STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Ernest Wm. Ellis, DMEA Member, Uranium Commodity Committee

DATE: June 5, 1952

FROM : Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee

SUBJECT: Field team report, DMEA Docket 2425, The Dan Kelly claims, Lucky K nos. 1-6, Outlaw Mesa, Mesa County, Colorado

I concur with recommendation made by Field Team Region IV and the examining geologist that exploration assistance in total amount of $25,670 requested by the applicant be denied.

How critical the need for uranium might be to warrant a possible smaller exploration outlined in the report would have to be determined by the Atomic Energy Commission. The reviewer judges, however, from general knowledge of results of exploration projects now in progress at various places on the Colorato Plateau and from information furnished in the report that the smaller project mentioned as a proviso would not be warranted until possibilities of many more favorable areas and prospects had been evaluated.

Arthur P. Butler, Jr.

Arthur P. Butler, Jr.

JUN 1 8 1952

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

Ernest Wm. Ellis, DMEA Member, Uranium Commodity Committee
Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee
Field team report, DMEA Docket 2425, The Dan Kelly claims, Lucky K nos. 1-6, Outlaw Mesa, Mesa County, Colorado

June 5, 1952

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Arthur P. Butler, Jr.

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

224 New Customhouse
Denver 2, Colorado

May 22, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2425, The Dan Kelly Claims, (Uranium) Outlaw Mesa, Mesa County, Colorado

Enclosed are the original and three copies of the final report on the Dan Kelly claims, the original and one copy of Form 3b and a copy of the letter of denial to the applicant.

If the uranium situation should become extremely critical later, the property might be reexamined with a view of proposing a very modified drilling program.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Defense Minerals Exploration Administration
MAY 26 1952

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

224 New Customhouse
Denver 2, Colorado

May 22, 1952

Mr. Dan E. Kelly
Route 4
Grand Junction, Colorado

Dear Mr. Kelly:

Reference is made to your application for Government assistance, DMEA-2425, in exploring your claims on Outlaw Mesa in the amount of $25,670.

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

A careful study of your property and data available to this agency, reveals that the probability of disclosing mineable reserves by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application for exploration aid is denied.

Very truly yours,

W. H. King

W. H. King
Executive Officer
Field Team, Region IV

cc: Acting Administrator
Attention: 210

MAY 26 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

May 12, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2425, The Dan Kelly Claims, Outlaw Mesa, Mesa County, Colorado

Attached are 10 copies of the geologic report by Donald R. MacLaren covering DMEA Docket 2425, The Dan Kelly Claims, Outlaw Mesa, Mesa County, Colorado.

The applicant proposes to explore for uranium ore by drilling 15,000 feet of holes by wagon drill and to drive 300 feet of tunnel. The area was previously studied by Mr. Stager of the U. S. Geological Survey for the Atomic Energy Commission and 22 diamond drill holes were put down on the applicant's claims. Drilling and field studies indicate that the area is unfavorable for finding significant deposits of uranium ore. MacLaren therefore recommends that the loan be denied. However, if the uranium situation is critical and justifies a long chance, a limited drilling program is suggested to cost approximately $5,960.

I concur with MacLaren's recommendations.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Denver
MAY 26 1952

Enclosures (10)

Reviewed by
DMEA OPERATING COMMITTEE
6-2-52
(date)

THE DAN KELLY CLAIMS

OUTLAW MESA

MESA COUNTY, COLORADO

DMEA DOCKET 2425

Geologic Report

By Donald R. MacLaren
U. S. Geological Survey

THE DAN KELLY CLAIMS
OUTLAW MESA, MESA COUNTY, COLORADO

INTRODUCTION

Mr. Dan E. Kelly, of Grand Junction, Colorado, has requested the Defense Minerals Exploration Administration to participate in a program to explore for uranium in Mesa County, Colorado. He proposes to drill 15,000 feet of holes by wagon drill, and to drive 300 feet of tunnel, at a total cost of $25,670, the Government's share of which will be $23,103.

Previous drilling done by the U. S. Geological Survey on Mr. Kelly's claims indicates that the area is unfavorable; that the chances of finding economic deposits of uranium-bearing ore are poor; and that the application as submitted should be denied.

However, if the condition of the uranium stock pile is critical enough to justify a long shot chance, a limited drilling program is suggested in the light of two holes considered to have favorable showings and four that are semi-favorable. This program will cost about $5,960, of which the Government's share would be $5,364.

LOCATION AND ACCESSIBILITY

The Kelly property, consisting of six claims, is on the west rim of Outlaw Mesa, in sections 23 and 26 of T. 50 N., R. 18 W., Mesa County, Colorado. It may be reached from Grand Junction by 50 miles of good surfaced and graveled highway, and 14 miles of unimproved dirt road. The final section is impassable during the winter months and spring

thaws, but may be classed as fair for truck and jeep travel from mid-April until the first heavy snows of late fall or early winter.

GEOLOGY

The geology of the area is extremely simple. Continental sediments of late Paleozoic and Mesozoic age lie on the east limb of a broad northwest trending syncline, toward which they dip at low angles. Except for three rather small areas of Dakota (?) sandstone, the Mesa is capped by the Morrison formation, in which occur all the known uranium-vanadium deposits of the area. The Morrison, which is 600 to 700 feet thick, is divided into two easily distinguishable parts. The lower part, 280 feet thick, is composed of lenticular beds of medium grained, cross-bedded sandstone, alternating with and replacing red and grey sandy clay and mudstone. A widespread zone of bench-forming sandstone beds at the top of the lower part contains most of the important uranium deposits, although occasionally, ore bodies have been found as much as 50 feet above and below this horizon. The upper part of the Morrison is composed of 180 feet of light-colored, soft bentonitic clays and mudstones, with a few sandstone lenses.

The ore consists principally of a fine grained, grey, micaceous mineral that coats the sand grains and to some extent fills the pore spaces of the sandstone, commonly accompanied by bright yellow carnotite. The deposits range from small, irregular shaped masses containing only a few tons of ore, to large tabular bodies containing several thousand tons. Although the long dimensions of the bodies are nearly parallel with the bedding in the sandstone, the ore layers do not follow the beds

in detail. Where sharp, the ore boundary frequently "rolls" and cuts across the bedding parallel to the long axis of the ore. The strike of the long axis varies from slightly east to slightly west of north. For this reason, when drilling is done to outline a deposit, the holes are spaced closer together along east-west lines than they are along north-south lines.

CONCLUSIONS

Considerable information was made available by Mr. Stager, of the U. S. Geological Survey staff in Grand Junction. He has made an extensive and detailed study of the area, and supervised the drilling of 22 diamond drill holes on the property (fig. 1). In addition to permitting inspection of the logs of the holes, he accompanied the examiner in the field.

Of the holes drilled on the Kelly claims, 17 were barren. According to Mr. Stager, 11 holes indicated that the east half of Claims Nos. 3, 4, 5, and most of No. 6 are unfavorable for prospecting; 4 were considered as semi-favorable; and only 2 as favorable. Core from 5 holes was assayed, with the results shown in Table 1. To be considered as ore, the assay should show a minimum of 0.1% U_3O_8 or 1.0% V_2O_5, and not more than 6.0% $CaCO_3$. The lack of promise of this property is indicated by the fact that out of 18 samples, only one showed U_3O_8 of ore grade, and that sample exceeded the allowable $CaCO_3$ content; none showed sufficient V_2O_5; and nine exceeded the maximum limit of $CaCO_3$.

Mr. Stager stated that in his opinion, the property is unworthy of further work by the Survey, but indicated three areas (fig. 1) as showing a very slight possibility of containing ore.

It is concluded that this is a poor prospect, and that the application as submitted should be denied.

RECOMMENDATIONS

Should the condition of the uranium stock pile be sufficiently critical as to make a long shot exploration project desirable, a program which might be acceptable to the applicant is submitted for the consideration of the Defense Minerals Exploration Administration.

Areas A, B, and C (fig. 1) are those believed to be slightly favorable by Mr. Stager. In area A (fig. 2) using a line through U. S. G. S. holes Nos. 391, 363, and 410 as a base, holes should be drilled at 50 foot intervals. Five similar rows, two to the north and three to the south, should be laid out, the distance between rows to be 100 feet. The 22 holes shown in the inner square are to be drilled first, to prove or disprove the continuity of the mineralization shown by the U. S. G. S. holes. Should continuity be shown, then those holes within the lined outer square that will follow the indicated trend of the mineralization may be drilled.

In area B (fig. 3) holes should follow a similar pattern starting 60 feet south of U. S. G. S. hole No. 389. Only the 15 holes within the inner square are to be drilled unless a mineralized trend is found, in which case the holes in the outer square that will follow the trend may be drilled.

Area C may be prospected by the 13 holes shown in fig. 1. These holes are to be spaced at 250 foot intervals, the first N-S row to be about 400 feet west of U. S. G. S. hole No. 363.

All holes should be deep enough to enter the third mudstone layer (fig. 4), or about 110 feet.

This program allows for 50 holes 110 feet deep, or a total of 5,500 feet, and will properly explore the most promising parts of the property. The contract should allow additional work should the results happen to be encouraging.

ASSAYS OF HOLES DRILLED BY U. S. G. S.

Claim	Hole No.	Footage From	Footage To	Thickness Feet	U_3O_8	Assay (%) V_2O_5	Assay (%) $CaCO_3$
Lucky K No. 2	363	37.8	39.7	1.9	Tr.	Tr.	0.35
		102.0	103.2	1.2	0.03	0.47	1.33
		103.2	104.3	1.1	0.01	0.00	11.00
Lucky K No. 5	389	91.2	93.0	0.8	0.02	0.11	7.60
		93.3	94.3	1.0	0.07	0.24	6.90
Lucky K No. 2	391	97.9	99.6	1.7	Tr.	0.19	1.49
		99.95	100.2	0.2	0.02	0.10	14.30
		100.2	100.7	0.5	0.12	0.17	8.60
		100.7	101.5	0.8	Tr.	Tr.	9.20
Lucky K No. 2	398	64.9	65.1	0.2	0.01	0.30	0.35
		99.2	100.8	1.6	0.01	Tr.	5.10
Lucky K No. 2	410	69.95	71.4	0.4	0.04	0.17	4.50
		71.4	71.7	0.3	0.08	Tr.	4.50
		71.7	72.8	1.1	0.01	0.00	9.30
		73.3	73.8	0.5	Tr.	0.00	7.30
		102.0	103.0	1.0	Tr.	0.14	3.70
		103.0	103.5	0.5	Tr.	0.17	3.00
		103.5	104.5	1.0	0.02	Tr.	6.10

Note: In order to be considered of ore grade, U_3O_8 should assay more than 0.10%, V_2O_5 should assay more than 1.00 %; and $CaCO_3$ should assay less than 6.00%.

Table 1

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

224 New Customhouse
Denver 2, Colorado

May 22, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2425, The Dan Kelly Claims, (Uranium) Outlaw Mesa, Mesa County, Colorado

Enclosed are the original and three copies of the final report on the Dan Kelly claims, the original and one copy of Form 3b and a copy of the letter of denial to the applicant.

If the uranium situation should become extremely critical later, the property might be reexamined with a view of proposing a very modified drilling program.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
MAY 26 1952

COPY

224 New Customhouse
Denver 2, Colorado

Mr. Dan E. Kelly
Route 4
Grand Junction, Colorado

Dear Mr. Kelly:

Reference is made to your application for Government assistance, DMEA-2425, in exploring your claims on Outlaw Mesa in the amount of $25,670.

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

A careful study of your property and data available to this agency, reveals that the probability of disclosing mineable reserves by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application for exploration aid is denied.

Very truly yours,

/s/ W. H. King
W. H. King
Executive Officer
Field Team, Region IV

cc: Acting Administrator
Attention: 210

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

May 12, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2425, The Dan Kelly Claims, Outlaw Mesa, Mesa County, Colorado

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The applicant proposes to explore for uranium ore by drilling 15,000 feet of holes by wagon drill and to drive 300 feet of tunnel. The area was previously studied by Mr. Stager of the U. S. Geological Survey for the Atomic Energy Commission and 22 diamond drill holes were put down on the applicant's claims. Drilling and field studies indicate that the area is unfavorable for finding significant deposits of uranium ore. MacLaren therefore recommends that the loan be denied. However, if the uranium situation is critical and justifies a long chance, a limited drilling program is suggested to cost approximately $5,960.

I concur with MacLaren's recommendations.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (10)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAY 26 1952

Reviewed by
DMEA OPERATING COMMITTEE
6-2-52
(date)

THE DAN KELLY CLAIMS

OUTLAW MESA

MESA COUNTY, COLORADO

DMEA DOCKET #425

Geologic Report

By Donald R. Maclaren
U. S. Geological Survey

THE DAN KELLY CLAIMS
OUTLAW MESA, MESA COUNTY, COLORADO

INTRODUCTION

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thaws, but may be classed as fair for truck and jeep travel from mid-April until the first heavy snows of late fall or early winter.

GEOLOGY

The geology of the area is extremely simple. Continental sediments of late Paleozoic and Mesozoic age lie on the east limb of a broad northwest trending syncline, toward which they dip at low angles. Except for three rather small areas of Dakota (?) sandstone, the Mesa is capped by the Morrison formation, in which occur all the known uranium-vanadium deposits of the area. The Morrison, which is 600 to 700 feet thick, is divided into two easily distinguishable parts. The lower part, 280 feet thick, is composed of lenticular beds of medium grained, cross-bedded sandstone, alternating with and replacing red and grey sandy clay and mudstone. A widespread zone of bench-forming sandstone beds at the top of the lower part contains most of the important uranium deposits, although occasionally, ore bodies have been found as much as 50 feet above and below this horizon. The upper part of the Morrison is composed of 180 feet of light-colored, soft bentonitic clays and mudstones, with a few sandstone lenses.

The ore consists principally of a fine grained, grey, micaceous mineral that coats the sand grains and to some extent fills the pore spaces of the sandstone, commonly accompanied by bright yellow carnotite. The deposits range from small, irregular shaped masses containing only a few tons of ore, to large tabular bodies containing several thousand tons. Although the long dimensions of the bodies are nearly parallel with the bedding in the sandstone, the ore layers do not follow the beds

in detail. Where sharp, the ore boundary frequently "rolls" and cuts across the bedding parallel to the long axis of the ore. The strike of the long axis varies from slightly east to slightly west of north. For this reason, when drilling is done to outline a deposit, the holes are spaced closer together along east-west lines than they are along north-south lines.

CONCLUSIONS

Considerable information was made available by Mr. Stager, of the U. S. Geological Survey staff in Grand Junction. He has made an extensive and detailed study of the area, and supervised the drilling of 28 diamond drill holes on the property (fig. 1). In addition to permitting inspection of the logs of the holes, he accompanied the examiner in the field.

Of the holes drilled on the Kelly claims, 17 were barren. According to Mr. Stager, 11 holes indicated that the east half of Claims Nos. 3, 4, 5, and most of No. 6 are unfavorable for prospecting; 4 were considered as semi-favorable; and only 2 as favorable. Core from 5 holes was assayed, with the results shown in Table 1. To be considered as ore, the assay should show a minimum of 0.1% U_3O_8 or 1.0% V_2O_5, and not more than 8.0% $CaCO_3$. The lack of promise of this property is indicated by the fact that out of 18 samples, only one showed U_3O_8 of ore grade, and that sample exceeded the allowable $CaCO_3$ content; none showed sufficient V_2O_5; and nine exceeded the maximum limit of $CaCO_3$.

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RECOMMENDATIONS

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Table 1

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-2425
Metal or Mineral
Date Received 3-17-52
Amount $
Participation (Government %)

Name and address of applicant

Dan E. Kelly
Route 4
Grand Junction, Colorado

Date March 5, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

(Name of company)	By Dan E. Kelly (Signature of authorized official)
March 5, 1952 (Date)	Owner (Title)

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—64067-2

Dan E. Kelly
Route 4
Grand Junction, Colorado

Form MF-103

1. (a) This property lies in Sections 23 and 26, Township 50 North, Range 18 West, in Mesa County, Colorado. This property consists of six (6) full size mineral claims which is twenty (20) acres more or less per claim, and lies in the Northern Mineral Belt of the Colorado Plateau.
   (b) Applicant is owner of property.
   (c) Same area as described in (a) above.
2. (a) Uranium and vanadium.
   (b) Inclosed are maps, engineers report, and drill logs. (Please return all of these).
3. (a) 15,000 feet of wagon drilling to be distributed as shown on sketch submitted with question No. 4. Three hundred (300) feet of tunnel as shown on sketch. Total cost of project $25,670.00
   (b) Thirty (30) days after securing loan. Completion date of project ten (10) months after start.
4. Inclosed is a sketch of the proposed exploration work.
5. No buildings or facilities on this property.
6. Four (4) buildings at an estimated cost of $400.00 each. Three of these buildings to be used as living quarters and one as a shop.
   Total cost of buildings $1,600.00
7. (a) None.
   (b)

One (1) Air compressor at a cost of	$4,800.00
One (1) Wagon drill hammer	500.00
One (1) Mine hoist	600.00
Two (2) Mine cars at $50.00 each	100.00
Six hundred (600) feet Mine track	600.00
Six hundred (600) feet cable	120.00
Two hundred (200) feet Wagon drill steel	250.00
Fifteen (15) Wagon drill bits	230.00

   Total cost of equipment to be purchased ----------$7,200.00
   (c) Wagon drill depreciation at $45.00 per month $450.00
   Tractor depreciation at $90.00 per month $900.00
   Compressor depreciation at $90.00 per month $900.00
   Total depreciation on equipment furnished by applicant----$2,250.00
8. Two (2) Miners at $10.00 per day for six (6) months $3,120.00
   (These Miners will not be working full length of contract).
   One (1) Wagon drill operator for ten (10) months at $260.00 per month $2,600.00
   One (1) Superviser at $500.00 per month $5,000.00 (Superviser will be applicant).
   Total cost of labor $10,720.00
9. Supplies -- dynamite, caps, and fuse $750.00
   fuel such as gas, oil, diesel fuel, and grease $1,250.00
   Engineering $700.00
   Assying $500.00
   For transportation of equipment to project $700.00
   Total cost of above $3,900.00
10. (a) Ten per cent (10%) of total cost of project.
    (b) Yes.
11. None.

Form MF-100
(May 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2425

Date received 3-17-52

Dan E. Kelly
Route 4
Grand Junction, Colorado

Name and address of applicant

Date March 5, 1952

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

MAR 1 1952

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

Dan E. Kelly
Route 4
Grand Junction, Colorado

Form MF-100

1.
(a) Uranium.
(b) Vanadium.

2. Lucky K claims No.s 1 to 6 inclusive, consisting of twenty (20) acres more or less per each claim.
(a) None.
(b) None.
(c) None.
(d) None.
There are no mines on this property.

3.
(a) 65 Miles South and West of Grand Junction, Colorado.
(b) Calamity Mining District of the Colorado Plateau.
(c) Township 50 North, Sections 23 and 26, Range 13 West.
(d) Mesa County, Colorado.

4.
(a) This property is not in operation.
(b) Owner.

5. Not in operation. Operation will begin after sufficient exploration justifies.

6. The applicant, who will be the operator, has had ten (10) years experience in various types of mining, such as iron, copper, coal, and uranium. The last four (4) years have in uranium. The applicant will manage the project.

7.
(a) The United States Geological Survey did a limited amount of core drilling on this property in the early spring of 1949.
(b) The government owned property, operated by the Climax Uranium Company, is one of the largest producers in the Colorado Plateau. The Ronnie Mine, owned by Barnett Brothers, is another large producer of this area. These properties lie approximately three (3) miles North of the LuckyK property.
(c) Inclosed is a private report by R. G. Sullivan, registered engineer.

8. Not a corporation. Private application.

9. None.

10. No production.

11. No production.

12. See Sullivan report.

13. 65 Miles to shipping point, supply, and residence. Truck roads in fair condition.

14. Sufficient water is available from mountain stream for all year operation.

15. Not in operation. No power used.

16. Not in operation. No labor used.

17. No equipment or buildings now on property. List of equipment now owned by applicant and in serviceable condition available for this operation:-
TD9 Tractor bulldoz er.
Ingersoll-Rand Wagon drill mounted on truck.
Worthington air compressor.
500 feet of pipe and hose.
Jack hammers.
All hand tools necessary.

18. The object of this application is to secure funds sufficient for exploration of this property so as to get it into production.

(*b*) If deposit is other than plac

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

(Name of company)

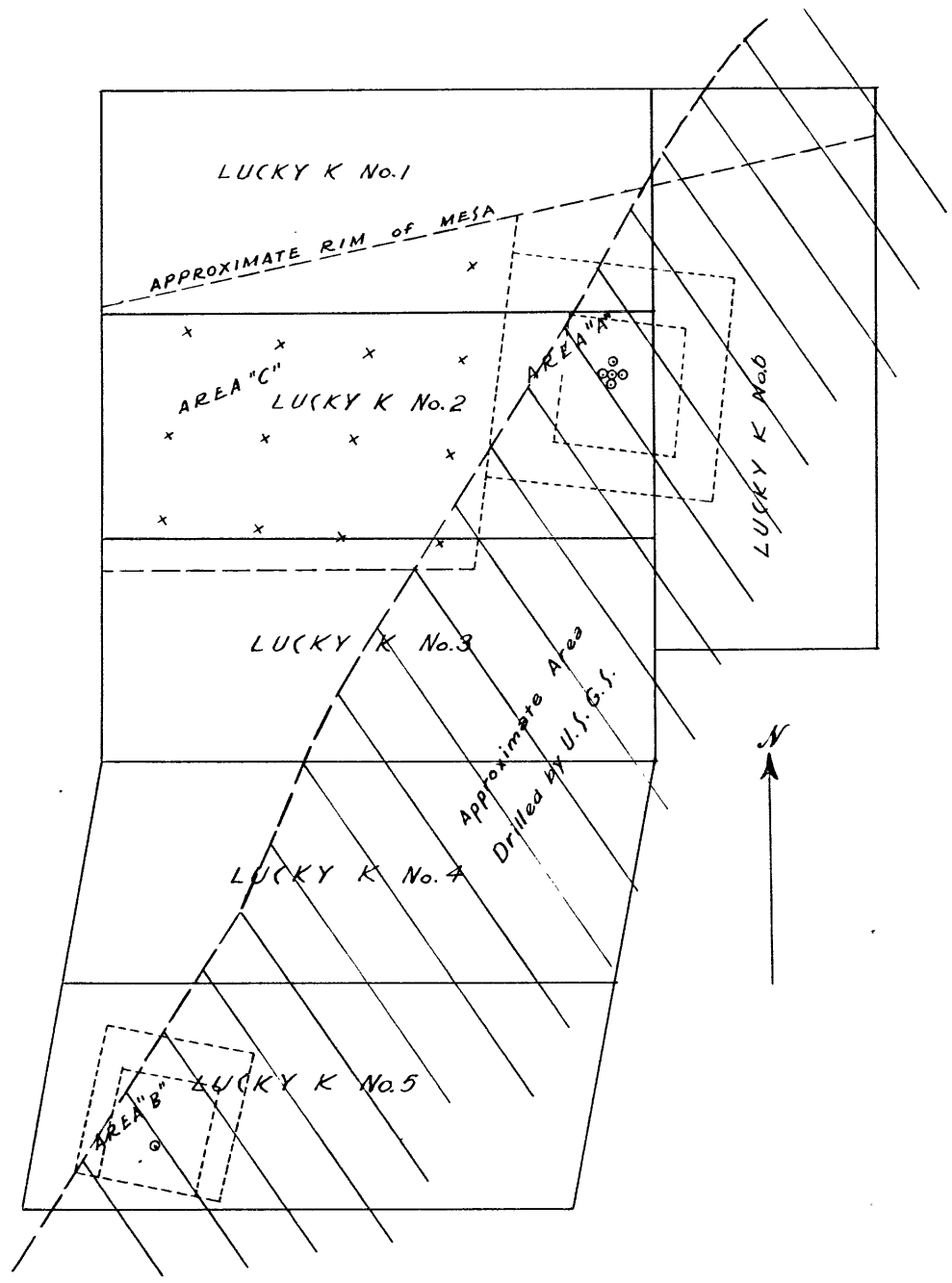
By Dan E. Kelly
(Signature of authorized official)

March 5, 1952
(Date)

Owner
(Title)

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—63792-1



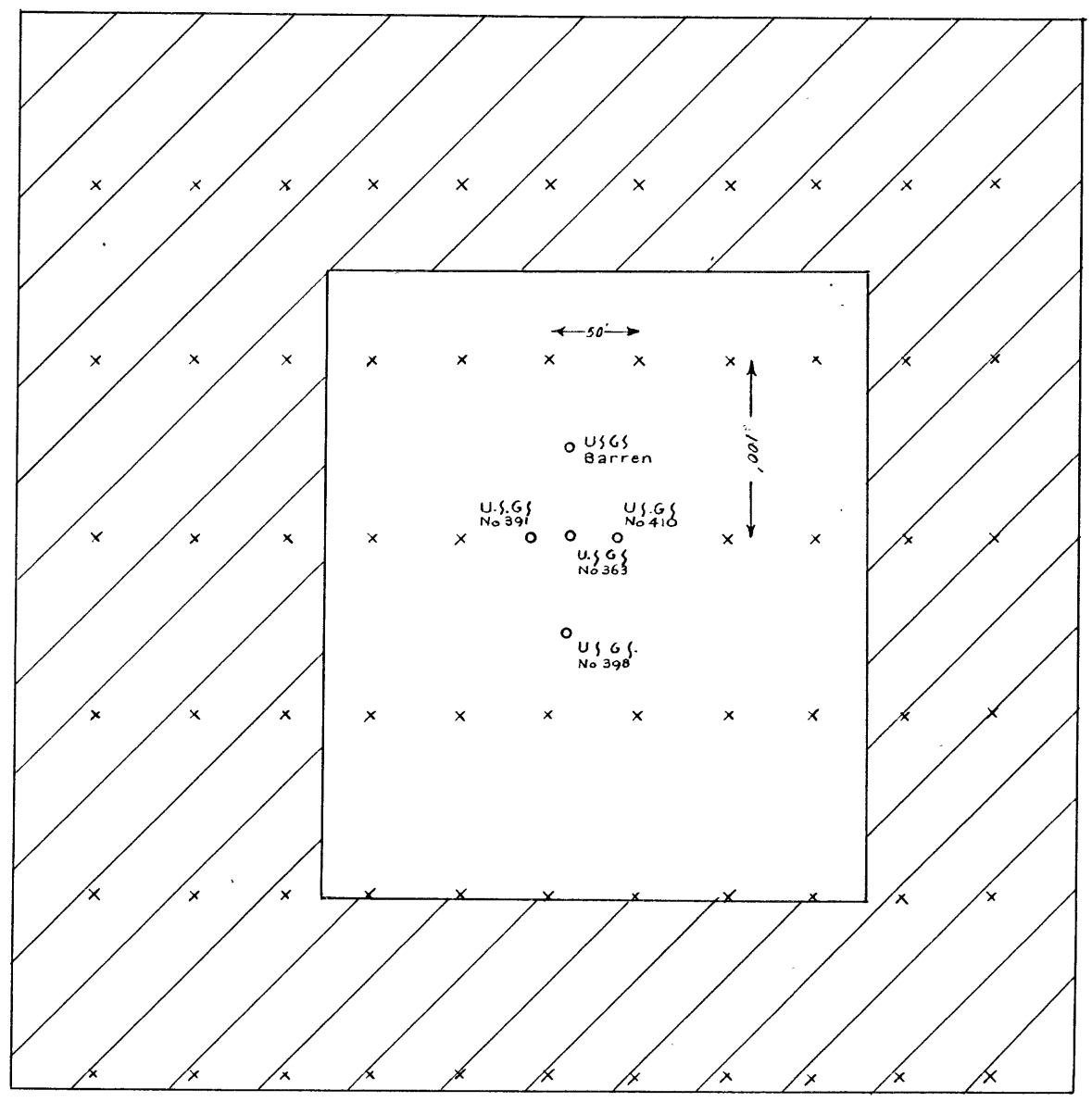
Department of Interior
U. S. GEOLOGICAL SURVEY

PLAN of DON KELLY CLAIMS
SHOWING APPROXIMATE AREA DRILLED BY U.S.G.S.; AREAS A, B, and C in which additional drilling is suggested; and suggested pattern of holes in Area "C".

DMEA DOCKET 2425
Fig. 1

D.R. MacLAREN April 1952

Scale 1" = 500'



Department of Interior
U. S. GEOLOGICAL SURVEY

AREA "A" *showing location of diamond drill holes and suggested pattern for wagon drill holes. Holes in lined area to be drilled only if indicated by results of holes in inner area.*

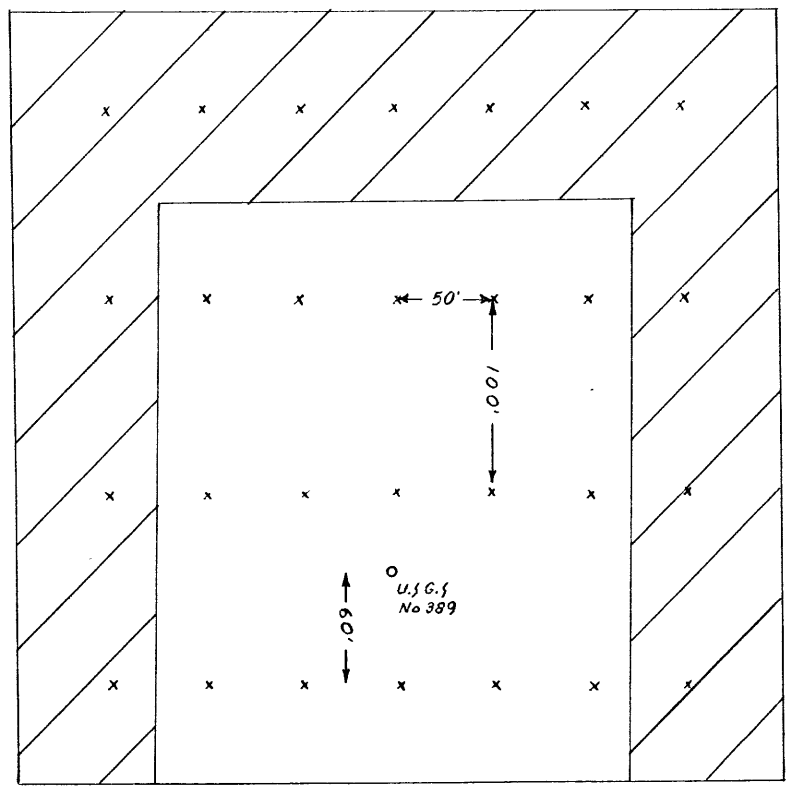
DMEA DOCKET 2425

Scale 1" = 100'

D. R. MacLAREN

April 1952

Fig. 2



Department of Interior
U. S. GEOLOGICAL SURVEY

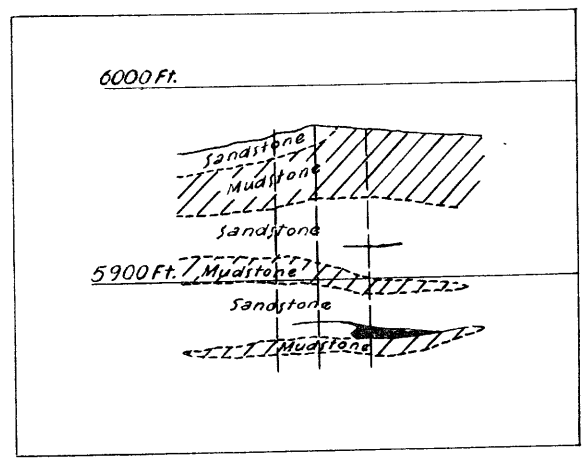
AREA "B" *showing location of U.S. Geological Survey diamond drill hole and suggested pattern for wagon drill holes. Holes in lined area to be drilled only if indicated by results of holes in inner area.*

DMEA DOCKET 2425

Scale 1" = 100'

D. R. MacLAREN April 1952

Fig. 3



Department of Interior
U. S. GEOLOGICAL SURVEY

SECTION *looking North through U.S. Geological Survey diamond drill holes Nos. 391, 363, 410 showing two thin minerallized layers in sandstone.*

DMEA DOCKET 2425

Scale 1" = 100'

D. R. MacLAREN April 1952

Fig. 4