IMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

IMEA NO. 4632

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(~~Withdrawn~~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) F.T. Memo Recomm.
(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

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

224 New Customhouse
Denver 2, Colorado

February 11, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 13 1957

DATE	INITIALS	CODE

Memorandum

To: Secretary of Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Phoenix Uranium Mines (Harvey, Pick and Shovel, Charlotte, Bud, Rich and BC Groups) Mesa County, Colorado

Enclosed are the original and one copy of the subject application in the amount of $68,500.00. One copy of the application is being forwarded to the Grand Junction office, DMEA, and one copy is being retained in the Denver office files.

Part of the proposed exploration is on leased ground. No copies of the two leases involved are furnished, although the applicant states they are available. A total of 30,000 feet of rotary drill with depths ranging from 125 to 250 feet is proposed, but no drill bids are submitted and the program as outlined is somewhat vague.

W. M. Traver

W. M. Traver

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DMEA
DEPARTMENT OF THE INTERIOR

FEB 11 1957
REGION III
DENVER, COLORADO

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. 4632
Metal or Mineral Uranium
Date Received 2-13-57
Estimated Cost $68,500.00
Participation (Government %)

RECEIVED FEB 13 1957 D.M.E.A.

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: Phoenix Uranium Mines, 1930 No. 15th, Grand Junction, Colo.
A partnership composed of:
R. E. Cowger, 1930 No. 15th, Grand Junction, Colo.
Dr. J. J. Parker, 721 - 26 Road, Grand Junction, Colo.

(*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
See attached letter

(*b*) State any mine name by which the property is known. Phoenix Uranium Mines

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
8 claims are held by lease and 15 claims by location. See attached letter.

(*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

(*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 [illegible]n 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 ___7___ days and be completed within ___4___ 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 [X] 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 December 27, 1956

Phoenix Uranium Mines
(Applicant)

By R. E. Berger

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

R. E. Cowger
J. J. Parker

PHOENIX *Uranium Mines*

1930 North 15th Street
GRAND JUNCTION, COLORADO

1. Name of applicant
   (a) Phoenix Uranium Mines, 1930 No. 15th, Grand Junction, Colo.
   (b) A partnership.
   (d) R. E. Cowger, 1930 No. 15th, Grand Junction, Colo.
   J. J. Parker, 721 - 26 Road, Grand Junction, Colo.

3. (a) 23 claims in the Gateway Mining District in sections 20, 28 and 29.

(b) Phoenix Uranium Mines.

(c) Harvey 1 and 2, unpatented claims leased from Mrs. Norma Engebretson, Monticello, Utah and leased by us at 15% royalty. These have been certified for bonus and about $42,000 of ore averaging 1% U308 has been mined by us and shipped.

The Pick and Shovel Claim and the Charlotte Group consisting of 6 unpatented claims and leased from Rex Shenton, Montrose, Colo. at 10% royalty.

15 claims located by R. E. Cowger and belonging to Phoenix Uranium Mines. These are located as Bud 1 to 6, Rich 1 to 6, and B C 6, 7, and 8.

(d) Copies of leases are available.

(e) There are no encumbrances on the claims or against Phoenix Uranium Mines.

(f) The following is a listing of the claims with the dates and page numbers of the recorded location notices: Mesa County, Colo.

	Book	Page
Harvey #1	393	101
Harvey #2	393	101
Charlotte #1	652	592
Charlotte #2	652	593
Charlotte #3	652	594
Charlotte #4	652	595
Charlotte #5	652	596
Pick and Shovel	606	487

The pick and Shovel staking is not valid and has been located and claimed by M. R. Douglass as Rodger #1 673 295 and has been quit claimed to Rex Shenton

Rich #1	674	44
Rich #2	674	49
Rich #3	674	45
Rich #4	674	46
Rich #5	674	47
Rich #6	674	48

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R. E. Cowger
J. J. Parker

PHOENIX Uranium Mines

1930 North 15th Street
GRAND JUNCTION, COLORADO

The above claims are shown on the attached map as RE 1 to 6 but have been relocated as Rich 1 to 6 and should show as such on the map.

	Book	Page
Bud #1	674	50
Bud #2	674	51
Bud #3	674	52
Bud #4	674	53
Bud #5	674	54
Bud #6	674	55

The above claims are shown on the attached map as BC 1 to 6 but have been relocated as Bud 1 to 6 and should show as such on the map.

BC #7	699	415
BC #8	699	416
BC #9	699	417

4. (a and b) The above claims are in groups of 1 to 9 claims, 17 of which are more or less adjoining or overlapping, and 6 separate claims (Rich 1 to 6) which do not adjoin the other groups. One drift of 300 feet has been completed in Harvey #1 from which $42,000 worth of Uranium ore averaging 1% has been mined at 200 feet; the next 100 feet is approaching an ore body 3 to 4 feet thick which shows about .40% U308. Another drift in Harvey #1 produced about 150 tons of ore that was .20% U308 and in excess of 1% Vanadium. At present we are drifting from the rim on the Pick and Shovel to an ore body about 50 feet from the rim.

(c) The ore is bedded in the Morrison formation. We have several drill holes in ore at a considerable distance from present operations. Have done extensive other drilling but this has been mostly unsatisfactory as we have encountered wet sands with our wagon drill which makes further deepening of the holes to possible ore bodies impossible. We have hired some rotary drilling done and have 2 holes in good ore about 300 feet apart but have been financially unable to do further drilling in these areas.

(d) The project is 65 miles from Grand Junction, Colo. and can be re ached in a passenger automobile in good weather or a pickup truck in the Winter.

(e) Adequate Manpower is available. Water must be hauled about 10 miles - we have a 300-gallon trailer tank with pump and Jeep for this purpose. Materials and supplies may be secured at Grand Junction.

5.(a) Uranium.

(b) The proposed work is rotary and wagon drilling with necessary roads to accomplish this.

R. E. Cowger
J. J. Parker

PHOENIX Uranium Mines

1930 North 15th Street
GRAND JUNCTION, COLORADO

(c) The work will start immediately and be completed as soon as possible.

(d) R. E. Cowger has been actively engaged in full time uranium exploration and drilling for the past 8 years. He will supervise operations.

6. Estimate of costs

(a) Independent contracts. 30,000 feet rotary drilling at approximately $1.75 per foot. These holes will be 125 to 250 feet deep. 52,500

Bulldozer and operator for roads, 20 days at $100 per day 2,000

(b) Supervision. R. E. Cowger, 4 months at $500 per month 2,000
Estimated cost of engineering and geology 2,000

(c) All necessary equipment except that used by independent contractors is on the property.

(d) Use of our own equipment which consists of 2 wagon drills mounted on half-tracks, drill steel, bits and all necessary equipment for 10,000 feet of wagon drilling at .75 per foot 7,500

(e and f) There is a 3-bed trailer and a 4-bunk bunkhouse on the ground with propane heaters and range and a 1,500 Watt generating plant on the property all in good condition and not in need of repairs.

(g) Part time accountant for 4 months at 125 per month 500

(h) Contingencies 2,000
68,500

7. We are prepared to furnish our share of the costs in doing wagon drilling as an independent contract, use of equipment owned by us and by furnishing money.

Yours very truly,

Phoenix Uranium Mines

By R E Cowger

R. E. Cowger
J. J. Parker

PHOENIX Uranium Mines

1930 North 15th Street
GRAND JUNCTION, COLORADO

Addenda:

4.(c). In the vicinity of our claims at $1\frac{1}{2}$ to 2 miles distant, the following properties are listed with their production:

Mammouth and Little Johnnie	16,000 tons
Black Mamma	12,000 tons
Okan	2,000 tons
Liberty Bell	5,000 tons

Please note:

Proposed drilling shown on attached map on Mooney claims should be shown in corresponding areas of Charlotte claims instead of on Mooney claims. Propose to follow ore trend at any location mineable ore may be discovered.

Yours very truly,

Phoenix Uranium Mines

By R E Cowger

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Docket

May 10, 1957

Summary of Proposed Project

Murphy

Object: Denial of application for exploration aid.

Docket No.: DMEA-4632

Commodity: Uranium

Applicant: Phoenix Uranium Mines
R. E. Cowger, President
1930 North 15th
Grand Junction, Colorado

Property: A total of 23 claims. 15 (the 6-Bud, 6-Rich, and 3-BC claims) owned by R. E. Cowger, also, the Applicant has 8 leased claims, the Harvey 1 and 2, Pick and Shovel, and Charlotte 1-5, all situated in secs. 20, 28, 29, and 32, T. 51 N., R. 18 W., N.M.P.M., Mesa County, Colorado.

Date of Application: December 27, 1956 (received Feb. 13, 1957)

Amount of Application: $68,500.00

Referred to Reg. 3: March 4, 1957

Field Examination: Not made

F. T. Report received: May 2, 1957

Work Proposed: 181 rotary drill holes and 60 wagon drill holes to explore the eastern andsouthern parts of the property. The holes to be spaced at approximately 100-foot centers.

Estimated Costs:

30,000 ft. rotary drilling holes, 125-250 ft. deep @ $1.75/ft.	$52,500.00	
10,000 Ft. wagon drilling @ $0.75/ft.	7,500.00	
Bulldozing access roads, 20 days @ $100/day	2,000.00	
Supervision & technical services	4,000.00	
Accountant (part time) 4 mths. @ $125/mth.	500.00	
Contingencies	2,000.00	
TOTAL		$68,500.00

Excerpts from the Field Team Report:

The field reviewers, D. P. Elston, USGS, and H. F. Robertson, USBM, recommended that the application be denied and the Field Team concurred in this recommendation.

Their decisions were based on the following information relating to the subject property and adjacent area:

"The claims are staked on the Summerville and Morrison formations of Jurassic age and the Burro Canyon formation of Cretaceous age.

"Production from the subject claims has come from three operations. The Harvey Nos. 1 and 2 mines produced, as of June 30, 1956, 340 tons which averaged 0.53 percent U_3O_8 and 1.29 percent V_2O_5. The average grade declined during the period July through December 1956, when 134 tons averaging 0.19 percent U_3O_8 and 0.94 percent V_2O_5 were produced. Production for January 1957, totaled 0.2 tons which averaged 5.0 percent U_3O_8 and 1037 percent V_2O_5. There is no production recorded for February 1957 for these two mines. The total tonnage produced as of January 1, 1957, is 474 tons averaging 0.43 percent U_3O_8 and 1.19 percent V_2O_5. Mining operations were apparently shifted in February 1957 to the Pick and Shovel Claim, where the initial production for that month totaled 8 tons, averaging 0.32 percent U_3O_8 and 0.96 percent V_2O_5.

"The $CaCO_3$ content for the 8 tons averaged 8.8 percent.

"The Harvey No. 1, Harvey No. 2, two mineralized outcrops to the south, including the Pick and Shovel claim, and other general outcrops of the Salt Wash member in the area, were examined on November 8, 1956 in conjunction with an examination of the adjacent and partly overlapping property on which application for DMEA assistance had been made (DMEA 4427). The examining team recommended denial of the application for DMEA assistance under docket 4427 because the chances of finding a significant ore deposit here is poor.

"The subject claims are on the eastern and south central parts of Tenderfoot Mesa. Ore on Tenderfoot Mesa has been produced from four horizons that range from 60 to 260 feet above the base of the Salt Wash member of the Morrison formation.

"Ore deposits on and near the claims on the east and southeast side of Tenderfoot Mesa are in the lowermost horizon, about 60 feet above the base of the Salt Wash member. These deposits are small and irregular. Drill hole spacing needed in order to define indicated ore is on the order of 25 feet. Ore produced from the Harvey mines has come from several deposits which are thin and erratically distributed. The thickest part of an individual deposit observed was about 2.5 feet. Intergranular gray-green mudstone, and gray-green mudstone at the base of the host sandstone is confined mainly to places where the host rock is mineralized. Elsewhere, mudstone in sandstone is variably red-brown and gray-green in color and the sandstone is classed as generally unfavorable for the occurrence of significant deposits of uranium ore.

"Ore deposits about 1 mile west of the northwestern group of the subject claims, are in the middle part of the Salt Wash member. However, these northwestern claims are staked on the Burro Canyon formation and depths to the potential ore horizon would range from about 500 to 750 feet deep.

"Ore deposits from one-half to over one mile southwest of the southwest group of the subject claims, are in the upper part of the Salt Wash member. The depth to a potential ore-bearing horizon on these claims would be about 150 feet, however, the applicant has proposed no drilling here. Depths to the lowest potential horizon would be as much as 400 feet here.

"The applicant lists production from the Mammoth, Little Johnny, Black Mamma, Omm, and Liberty Bell properties that totals 35,000 tons. A check of AEC production records shows that total production from these properties, as of January 1, 1957 is 12,229 tons averaging 0.25 percent V_2O_5 and 0.99 percent U_3O_8. The Mammoth mine,

[illegible]est mine on Tenderfoot Mesa, which is now presently inoperative, produced 5,067 tons as of January 1, 1954. The Little Johnny mine produced 796 tons, the Black Mamma mine produced 2,427 tons, and the Liberty Bell mine produced 1,497 tons as of January 1, 1957. The Liberty Bell No. 2 has produced 654 tons as of October 1, 1956, and the Okan properties (five properties) produced 1,548 tons as of July 1, 1956. These mines and groups of mines are the largest on Tenderfoot Mesa. There are many prospects and small workings in individual deposits with production commonly ranging from a few tons to as much as 500 tons. Production has come from various stratigraphic positions within the Salt Wash member. The Mammoth and Liberty Bell mines are about 260 feet above the base of the Salt Wash member; the Okan properties are about 220 feet above the base of the Salt Wash; the Little Johnny is about 205 feet above the base of the Salt Wash; the Black Mamma is about 110 feet above the base of the Salt Wash, and the Harvey and Hundinger mines are about 60 feet above the base of the Salt Wash member. The few known moderate sized deposits on Tenderfoot Mesa are in the middle and upper parts of the Salt Wash member.

"The ore deposits are classed as tabular ore deposits or as "roll" ore deposits. The tabular ore deposits commonly range from less than one foot to 2 to 3 feet thick and have a diameter that rarely exceeds 100 feet. The "roll" ore deposits are 3 to 4 feet in diameter and have a variable length; none are extensive but they usually contain rich ore. The larger mines have produced from clusters of individual deposits. Exploration drilling for tabular or "roll" deposits requires holes on closely spaced centers.

"The Harvey, Hundinger, and Okan properties have been examined pursuant to applications for DMEA aid for exploration (DMEA 4427, 4354, 4235). Because of the probable small size and scattered nature of possible ore deposits in the lower Salt Wash, denials of the first two applications above were recommended. A recommendation for approval was made for the third application above; however, the target for this exploration was "roll" ore deposits at very shallow depths.

"The applicant in an addendum states that a block of proposed drill holes shown on his map should be moved from the Cooney block of claims westward to the Charlotte block of claims. As the Charlotte claims are staked on the Brushy Basin member of the Morrison formation and on the Burro Canyon formation, drilling depths to the lowest potential horizon would probably range between 400 and 600 feet in depth. The applicant makes no depth correction for this change of location in his brochure.

"Ore deposits on Tenderfoot Mesa generally are small and are scattered stratigraphically through the Salt Wash member of the Morrison formation. Exploration proposed for the claims apparently would test the lowermost mineralized horizon where known individual deposits are less than 100 tons. The chance of finding a significant uranium ore deposit here is poor."

DMEA Form 7
(12-56)

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Date	Surname	Code
5/13	Murphy	700
5/13	Elm	700
5/13	Schwartz	130
	Lahr	
	Kiilsgaard	
5/13	Elm	110
"	Mittendorf	100
		220

MAY 13 1957

Mr. R. B. Cowger, Partner
Phoenix Uranium Mines
1930 No. 15th
Grand Junction, Colorado

Re: Docket No. DMEA-4632 (Uranium)
Charlotte, et al., Claims
Mesa County, Colorado

Dear Mr. Cowger:

Your application for aid in an exploration project and other information available to us in Washington concerning your above-named property have been 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 all our information, although noting some uranium mineralization on your property, indicates that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

FMMurphy/izm 5-13-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2)

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DATE	INITIALS	CODE
5/9	C	220
"	Murphy	700
Comments		
Complete		

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

Date: May 8, 1957

DMEA Docket No. 4632
DMEA Contract No.
Commodity Uranium
Name of applicant Phoenix Uranium Mines
Name of property Harvey, Rck & Shovel, Charlotte, etc.
Location of property Mesa County, Colo.
Estimated cost of project $68,500.00

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 4/30/57. 2. Date received by reviewer: 5/6/57

3. Prior reports on this property known to reviewer: Yes [ ] No [ ]

4. Prior reports on nearby properties known to reviewer: Yes [ ] No [ ]

5. Information available on past production: Yes [ ] No [ ]

6. Other pertinent factors known to reviewer: Yes [ ] No [ ]

7. Explain items marked yes above:

8. Factors meeting special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Denial [X]
   d. Agree with Field Team [X]
      1. Consult with Mr. _____ at _____ AEC office.
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]

10. Remarks: (Use back of page if necessary)

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DMEA
MAY 8 1957
CODE
C 220
5/9 Murphy 700

IN REPLY REFER TO:

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

May 7, 1957

Re: DMEA 4632
Phoenix Uran. Mines
Harvey, etc. Groups
Mesa Co. Colo.
$68,500.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of reviewers memorandum

The applicant requested assistance in exploring by rotary and wagon drilling 23 claims. The claims are credited with the production of the following tonnages from three small ore deposits:

Claims	Year	Tons	$\%U_3O_8$	V_2O_5	CaO_3
Harvey	1956	340.2	0.53	1.29	---
Harvey	1957	0.2	5.00	10.37	---
Harvey	Previous to 1956	134	0.17	0.91	---
Pick and Shovel	1957	80	0.32	0.96	8.8

The reviewers analyze the production history of mines in the general vicinity (Tenderfoot Mesa) and I find that a 5% royalty on the production of all of the mines would not have been commensurate with the estimated cost of the work proposed for the referenced properties. Judged on that basis the conclusions of the reviewers and their recommendation of denial which is concurred with by the Field Team, are well justified.

I agree with the opinions that a formal examination is not justified and concur with the recommendation of denial of the application.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

April 30, 1957

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DMEA
RECEIVED MAY 2 1957

DATE	INITIALS	CODE
5/2	JWJ	220
	ey	130
5/6	O	220
5/7	Murphy	700

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA-4632 (Uranium) Phoenix Uranium Mines (Harvey, Pick and Shovel, Charlotte, Bud, Rich and B. C. Groups) Mesa County, Colorado

Enclosed are four copies of a memorandum dated April 26, 1957, from H. F. Robertson, USBM, and D. P. Elston, USGS.

The authors of the memorandum recommend that the application included under the subject docket be denied without a field examination.

The Field Team agrees to the recommendation.

E. N. Harshman

By E. N. Harshman
Acting Executive Officer

Enclosures

F.T. Memo Recomm.

Reviewed by
DMEA OPERATING COMMITTEE
5/6/57
(date)

DMEA
DEPARTMENT OF THE INTERIOR
APR 29 1957
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

MINERAL DEPOSITS
IN REPLY REFER TO:
DMEA
RECEIVED
APR 29 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1957

DATE	INITIALS	CODE

April 26, 1957

Memorandum

To: Acting Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman
John F. Shaw
J. William Hasler

From: D. P. Elston
H. F. Robertson

Subject: Memorandum report denying application without field examination, DMEA docket 4632 (Uranium), Phoenix Uranium Mines (Harvey, Pick and Shovel, Charlotte, Bud, Rich, and B. C. groups), Mesa County, Colorado.

The subject group consists of 23 claims in the Tenderfoot Mesa area, Gateway Mining District in secs. 20, 28, 29, and 32, T. 51 N., R. 18 W., N.M.P.M., Mesa County, Colorado. The claims are staked on the Summerville and Morrison formations of Jurassic age and the Burro Canyon formation of Cretaceous age.

The applicant, a partnership composed of R. E. Cowger, 1930 N. 15th St., and Dr. J. J. Parker, 721 26 Rd., both of Grand Junction, Colorado, proposes to explore for uranium ore deposits by drilling a total of 30,000 feet of rotary drilling and 10,000 feet of wagon drilling at an estimated cost of $68,500.00. The holes are estimated to range between 125 to 250 feet deep. There are 181 rotary drill holes and 60 wagon drill holes proposed to explore the ground in the eastern and southern parts of the subjugated property. The holes are on about 100-foot centers.

Production from the subject claims has come from three operations. The Harvey Nos. 1 and 2 mines produced, as of June 30, 1956, 340 tons which averaged 0.53 percent U_3O_8 and 1.29 percent V_2O_5. The average grade declined during the period July through December 1956, when 134 tons averaging 0.19 percent U_3O_8 and 0.94 percent V_2O_5 were produced. Production for January 1957, totaled 0.2 tons which averaged 5.0 percent U_3O_8 and 10.37 percent V_2O_5. There is no production recorded for February 1957 for these two mines. The total tonnage produced as of January 1, 1957, is 474 tons averaging 0.43 percent U_3O_8 and 1.19 percent V_2O_5. Mining operations were apparently shifted in February 1957 to the Pick and Shovel claim, where the initial production for that month totaled 8 tons, averaging 0.32 percent U_3O_8 and 0.96 percent V_2O_5.

Reviewed by
DMEA OPERATING COMMITTEE
5/6/57
(date)

the largest mine on Tenderfoot Mesa, which is now presently inoperative, produced 5,067 tons as of January 1, 1954. The Little Johnny mine produced 796 tons, the Black Mamma mine produced 2,427 tons, and the Liberty Bell mine produced 1,497 tons as of January 1, 1957. The Liberty Bell No. 2 has produced 894 tons as of October 1, 1956, and the Okan properties (five properties) produced 1,548 tons as of July 1, 1956. These mines and groups of mines are the largest on Tenderfoot Mesa. There are many prospects and small workings in individual deposits with production commonly ranging from a few tons to as much as 500 tons. Production has come from various stratigraphic positions within the Salt Wash member. The Mammoth and Liberty Bell mines are about 260 feet above the base of the Salt Wash member; the Okan properties are about 220 feet above the base of the Salt Wash; the Little Johnny is about 205 feet above the base of the Salt Wash; the Black Mamma is about 110 feet above the base of the Salt Wash, and the Harvey and Humdinger mines are about 60 feet above the base of the Salt Wash member. The few known moderate sized deposits on Tenderfoot Mesa are in the middle and upper parts of the Salt Wash member.

The ore deposits are classed as tabular ore deposits or as "roll" ore deposits. The tabular ore deposits commonly range from less than one foot to 2 to 3 feet thick and have a diameter that rarely exceeds 100 feet. The "roll" ore deposits are 3 to 4 feet in diameter and have a variable length; none are extensive but they usually contain rich ore. The larger mines have produced from clusters of individual deposits. Exploration drilling for tabular or "roll" deposits requires holes on closely spaced centers.

The Harvey, Humdinger, and Okan properties have been examined pursuant to applications for DMEA aid for exploration (DMEA 4427, 4354, 4235). Because of the probable small size and scattered nature of possible ore deposits in the lower Salt Wash, denials of the first two applications above were recommended. A recommendation for approval was made for the third application above; however, the target for this exploration was "roll" ore deposits at very shallow depths.

The applicant in an addendum states that a block of proposed drill holes shown on his map should be moved from the Mooney block of claims westward to the Charlotte block of claims. As the Charlotte claims are staked on the Brushy Basin member of the Morrison formation and on the Burro Canyon formation, drilling depths to the lowest potential horizon would probably range between 400 and 600 feet in depth. The applicant makes no depth correction for this change of location in his brochure.

Ore deposits on Tenderfoot Mesa generally are small and are scattered stratigraphically through the Salt Wash member of the Morrison formation. Exploration proposed for the claims apparently would test the lowermost mineralized horizon where known individual deposits are less than 100 tons. The chance of finding a significant uranium ore deposit here is poor. It is recommended that this application be denied without a field examination.

D P Elston

D. P. Elston,
Geological Survey

H. F. Robertson

H. F. Robertson,
Bureau of Mines

DPE/bh

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 14 1957

DATE	INITIALS	CODE
3/14	C	220

DMEA
DEPARTMENT OF THE INTERIOR
MAR 8 1957
REGION III
DENVER, COLORADO

March 8, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4632 (Uranium) Phoenix Uranium Mines (Charlotte et al claims) Mesa County, Colorado

The application for Phoenix Uranium Mines, Docket DMEA 4632 in the amount of $68,500.00 was received in this office on March 8.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

W. H. King

cc: Executive Officer (2)
E. H. Burnham
J. W. Hasler
M. H. Salsbury
J. F. Shaw

WO (2)

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 11 1957

DATE	INITIALS	CODE
3/11	C	220
"	Murphy	700

224 New Customhouse
Denver 2, Colorado

March 7, 1957

Memorandum

To: J. W. Mader W/Copy Chmn. Letter & Review Memoranda
W. N. King (2) W/Copy Appl., Chmn. Letter & Review Memoranda

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4632 (Uranium) Phoenix Uranium Mines (Charlotte et al., claims) Mesa County, Colorado

Enclosed are a copy of the subject application, its transmittal to the field by the Chairman of the Operating Committee, DMEA, and Memoranda of Review by J. E. Crawford, USBM, and W. P. Williams, USGS. A field examination and suitable Report of Examination are requested.

If the Field Examiners view the proposal favorably, the applicant should be advised that it must comply with those requirements listed in the Chairman's letter.

The Bureau of Mines' copy of the application should be returned with your Report of Examination. The Geological Survey's copy should be returned to Mr. Harshman's office.

DMEA Field Team, Region III

Original signed by
E. N. HARSHMAN

By E. N. Harshman
Acting Executive Officer

Enclosures

MBM:eh
cc: Sec. Op. Comm. (2)
Harshman W/Copy Chmn. Letter & Review Memoranda
Docket
Chron.

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
3-4	Murphy	700
3-4	Elder	700
3/4	Selfridge	130
"	Johnson	110
"	Shutenbery	100
3-5	C	220

700

MAR 4 1957

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

Re: Docket No. DMEA-4632 (Uranium)
Phoenix Uranium Mines
Charlotte, et al., Claims
Mesa County, Colorado

Dear Mr. Harshman:

The captioned application is referred to Region III Field Team for investigation, a field examination if deemed advisable, and recommendations.

Enclosed are copies of memoranda, dated February 15 and 27, 1957, by J. E. Crawford, USBM, and W. P. Williams, USGS, respectively, relating to the application. Also enclosed for Field Team use is one copy of the application.

In the event the Field Team concludes a project to explore the subject claims is warranted it should advise the Applicant that we require the following:

1. A copy of the lease from Rex Shonton on the Pick and Shovel and the Charlotte claims;

2. A copy of the transfer of the Bud, Rich, and BG claims from R. E. Couger to the partnership; and

3. Copies of the bids from three independent contractors for the proposed drilling.

It is possible that in the event a contract is approved, the Applicant might wish to exclude all or part of the Harvey No. 1 and No. 2 claims. The Field Team should discuss this matter with the Applicant.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SLB)

Enclosures
APPROVED:

Frank D. Lamb (SLB)
Member, Bureau of Mines

Thor H. Kiilsgaard (SLB)
Member, Geological Survey

FMMurphy/izm 3-4-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
JKratchman, AEC

0623

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
3-4	Murphy	700
3-4	Ellis	700
3/4	Selfridge	130
"	Johnson	110
"	Mittendorf	100
		220

MAR -4 1957

Mr. R. E. Cowger, Partner
Phoenix Uranium Mines
1930 No. 15th
Grand Junction, Colorado

Re: Docket No. DMEA-4632 (Uranium)
Charlotte, et al., Claims
Mesa County, Colorado

Lamb
Kilgaard

Dear Mr. Cowger:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to:

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

The Regional Office will contact you in regard to your project if additional information is required.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FMMurphyizm 3-4-57
cc to: Mr. Murphy
Admr.'s Reading File
DMEA FT Reg. 3 (2)

8623

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 28 1957

DATE	INITIALS	CODE
2·28	C	220
~~2-28~~	Murph	700

Comment complete

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

February 27, 1957

Re: DMEA 4632
Phoenix Uranium Mines
Charlotte, etal claims
Mesa County, Colorado
$68,500.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4632, Phoenix Uranium Mines, Charlotte, etal claims, Tenderfoot Mesa, Mesa County, Colorado, (Uranium).

The applicant proposes to explore for uranium ore deposits on two blocks of land comprising, a total of 23 mining claims. The proposed project would consist of a total of 30,000 feet of rotary drilling and 10,000 feet of wagon drilling at a total estimated cost of $68,500. Estimated costs are not detailed, and drilling bids are not attached.

The applicant states that some underground workings on the Harvey No. 2 claim are in ore but none of the proposed drilling appears to be near those workings. The applicant also mentions some previously drilled holes that penetrated ore but does not show on his map where those holes are located.

The Atomic Energy Commission has done a large amount of drilling on Tenderfoot Mesa. The AEC exploration office in Grand Junction will undoubtedly have specific information about the applicant's property. I recommend that the application be referred to the Field Team for review and field examination should they deem such necessary.

W. P. Williams

William P. Williams

OFFICIAL FILE COPY DMEA RECEIVED FEB 18 1957		
DATE	INITIALS	CODE
2-18	C	220
—	Ellis	700

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

Date February 15,1957

DMEA Project No. 4632
DMEA Contract No.
Commodity Uranium
Name of applicant Phoenix Uranium Mines
Name of property (Harvey, Pick & Shovel, etc. groups)
Location of property Mesa County, Colorado
Estimated cost of project $68,500.00

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Application
(Application, Field Team Report, etc.)

1. Date of initial contact: 2/13/57. 2. Date received by reviewer: 2/14/57.

3. Information on this property known to reviewer: Yes ☐ No ☐

4. Other reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked yes above:

8. Factors meeting special consideration:
- a. Location ☐
- b. Commodity ☐
- c. Evidence of mineralization ☐
- d. Geology ☐
- e. Proposed exploration method ☐
- f. Alternate exploration method ☐
- g. Costs ☐
- h. Claims ☒

9. Action advised:
- a. Obtain information from applicant ☐
- b. Refer to Field Team ☒
- c. Denial ☐
- d. Agree with Field Team ☐
- e. Disagree with Field Team ☐
- f. Support alternate plan ☐
- g. Request another consideration ☐
- h. Approval ☐
- i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary)

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

February 13, 1957

Phoenix Uranium Mines,
1930 No. 15th
Grand Junction, Colorado

Subject: DMEA-4632

Gentlemen:

Your application for exploration assistance, dated December 27, 1956 submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-4632 and referred to the Rare & Miscellaneous Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to: 700
Region III

6416

Commodity Member's Comments:

USGS, N. E. Nelson, May 7, 1957:

Mr. Nelson notes that a 5% royalty on all the production of the mines in the general vicinity (Tenderfoot Mesa) of the subject property would be less than the estimated cost of the proposed project. He agrees with the conclusions of the field reviewers and concurs in the Field Team's recommendation to deny the application without a field examination.

USBM, James Paone, May 8, 1957:

Mr. Paone concurs in the Field Team's recommendation.

Rare and Miscellaneous MetalsDivision, F. M. Murphy, May 10, 1957:

In view of the field reviewer's estimate that holes 500 to 750 feet deep would be required to explore the areas proposed by the Applicant, and because a minimum 100-foot grid would be needed to adequately explore for the small deposits, known to occur in the adjacent areas, it is evident that the value of any ore found would not be commensurate to the cost of the proposed work. The reviewers further note that holes would have to be drilled on 25-foot centers in order to define any ore found by wider spaced drilling.

Conclusion and Recommendations:

Based on the comprehensive data submitted by the field reviewers, this Division concurs in the Field Team's Recommendation to deny the subject application.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

The $CaCO_3$ content for the 8 tons averaged 8.8 percent.

The Harvey No. 1, Harvey No. 2, two mineralized outcrops to the south, including the Pick and Shovel claim, and other general outcrops of the Salt Wash member in the area, were examined on November 8, 1956 in conjunction with an examination of the adjacent and partly overlapping property on which application for DMEA assistance had been made (DMEA 4427). The examining team recommended denial of the application for DMEA assistance under docket 4427 because the chance of finding a significant ore deposit here is poor.

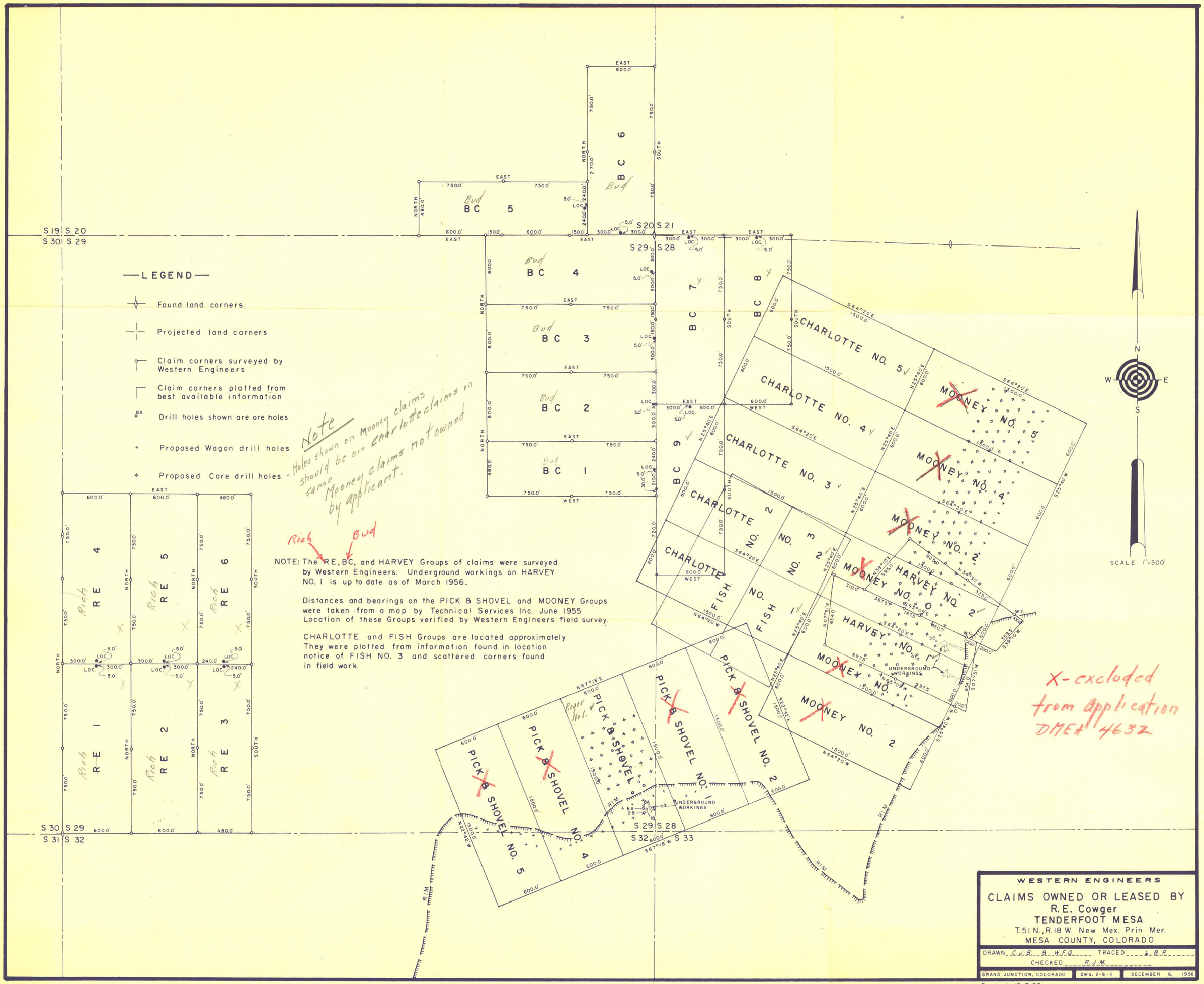
The subject claims are on the eastern and south central parts of Tenderfoot Mesa. Ore on Tenderfoot Mesa has been produced from four horizons that range from 60 to 260 feet above the base of the Salt Wash member of the Morrison formation.

Ore deposits on and near the claims on the east and southeast side of Tenderfoot Mesa are in the lowermost horizon, about 60 feet above the base of the Salt Wash member. These deposits are small and irregular. Drill hole spacing needed in order to define indicated ore is on the order of 25 feet. Ore produced from the Harvey mines has come from several deposits which are thin and erratically distributed. The thickest part of an individual deposit observed was about 2.5 feet. Intergranular gray-green mudstone, and gray-green mudstone at the base of the host sandstone is confined mainly to places where the host rock is mineralized. Elsewhere, mudstone in sandstone is variably red-brown and gray-green in color and the sandstone is classed as generally unfavorable for the occurrence of significant deposits of uranium ore.

Ore deposits about 1 mile west of the northwestern group of the subject claims, are in the middle part of the Salt Wash member. However, these northwestern claims are staked on the Burro Canyon formation and depths to the potential ore horizon would range from about 500 to 750 feet deep.

Ore deposits from one-half to over one mile southwest of the southwest group of the subject claims, are in the upper part of the Salt Wash member. The depth to a potential ore-bearing horizon on these claims would be about 150 feet, however, the applicant has proposed no drilling here. Depths to the lowest potential horizon would be as much as 400 feet here.

The applicant lists production from the Mammoth, Little Johnny, Black Mamma, Okan, and Liberty Bell properties that totals 35,000 tons. A check of AEC production records shows that total production from these properties, as of January 1, 1957 is 12,229 tons averaging 0.25 percent U_3O_8 and 0.99 percent V_2O_5. The Mammoth mine,


LEGEND
Found land corners
Projected land corners
Claim corners surveyed by Western Engineers
Claim corners plotted from best available information
Drill holes shown are ore holes
Proposed Wagon drill holes
Proposed Core drill holes
Note
Holes shown on Mooney claims should be on Charlotte claims in same
Mooney claims not owned by applicant.
Rich
Bud
NOTE: The RE, BC, and HARVEY Groups of claims were surveyed by Western Engineers. Underground workings on HARVEY NO. 1 is up to date as of March 1956.
Distances and bearings on the PICK & SHOVEL and MOONEY Groups were taken from a map by Technical Services Inc. June 1955 Location of these Groups verified by Western Engineers field survey.
CHARLOTTE and FISH Groups are located approximately They were plotted from information found in location notice of FISH NO. 3 and scattered corners found in field work.
BC 1
BC 2
BC 3
BC 4
BC 5
BC 6
BC 7
BC 8
BC 9
RE 1
RE 2
RE 3
RE 4
RE 5
RE 6
CHARLOTTE NO. 5
CHARLOTTE NO. 4
CHARLOTTE NO. 3
CHARLOTTE NO. 2
CHARLOTTE NO. 1
FISH NO. 3
FISH NO. 2
FISH NO. 1
MOONEY NO. 5
MOONEY NO. 4
MOONEY NO. 3
MOONEY NO. 2
MOONEY NO. 1
HARVEY NO. 2
HARVEY NO. 1
PICK & SHOVEL NO. 5
PICK & SHOVEL NO. 4
PICK & SHOVEL NO. 3
PICK & SHOVEL NO. 2
PICK & SHOVEL NO. 1
Roger No. 1
UNDERGROUND WORKINGS
RIM
W.C.
SCALE 1"=500'
X-excluded from application DMEA 4632
WESTERN ENGINEERS
CLAIMS OWNED OR LEASED BY
R. E. Cowger
TENDERFOOT MESA
T. 51 N., R. 18 W. New Mex. Prin Mer.
MESA COUNTY, COLORADO
DRAWN C.J.B. & W.F.Q.
TRACED G.B.P.
CHECKED R.J.M.
GRAND JUNCTION, COLORADO
DWG. 2-6-3
DECEMBER 6, 1956
Revised; 12-7-56
Revised; 1-9-57