland Bancroft, 1910 Contributions to Economic Geology, Bulletin 430, U. S. Geological Survey.

Bancroft says "Considering the facts that late eruptions are absent in the vicinity, that the deposit is entirely oxidized, that copper stains are prominent, and that values of gold and silver occur in the vein, it seems highly probable that the cinnabar has been derived from mercurcial tetrahedrite".

Assistance in doing part of the work proposed may be warranted. Perhaps the drilling should come first.

Referral of the application to the Field Team is recommended.

N. E. Nelson

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 10 1957

DATE	INITIALS	CODE
5/10	C	220
5/10	WSM	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY DMEA RECEIVED MAY 9 1957		
DATE	INITIALS	CODE
5/9	C	220
5/10	WSM	400
May	9, 1957	

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: Assistant Chief, Branch of Base Metals

Subject: Review of application, Docket No. DMEA 4739 (mercury), Jack G. Fisher, Old Cinnabar Mine, Yuma County, Arizona. $75,710.54

The applicant proposes to explore for mercury mineralization at the Old Cinnabar mine by rehabilitation of the existing workings and sampling dumps at an estimated total cost of $75,710.54.

Before the expensive and extensive rehabilitation work is done, it would be preferable to examine the area and determine if a preliminary program of drilling is warranted. There seems to be little justification to dewater and retimber the shaft its entire depth of 640 feet. Rehabilitation of the shaft and workings down to the 135 foot level would permit inspection, sampling, and, if necessary, drilling. Results of this modified program could be used to evaluate a more extensive exploration.

Referral of the application to the Field Team is recommended.

The application is returned herewith.

J. W. Pennington

Attachment

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U.S.G.S.
F. D. Lamb
F i l e s

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

May 8, 1957

Mr. Jack G. Fisher,
805 Nineteenth Street,
Yuma, Arizona.

Subject: DMEA 4739
Re: Exploration Assistance

Dear Mr. Fisher:

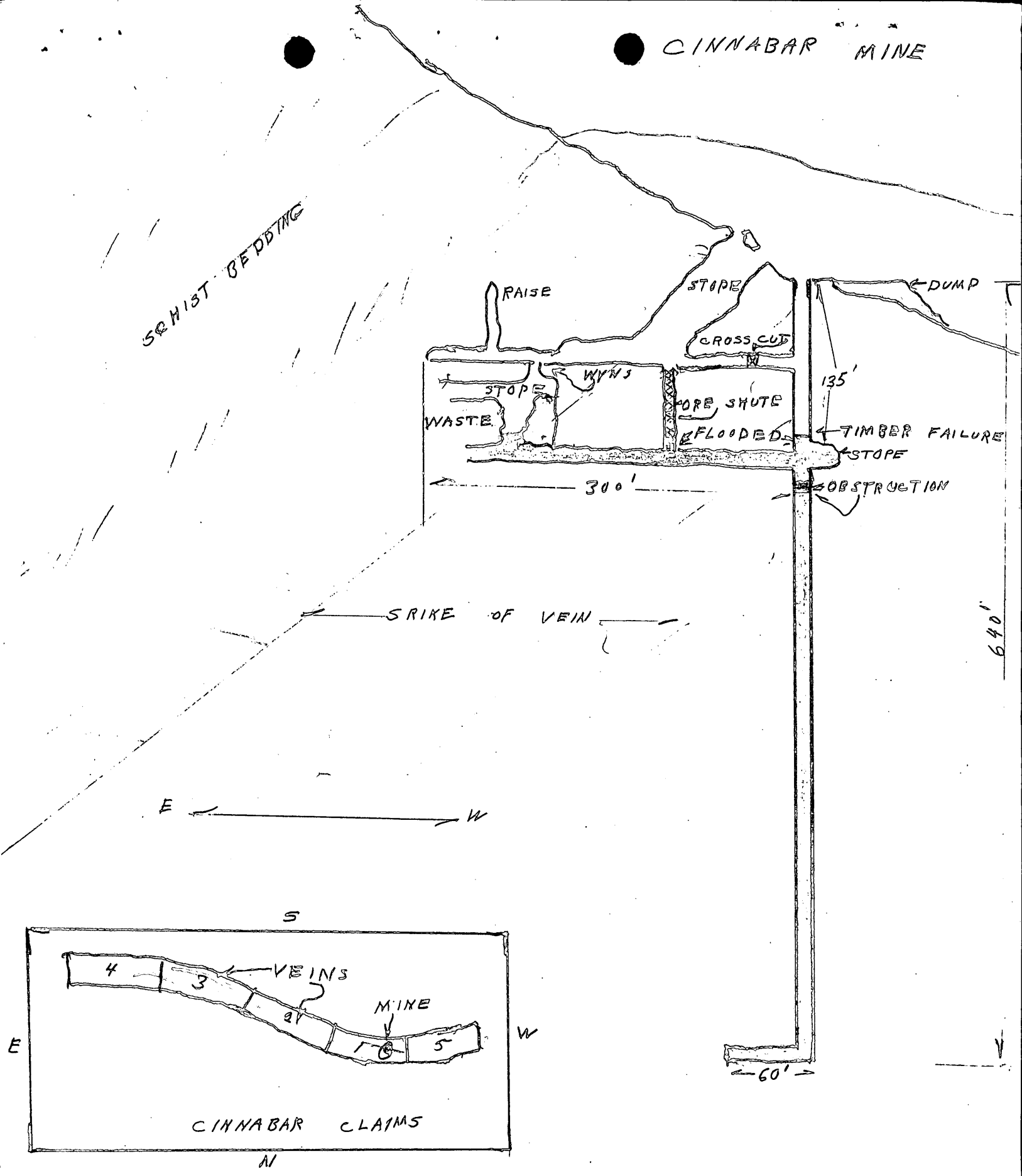
Your application for exploration assistance, dated May 4, 1957, submitted to our office at Denver, Colorado, has been assigned Docket Number DMEA 4739 and referred to the Iron & Ferro-Alloys Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Chief
Operations Control and
Statistics Division

Copy to: Region III.

CINNABAR MINE



OFFICIAL FILE COPY
RECEIVED MAY 8 1957
D M E A

DATE	INITIALS	CODE

FIGURES ON RECONDITIONING, TIMBERING & DE-WATERING A 640' SHAFT, AND ALSO BUILDING A 75' HEAD FRAME, HOIST BUILDING, AND OTHER PERMANENT INSTALLATIONS AT A CINNABAR PROPERTY LOCATED IN ARIZONA NEAR BLYTHE, CALIFORNIA, AND OWNED BY MR. JACK FISHER, 805 - 19TH ST., YUMA, ARIZONA

Tate MINE CONTRACTING AND DEVELOPMENT CO.

3438 NORTH KELVIN
TUCSON, ARIZONA — PH. 6-6348

SETS

Pcs			Price	Total Per Set	Price Per Set	Number of Sets	Total Material	Total Price
2	WALL PLATES	3"x8"	M' 90 - 20.	118'	10.62	113	20. 1333'	1200.06
2	END PLATES	8 x 8	M' 90 - "	68'	6.12	113	" 7681'	691.56
1	DIVIDERS	6 x 8	M' 90 - "	20'	1.80	113	" 2260'	203.40
6	POSTS	8 x 8	M' 90 - "	160'	14.40	113	" 18080'	1627.20
	DAPPING	2 x 12	M' 90 - "	18'	1.62	113	" 2034'	183.06
26	LAGGING	2 x 12	M' 90 - "	260'	23.40	113	" 29380'	2644.20
1	LADDER		EA. 10 - EA.	1	10.00	113	EA. 113	1130.-
8	HANGING RODS					113		
4	WASHERS		EA. 150	8	12.00	113	EA. 904	1356.-
4	NUTS					113		
2	GUIDES	4 x 4	M' 90 - 20.	15'	1.35	113	20. 1695'	152.55
2	LAG SCREWS	1/2" x 4"	C 11.30 EA.	2	.23	113	EA. 226	24.86
8	BLOCKS		M' 90 - 20.	50'	4.50	113	20. 5650'	508.50
25	WEDGES		C 1.95 EA.	25	1.24	113	EA. 2825	140.12
20 lb.	NAILS		LB. 15.18	20	3.00	113	LB. 2260	339.-
5	CENTER LAGGING	1 x 12	20.	25'	2.25	113	20. 2825'	254.25
38	STATION MANWAY FLOORS		M' 90 -	30'		38	20. 1140'	1026.00

BEARER SETS

2		3 x 8	M' 90 - 20.	90'		6	20. 540'	48.60
1		6 x 8	M' 90 - "	32'		6	20. 192'	17.28
					TOTAL 20. FT. OF LUMBER		2481'	TOTAL PRICE — 1062.34 — UNIT #1
	PIPE - (WATER)	1"	C' 20 -				FT. 640	128.-
	" - (VENTILATION)	12"	C' 120 -				" 640	768.-
	" - (AIR)	3"	C' 107 -				" 640	671.60
								TOTAL PRICE — 1567.60 — UNIT #2

		Rental of Use Rates → Weekly - Monthly	Amt. of Time Required	Total Cost
1	125 CFM AIR COMPRESSOR	65.50 198.-	5 MONTHS	990.-
1	75 CFM " "	50.- 150.-	"	750.-
1000'	AIR HOSE	32.50 100.-	"	500.-
1	4 W.D. DODGE POWER WAGON TRUCK	58.- 176.-	"	880.-
1	4 W.D. WILLYS JEEP	50.- 150.-	"	750.-
1	1 1/2 T. FLATBED TRUCK	70.- 210.-	"	1,050.-
2	CHIPPING HAMMERS - WITH KITS COMPLETE	30.- 60.50	"	121.50
1	AIR SAW	32.25 97.50	"	97.50
1	PORTABLE LITE PLANT, WIRING, BULBS, ETC.	15.- 45.-	"	225.-
	MISC. HAND TOOLS TO NUMEROUS TO MENTION CONSISTING OF; PICKS, SHOVELS, HAMMERS, SAWS, BARS, LEVELS, BIT KNOCKERS, BLOW PIPES, LIFES, ROPES, CABLES, CHAINS, SAFTY BELTS, DRILL STEEL, ETC.	80.- 240.-	"	1,200.-
		1454.-	X 5 MONTHS =	7270.- UNIT #9

— LABOR - WAGE - SCALE —

	Based on 8 hr. day week 8 hr. over time.	Daily Rate
1	FORMAN (WILL ALSO WORK AS TIMBERMAN)	21.67
2	TIMBERMAN @ 19.50	39.00
1	TIMBER FRAMER	19.50
1	TOPLANDER	18.42
1	HOISTMAN	17.52
		118.11

LABOR - SHAFT

20 SHIFTS - REMOVING & HOISTING OLD TIMBER	- 236.220
31 SHIFTS - TIMBERING	- 673.227
12 SHIFTS - MOVING LUMBER FROM CARS @ BLYTH TO MINE	- 141.732
10 SHIFTS - MOVING IN AND OUT	- 118.110
6 SHIFTS - SETTING UP & TEARING DOWN	- 70.866
5 SHIFTS - LOST TIME - WEATHER ETC.	- 590.55
110 TOTAL SHIFTS	TOTAL - 1,792.10

110 SHIFTS @ 6 MEN PER SHIFT = 660 MAN SHIFTS

PAY PER DAY = 118.11
" " WK. = 708.66

36 SHIFTS PER WEEK -
TOTAL TIME = 18 1/3 WEEKS OR 110 DAYS

LABOR - HOIST BLDG & HEAD FRAME

TOTAL TIME = 8 1/3 WEEKS OR 51 DAYS - 6023.61

TOTAL LABOR - NET WAGES - 17,015.71 - UNIT #10

SUMMARY

Units		
#1	TOTAL BD. FT. OF LUMBER 74,291' @ 90.- PER M (INCLUDING HANGER RODS, WASHERS, ETC.)	13,693.34
#2	PIPE - WATER, VENT. & AIR	1567.60
#3	HEAD FRAME - WOOD - 75' HIGH - TOTAL MATERIAL	3900.-
#4	HOIST BUILDING - 24' x 40' - TOTAL MATERIAL	2500.-
#5	HOIST ENGINE & CABLE - COMPLETE	3400.-
#6	PUMP JACK, ENGINE, CYLINDER, 640' OF 3" GALV. PIPE	3952.17
#7	TOTAL EQUIPMENT RENTAL - 1854.00 PER MO. x 5 MONTHS	7270.-
#7	ESTIMATED EQUIPMENT MAINTENANCE	1454.-
#7	ESTIMATED FUEL, OIL, LUBE - 15.00 PER DAY x 161 DAYS	2415.-
#10	TOTAL LABOR - NET WAGES - 161 SHIFTS (DAYS)	17,015.71
#11	INDUSTRIAL INSURANCE - COMP. & O.D. 1454.11	
	EMPLOYER'S 2 1/4% FICA 439.25	
	EMPLOYER'S 2.7% UNEMPLOYMENT INSURANCE 513.40	2395.97
#12	OFFICE, INSURANCE, SUPERVISION, OVER HEAD AND PROFIT	11,313.92
	TOTAL PRICE =	67,023.54