UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

224 New Customhouse
Denver 2, Colorado

November 22, 1954

Memorandum

To: Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 3343, C. O. Carlson's Apex Mercury Deposit
Sunflower Mining District, Maricopa County, Arizona

Enclosed are two copies of a letter from C. O. Carlson requesting that DMEA Docket 3343 be placed in the inactive file.

John F. Shaw
For W. H. King

Enclosures

Mr. Walter R. Storms :- Payson, Ariz
Nov 4, 54

Dear Sir -

Due To Litigation - Re - Apex Mine - Please Put The Loan - on In Active Status - until This Matter is Settled - As Then It May be Possible The Loan Will Be Needed

I Hereby With To Thanks For The Co-operation Shown - on This Matter -

Regards
C. O. Carlson

Docket DMEA - 3343

U. S. BUREAU OF MINES
MINING DIVISION
NOV 5 1954
TUCSON, ARIZONA

11/29/54 gla

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Docket DMEA-3343

U. S. BUREAU OF MINES
MINING DIVISION
NOV 5 1954
TUCSON, ARIZONA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

224 New Customhouse
Denver 2, Colorado

May 7, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMEA Form 3a and MF-103 and supporting data pertaining to the following applications for Government assistance in exploration work:

C. O. Carlson (Mercury)
Payson
Arizona

Leo Daffern (Copper)
P. O. Box 182
Ajo, Arizona

W. H. King

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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. 3343
Metal or Mineral Mercury
Date Received
Estimated Cost $26,928
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: C.O.CARLSON. PAYSON, 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 GROUP OF 14. LODE MINING CLAIMS. SUNFLOWER MINING DISTRICT, MARICOPA CO, ARIZONA., KNOWN AS APEX MERCURY., TITLE BY LOCATION.

SEE EXHIBIT A..

(*b*) State any mine name by which the property is known. APEX MERCURY.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise OWNER BY LOCATION.

(*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. LIST INCLUDED OF BOOK & PAGE. SEE EXHIBIT B..

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. SEE EXHIBIT C.

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

(*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. SEE EXHIBIT E.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. ROAD TO PROPERTY.. 65 MILES TO MESA, ARIZONA.

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

16—66551-1

PLENTY LABOR, SUPPLYS, ECT, FROM, MESA, PHOENIX GLOBE, ECT.
WATER AT PROPERTY., NO POWER LINES, PHONE LINE TO MINE CAMP.
'(CREEKS & SPRINGS).

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

(*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. ENCLOSE SD EXHIBIT F.

(*c*) The work will start within 10 days and be completed within 18 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. 20 YEARS MINING.

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: EXHIBIT G

(*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. EXHIBIT H.

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 APR. 15, 1954., 195__

C.O.CARLSON.
(Applicant)

By C. O. Carlson

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

C, O. CARLSON
Payson, Arizona

3. (f)
EXHIBIT B.

CLAIM NAME	DOCKET NO.	PAGE NO.	MARICOPA COUNTY, ARIZONA
Apex 1	1124	380	
Apex 2	1124	381	
Apex 3	1124	382	
Apex 4	1124	383	
Apex 5	1158	254	
Apex 7	1124	384	
Apex 8	1129	280	
Apex 9	1158	255	
Apex 10	1129	291	
Apex 11	1158	256	
Apex 12	1158	257	
Apex 13	1158	258	
Apex 14	1129	292	
Apex 15	1158	259	

4. (a)
EXHIBIT C.

This is the only property that produced mercury in Arizona in 1953. This production was from prospecting and sampling operations, and from trial runs made in a new type mercury recovery unit designed by C. O. Carlson. Some small scale production has been made in 1954. All mining and processing under the direction of C. O. Carlson. Most of the mine workings (old) are open for examination. All new workings open for inspection and good roads and/or trails to all.

4. (b)
EXHIBIT D.

Past production records not available but understand several thousand flasks were produced by a 100 ton plant that the general overall average of ore was ten (10) pounds of mercury per ton of ore heads. Plant was removed in 1945 when price of percury dropped.

4. (c)
EXHIBIT E.

Vein deposits consisting of three large parallel veins from 4 to 50 feet wide, direction trend NE-SW and approximately three miles long, showing many ore shoots in each structure of commercial value, with high grade bunches and stringers showing up to 50% mercury content. Veins are in slate and/or quartz. The veins lay in slate zone in schist, with jasper wall on the northwest side and a brown slate on the southeast side. The proposed exploration tunnel of 600 feet would cut these veins at about 200 feet in depth, opening vergin ground for the extraction of ore. The work would cross cut the ore structure-formation and should cross cut three or more ore structures and should develop ore to supply a 100 ton per day operation. A tunnel approximately 450 feet in length has been run into the mountain to start this plan of exploration. This tunnel is in good working condition and the proposed exploration under this loan application would start from the further most end of this present 450 foot tunnel, thus saves approximately 450 feet of work now completed.

C. O. CARLSON
Payson, Arizona

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EXHIBIT B.

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C. C. CARLSON
Payson, Arizona.

6. EXHIBIT G.

It has been found that; if an attempt is made to break down the total estimated cost as per form supplied, it would most likely be confusing. Therefore, the application has been broken down in estimates as follows:

Driving the proposed exploration tunnel on basis of five foot advance:

Labor and supervision - 5 men at $15.00 each	$ 75.00
Powder, caps and fuse	16.00
Air compressor rental - 220 cu. ft. capacity	12.00
Fuel, lube oil and grease	10.00
Drill steel, bits and hose: Grinding, repairs, etc.	19.50
Timber, wedges and props	10.00
2" air line pipe and 1" water line pipe	10.00
Track, ties, spikes and fishplates	10.00
Shovels, picks, tools, ore-cars -- replace and repair	2.50
Insurance, S. S., @ 20% of payroll	15.00
Total per five foot advance	$ 180.00
Cost per foot estimate	36.10

Estimated cost of 600 foot tunnel $21,708.00

Cost estimate for rehabilitation of present 450 ft. tunnel:

24 tons of rail @ $200.00 per T.	$ 500.00
225 - hewn ties @ 40¢ ea.	90.00
6000 feet timber @ $60.00 per M.	360.00
Rail spikes, bolts and fish plates	40.00
450 ft. 2" air line hose @ 60¢ per ft.	270.00
450 ft. 1" water line hose @ 40¢ per ft.	180.00
Labor: 24 shifts @ $15.00 per shift	360.00
Insurance and S. S. at 20% of payroll	72.00
Total	$1,872.00

Cost estimate to rehabilitate camp for employees:

Repair three (3) cabins, consisting of roofing, doors, windows, screens, water lines, and labor	$ 600.00

Total estimated cost of exploration intended: $24,480.00

Add ten (10%) per cent for Contingencies: 2,448.00

Recapitulation total $26,928.00

G. C. GRAVES
Tyrone, Arizona.

7. (b)
EXHIBIT H.

Applicant will furnish as follows:

The share of the crew in money and equipment presently on hand is follows, viz:

1. Gopco air drill.
1. Gopco air drill leg.
1. Gopco air drill stopes leg.
1. Gopco bit grinder.
1. Air drill oiler.
1. Set of six carbide drill steel for above machine.
2. 50 foot air hose
2. 50 foot water hose
   Pipe tools-valve fitt.
   Steel and timber tools-valve fitt
1. Air blower and motor.
1. Air tamper.
2. Drills--drifters with water feed--and oilers.
   Hand tools valve fitt.
1. 1 & 1 truck & Army Dodge.
1. Chev. pickup, one-half ton capacity
1. Air compressor-110 Cu. Ft.
   200 feet of one inch pipe
   200 feet of two inch pipe
   One (1) ton of well
2. Mine cars.
1. Timber truck
2. Drill collars and cars.
   Four (4) hardhats for employes.

C.O.CARLSON.. PAYSON, ARIZ..

EXHIBIT, F 4 . (B) PROPOSED EXPLORATION.

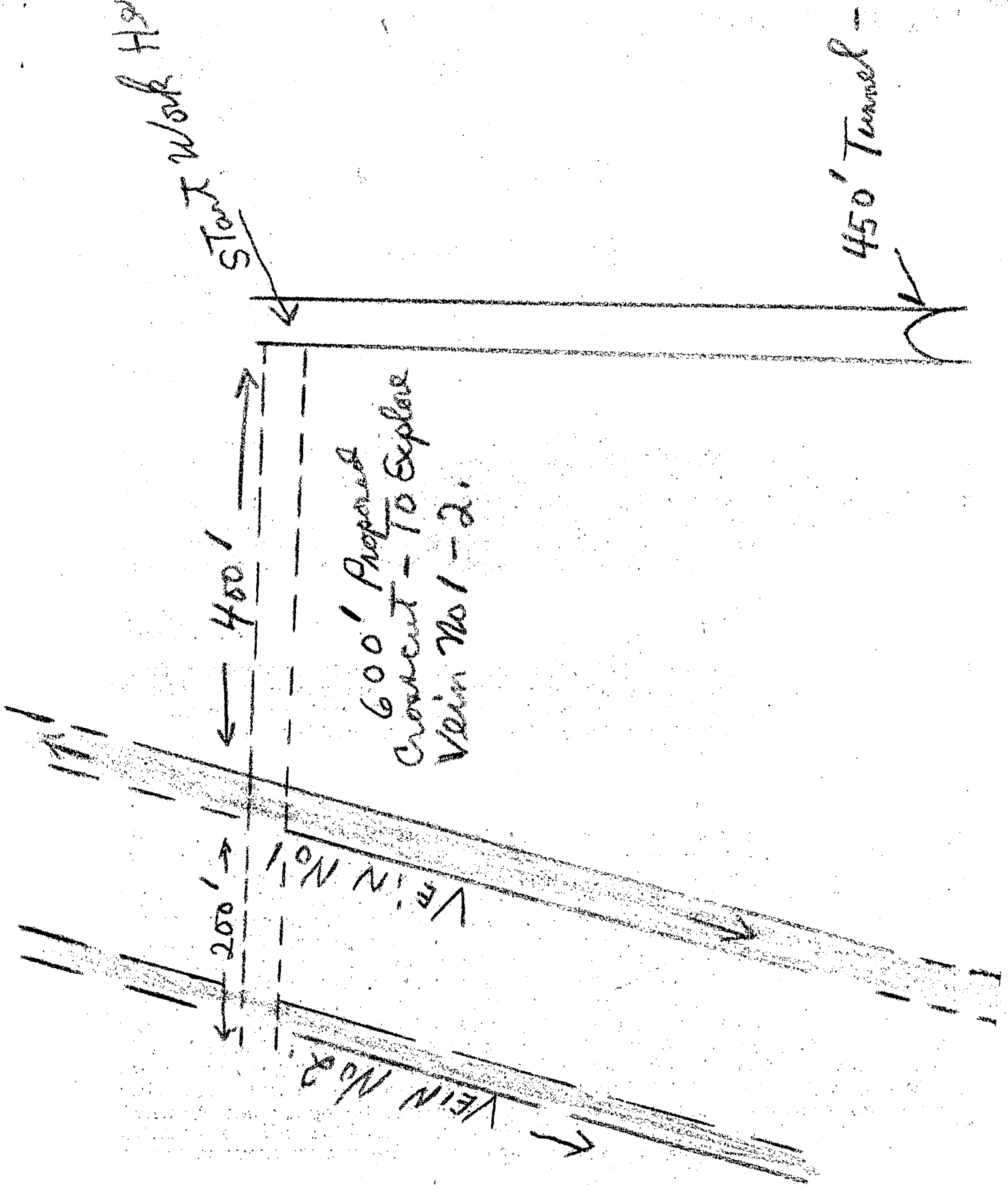

Exhibit A. Land To Be Benifitted Inside Red Lines

C.O. Carlson
Payson, ariz.