Cross index with

OME 6034

June 2, 1959
Re: OME 6034 (Uranium)
Radskin Claims
Park County, Colorado

Memorandum

To: F. L. Kausse, Office of Minerals Exploration

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of Field Team Report

Field examiners recommend denial of the cited application, but the Field Team, Region III do not concur with these recommendations. Instead, they recommend consideration be given a modified program, which would consist of surface trenching and diamond drilling.

Field examiners describe the deposit as a shear zone, about 18 inches wide, and several hundred feet long. Within this zone are sporadic occurrences of the secondary uranium minerals, torbernite and metatorbernite. Two samples taken in the zone by the applicant assayed 0.33 and 1.24 percent U_3O_8 respectively; however, the examiners found only a "small zone" with the shaft that contained from 0.13 to 0.16 U_3O_8. Sacks of sorted ore beside the shaft, believed by the applicants to assay about 1.0 percent U_3O_8 gave a geiger-counter of only 5 to 7 M/R on the 2 scale, an insignificant count when contrasted to what would be given from ore assaying 1.0 percent U_3O_8. Other geiger counts taken along the projected course of the zone assayed only 2 to 5 times background, indicating insignificant amounts of secondary uranium ore.

Torbernite is a rather stable mineral under oxidizing conditions as described at the deposit. Its presence is not necessarily indicative of increased uranium enrichment at depth. There may have been some primary uranium ores in the shear zone that oxidized to torbernite, but it also is likely that the torbernite originated from uranium leaching of the adjoining country rock and subsequent transportation to the sheared area by percolating ground water. In either event, the shear zone is narrow, the uranium distribution within the zone is sporadic, and the assay values low. In view of these facts, I support the field examiners and recommend the project be denied because of the strong improbability of making a significant discovery.

T. H. Kiilsgaard

cc: OME (3)
James Paone
C.I. Gardner
Director's reading
Branch reading
Chron. file
Docket file

THKiilsgaard/mm
G-MD-6-2-59

[illegible] Box [illegible]
Denver 2, Colorado

May 26, 1959

I have read this & return to the file
B Boze

EXTRA COPY O. M. E. RECEIVED JUN 1 1959		
DATE	INITIALS	CODE

Memorandum

To: Chairman, Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket [illegible] (Stanton) Rubidin Mines (Rubidin Shales) Park County, Colorado

Enclosed are the original and two copies of a Joint Engineering and Geologic Report dated May 26, 1959, by J. W. Shelby, Geologist, Geological Survey, and E. W. Beal, Mining Engineer, Bureau of Mines, pertaining to the subject application.

The Field examiners recommend that the application be denied without prejudice, and this recommendation may be appropriate. However, a review of facts brought out in the report indicate to us that the property has some merit which might qualify it for exploration assistance under the OME program.

In personal consideration of a two-step program, essentially as proposed by the applicant, consisting of surface trenching in Stage I and continuing on the results thereof, a much amount of diamond drilling under Stage II. The applicant's Stage III would be eliminated.

If you concur in our recommendations, please advise immediately; and we will prepare and forward maps and an engineering estimate of costs of the proposed work.

Reviewed by
OME OPERATING COMMITTEE

(date)

Original signed by
J. W. TOWNSEND

J. W. Townsend

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures
JWT:jy
cc: David B. Baker, AEC (2)
Harshman
OME/DFC
OMR/DFC
Docket
Chron.

} w/copy of examination report

[illegible]
DEPARTMENT OF THE INTERIOR
[illegible], SECRETARY

OFFICE OF MINERALS EXPLORATION
REGION III

OME
DEPARTMENT OF THE INTERIOR
MAY 28 1959
REGION III
DENVER, COLORADO

OME 6[illegible]

[illegible] Mines

[illegible] claims

[illegible] County, Colorado

Preliminary

Joint Engineering and Geologic Report

by

J. W. [illegible], Geologist
Geological Survey

[illegible] W. [illegible], Mining Engineer
Bureau of Mines

Reviewed by
OME OPERATING COMMITTEE

May 26, 1959

(date)

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Property	2
Location and accessibility	2
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ILLUSTRATIONS

Figure	Follows page
1. Index map showing location of Rainbow Mines, Rainbow Gulch, Park County, Colo. Docket [illegible]	2
2. Claim map showing location of Rainbow Mines, Park County, Colo. - Docket No. [illegible]	3

[illegible] 603

[illegible]
[illegible]
[illegible], [illegible]

INTRODUCTION AND SUMMARY

The [illegible] Mines, P. O. Box 1[illegible], [illegible], [illegible], submitted an application June 10, 1[illegible], to the Bureau Minerals Exploration Administration to explore for uranium and "related ores" on the [illegible] claims (state land parcels), Park County, Colorado. Prior to the reorganization of the Bureau Minerals Exploration Administration program to the Office of Minerals Exploration, the applicant's request for financial assistance was held in abeyance pending resolution of reorganizational matters.

The applicant proposed a three-stage exploration program which included bulldozer trenching, diamond core drilling, shaft sinking, and drifting and/or crosscutting at an estimated cost of $35,436.03.

The property was examined May 1, 1977, by J. W. Butler, geologist, U. S. Geological Survey, and E. W. Beal, mining engineer, U. S. Bureau of Mines. The OMX field assistants were represented by Mr. Jong Hun Lee, Director of Fuelgen Laboratories, Geological Survey of Korea, and by Messrs. J. R. and P. F. Fitzsimmons, co-partners.

The property contains secondary uranium mineralization occurring as thin coatings within a shear zone in a granite and schist country rock. The rock is of the Precambrian Idaho Springs Formation. As seen in a

15-foot "short" the shear zone measures 1-1/2 feet wide and is generally mineralized with discontinuous mineralization throughout its exposed depth.

The property is largely in the prospect stage. The applicant indicated to the examiner that additional exploratory work would be done. It is considered that the request for GED exploration on the property should be denied without prejudice pending the results of additional exploratory work by the applicant.

FINDINGS

Location and accessibility

The property is in the NW¼ of sec. 27, T. 7 S., R. 73 W., sixth principal meridian, Park County, Colorado (Fig. 1).

From Hartsel, Colorado, a small town on U. S. Highway 285, the property is reached by traveling less than 1 mile along the old Highway 285. The old county-maintained highway passes through the property.

Physical features

The property lies in an area of moderate sloping foothills of the Platte River Mountains which face the southerly bounds of the South Platte River. The relief as measured from the river valley to the highest part of the property does not exceed 700 feet.

The principal drainage of the property area is Hatcher Creek which flows through the southerly parts of the Rattler Nos. 1-4 and 1-3 claims.

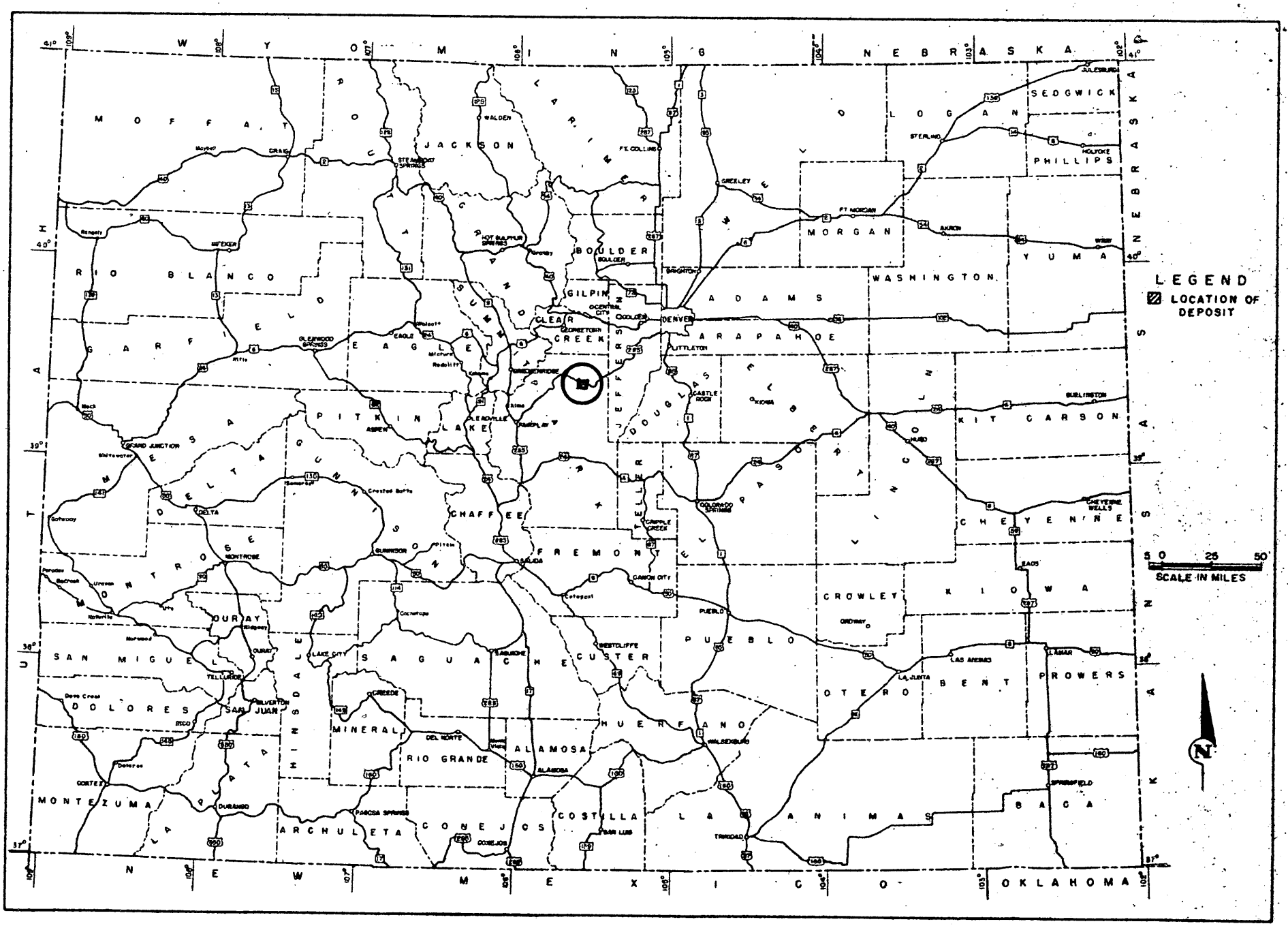

FIGURE 1. INDEX MAP SHOWING LOCATION OF REDSKIN MINES, REDSKIN CLAIMS, PARK COUNTY, COLO. DOCKET OME 6034.

The creek contains sufficient water the year around to meet any mining requirement. An abundance of timber for mine timbers exists on the property.

The winter climate of the area is moderate, and snow would not hamper any mining operations for more than a day or two even under the most extreme conditions.

A REA power-line passes through the property.

Experienced mining labor and mine supplies can be obtained in several nearby communities or from Denver which is less than 55 miles from the property.

Patent and ownership

The property comprises five parcels of land which are owned by the State of Colorado. The land parcels have been designated by the applicant as the Rotskin Res. 1-A, 1-B, 2-A, 2-B, and 3 claims (fig. 2). The claims have been divided into tracts which measure from a minimum of 300 by 1,140 feet to a maximum of 600 by 1,500 feet.

The applicant holds the property by virtue of a State of Colorado lease. A considerable amount of difficulty was experienced by the applicant in obtaining a lease. After a district court had ruled in favor of the State, the applicant appealed his case to the Colorado Supreme Court. A favorable decision was awarded the applicant on March 17, 1958, by the Supreme Court.

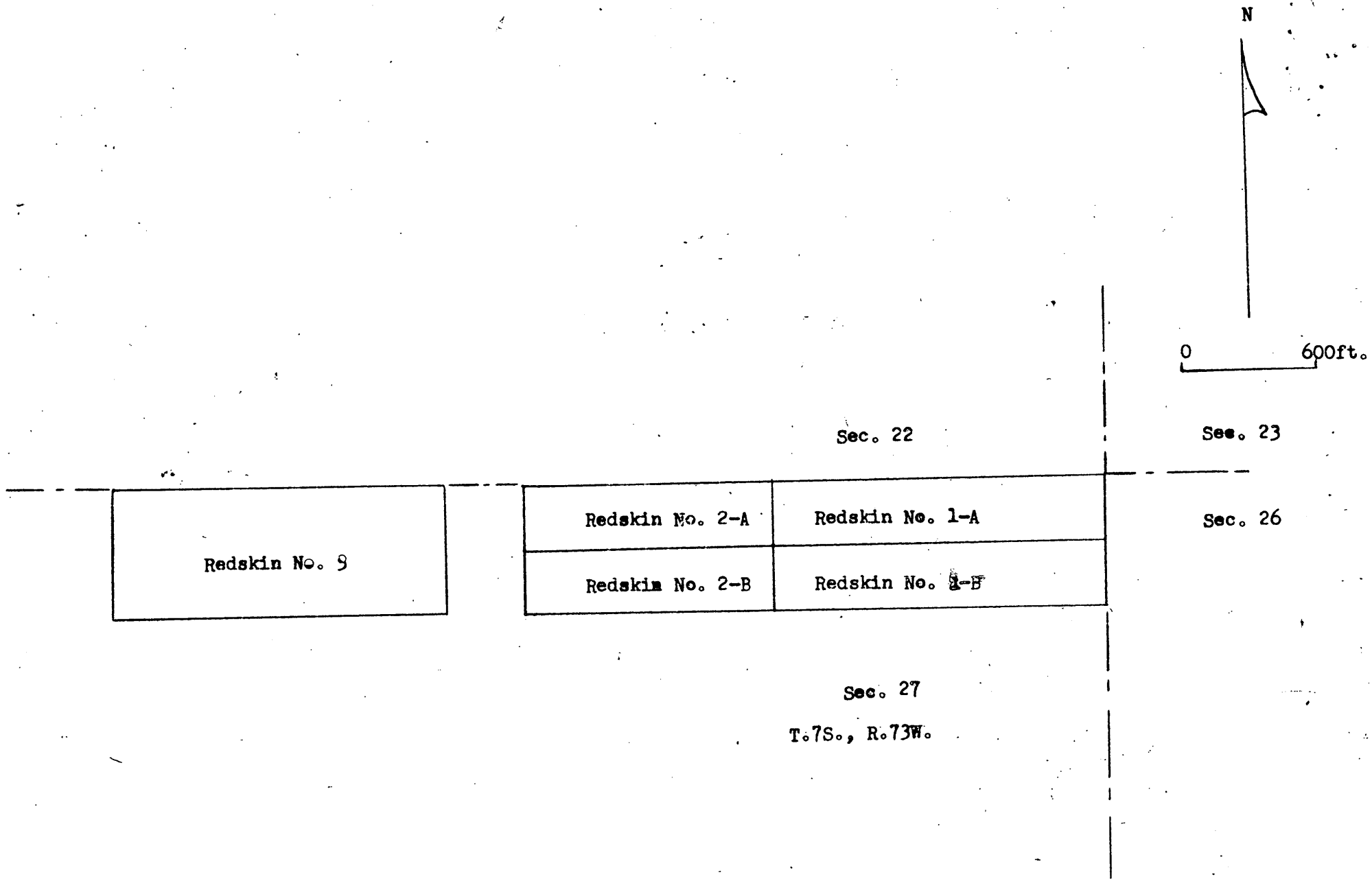

Figure 2- Claim Map Showing Location of Redskin Mines, Park County, Colo. - Docket No. OME 6034

History and production

Radioactivity was first discovered on the property by the applicant during February 1955. Since then the applicant has superficially explored the property principally by shallow bulldozer trenches, percussion drill holes, and test pits.

From one 15-foot "shaft," about 1½ tons of ore was removed. The ore, believed to contain about 1.0 percent U_3O_8, has been sacked and is stockpiled near the "shaft." There has been no other ore production.

Present status

The property has been prospected and explored by two shallow bulldozer trenches and several small test pits. Of these pits, the principal one referred to as a "shaft" measures 5 by 7 feet in cross section and extends to a depth of 15 feet.

The applicant indicated to the field examiners that he contemplates some additional trenching and/or dredging and extending existing trenches. Except for the mineralized structure delineated in the "shaft," the applicant's other exploratory workings have not sufficiently determined the extent of the structure; hence the additional work by the applicant would materially add needed geologic information.

APPLICANT'S EXPLORATION PROGRAM

The applicant proposes to explore the property by a three-stage program at an estimated total cost of $35,463.83. Stage I would consist of 180 hours of bulldozing trenches or cuts in an effort to determine the extent of the mineralized structure or vein. Contingent upon the results of Stage I work, 1,200 feet of diamond drilling are proposed in Stage II to test the structure at depth. Stage III work would consist of shafts and tunneling the location and extent of which would be determined from the results of Stage II diamond drilling. Other than that information given above, the applicant gave us other specific explanatory data.

GEOLOGY

Precambrian granite, gneiss, and schist make up most of the rocks exposed in the Front Range. The Precambrian terrain is nearly everywhere bordered by steeply tilted Paleozoic rocks, but along the west side of the Front Range near Boulderridge, steeply dipping Mesozoic rocks rest directly on the Precambrian basement. Gently dipping Tertiary beds rest on the truncated edges of the Mesozoic and Paleozoic formations and lap onto the Precambrian rocks in the northern part of the Front Range and an extensive series of interbedded Tertiary tuffs and lavas rests upon Precambrian, Paleozoic, and Mesozoic rocks in the southern part of the Front Range.

Granite and granite gneiss are the most abundant Precambrian rocks, but schists and gneisses representing much metamorphosed sedimentary rocks occupy large areas. The northern and southern parts of the Front Range consist chiefly of granite, and the central part, in which most of the schist occurs, is cut by innumerable small granitic masses and several sieves and small batholiths.

The uranium deposit found in the Shootsie area in sec. 27, T. 7 S., R. 73 W., sixth principal meridian, which contained the Bobbin claims, Park County, Colorado, occurs in the Idaho Springs Formation of Precambrian age; consequently, only the Idaho Springs formation will be discussed.

The oldest rocks known in the Front Range consist of schists and gneisses of the Idaho Springs Formation. The formation is composed chiefly of quartz-biotite schists and quartz-biotite-sillimanite schists, but quartzite, quartz schists, or quartz gneisses are common in some localities.

Quartzite or quartz schist occurs in several localities and is common along the eastern margin of the mountains near the Big Thompson River, Turkey Creek, and in the Pikes Peak Quadrangle. A few thin lenticular beds of marble are found in the north-central part of the Front Range, and widely scattered masses of lime silicates intergrown with garnets and magnetite suggests metamorphism of limy beds in the central part of the range. The comparatively simple types of schist mentioned above are most abundant in regions that escaped severe metamorphism that accompanied the intrusion of large granite masses. In many places extremely fluid granite magma developed injection gneiss on a large scale, and

some parts of the Idaho Springs formation have been so thoroughly soaked with granitic material that they now resemble a primary granite-gneiss.

ORE DEPOSITS

Uranium deposits occur as a local constituent of the pyritic veins associated with hematite roofs found in the Idaho Springs formation.

Uranium-bearing material on the Hatskin group of claims, Bear County, Colorado, has been discovered along a shear zone that strikes N. 75°-80° E. and dips 85° to the north. The shear zone cuts the Idaho Springs gneiss and schists at a slight angle and is about 18 inches wide. The shear zone consists of almost heavily limonitic material, with silicified and pyritized rock in and adjacent to the shear zone. Secondary uranium minerals were torbernite and possibly meta-torbernite observed along fracture surfaces in the more highly oxidized material near the middle of the shear zone.

Examination of the vein material in the "shaft" on the Hatskin No.1 claim and a line along the strike for a distance of some 600 feet showed background count from twice to as much as five times normal. A small zone within the "shaft" showed ore-grade material containing from 0.13 to 0.16 percent U_3O_8. Natural chips of ore beside the "shaft" on the No.4 Hatskin claim were checked with a geiger counter and averaged 5 to 7 R/H on the E scale.

In addition to the shaft, the applicant has prospected the Hatskin group of claims by digging several test pits, most of them shallow, and

a bulldozer trench on Redskin claim 1-A. Reconnaissance along the shear zone shows the bulldozer trench to be immediately west of the projected trend of the shear zone. Geiger counter readings along the projected course of the zone range from 2 to 5 times background count with some areas showing a somewhat higher count; none of the readings indicated the presence of ore-grade material. The shear zone was traced by quartz float and geiger-counter readings for several hundred feet beyond the shear trench.

Several other test pits had been dug but were badly caved. Geiger-counter readings in the pits ranged from 2 to 5 times background count. Test pits on the Redskin claims 1-B and 2-B were in more granitic material rather than on the shear zone, which is mostly in the gneisses and schists of the Idaho Springs formation trending northeastward on the Redskin 2-A and 1-A claims. The radioactivity was less intense in the more granitic areas than along the shear zone but neither area registered strong enough radioactivity to be considered for a full-scale exploration program at this time.

CONCLUSIONS AND RECOMMENDATIONS

Findings resulting from the field examination show the property to be largely in the prospect stage.

It is recommended that the application for OMK assistance be denied without prejudice because of the narrow, sporadic occurrence of uranium along the shear zone and the insufficiency of geologic data in the present supplementary workings. The applicant should be encouraged to explore the project at his own expense to more or less prove the worth of the prospect before any further consideration by the Field Team.

6034

EXTRA COPY
O. M. E.
RECEIVED JUN 19 1959

DATE	INITIALS	Copy

224 New Customhouse
Denver 2, Colorado

June 16, 1959

Memorandum

To: Chairman, Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket OME 603 (Uranium) Rainbow Mines (Rainbow claims) Park County, Colorado

In reference to your teletype of June 5, 1959, enclosed are the original and two copies of a supplemental engineering report by M. H. Marshall, Mining Engineer, Bureau of Mines, dated June 1959, and his memorandum of transmittal thereof, dated June 15, 1959.

The applicant was contacted by telephone on June 9, 1959, and request made for the partnership's latest balance sheet and profit and loss statement, percentage of ownership of each partner, and new bank letters. In addition, the applicant was requested to submit at least two copies of bids for the drilling. To date none of the requested material has been received; however, it will be forwarded as soon as made available to this office.

The consulting engineer details the estimated costs for 1,000 feet of trenching in Stage I and not to exceed 1,375 feet of BX core drilling in Stage II, at a total estimated cost of the project at $12,752.50, toward which the Government would contribute 50 percent, or not to exceed $6,376.25.

The engineer's estimate of incidental allowance is justified on the following basis:

Stage I

Consulting geological engineer, 4 days @ $50/day	$200.00
Use of geiger counter, 4 days @ $15/day	60.00
Accounting and miscellaneous	40.00
Total	$300.00
(1,000 feet of trenching at $30/foot	$300.00)

Reviewed by
OME OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III
DENVER EXPERIMENT STATION

OME
DEPARTMENT OF THE INTERIOR
JUN 16 1959
REGION III
DENVER, COLORADO

BUILDING 20, FEDERAL CENTER
DENVER 2, COLORADO

June 15, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III

From: Milton H. Marshall

Subject: Docket OME 6034 (Uranium) Redskin Mines, (Redskin Claims), Park County, Colorado -- Re-examination of Property.

The property proposed for subordination under the subject docket was re-examined June 8, 1959. As requested, a sufficient number of claim corners were found to verify that the claims are located as recorded.

The recommended exploration program described in the attached supplemental report was discussed with Mr. J. B. Fitzsimmons, Shawnee, Colorado, and meets with his approval.

Mr. E. N. Harshman, Geologist, Geological Survey, suggested the method of exploration that is incorporated into the report.

Milton H. Marshall
Milton H. Marshall
Mining Engineer

MHM:s

COPY TO: Harshman

EXTRA COPY
O. M. E.
RECEIVED JUN 19 1959

DATE	INITIALS	CODE

OME
DEPARTMENT OF THE INTERIOR
JUN 16 1959
REGION III
DENVER, COLORADO

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

OFFICE OF MINERALS EXPLORATION
REGION III

OME 6034
Bulldog Mines
Bulldog Claims
Park County, Colorado

Review

Supplemental Engineering Report
to the
Joint Engineering and Geologic Report

by

M. H. Marshall, Mining Engineer
Bureau of Mines

June 1959

EXTRA COPY
O. M. E.
RECEIVED JUN 19 1959

DATE	INITIALS	CODE

Reviewed by
OME OPERATING COMMITTEE

(date)

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Recommended work program 2

Estimate of costs 3

ILLUSTRATIONS

Plates Follows page

1. Claim map showing location of pit on Redskin No. 2-A claim, Redskin Mines, Park County, Colo. 6

2. Exploration map, Redskin Mines, Park County, Colo. 6

GENERAL

The Redskin Mines property proposed for subcontracting under Contract OSS 639 was re-examined June 8, 1939 with consideration given to a possible OSS contract.

In considering the property (Fig. 1) from a project standpoint, the following points are noteworthy, although they were not highlighted in the original report, they have a definite bearing on the estimate of costs.

1. The property is located 1 mile from Shawnee, Colo., a community served by U. S. Highway 285. Shawnee is approximately 1 hour driving time from Denver, Colo. The property is directed by an excellently maintained county road.

2. The area in which work is recommended is approximately 400 feet distant to the north and roughly parallels the county road. Relief within the exploration area does not exceed 75 feet. The soil cover is reported to range from four to six feet in depth. Some sharp ridges may be encountered in cutting trenches owing to the differential weathering of the underlying steeply inclined strata.

3. The going rates for dozer work in the area are:

D-6 or equiv.	$20.00 per hour
D-7 or equiv.	12.50 per hour
D-8 or equiv.	16.00 per hour

The D-6 and D-7 type dozers are obtainable locally. The D-8 type dozer would probably be brought in from the Denver vicinity, necessitating more moving time.

RECOMMENDED WORK PROGRAM

The recommended work consists of exploration by bulldozing, trenching, and core drilling to test a uranium bearing shear zone in the Precambrian Idaho Springs formation.

Bulldozing should be done with a D-7 or D-8 Caterpillar dozer or equivalent unit of any other make. The larger capacity units are recommended so that the soil mantle may be completely removed within a minimum period of time. A ripper attachment to the dozer may facilitate the trenching and would be more efficiently employed on a heavier dozer.

The half-time services of a competent consulting geologist will be required to direct the cutting of the trenches inasmuch as the locations of three of the five recommended trenches will be dependent on the geologic appraisal of conditions revealed by previous trenching. In the absence of GSE personnel, the consulting geologist would be required to expeditiously determine the favorability of the exposed shear zone and direct subsequent trenching accordingly.

Sections of the trenches showing significant mineralization should be sampled. Such samples should be split. The operator will use one half for chemical assay purposes; the other half shall be stored in a suitable container properly identified as to sample number, trench number, location where obtained in the trench, width of vein where sampled, and length of cut to obtain the sample.

Inasmuch as the terrain is relatively flat and shallow dozing is no problem, access road and drill site preparation can easily be done with a D-6 or D-7 Caterpillar dozer or equivalent unit of any other make.

All drill holes shall be cored NX or larger. Drilling depths will depend upon geological conditions revealed or indicated by the bulldozing but are expected to intersect the shear zone at depths from 75 to 150 feet below the surface. Sections of cores showing significant mineralization shall be split, the operator will use one half for chemical assay purposes; the other half to be stored with the non-mineralized core in boxes properly identified as to hole number with spacers placed between the core sections marked to indicate the depth represented.

STAGE I

Excavate five (5) bulldozer trenches of not more than 200 lineal feet each to an approximate depth of five (5) feet. The trenches are to be cut at right angles to the strike of the shear zone and be spaced approximately 200 feet apart. Trenches Nos. 1 and 2 as indicated by figure 2 attached, shall be cut to intersect the shear zone; one approximately 100 feet east and one approximately 100 feet west of the fifteen feet deep Rudskin No. 2-A claim prospect pit. The remaining three trenches shall be cut to intersect the shear zone in the direction determined to be most favorable based on previous CMK trenching.

STAGE II

If significant mineralization, anomalous radioactivity, or favorable geologic conditions are revealed by the Stage I trenching, CMK may authorize Stage II.

Stage II is to consist of access road and drill site preparation followed by a maximum of 1,375 feet of diamond core drilling to explore at depth any uranium bearing zones encountered or indicated by Stage I trenching.

The position, depth, bearing, and inclination of the holes will be determined by CMK. An estimated 5 holes drilled from 5 drill sites may be

required for this stage. All drill holes, however, will be located by GSS prior to commencing Stage II drilling.

All drill holes are to be probed for radioactivity, and logs both lithologic and radioactivity are to be prepared.

No drill hole shall intersect the shear zone at a vertical depth of less than 75 feet from the surface.

No drill hole shall intersect the shear zone closer than 100 feet from the property boundary, nor shall drill holes intersect the shear zone at intervals of less than 75 feet.

A drill bid dated June 23, 1958 from Golden Drilling Company was included in the application with indication that two additional drill bids would be submitted. To date no additional drill bids have been received. For the sake of expediency, the examining engineer contacted Golden Drilling Company. Mr. V. E. Matthews, the company's president, reaffirmed the bid prices and stated a bid price of $7.00 per foot of NX coring for the 250 to 300 foot interval. In the absence of other bids, and discussion of the matter with other Bureau of Mines mining engineers familiar with local drill bid prices in comparable ground, the examining engineer has estimated Stage I drilling from the Golden Drilling Company bid.

ESTIMATE OF COSTS

Stage I

Estimate seven 8-hour days for completion

40 hrs. bulldozing, D-8 bulldozer at $16.00/hr. (including moving time)		
51.2 hrs. bulldozing, D-7 bulldozer at $12.50/hr. (including moving time)	$640.00	
85 chemical analyses for H_2O_2 at $5.00/ea.	425.00	
Incidental allowance 1/ for each acceptable linear foot of trenching completed. 1000 ft. trenching at $0.30/ft.	300.00	
Total Stage I		$1,065.00
Government participation		532.50

Stage II

Estimate fourteen 40-hour weeks for completion

16 hrs. bulldozing D-7 bulldozer at $12.50/hr. (including moving time)	$200.00	
or		
20 hrs. bulldozing D-6 bulldozer at $10.00/hr. (including moving time)		
1000 ft. EX core drilling at $6.25/ft. 0 to 250 ft.	6,250.00	
375 ft. EX core drilling at $7.00/ft. 250 to 310 ft.	2,625.00	
250 ft. reaming and casing at $3.25/ft.	812.50	
25 ft. cementing and redrilling at $2.50/ft.	62.50	
10 hrs. standby time for pushing holes etc. at $8.00/hr.	80.00	
50 chemical analyses for H_2O_2 at $5.00/ea.	250.00	
100 core boxes at $1.00/ea.	100.00	
Incidental allowance 1/ for each foot of core drilling completed. 1,375 ft. at $0.30/ft. drilling	412.50	

Total Stage II	$11,687.50
Government participation	5,843.75
Total estimated cost of project	$12,752.50
Government participation at 50 percent	6,376.25

1/ Including all costs whatsoever that are not included in the estimates for Category (1) Administrative Expenses and include such items as labor supervision, technical services, payroll taxes, rental of reclamation-executive members, parking equipment, bookkeeping, etc. which would be allowable under Categories (2) through (7) of a contract.

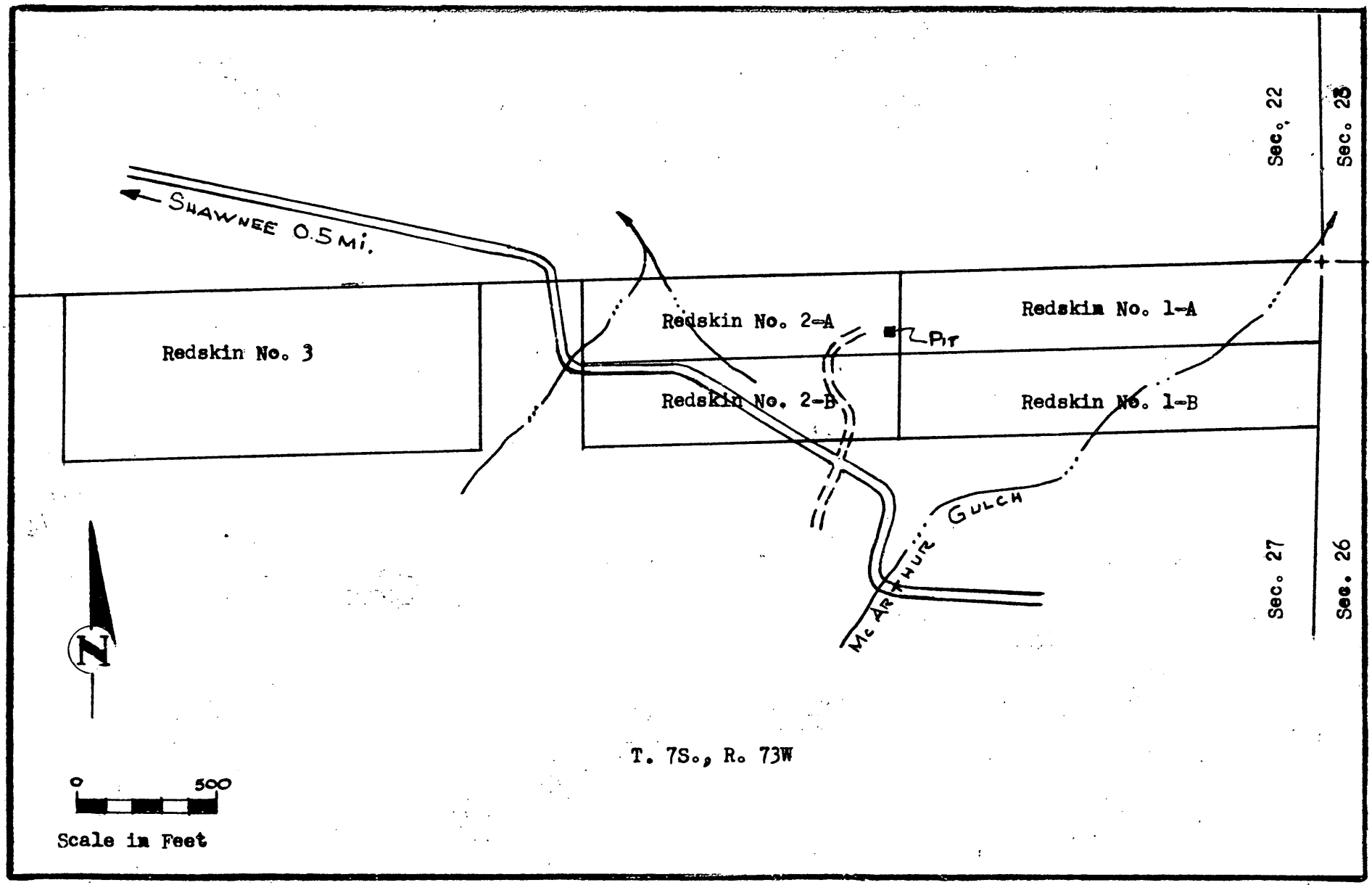


Figure 1- Claim map showing location of pit on Redskin No. 2-A claim, Redskin Mines, Park County, Colorado
Docket OME 6034

RECEIVED JUN 1959
CODE

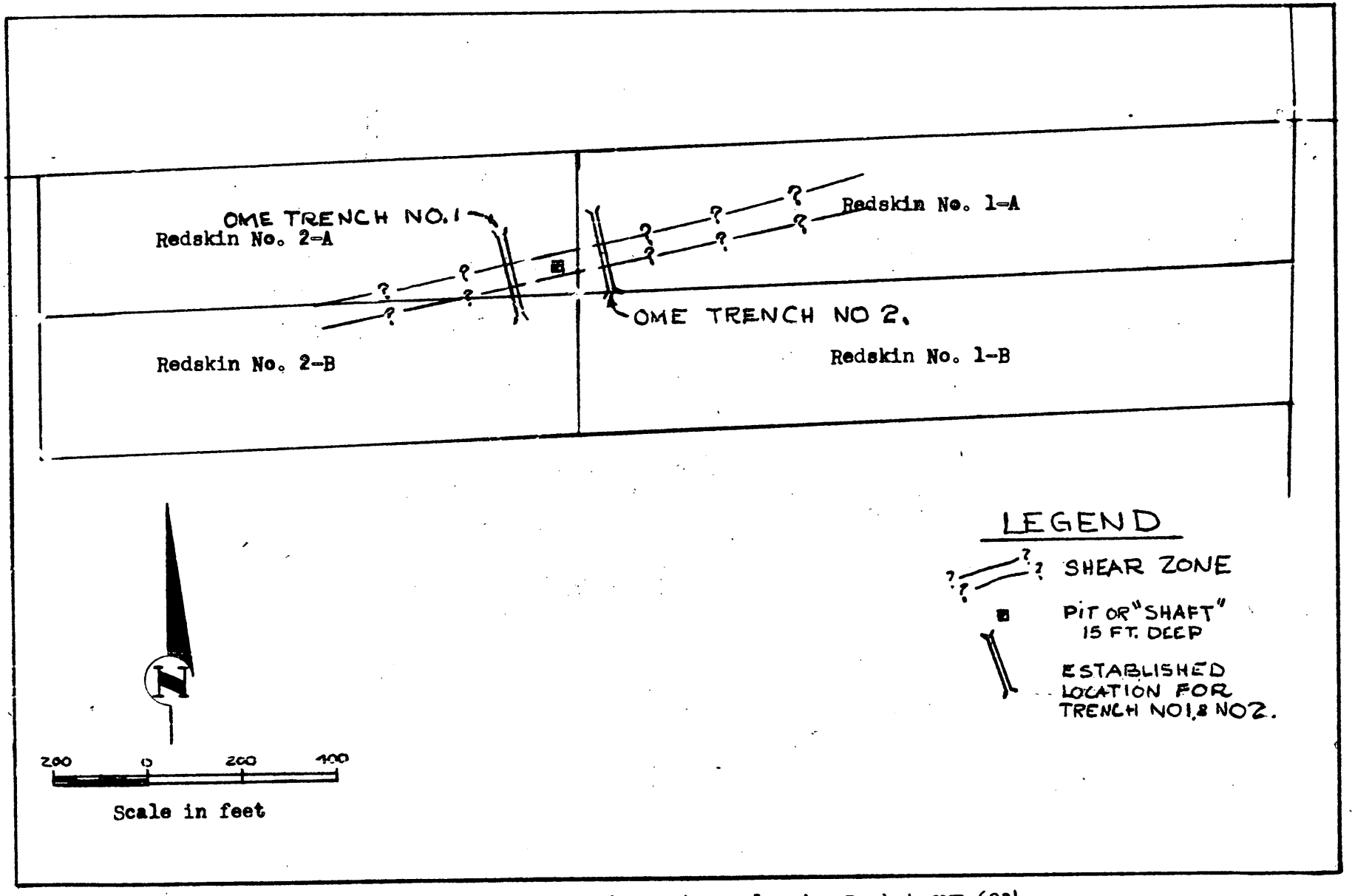


Figure 2- Exploration map, Redskin Mines, Park County, Colorado, Docket OME 6034

EXTRA COPY
O. M. E.
RECEIVED JUN 19 1959

DATE	INITIALS	CODE

MME Form 40
Dec. 1958

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Budget Bureau No. 42-R1368
Approval expires Dec. 31, 1963

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

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

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

REDSKIN MINES
Bailey, Colorado

P. O. Box 124

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6034

DATE RECEIVED: 4-6-59

REGION: III

DIVISION CODE: 700

BUSINESS ORGANIZATION *(Check one)*

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

STATE IN WHICH FIRM IS ORGANIZED: Colorado

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
J. B. Fitzsimmons	Shawnee, Colo.	Partner
Tom Tatum	Bailey, Colo.	"
John Wonder	Shawnee, Colo.	"
Perry Fitzsimmons	Shawnee, Colo.	"
E. W. Jackson	Bailey, Colo.	"
Steven Hickel	Shawnee, Colo.	"
Jean Durfee	Bailey, Colo.	"

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: Uranium and Related Ores

ESTIMATED COST OF PROJECT: $35,436.03

PROPERTY NAME	LOCATION COUNTY	STATE
Shawnee	Park	Colorado

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. III). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Office of Minerals Exploration, Department of the Interior, Washington 25, D. C., or with the nearest OME Field Office.*

CERTIFICATION

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

REDSKIN MINES

23 March 1959
DATED

BY *(Signature)* J. B. Fitzsimmons

Agent (Partner)
TITLE

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

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

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

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

2. Applicant's Rights in Land:

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

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

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

3. Physical Description:

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

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

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

(d) Describe known ore reserves, giving quantities and grades and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

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

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

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

4. Accessibility of Property:

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

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

5. Exploration Work:

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

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

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

6. Experience:

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

7. Estimate of Costs:

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

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

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

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

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

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

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

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

INT.-DUP. SEC., WASH., D.C. 48740

JUL 7 1960

Redskin Mines, Inc.
Post Office Box 124
Bailey, Colorado

Re: OME-6034 (Uranium)
Redskin Mines
Redskin Claims
Park County, Colorado

Gentlemen:

With reference to our letter of May 24, 1960, relating to your submitting a new application in the name of Redskin Mines, Inc., will you kindly advise this office the approximate date we may expect to receive the new executed forms.

In the event that you do not wish to submit a new application, we would appreciate a statement to that effect so the subject application can be closed.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

FMMurphy/fw-7/6/60
cc: Docket
Dir.Read.File
Reg. III (2)
Mr. Kirkemo
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COLORADO
(PARK COUNTY)
SHAWNEE QUADRANGLE
7½-MINUTE SERIES

(Georgetown) 1:62500

(Denver Mountain Parks) 1:62500

Exhibit A-2

EXTRA COPY
DMEA
RECEIVED JUN 30 1958
DATE | INITIALS | CODE

(Platte Canyon 1:125000)

Exhibit A-2
Rydokin Mining Co
Shawnee Colo
J. R. Ditzenmons
Tom Tatum
John Wonder
Perry Ditzenmons
C. D. Jackson
Steven Nickel
Jean Dreifer

EXTRA COPY
DMEA
RECEIVED JUN 30 1958
DATE | INITIALS | CODE

Mapped by the Geological Survey
1945

ROAD CLASSIFICATION
1947

Dependable hard-surface heavy-duty road — Dry weather roads — U. S. Route
Secondary hard-surface all weather road — Loose-surface graded — Unsurfaced, graded — Dirt road — State Route
More than two lanes indicated along road with tick at point of change 3 LANE, 4 LANE

TRUE NORTH
MAGNETIC NORTH
14°
APPROXIMATE MEAN DECLINATION, 1945

Scale $\frac{1}{24000}$
1 Mile
1000 0 1000 2000 3000 4000 5000 6000 7000 Feet
1 Kilometer

Contour interval 50 feet
Datum is mean sea level

Polyconic Projection. 1927 North American datum
10000 foot grid based on Colorado (Central) rectangular coordinate system

(Platte Canyon) 1:125000

SHAWNEE, COLO.
Edition of 1948

N 3922.5—W 10530/7.5

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a series of standard topographic maps to cover the United States. This work has been in progress since 1882, and the published maps cover more than 47 percent of the country, exclusive of outlying possessions.

The maps are published on sheets that measure about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, the areas that they represent are of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, miles, and kilometers. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 of the same units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys and the resulting maps have for many years been of three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile) or $\frac{1}{24,000}$ (1 inch = 2,000 feet), with a contour interval of 1 to 100 feet, according to the relief of the particular area mapped.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 100 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, and the high mountain area of the northwest, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles) or $\frac{1}{250,000}$ (1 inch = nearly 4 miles), with a contour interval of 20 to 250 feet.

The aerial camera is now being used in mapping. From the information recorded on the photographs, planimetric maps, which show only drainage and culture, have been made for some areas in the United States. By the use of stereoscopic plotting apparatus, aerial photographs are utilized also in the making of the regular topographic maps, which show relief as well as drainage and culture.

A topographic survey of Alaska has been in progress since 1898, and nearly 44 percent of its area has now been mapped. About 15 percent of the Territory has been covered by maps on a scale of $\frac{1}{500,000}$ (1 inch = nearly 8 miles). For most of the remainder of the area surveyed the maps published are on a scale of $\frac{1}{250,000}$ (1 inch = nearly 4 miles). For some areas of particular economic importance, covering about 4,300 square miles, the maps published are on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile) or larger. In addition to the area covered by topographic maps, about 11,300 square miles of southeastern Alaska has been covered by planimetric maps on scales of $\frac{1}{125,000}$ and $\frac{1}{250,000}$.

The Hawaiian Islands have been surveyed, and the resulting maps are published on a scale of $\frac{1}{62,500}$.

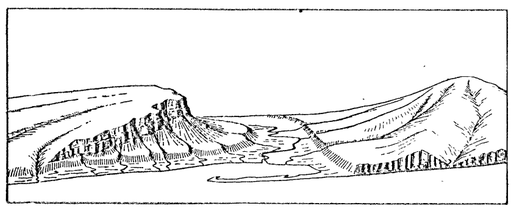
A survey of Puerto Rico is now in progress. The scale of the published maps is $\frac{1}{30,000}$.

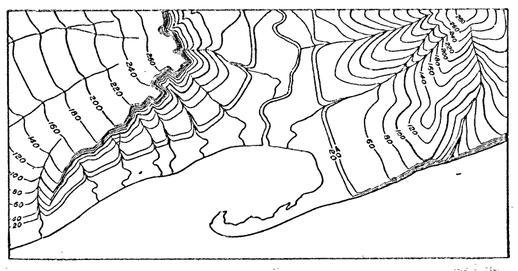
The features shown on topographic maps may be arranged in three groups—(1) water, including seas, lakes, rivers, canals, swamps, and other bodies of water; (2) relief, including mountains, hills, valleys, and other features of the land surface; (3) culture (works of man), such as towns, cities, roads, railroads, and boundaries. The symbols used to represent these features are shown and explained below. Variations appear on some earlier maps, and additional features are represented on some special maps.

All the water features are represented in blue, the smaller streams and canals by single blue lines and the larger streams by double lines. The larger streams, lakes, and the sea are accentuated by blue water lining or blue tint. Intermittent streams—those whose beds are dry for a large part of the year—are shown by lines of blue dots and dashes.

Relief is shown by contour lines in brown, which on a few maps are supplemented by shading showing the effect of light thrown from the northwest across the area represented, for the purpose of giving the appearance of relief and thus aiding in the interpretation of the contour lines. A contour line represents an imaginary line on the ground (a contour) every part of which is at the same altitude above sea level. Such a line could be drawn at any altitude, but in practice only the contours at certain regular intervals of altitude are shown. The datum or zero of altitude of the Geological Survey maps is mean sea level. The 20-foot contour would be the shore line if the sea should rise 20 feet above mean sea level. Contour lines show the shape of the hills, mountains, and valleys, as well as their altitude. Successive contour lines that are far apart on the map indicate a gentle slope, lines that are close together indicate a steep slope, and lines that run together indicate a cliff.

The manner in which contour lines express altitude, form, and grade is shown in the figure below.





The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly enclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which its slopes gradually away and forms an inclined tableland that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

The contour interval, or the vertical distance in feet between one contour and the next, is stated at the bottom of each map. This interval differs according to the topography of the area mapped: in a flat country it may be as small as 1 foot; in a mountainous region it may be as great as 250 feet. In order that the contours may be read more easily certain contour lines, every fourth or fifth, are made heavier than the others and are accompanied by figures showing altitude. The heights of many points—such as road intersections, summits, surfaces of lakes, and benchmarks—are also given on the map in figures, which show altitudes to the nearest foot only. More precise figures for the altitudes of benchmarks are given in the Geological Survey's bulletins on spirit leveling. The geodetic coordinates of triangulation and transit-traverse stations are also published in bulletins.

Lettering and the works of man are shown in black. Boundaries, such as those of a State, county, city, land grant, township, or reservation, are shown by continuous or broken lines of different kinds and weights. Public roads suitable for motor travel the greater part of the year are shown by solid double lines; poor public roads and private roads by dashed double lines; trails by dashed single lines. Additional public road classification if available is shown by red overprint.

Each quadrangle is designated by the name of a city, town, or prominent natural feature within it, and on the margins of the map are printed the names of adjoining quadrangles of which maps have been published. More than 4,100 quadrangles in the United States have been surveyed, and maps of them similar to the one on the other side of this sheet have been published.

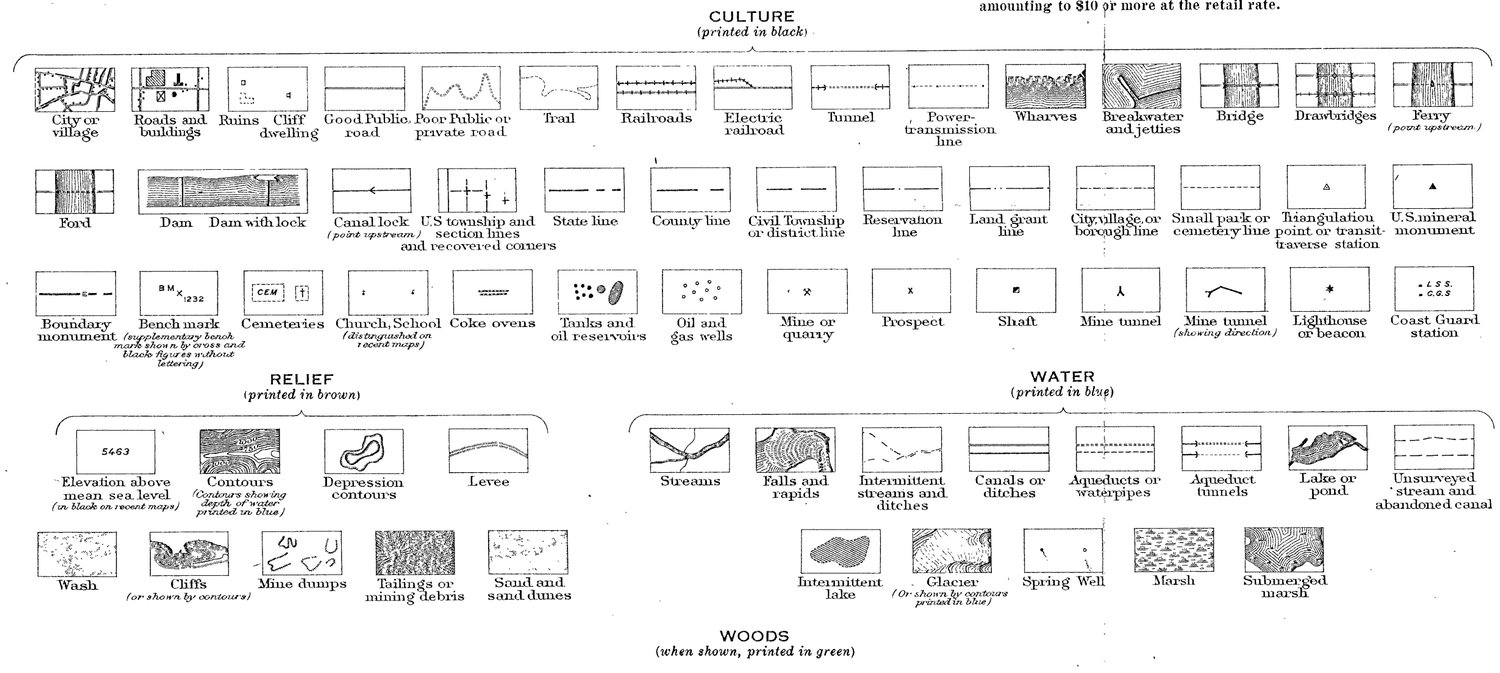
Geologic maps of some of the areas shown on the topographic maps have been published in the form of folios. Each folio includes maps showing the topography, geology, underground structure, and mineral deposits of the area mapped, and several pages of descriptive text. The text explains the maps and describes the topographic and geologic features of the country and its mineral products. Two hundred twenty-five folios have been published.

Index maps of each State and of Alaska and Hawaii showing the areas covered by topographic maps and geologic folios published by the United States Geological Survey may be obtained free. Copies of the standard topographic maps may be obtained for 10 cents each; some special maps are sold at different prices. A discount of 40 percent is allowed on an order amounting to $5 or more at the retail price. The discount is allowed on an order for maps alone, either of one kind or in any assortment, or for maps together with geologic folios. The geologic folios are sold for 25 cents or more each, the price depending on the size of the folio. A circular describing the folios will be sent on request.

Applications for maps or folios should be accompanied by cash, drift, or money order (not postage stamps) and should be addressed to

THE DIRECTOR,
United States Geological Survey,
Washington, D. C.

November 1937.

NOTE:—Effective on and after October 1, 1946, the price of standard topographic quadrangle maps will be 20 cents each, with a discount of 20 percent on orders amounting to $10 or more at the retail rate.

STANDARD SYMBOLS