File Copy
Surname
Griswold
Kiilsgaard
Gehon
Selfridge
Kjolmen

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

DEC 15 1955

Mr. Ralph E. Simpson, President
New-Mar Uranium Corporation
Post Office Box 1599
Grand Junction, Colorado

Re: Docket No. DMEA-3965 (Copper-Lead)
New-Mar Uranium Corporation
Frank Hough Mine
Ouray County, Colorado

Dear Mr. Simpson:

Your application for aid for an exploration project and other reports available to us in Washington concerning your mine have been reviewed.

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

Careful study of all information available to us concerning your property indicates that the probability of finding a significant amount of mineable ore by your proposed program does not warrant Government participation. We regret to advise you, therefore, that your application for exploration assistance is denied. Such denial, however, is made without prejudice to your property.

The lack of accessibility of the mine workings made it impossible for the examining engineers to obtain the necessary information as to mineralization and structure on which to base favorable consideration for a project. In the event, however, your company should make the mine workings accessible for an examination, we would be pleased to consider a new application for exploration assistance on a project encompassing work performed through or in the vicinity of the present shaft workings.

WRGriswold/er 12/12/55 (rewritten)
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Region III(2)
Chron.

Sincerely yours,

E. C. [illegible]
(By ESF)
Administrator

R.C.R.

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

Mr. Ralph E. Simpson, President
New-Mar Uranium Corporation
Post Office Box 1599
Grand Junction, Colorado

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

Careful study of all our information indicates that the available data are too meager to warrant a large project such as you propose or even a smaller project. Little of significance was available to our field examiners since all of the workings of the Frank Hough mine are inaccessible.

We regret to advise you, under these circumstances that your application for exploration assistance is denied, though without prejudice to your mine. If at any time your company should see fit to rehabilitate the shaft and levels of the mine, so as to make them accessible for a proper examination, we could again give consideration to an application for exploration assistance. However, any such application should first deal with exploration to be done through the shaft.

Sincerely yours,

Administrator

File Copy
Surname
Griswold
Fisher
Chambers

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

Mr. Ralph E. Simpson, President
New-Mar Uranium Corporation
Post Office Box 1599
Grand Junction, Colorado

Re: Docket No. DMEA-3965 (Copper-Lead)
New-Mar Uranium Corporation
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Sincerely yours,

Administrator

WMGriswold/er 12/7/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

Mr. Ralph E. Simpson, President
Ken-Mar Uranium Corporation
Post Office Box 1599
Grand Junction, Colorado

Re: Docket No. DMEA-1965 (Copper-Lead)
Ken-Mar Uranium Corporation
Frank Hough Mine
Ouray County, Colorado

Dear Mr. Simpson:

Your application for aid for an exploration project and other reports available to us in Washington concerning your mine have been reviewed.

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

Careful study of all our information indicates that the available data are too meager to warrant a large project such as you propose or even a smaller project. Little of significance was available to our field examiners since all of the workings of the Frank Hough mine are inaccessible.

We regret to advise you, under these circumstances that your application for exploration assistance is denied, though without prejudice to your mine. If at any time your company should see fit to rehabilitate the shaft and levels of the mine, so as to make them accessible for a proper examination, we could again give consideration to an application for exploration assistance. However, any such application should first deal with exploration to be done through the shaft.

Sincerely yours,

Administrator

WHOriswold/er 12/7/55
Copy to: DocDrt
Admr R File
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

December 7, 1955

Memorandum

To: The Administrator

From: Chief, Base Metals Division

Subject: Denial of Application, Docket No. DMEA-3965, New-Mar Uranium Corporation, Frank Hough Mine, Ouray County, Colorado, Copper and Lead.

The Applicant has requested a large program, 4,500 feet of crosscutting and drifting, all based upon the existance of an old caved, inaccessible mine 1200 - 1400 feet higher up and half a mile distant, horizontally.

It is all very far - fetched and nebulous. If the company will clean out the old workings and make them available for examination a small project possibly would be warranted.

W. R. Griswold

W. R. Griswold

File Copy
Surname

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

500

December 7, 1955

Memorandum

To: The Administrator

From: Chief, Base Metals Division

Subject: Denial of Application, Docket No. DMEA-3965, New-Mar Uranium Corporation, Frank Hough Mine, Ouray County, Colorado, Copper and Lead.

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W. R. Griswold

W. R. Griswold

WRG/er
Copy to: Docket
Base Metals
Chron.

IN REPLY REFER TO:

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

RECEIVED
DEC - 6 1955

December 6, 1955

Re: DMEA 3965
New-Mar Uranium Corporation
Frank Hough Mine
Hinsdale & Ouray Counties, Colo.
$275,820.00 - Copper, Lead

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant requested aid in exploring at a depth of 1200 to 1400 feet for a vein of doubtful dip and small production, in tons, in shaft workings. The estimated cost of the proposed work is $275,820.00.

Because of the lack of and conflicting information concerning the dip of the vein, and almost total uncertainty as to its existence and the location of the ore shoot at the exploration level, the examiners conclude that the proposed work is not justified and recommend that the application be denied without prejudice.

I agree with their conclusion and concur with the recommendation that the application be denied.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
DEC - 6 1955

December 6, 1955

Re: DMEA 3965
New-Mar Uranium Corporation
Frank Hough Mine
Hinsdale & Ouray Counties, Colo.
$275,820.00 - Copper, Lead

Memorandum

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I agree with their conclusion and concur with the recommendation that the application be denied.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-12/6/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
H. M. Meyer, 3623

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

RECEIVED
DEC - 6 1955

December 5, 1955

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of Examination Report, Docket No. DMEA - 3965 (copper-lead), New Mar Uranium Corporation, Frank Hough Mine, Hirsdale and Ouray Counties, Colorado, $275,820.00

This exploration program was based on the projection of the known ore bearing structure, Frank Hough vein, for 2,300 to 2,800 feet horizontally and 1,200 to about 1,400 feet vertically.

Examination of this property by D. R. MacLaren, Geological Survey, and C. M. Harrer, Bureau of Mines, revealed that it was impossible to determine the dip of the Frank Hough vein and the extent or type of the ore deposit.

The examiners concluded that the projection cannot be made with sufficient accuracy to justify driving the 1,500 feet of crosscut and 3,000 feet of drift requested by the applicant.

I agree with the conclusions of the examiners and support their recommendation that this application be denied without prejudice to the Frank Hough ore body. Also, should the Frank Hough shaft and levels be rehabilitated and a proposal submitted to explore the ore body from the shaft, consideration is recommended.

J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals
J. W. Pennington
R. W. Geehan
Thor Kiilsgaard, U.S.G.S.
F i l e s

RECEIVED
DEC - 6 1955

December 5, 1955

Memorandum

To: W. H. Griswold, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of Examination Report, Docket No. DMEA - 3365 (copper-lead), New Mar Uranium Corporation, Frank Hough Mine, Hinsdale and Ouray Counties, Colorado, $275,000.00

This exploration program was based on the projection of the known ore bearing structure, Frank Hough vein, for 2,300 to 2,800 feet horizontally and 1,200 to about 1,400 feet vertically.

Examination of this property by D. H. Maclaren, Geological Survey, and C. M. Harrer, Bureau of Mines, revealed that it was impossible to determine the dip of the Frank Hough vein and the extent or type of the ore deposit.

The examiners concluded that the projection cannot be made with sufficient accuracy to justify driving the 1,500 feet of crosscut and 3,000 feet of drift requested by the applicant.

I agree with the conclusions of the examiners and support their recommendation that this application be denied without prejudice to the Frank Hough ore body. Also, should the Frank Hough shaft and levels be rehabilitated and a proposal submitted to explore the ore body from the shaft, consideration is recommended.

J. W. Pennington

J. W. Pennington

JWPennington/vr

Copy to: Division of Minerals
Branch of Base Metals
J. W. Pennington
R. W. Gaskes
Thor Kiliegaard, U.S.G.S.
F i l e s

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

RECEIVED
DEC - 1 1955

Griswold

November 23, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, DMEA Docket 3965 (Copper-Lead) New-Mar Uranium Corporation, Frank Hough mine, Hinsdale and Ouray Counties, Colorado

Enclosed are the original and three copies of the report pertaining to the above application.

The mine workings are inaccessible and the examiners conclude that neither the dip of the vein nor the probable extent or type of ore deposit can be determined at this time.

The examiners recommend, and we concur, that the application be denied without prejudice.

W. M. Traver

By J. W. Townsend
J. W. Townsend

E. N. Harshman
E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
12-5-55
(date)

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

RECEIVED DEC - 1 1955

Goswold
Betty

November 23, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, DMEA Docket 3965 (Copper-Lead) New-Mar Uranium Corporation, Frank Hough mine, Rinaldo and Ouray Counties, Colorado

Enclosed are the original and three copies of the report pertaining to the above application.

The mine workings are inaccessible and the examiners conclude that neither the dip of the vein nor the probable extent or type of ore deposit can be determined at this time.

The examiners recommend, and we concur, that the application be denied without prejudice.

W. M. Traver

By J. W. Townsend
J. W. Townsend

E. N. Kerchman
E. N. Kerchman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

(date)

RECEIVED
DEC - 1 1955

Region III

Building 20
Denver Federal Center
Denver 2, Colorado
November 18, 1955

TRANSMITTED
NOV 23 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA 3965 (Copper-lead) New-Mar Uranium Corporation (Frank Hough mine) Hinsdale and Ouray Counties, Colorado

Enclosed are the original and seven copies of a joint engineering and geologic report by D. R. MacLaren, geologist, and C. M. Harrer, mining engineer, covering docket DMEA 3965.

The New-Mar Uranium Corporation applied for exploration assistance to explore 18 patented lode claims in Hinsdale and Ouray Counties, Colorado, for copper and lead. The applicant proposed to extend an existing crosscut adit approximately 1,500 feet to the Frank Hough vein and then drift 3,000 feet on the vein at an estimated cost of $275,820.00. A field examination was made on September 23, 1955. All the existing workings, with the exception of a short crosscut, were inaccessible. The proposed work was for the purpose of cutting a known ore bearing structure from 2,300 to 2,800 feet horizontally and from 1,200 to 1,400 feet vertically from known workings.

It is concluded that neither the dip of the vein nor the probable extent or type of ore deposit can be determined at this time. It is recommended that the application be denied.

John F. Shaw
John F. Shaw
Supervising Mining Engineer

E. N. Harshman
E. N. Harshman
Member, Field Team

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

(date)

cc 7
EWHarshman
DMEA 3965
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

RECEIVED
DEC - 1 1955

TRANSMITTED
NOV 23 1955

DMEA 7661

NEW-WAR MINING CORPORATION

FRANK MORSE MINE

MINERAL AND GRANT COUNTIES, COLORADO

Copper-Lead

Joint Engineering and Geologic Report

By

D. R. MacLaren, Geologist
Geological Survey

C. M. Herrer, Mining Engineer
Bureau of Mines

November 18, 1955

Approved by
DMEA OPERATING CONSENT

(date)

DMEA 3965

RECEIVED
DEC - 1 1955

NEW-MAR URANIUM CORPORATION
FRANK HOUGH MINE
HINSDALE AND OURAY COUNTIES, COLORADO

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Joint engineering and geologic report — Page

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Ownership 5
Geology 6
Minable ore reserves 9
Present status 9
Exploration and development 9
Mining, milling, and other facilities 9
Applicant's project proposal and costs 10
Conclusions and recommendations 12

ILLUSTRATIONS

Figure — Follows page

1. Location map, New-Mar Uranium Corporation (Frank Hough mine) property, Hinsdale and Ouray Counties, Colorado 2

2. Claim and exploration map, New-Mar Uranium Corporation (Frank Hough mine) property, Hinsdale and Ouray Counties, Colorado 2

3. Plan showing geology and property boundary, New-Mar Uranium Corporation, Frank Hough mine, Ouray and Hinsdale Counties, Colorado 6

RECEIVED
DEC - 1 1955

DMEA 3965

NEW-MAR URANIUM CORPORATION
FRANK HOUGH MINE
HINSDALE AND OURAY COUNTIES, COLORADO

SUMMARY

New-Mar Uranium Corporation has applied for Defense Minerals Exploration Administration assistance to explore their property for copper and lead. Their contiguous group of 18 patented lode claims are in secs. 24 and 25, T. 43 N., R. 7 W., in the Galena mining district in Hinsdale and Ouray Counties, Colorado. The claims are at altitudes ranging between 11,000 and 13,000 feet above sea-level. The claims are in very rough, mountainous terrain above timberline and are accessible by truck and jeep roads from both Ouray and Lake City.

The applicant company proposes to extend an existing adit crosscut on the Calumet claim about 1,500 feet to the Frank Hough vein and then drift 3,000 feet on the vein at an over-all cost originally estimated at $265,035.00, but revised to $275,820.00.

Because all workings with the exception of a short crosscut are inaccessible and existing records are incomplete and somewhat conflicting, it is concluded that neither the dip of the Frank Hough vein, nor the probable extent or type of the ore deposit can be determined at this time. Lacking this information, a projection of the known ore bearing structure for 2,300 to 2,800 feet horizontally and 1,200 to about 1,400 feet vertically cannot be made with sufficient assurance of accuracy to justify driving the 1,500 feet of crosscut and 3,000 feet of drift requested by the applicant.

It is, therefore, recommended that this application be denied without prejudice to the Frank Hough ore body.

Should the Frank Hough shaft and levels be rehabilitated and a proposal to explore the ore body from the shaft be submitted, consideration is recommended.

INTRODUCTION

New-Mar Uranium Corporation have leased a contiguous group of 18 patented lode claims in the Galena mining district of Hinsdale and Ouray Counties, Colorado, (figures 1) ~~and 2~~), and have applied for Defense Minerals Exploration Administration assistance to explore the property with a program of underground exploration at an estimated cost of $268,035.00.

The applicant's claims were examined by a joint Bureau of Mines and Geological Survey team on September 23, 1955, accompanied by Messrs. Ralph E. Simpson, H. G. Burgess and Joe R. Brown.

ACKNOWLEDGMENTS

Messrs. Ralph E. Simpson and H. G. Burgess, president and superintendent respectively of New-Mar Uranium Corporation and Joe R. Brown, owner and lessor, accompanied the examining team and contributed their knowledge of the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The group of claims leased by New-Mar Uranium Corporation are in secs. 24 and 25, T. 43 N., R. 7 W., in the Galena and Red Mountain mining districts, in Hinsdale and Ouray Counties, Colorado (figures 1) ~~and 2~~).

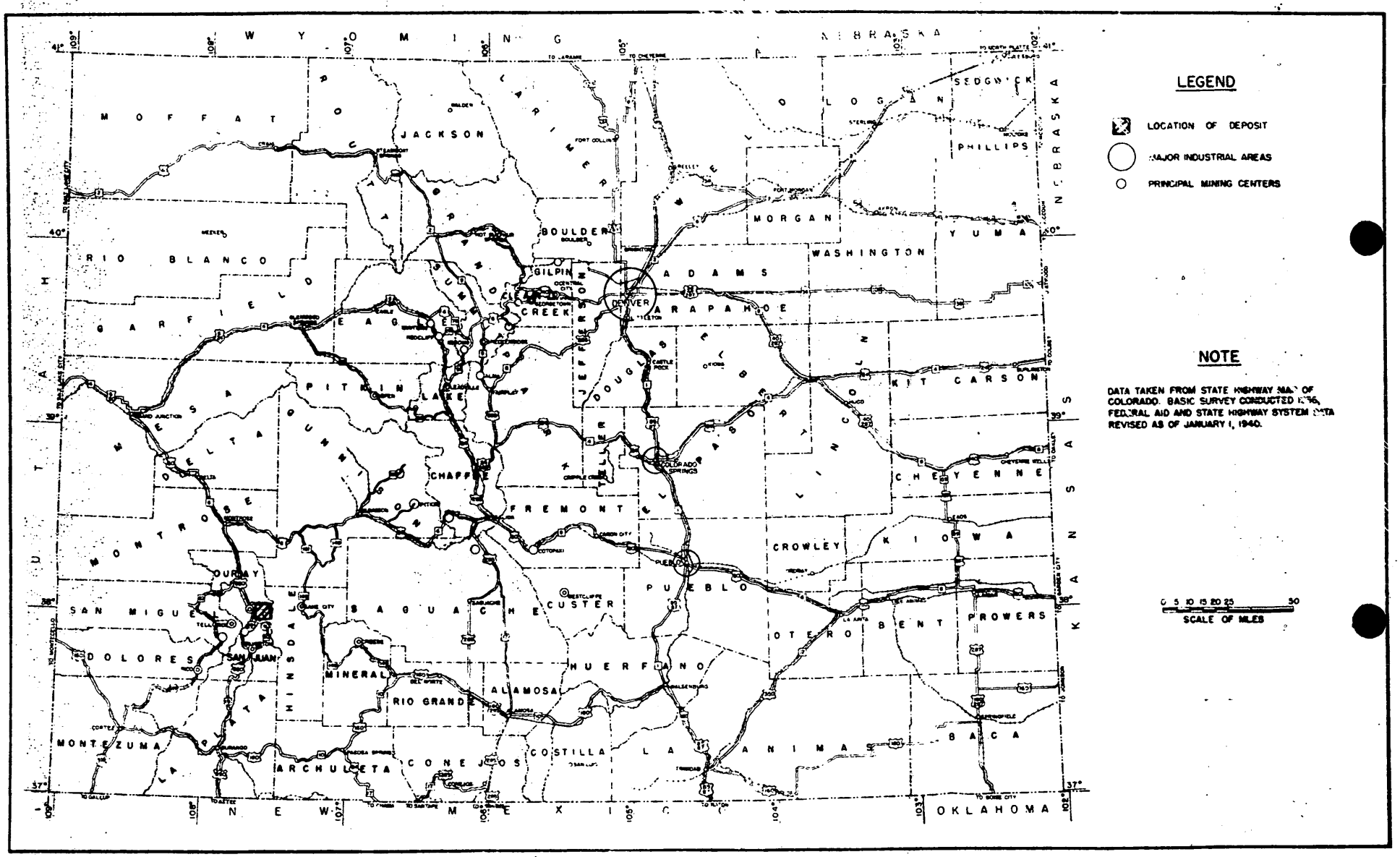


FIGURE 1 - LOCATION MAP, NEW-MAR URANIUM CORPORATION (FANK HOUGH MINE) PROPERTY, HINSDALE AND OURAY COUNTIES, COLO.
DMEA 3965

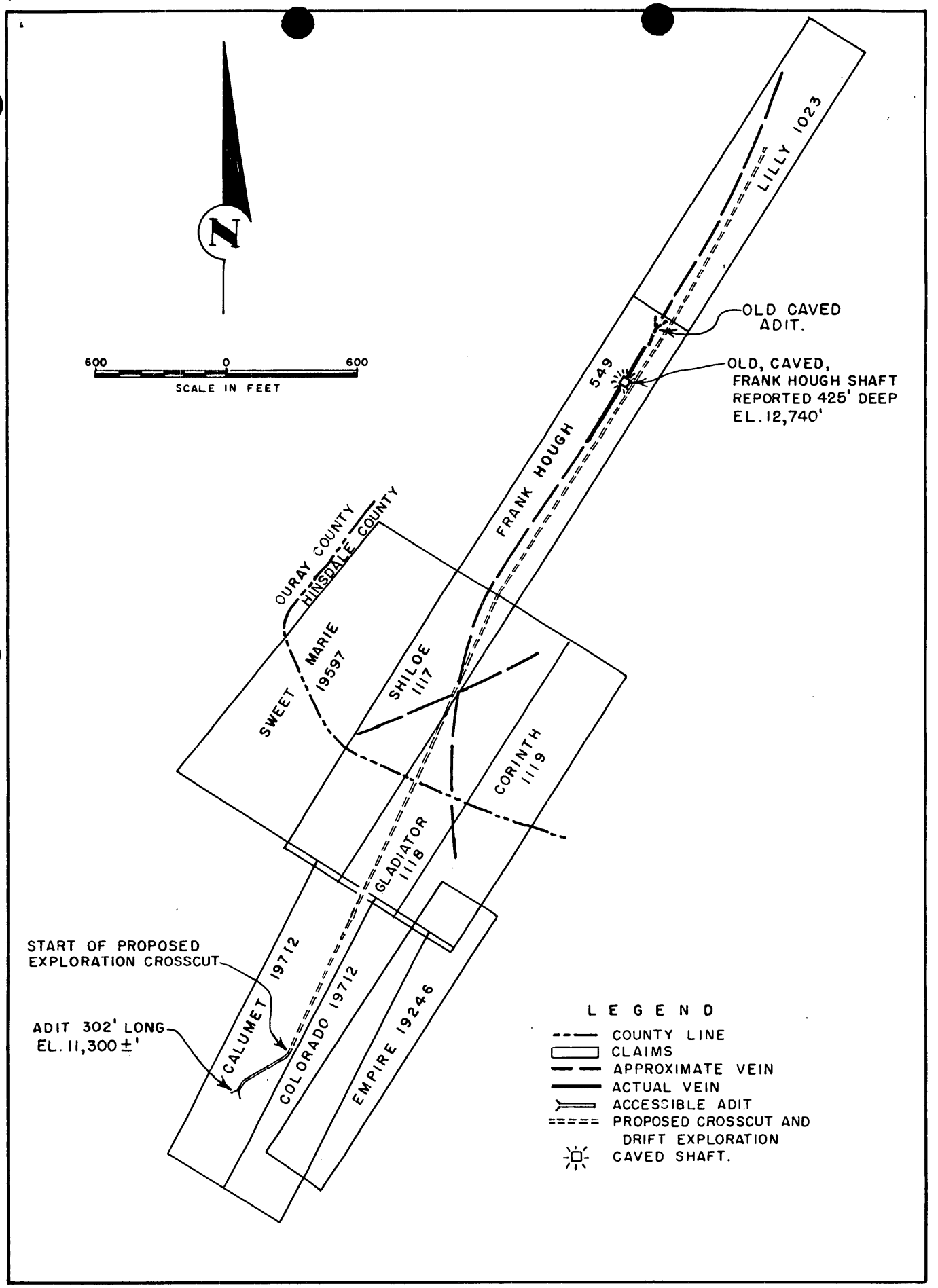


FIGURE 2 - CLAIM AND EXPLORATION MAP, NEW-MAR URANIUM CORPORATION (FRANK HOUGH MINE) PROPERTY, HINSDALE AND OURAY COUNTIES, COLO. DMEA 3965

The property is in the vicinity of Palmette Gulch and American Flats at the headwaters of Henson Creek, at altitudes ranging between 11,000 and 13,000 feet above sea-level. It is also on the northern slope of Engineer Mountain. The property is above timberline in rugged, barren mountain terrain. It is accessible over steep and narrow trunk access roads from both Ouray and Lake City. Water would have to be trucked in from nearby creeks and springs. The property is reached by driving 4.4 miles south from Ouray over U. S. Highway 550 and thence 6.2 miles easterly over rough access roads to the portal of the existing adit on the Calumet claim. The Frank Hough claim and shaft are 4 road miles farther to the east in the American Flats area. Supplies and labor are available in the Ouray and Lake City areas. The nearest railroad facilities are those of the Denver and Rio Grande Western at Ridgway, Colorado, 21 to 30 miles distant.

HISTORY AND PRODUCTION

The group of patented claims held under lease by New-Mar Uranium Corporation is known as the Frank Hough group and includes the old Frank Hough mine which was discovered by Mr. J. S. Hough in January 1881. The old mine was completely inaccessible and the shaft at an altitude of 12,740 feet was caved. This shaft was last reported as 425 feet deep with working levels at 50, 80, 140 and 200 feet below its collar. The 200-foot level was reported advanced nearly 60 feet in ore. About 60 tons mined in 1882 contained 20 to 25 percent copper, a trace to 1 ounce of gold and 50 to 60 ounces of silver per ton. Production from the

property between 1881 and 1900 was reported[1/] as about 2,000 tons of high grade copper-silver ore. Output of the property during the period 1908-1955 was 3,081 tons of copper-lead-gold-silver ore. Confidential statistics of production from the Frank Hough mine for this period were obtained from the Division of Mineral Industries, Bureau of Mines, Region III. Their distribution based on assay values of the ore, is as follows:

Period	Tons crude ore	Copper total pounds	Copper percent	Lead total pounds	Lead percent	Gold total	Gold per ton	Silver total	Silver per ton
1901-07	none	—	—	—	—	—	—	—	—
1908	344	186,744	27.1	30,507	4.4	34.60	.10	12,923	37.5
1909	1,370	708,514	24.8	88,598	3.2	185.00	.14	49,640	36.2
1910	1,055	553,514	26.3	97,961	4.6	219.00	.22	38,657	36.6
1911	31	12,000	19.4	—	—	6.01	.19	1,144	36.9
1912	20	8,771	21.9	—	—	3.77	.19	1,008	50.4
1913	127	71,920	28.3	6,198	2.4	25.58	.20	6,770	53.2
1914	65	19,830	15.3	—	—	4.65	.07	1,236	19.0
1916	26	3,852	7.4	1,691	3.3	1.44	.06	204	7.9
1917	23	3,678	8.0	570	1.2	1.44	.06	291	12.6
1918	18	3,253	9.0	950	2.6	1.30	.07	298	16.6
1920	2	718	17.9	259	6.5	.40	.20	53	26.5
1921-55	none	none	—	—	—	—	—	—	—
Totals	3,081	1,574,824		226,734		483.19		112,224	

1/ Oral communication from Jas. W. Abbott, deputy mineral land surveyor of Lake City to F. L. Ransome, U.S. Geological Survey.

OWNERSHIP

Mor-Mar Uranium Corporation has leased a group of 18 patented lode claims known as the Frank Hough group, from Joe R. Brown of Montrose, Colorado, for a period of 10 years. The lease was entered into on June 14, 1955, and continues until June 14, 1965, and as long thereafter as ore is produced in commercial quantities unless terminated or forfeited sooner. The claims are registered in both Hinsdale and Ouray Counties as follows:

Claim	Survey No.	County
Lilly	1023	Hinsdale
Frank Hough	549	Hinsdale
Shiloe	1117	Hinsdale and Ouray
Gladiator	1118	Hinsdale and Ouray
Corinth	1119 or 6825	Hinsdale and Ouray
Sweet Maria	19597	Hinsdale and Ouray
Colorado	19712	Ouray
Empire	19246	Ouray
Calumet	19712	Ouray
York Town	12196	Hinsdale
Jamestown	12196	Hinsdale
Guyandotte	12196	Hinsdale
Roanoke	12196	Hinsdale
Norfolk	12196	Hinsdale
Portsmouth	12196	Hinsdale
Richmond	12196	Hinsdale
Petersburg	12196	Hinsdale
Newportnews	12196	Hinsdale

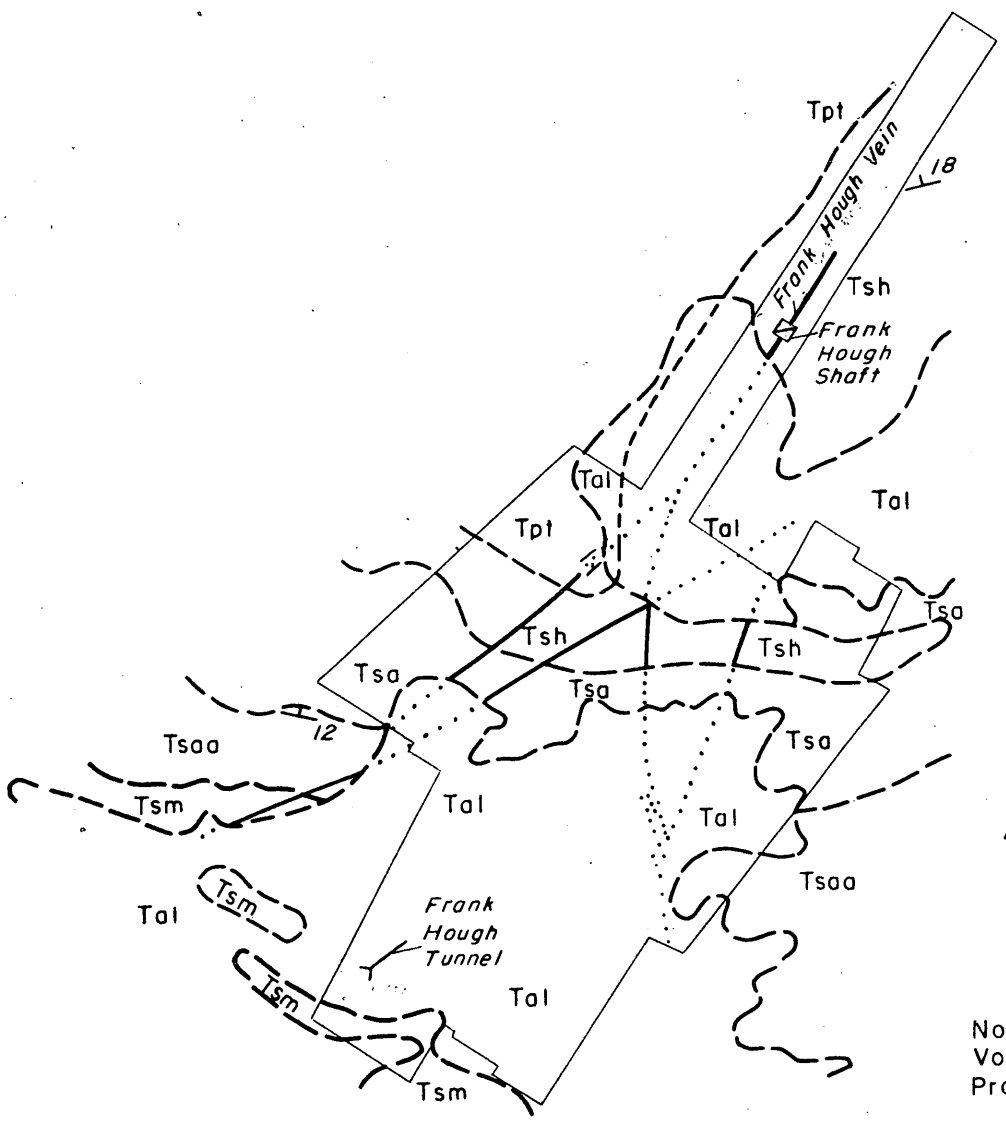
An option to purchase agreement is in effect between Joe R. Brown and J. F. Anderson of Montrose, Colorado.

Mor-Mar Uranium Corporation proposes an exploration program which they believe would benefit only 9 of the above group of claims. These are the Lilly, Frank Hough, Shiloe, Gladiator, Corinth, Sweet Maria, Colorado, Empire and Calumet claims, figure 2.

GEOLOGY

The geology of the Engineer Mountain area is described by V. C. Kelley in Colorado Scientific Society Proceedings, volume 14, number 7, (1946) F. L. Ransome in U. S. Geological Survey Bulletin 182, (1901), and H. G. Burchard in Report to the Director of the Mint upon the production of precious metals during the calendar year 1882, (1883). Much of the following has been drawn from these publications. Rocks in the area are andesite, tuff, and rhyolite of the Silverton and Potosi volcanic series, Miocene in age. On the applicant's claims much of the surface is covered by Pleistocene to Recent deposits of alluvium and talus, (figure 3). The Silverton volcanic series dip 10° to 20° NW and is represented by andesite and andesite tuff (Burns latite), pyroxene andesite, and Ransome tuff. The andesite is gray in color, somewhat amygdaloidal in structure, and contains layers of breccia. The andesite tuff is gray amygdaloidal andesite that grades into coarse even-bedded tuff. The pyroxene andesite forms bold cliffs. It is dark gray in color and dense felsitic to porphyritic in texture except near the top of the formation where it is somewhat amygdaloidal. The Ransome tuff is sandy, well stratified and locally cross-bedded. The color of the various beds may be green, buff, brown, or purple. The only representative of the Potosi volcanic series is a dense, fine grained rhyolite flow that has been whitened by alteration and dips more or less conformably with the Silverton series.

With few exceptions the fissures in the vicinity of the applicant's claims, several of which appear to be five thousand to six thousand feet long, strike N. 30° to 35° E. and dip 75° SE to vertical. In general the fissures are more numerous and more intricate in their branchings in the andesite and andesite tuff (Burns latite) than they are in the overlying



EXPLANATION

Tal
Talus, alluvium, etc.

Tpt
Potosi volcanic series
EROSION SURFACE

Tsh
Henson tuff

Tsa
Pyroxene andesite
EROSION SURFACE

Tsaa
Andesite and tuff

Tsm
Andesite

Burns latite

N

Vein
Dotted where concealed by surface deposits

Formation boundaries
Dashed where inferred

Note: Adapted from V. C. Kelley, Colo. Sci. Soc. Proc., Vol. 14, No. 7.
Property boundary located approximately.

D.R. McLaren, Nov. 1955

FIGURE 3 - PLAN SHOWING GEOLOGY AND PROPERTY BOUNDARY, NEW MAR URANIUM CORP., FRANK HOUGH MINE, OURAY AND HINSDALE COUNTIES, COLORADO.

1000 500 0 1000 Feet

pyroxene andesite where many of them lose their identity in wide zones of altered rock. The fissure fillings are usually siliceous. The veins are vuggy and open, while banded and crusted structures are common. Ore minerals are auriferous and argentiferous sulfides that include tetrahedrite, chalcopyrite, bornite, galena and sphalerite. The gangue minerals include quartz, rhodonite, rhodochrosite, pyrite, marcasite, kaolin, and sericite. The wall rock has been altered by impregnation and replacement of one or more of these minerals. Three structural and genetic types of ore deposits are recognized in the area. They are fissure and cavity fillings, breccia chimney and breccia dike deposits and replacement deposits. Although they are generally distinct, any two or all three types may be mixed in a single deposit.

On the applicant's property (fig. 2), the Frank Hough shaft, said to be 425 feet deep, was caved at the collar and was inaccessible to the examiners. Workings from the shaft are said to consist of drifts turned at depths of 50, 80, 140, and 200 feet below the collar which is at an altitude of 12,740 feet. There is no information regarding the length of the levels or the location and size of the stopes other than Burchards brief statement that the 50-foot level exposed "12 feet of solid ore"; the 80-foot level exposed "17 feet"; the 140-foot level, "25 feet"; and the 200-foot level had been "run for 57 feet in a solid ore body". About 300 feet from the shaft in a northeasterly direction is a tunnel said to connect with the shaft on the 80-foot level. The drift was caved and inaccessible to the examiners. These workings are on the Frank Hough vein which strikes N. 30° E., the dip of which could not be determined. F. L. Ransome says on page 90 (1908) that according to Mr. Hough the vein dips about 45° W. As pointed out by Kelley, this dip is not compatable with the surface

course of this vein, or with the usual dips of other veins in the area but it is possible that this dip represents a local flexure in the vein. The southeastward course of the vein is not certain for more than 200 feet from the shaft because beyond that distance the Hansen tuff is covered by talus. South and west of the talus cover are two veins, one striking N. 47° E., the other striking nearly north. Although either of these veins may be the continuation of the Frank Hough vein, it is more reasonable to believe that the N. 47° E. vein is the continuation of the Frank Hough and that the northerly striking vein is a branch or cross vein.

H. C. Burchard states on page 477 (1883) that the prospectors at the time worked on the theory that the Frank Hough ore body was in layer in a horizontal direction", and further describes the deposit as being "no fissure vein, but one of those irregular bodies of copper ore such as are known to exist at Fahlun (Falun) in Sweden...". Ransome, on page 190 (1901) describes the ore body "from the accounts of Mr. J. S. Hough...the ore body seems to have been an irregular impregnation or replacement deposit alongside a fissure". Judging by the material seen on the dumps, Ransome's description appears to be more acceptable than Burchard's.

About 3,900 feet S. 32° W. of the Frank Hough shaft (figure 3) is a tunnel, the only working on the property accessible to the examiners. This tunnel, at an approximate altitude of 11,300 feet, has been driven entirely in andesite (Burro latite) for a distance of 300 feet from the portal on an average bearing of N. 52° E. If continued for 1,300 to 1,700 feet on the same bearing, the tunnel should pass vertically beneath the outcrop of the northerly striking branch(?) of the Frank Hough vein some 2,300 feet along the vein southwest of the Frank Hough shaft. If the tunnel is

driven about 1,200 feet northerly from the present breast, it should pass vertically beneath the outcrop of the N. 47° E. striking Frank Hough(?) vein some 2,800 feet along the vein southeast of the shaft. In either case the tunnel should intersect the vein about 1,440 feet below the collar of the shaft, or 1,200 feet below the lowest reported ore.

MINABLE ORE RESERVES

There is no basis on which to base any estimate of possible ore reserves since the Frank Hough mine workings are entirely inaccessible.

PRESENT STATUS

Exploration and Development

Work on the Frank Hough property prior to 1910 consisted of mining operations on the Frank Hough claim where a 425-foot shaft was sunk and copper-lead-gold-silver ore was mined. During 1910 the entire surface plant was destroyed by fire and active mining ceased. Between 1910 and 1920, production consisted mainly in reworking old dumps. There has been no mining activity on the property from 1920 to date and all Frank Hough mine workings are entirely inaccessible and caved. The Frank Hough mine shaft collar is at a reported altitude of 12,740 feet. An old crosscut adit, 302 feet long, is entirely accessible on the Calumet claim (figure 2), and is the start of the proposed DMEA exploration program.

Mining, Milling and Other Facilities

There are no mining, milling or other facilities on the property to date.

APPLICANT'S PROJECT PROPOSAL AND COSTS

Mar-Mar Uranium Corporation proposes to explore the Frank Hough vein approximately 1,500 feet below the collar of the old Frank Hough shaft or about 1,075 feet below its deepest reported workings[2/3/]. The top of the shaft is reported at an altitude of 12,740 feet. They propose to accomplish this by extending an existing crosscut adit on their Calumet claim (figure 2) for about 1,500 feet northeasterly to a junction with the Frank Hough vein and then drifting northeasterly along the vein for 3,000 feet to explore it some distance beyond the old Frank Hough shaft.

Mar-Mar Uranium Corporation estimates the cost of this project at $268,035.00. They propose to work on a two-shift basis. Costs are distributed according to a letter dated September 27, 1955 as follows:

	Total cost of items		Cost per foot
(1) Independent contracts:			
Contract for drilling, blasting, and mucking, with all equipment and supplies furnished. $20.00 per lineal foot of 5 x 7-foot cross section of drift or crosscut.	$90,000.00		$20.00
Total independent contracts		$90,000.00	
(2) Labor, supervision and technical services:			
Labor - three laborers will be employed per shift to tram muck, install track, pipe, etc., haul supplies and take care of operating equipment. Cost will be $16.25 per man shift, or $11.00 per foot of advance.	$49,500.00		$11.00

2/ Ransome, Frederick Leslie, Economic Geology of the Silverton Quadrangle, Colorado. U. S. Geological Survey Bulletin 182, Series A. Econ. Geol. 12 (1901) pp. 189-191.

3/ Kelley, V. C., Geology, Ore Deposits and Mines of the Mineral Point, Roughcastle and Upper Uncompahgre Districts, San Juan, Hinsdale Counties, Colorado. Colo. Sci. Soc. Proc., Vol. 14, No. 7 (1946).

	Total cost of items		Cost per foot
Supervision - a superintendent at $600.00 per month or $2.00 per foot of drift.	$9,000.00		$2.00
Technical services - 1 engineer, 4 days per month at $50.00 per day. 1 geologist, 4 days per month at $50.00 per day. Total technical services estimated at $1.50 per foot	6,750.00		$1.50
Total labor, supervision and technical services		$65,250.00	

(3) Operating materials and supplies:

Timber	None		
Explosives at $4.50 per foot	$20,250.00		
Pipe (20-inch, galvanized, ventilating) at $2.50 per foot	11,250.00		
(3-inch aluminum compressed air line, complete) at $1.50 per foot	6,750.00		
Track - (20-pound rail, complete with ties, spikes, plates, bolts) at $1.75 per foot	7,875.00		
Drill steel and bits at $1.50 per foot	6,750.00		
Fuel - diesel fuel, gasoline and lubricants at $11.84 per day or $1.20 per foot	5,400.00		$12.95
Total operating materials and supplies		$58,275.00	

(4) Operating equipment:

Rental:			
600-c.f.m. compressor at $931.00 per month.			
Sutorbuilt ventilation blower rated 4,000 c.f.m. at 10 pounds pressure with 100 H.P. gasoline motor - $400.00 per month.			
Battery tramper at $400.00 per month.			
Eimco model 21 loader at $300.00 per month.			
Ten 40-cubic foot side dump mine cars at $300.00 per month.			
Four 55-pound pneumatic rock drills with jacklegs at $300.00 per month.			
Grinder for sharpening steel at $15.00 per month.			
Compressed air received (3' x 7') at $20.00 per month.			
Westinghouse 3 kw., 300 amp., gas powered welder and generating plant at $100.00 per month.			
Motor vehicle for hauling supplies at $75.00 per month.			
Total monthly rentals	$2841.00		$10.00
Total operating equipment (rental)		$45,000.00	

	Total cost of items		Cost per foot
(5) Initial rehabilitation and repairs:			
None			
(6) New buildings, improvements, etc.:			
One Butler 14 x 40 feet for shop and change house	$2,240.00		
One Butler 14 x 20 feet for compressor	1,120.00		
Snow sheds and supply shed	1,200.00		
Total new buildings, improvements, etc.		$4,560.00	$1.01+
(7) Miscellaneous:			
Payroll taxes at $200.00 per month. Workmens compensation and liability insurance at $450.00 per month. Office work and expense at $200.00 per month.			
Total monthly miscellaneous	$850.00		$2.83
Total miscellaneous		$12,735.00	
Total cost of project		$275,820.00	$61.29

Average cost per foot of crosscut and drift is estimated at $\frac{(\$275,820)}{4,500 \text{ feet}}$ $61.29

The costs appear somewhat high and would be considered a maximum for the job. The applicant's original estimated cost of the project was at $268,035.00 or $59.56 per lineal foot.

CONCLUSIONS AND RECOMMENDATIONS

Because all workings with the exception of a short crosscut are inaccessible and existing records are incomplete and somewhat conflicting, it is concluded that neither the dip of the Frank Hough vein, nor the probable extent and type of the ore deposit can be determined at this time.

Lacking this information, a projection of the known ore bearing structure for 2,300 to 2,800 feet horizontally and 1,200 to 1,400 feet vertically cannot be made with sufficient assurance of accuracy to justify driving the 1,500 feet of crosscut and 3,000 feet of drift requested by the applicant. Therefore, it is recommended that this application be denied without prejudice to the Frank Hough ore body. Should the Frank Hough shaft and levels be rehabilitated and a proposal to explore the ore body from the shaft be submitted, consideration is recommended.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

RECEIVED
DEC 1 1955

Region III

Building 20
Denver Federal Center
Denver 2, Colorado
November 18, 1955

Memorandum

TRANSMITTED
NOV 23 1955

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA 3965 (Copper-lead) New-Mar Uranium Corporation (Frank Hough mine) Hinsdale and Ouray Counties, Colorado

Enclosed are the original and seven copies of a joint engineering and geologic report by D. R. MacLaren, geologist, and C. M. Harrer, mining engineer, covering docket DMEA 3965.

The New-Mar Uranium Corporation applied for exploration assistance to explore 18 patented lode claims in Hinsdale and Ouray Counties, Colorado, for copper and lead. The applicant proposed to extend an existing crescent adit approximately 1,500 feet to the Frank Hough vein and then drift 3,000 feet on the vein at an estimated cost of $275,820.00. A field examination was made on September 23, 1955. All the existing workings, with the exception of a short crescent, were inaccessible. The proposed work was for the purpose of cutting a known ore bearing structure from 2,300 to 2,800 feet horizontally and from 1,200 to 1,400 feet vertically from known workings.

It is concluded that neither the dip of the vein nor the probable extent or type of ore deposit can be determined at this time. It is recommended that the application be denied.

John F. Shaw
John F. Shaw
Supervising Mining Engineer

E. N. Harshman
E. N. Harshman
Member, Field Team

Enclosures

cc 7
EHHarshman
DMEA 3965
Chron

Reviewed by
DMEA OPERATING COMMITTEE
12-5-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
DEC - 1 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED
NOV 23 1955

DMEA 3965

NEW-MAR URANIUM CORPORATION

FRANK HOUGH MINE

HINSDALE AND OURAY COUNTIES, COLORADO

Copper-Lead

Joint Engineering and Geologic Report

By

D. R. MacLaren, Geologist
Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

November 18, 1955

Reviewed by
DMEA OPERATING COMMITTEE
12-5-55
(date)

DMEA 3965

RECEIVED
DEC - 1 1955

NEW-MAR URANIUM CORPORATION
FRANK HOUGH MINE
HINSDALE AND OURAY COUNTIES, COLORADO

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    Exploration and development..... 9
    Mining, milling, and other facilities..... 9
Applicant's project proposal and costs..... 10
Conclusions and recommendations..... 12

ILLUSTRATIONS

Figure — Follows page

1. Location map, New-Mar Uranium Corporation (Frank Hough mine) property, Hinsdale and Ouray Counties, Colorado..... 2

2. Claim and exploration map, New-Mar Uranium Corporation (Frank Hough mine) property, Hinsdale and Ouray Counties, Colorado..... 2

3. Plan showing geology and property boundary, New-Mar Uranium Corporation, Frank Hough mine, Ouray and Hinsdale Counties, Colorado..... 6

DMEA 3965

NEW-MAR URANIUM CORPORATION
FRANK HOUGH MINE
HINSDALE AND OURAY COUNTIES, COLORADO

RECEIVED
DEC - 1 1955

SUMMARY

New-Mar Uranium Corporation has applied for Defense Minerals Exploration Administration assistance to explore their property for copper and lead. Their contiguous group of 18 patented lode claims are in secs. 24 and 25, T. 43 N., R. 7 W., in the Galena mining district in Hinsdale and Ouray Counties, Colorado. The claims are at altitudes ranging between 11,000 and 13,000 feet above sea-level. The claims are in very rough, mountainous terrain above timberline and are accessible by truck and jeep roads from both Ouray and Lake City.

The applicant company proposes to extend an existing adit crosscut on the Calumet claim about 1,500 feet to the Frank Hough vein and then drift 3,000 feet on the vein at an over-all cost originally estimated at $268,035.00, but revised to $275,820.00.

Because all workings with the exception of a short crosscut are inaccessible and existing records are incomplete and somewhat conflicting, it is concluded that neither the dip of the Frank Hough vein, nor the probable extent or type of the ore deposit can be determined at this time. Lacking this information, a projection of the known ore bearing structure for 2,300 to 2,800 feet horizontally and 1,200 to about 1,400 feet vertically cannot be made with sufficient assurance of accuracy to justify driving the 1,500 feet of crosscut and 3,000 feet of drift requested by the applicant.

It is, therefore, recommended that this application be denied without prejudice to the Frank Hough ore body.

Should the Frank Hough shaft and levels be rehabilitated and a proposal to explore the ore body from the shaft be submitted, consideration is recommended.

INTRODUCTION

New-Mar Uranium Corporation have leased a contiguous group of 18 patented lode claims in the Galena mining district of Hinsdale and Ouray Counties, Colorado, (figure 1), and have applied for Defense Minerals Exploration Administration assistance to explore the property with a program of underground exploration at an estimated cost of $268,035.00.

The applicant's claims were examined by a joint Bureau of Mines and Geological Survey team on September 23, 1955, accompanied by Messrs. Ralph E. Simpson, H. G. Burgess and Joe R. Brown.

ACKNOWLEDGMENTS

Messrs. Ralph E. Simpson and H. G. Burgess, president and superintendent respectively of New-Mar Uranium Corporation and Joe R. Brown, owner and lessor, accompanied the examining team and contributed their knowledge of the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The group of claims leased by New-Mar Uranium Corporation are in secs. 24 and 25, T. 43 N., R. 7 W., in the Galena and Red Mountain mining districts, in Hinsdale and Ouray Counties, Colorado (figure 1).

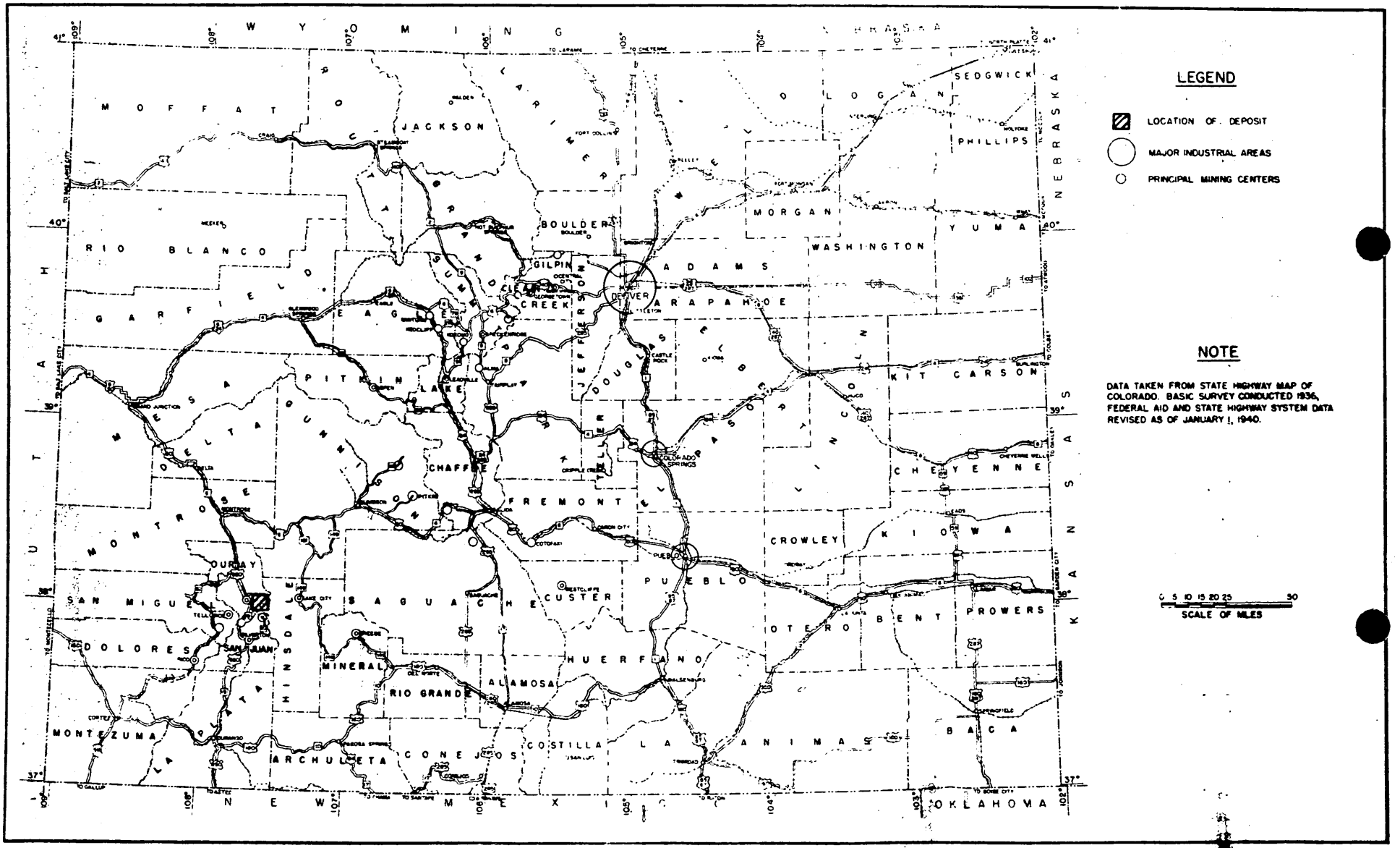


FIGURE 1 - LOCATION MAP, NEW-MAR URANIUM CORPORATION (FANK HOUGH MINE) PROPERTY, HINSDALE AND OURAY COUNTIES, COLO.
DMEA 3965

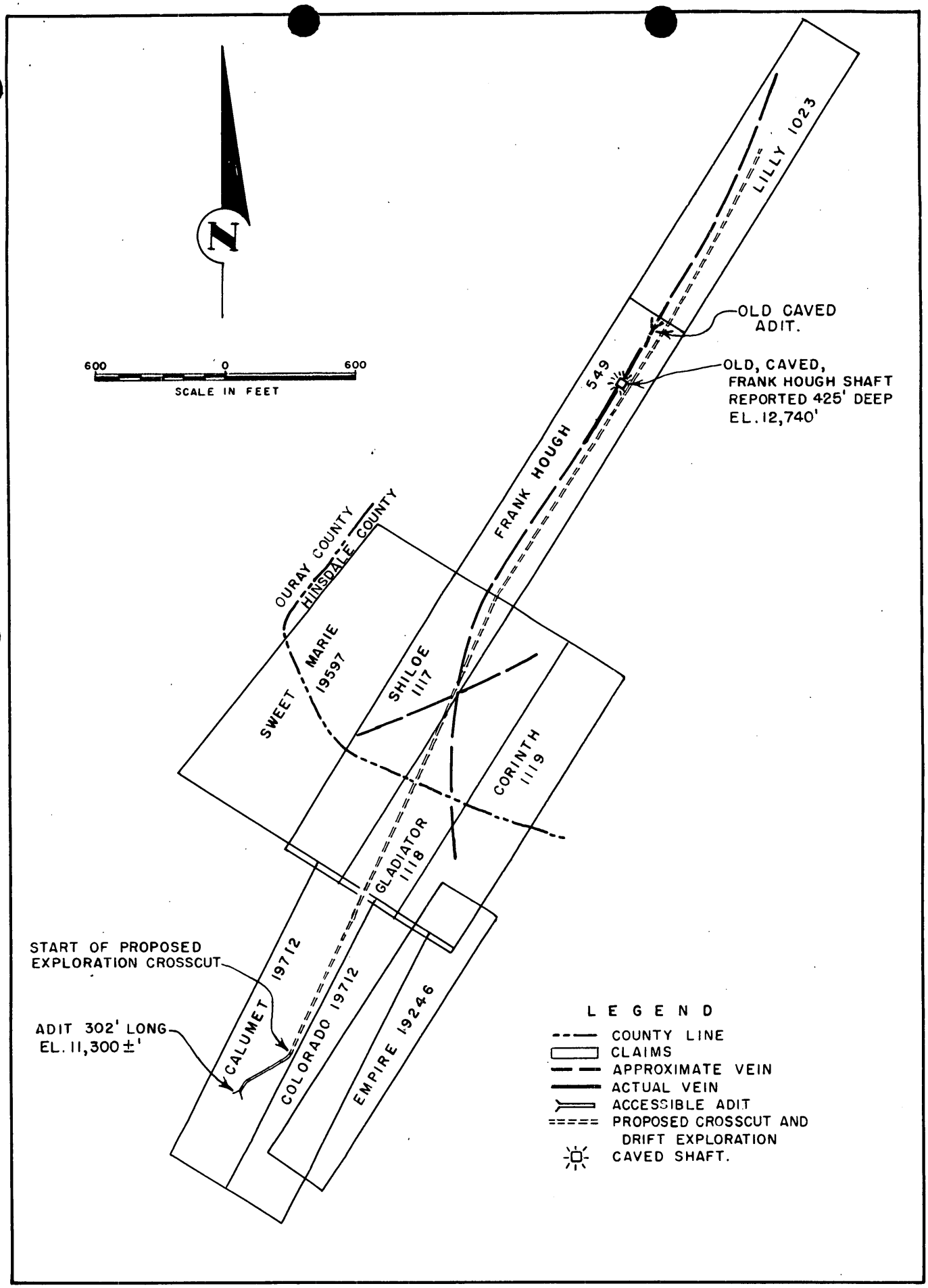


FIGURE 2 - CLAIM AND EXPLORATION MAP, NEW-MAR URANIUM CORPORATION (FRANK HOUGH MINE) PROPERTY, HINSDALE AND OURAY COUNTIES, COLO. DMEA 3965

The property is in the vicinity of Palmetto gulch and American Flats at the headwaters of Henson Creek, at altitudes ranging between 11,000 and 13,000 feet above sea-level. It is also on the northern slope of Engineer Mountain. The property is above timberline in rugged, barren mountain terrain. It is accessible over steep and narrow truck access roads from both Ouray and Lake City. Water would have to be trucked in from nearby creeks and springs. The property is reached by driving 4.4 miles south from Ouray over U. S. Highway 550 and thence 6.2 miles easterly over rough access roads to the portal of the existing adit on the Calumet claim. The Frank Hough claim and shaft are 4 road miles farther to the east in the American Flats area. Supplies and labor are available in the Ouray and Lake City areas. The nearest railroad facilities are those of the Denver and Rio Grande Western at Ridgway, Colorado, 21 to 30 miles distant.

HISTORY AND PRODUCTION

The group of patented claims held under lease by New-Mar Uranium Corporation is known as the Frank Hough group and includes the old Frank Hough mine which was discovered by Mr. J. S. Hough in January 1881. The old mine was completely inaccessible and the shaft at an altitude of 12,740 feet was caved. This shaft was last reported as 425 feet deep with working levels at 50, 80, 140 and 200 feet below its collar. The 200-foot level was reported advanced nearly 60 feet in ore. About 60 tons mined in 1882 contained 20 to 28 percent copper, a trace to 1 ounce of gold and 50 to 60 ounces of silver per ton. Production from the

property between 1881 and 1900 was reported[1] as about 2,000 tons of high grade copper-silver ore. Output of the property during the period 1908-1955 was 3,081 tons of copper-lead-gold-silver ore. Confidential statistics of production from the Frank Hough mine for this period were obtained from the Division of Mineral Industries, Bureau of Mines, Region III. Their distribution based on assay values of the ore, is as follows:

						Ounces			
	Tons	Copper		Lead		Gold		Silver	
Period	crude ore	total pounds	percent	total pounds	percent	total	per ton	total	per ton
1901-07	none	--	--	--	--	--	--	--	--
1908	344	186,744	27.1	30,507	4.4	34.60	.10	12,923	37.5
1909	1,370	708,514	24.8	88,598	3.2	185.00	.14	49,640	36.2
1910	1,055	553,514	26.3	97,961	4.6	219.00	.22	38,657	36.6
1911	31	12,000	19.4	--	--	6.01	.19	1,144	36.9
1912	20	8,771	21.9	--	--	3.77	.19	1,008	50.4
1913	127	71,920	28.3	6,198	2.4	25.58	.20	6,770	53.2
1914	65	19,830	15.3	--	--	4.65	.07	1,236	19.0
1916	26	3,852	7.4	1,691	3.3	1.44	.06	204	7.9
1917	23	3,678	8.0	570	1.2	1.44	.06	291	12.6
1918	18	3,253	9.0	950	2.6	1.30	.07	298	16.6
1920	2	718	17.9	259	6.5	.40	.20	53	26.5
1921-55	none	none	--	--	--	--	--	--	--
Totals	3,081	1,572,824		226,734		483.19		112,224	

1/ Oral communication from Jas. W. Abbott, deputy mineral land surveyor of Lake City to F. L. Ransome, U.S. Geological Survey.

OWNERSHIP

New-Mar Uranium Corporation has leased a group of 18 patented lode claims known as the Frank Hough group, from Joe R. Brown of Montrose, Colorado, for a period of 10 years. The lease was entered into on June 14, 1955, and continues until June 14, 1965, and as long thereafter as ore is produced in commercial quantities unless terminated or forfeited sonner. The claims are registered in both Hinsdale and Ouray Counties as follows:

Claim	Survey No.	County
Lilly	1023	Hinsdale
Frank Hough	549	Hinsdale
Shiloe	1117	Hinsdale and Ouray
Gladiator	1118	Hinsdale and Ouray
Corinth	1119 or 6825	Hinsdale and Ouray
Sweet Marie	19597	Hinsdale and Ouray
Colorado	19712	Ouray
Empire	19246	Ouray
Calumet	19712	Ouray
York Town	12196	Hinsdale
Jamestown	12196	Hinsdale
Guyandotte	12196	Hinsdale
Roanoke	12196	Hinsdale
Norfolk	12196	Hinsdale
Portsmouth	12196	Hinsdale
Richmond	12196	Hinsdale
Petersburg	12196	Hinsdale
Newportnews	12196	Hinsdale

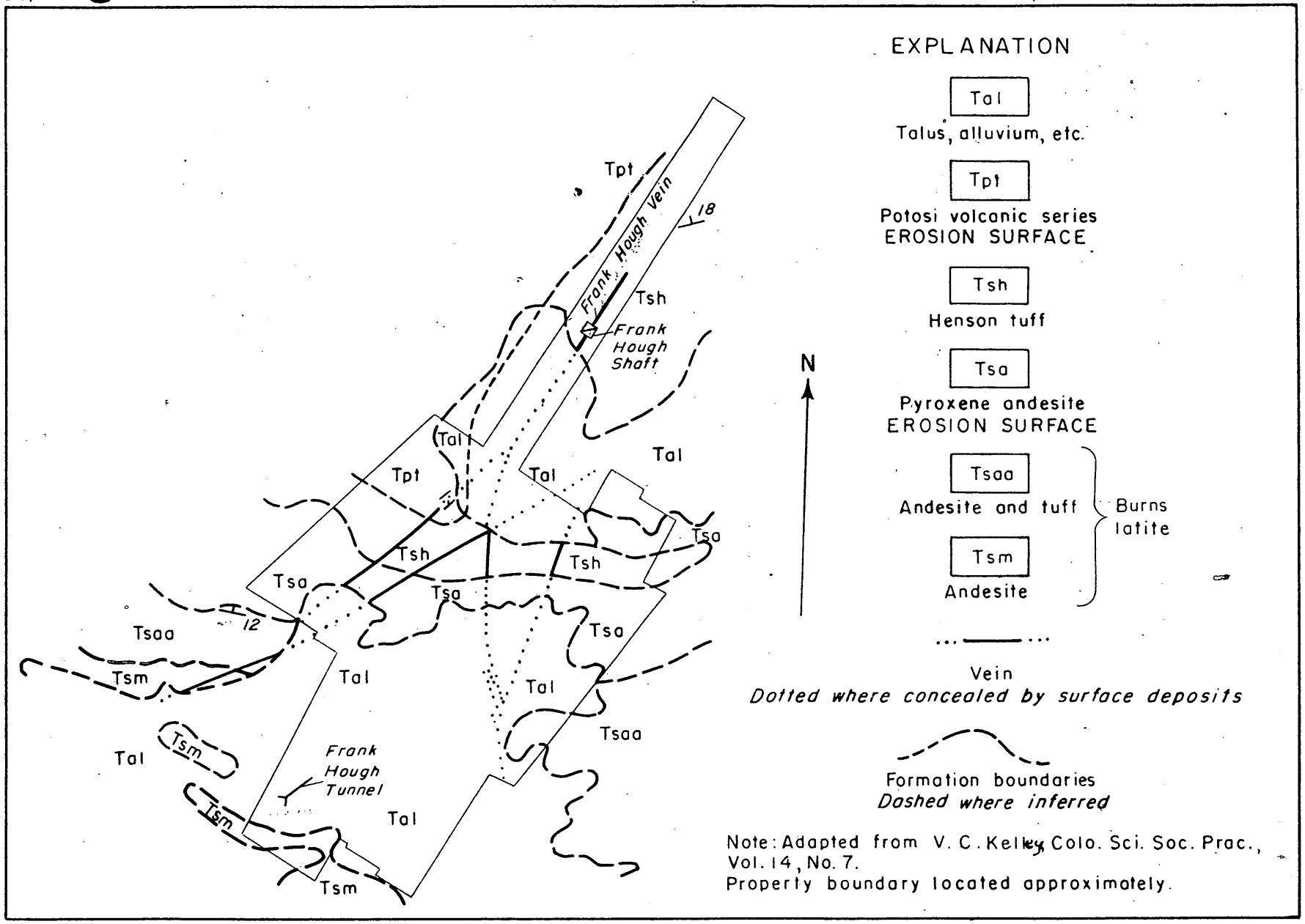
An option to purchase agreement is in affect between Joe R. Brown and J. F. Anderson of Montrose, Colorado.

New-Mar Uranium Corporation proposes an exploration program which they believe would benefit only 9 of the above group of claims. These are the Lilly, Frank Hough, Shiloe, Gladiator, Corinth, Sweet Marie, Colorado, Empire and Calumet claims, figure 2.

GEOLOGY

The geology of the Engineer Mountain area is described by V. C. Kelley in Colorado Scientific Society Proceedings, volume 14, number 7, (1946) F. L. Ransome in U. S. Geological Survey Bulletin 182, (1901), and H. C. Burchard in Report to the Director of the Mint upon the production of precious metals during the calendar year 1882, (1883). Much of the following has been drawn from these publications. Rocks in the area are andesite, tuff, and rhyolite of the Silverton and Potosi volcanic series, Miocene in age. On the applicant's claims much of the surface is covered by Pleistocene to Recent deposits of alluvium and talus, (figure 3). The Silverton volcanic series dip 10° to 20° NW and is represented by andesite and andesite tuff (Burns latite), pyroxene andesite, and Henson tuff. The andesite is grey in color, somewhat amygdaloidal in structure, and contains layers of breccia. The andesite tuff is grey amygdaloidal andesite that grades into coarse even-bedded tuff. The pyroxene andesite forms bold cliffs. It is dark grey in color and dense felsitic to porphyritic in texture except near the top of the formation where it is somewhat amygdaloidal. The Henson tuff is sandy, well stratified and locally cross-bedded. The color of the various beds may be green, buff, brown, or purple. The only representative of the Potosi volcanic series is a dense, fine grained rhyolite flow that has been whitened by alteration and dips more or less conformably with the Silverton series.

With few exceptions the fissures in the vicinity of the applicant's claims, several of which appear to be five thousand to six thousand feet long, strike N. 30° to 35° E. and dip 75° SE to vertical. In general the fissures are more numerous and more intricate in their branchings in the andesite and andesite tuff (Burns latite) than they are in the overlying



D.R. McLaren, Nov. 1955

FIGURE 3 - PLAN SHOWING GEOLOGY AND PROPERTY BOUNDARY, NEW MAR URANIUM CORP., FRANK HOUGH MINE, OURAY AND HINSDALE COUNTIES, COLORADO.

pyroxene andesite where many of them lose their identity in wide zones of altered rock. The fissure fillings are usually siliceous. The veins are vuggy and open, while banded and crusted structures are common. Ore minerals are auriferous and argentiferous sulfides that include tetrahedrite, chalcopyrite, bornite, galena and sphalerite. The gangue minerals include quartz, rhodonite, rhodochrosite, pyrite, marcasite, kaolin, and sericite. The wall rock has been altered by impregnation and replacement of one or more of these minerals. Three structural and genetic types of ore deposits are recognized in the area. They are fissure and cavity fillings, breccia chimney and breccia dike deposits and replacement deposits. Although they are generally distinct, any two or all three types may be mixed in a single deposit.

On the applicant's property (fig. 2), the Frank Hough shaft, said to be 425 feet deep, was caved at the collar and was inaccessible to the examiners. Workings from the shaft are said to consist of drifts turned at depths of 50, 80, 140, and 200 feet below the collar which is at an altitude of 12,740 feet. There is no information regarding the length of the levels or the location and size of the stopes other than Burchards brief statement that the 50-foot level exposed "12 feet of solid ore"; the 80-foot level exposed "17 feet"; the 140-foot level, "25 feet"; and the 200-foot level had been "run for 57 feet in a solid ore body". About 300 feet from the shaft in a northeasterly direction is a tunnel said to connect with the shaft on the 80-foot level. The drift was caved and inaccessible to the examiners. These workings are on the Frank Hough vein which strikes N. 30° E., the dip of which could not be determined. F. L. Ransome says on page 90 (1901) that according to Mr. Hough the vein dips about 45° W. As pointed out by Kelley, this dip is not compatable with the surface

course of this vein, or with the usual dips of other veins in the area but it is possible that this dip represents a local flexure in the vein. The southwestward course of the vein is not certian for more than 200 feet from the shaft because beyond that distance the Henson tuff is covered by talus. South and west of the talus cover are two veins, one striking N. 47° E., the other striking nearly north. Although either of these veins may be the continuation of the Frank Hough vein, it is more reasonable to believe that the N. 47° E. vein is the continuation of the Frank Hough and that the northerly striking vein is a branch or cross vein.

H. C. Burchard states on page 477 (1883) that the prospectors at the time worked on the theory that the Frank Hough ore body was "a layer in a horizontal direction", and further describes the deposit as being "no fissure vein, but one of those irregular bodies of copper ore such as are known to exist at Fahlun (Falun) in Sweden...". Ransome, on page 190 (1901) describes the ore body "from the accounts of Mr. J. S. Hough...the ore body seems to have been an irregular impregnation or replacement deposit alongside a fissure". Judging by the material seen on the dumps, Ransome's description appears to be more acceptable than Burchard's.

About 3,900 feet S. 32° W. of the Frank Hough shaft (figure 3) is a tunnel, the only working on the property accessible to the examiners. This tunnel, at an approximate altitude of 11,300 feet, has been driven entirely in andesite (Burns latite) for a distance of 300 feet from the portal on an average bearing of N. 52° E. If continued for 1,500 to 1,700 feet on the same bearing, the tunnel should pass vertically beneath the outcrop of the northerly striking branch(?) of the Frank Hough vein some 2,300 feet along the vein southwest of the Frank Hough shaft. If the tunnel is

driven about 1,200 feet northerly from the present breast, it should pass vertically beneath the outcrop of the N. 47° E. striking Frank Hough(?) vein some 2,800 feet along the vein southwest of the shaft. In either case the tunnel should intersect the vein about 1,440 feet below the collar of the shaft, or 1,200 feet below the lowest reported ore.

MINABLE ORE RESERVES

There is no basis on which to base any estimate of possible ore reserves since the Frank Hough mine workings are entirely inaccessible.

PRESENT STATUS

Exploration and Development

Work on the Frank Hough property prior to 1910 consisted of mining operations on the Frank Hough claim where a 425-foot shaft was sunk and copper-lead-gold-silver ore was mined. During 1910 the entire surface plant was destroyed by fire and active mining ceased. Between 1910 and 1920, production consisted mainly in reworking old dumps. There has been no mining activity on the property from 1920 to date and all Frank Hough mine workings are entirely inaccessible and caved. The Frank Hough mine shaft collar is at a reported altitude of 12,740 feet. An old crosscut adit, 302 feet long, is entirely accessible on the Calumet claim (figure 2), and is the start of the proposed DMEA exploration program.

Mining, Milling and Other Facilities

There are no mining, milling or other facilities on the property to date.

APPLICANT'S PROJECT PROPOSAL AND COSTS

New-Mar Uranium Corporation proposes to explore the Frank Hough vein approximately 1,500 feet below the collar of the old Frank Hough shaft or about 1,075 feet below its deepest reported workings[2 3/]. The top of the shaft is reported at an altitude of 12,740 feet. They propose to accomplish this by extending an existing crosscut adit on their Calumet claim (figure 2) for about 1,500 feet northeasterly to a junction with the Frank Hough vein and then drifting northeasterly along the vein for 3,000 feet to explore it some distance beyond the old Frank Hough shaft.

New-Mar Uranium Corporation estimates the cost of this project at $268,035.00. They propose to work on a two-shift basis. Costs are distributed according to a letter dated September 27, 1955 as follows:

	Total cost of items		Cost per foot
(1) Independent contracts:			
Contract for drilling, blasting, and mucking, with all equipment and supplies furnished. $20.00 per lineal foot of 5 x 7-foot cross section of drift or crosscut.	$90,000.00		$20.00
Total independent contracts		$90,000.00	
(2) Labor, supervision and technical services:			
Labor - three laborers will be employed per shift to tram muck, install track, pipe, etc., haul supplies and take care of operating equipment. Cost will be $18.25 per man shift, or $11.00 per foot of advance.	$49,500.00		$11.00

2/ Ransome, Frederick Leslie, Economic Geology of the Silverton Quadrangle, Colorado. U. S. Geological Survey Bulletin 182, Series A. Econ. Geol. 12 (1901) pp. 189-191.

3/ Kelley, V. C., Geology, Ore Deposits and Mines of the Mineral Point, Roughkeepsie and Upper Uncompahgre Districts, San Juan, Hinsdale Counties, Colorado. Colo. Sci. Soc. Proc., Vol. 14, No. 7 (1946).

	Total cost of items		Cost per foot
Supervision - a superintendent at $600.00 per month or $2.00 per foot of drift.	$9,000.00		$2.00
Technical services - 1 engineer, 4 days per month at $50.00 per day. 1 geologist, 4 days per month at $50.00 per day. Total technical services estimated at $1.50 per foot	$6,750.00		$1.50
Total labor, supervision and technical services		$65,250.00	

(3) Operating materials and supplies:

Timber	None		
Explosives at $4.50 per foot	$20,250.00		
Pipe (20-inch, galvanized, ventilating) at $2.50 per foot	11,250.00		
(3-inch aluminum compressed air line, complete) at $1.50 per foot	6,750.00		
Track - (20-pound rail, complete with ties, spikes, plates, bolts) at $1.75 per foot	7,875.00		
Drill steel and bits at $1.50 per foot	6,750.00		
Fuel - diesel fuel, gasoline and lubricants at $11.84 per day or $1.20 per foot	5,400.00		$12.95
Total operating materials and supplies		$58,275.00	

(4) Operating equipment:

Rental:			
600-c.f.m. compressor at $931.00 per month.			
Sutorbuilt ventilation blower rated 4,000 c.f.m. at 10 pounds pressure with 100 H.P. gasoline motor - $400.00 per month.			
Battery trammer at $400.00 per month.			
Eimco model 21 loader at $300.00 per month.			
Ten 40-cubic foot side dump mine cars at $300.00 per month.			
Four 55-pound pneumatic rock drills with jacklegs at $300.00 per month.			
Grinder for sharpening steel at $15.00 per month.			
Compressed air received (3' x 7') at $20.00 per month.			
Westinghouse 3 kw., 300 amp., gas powered welder and generating plant at $100.00 per month.			
Motor vehicle for hauling supplies at $75.00 per month.			
Total monthly rentals	$2841.00		$10.00
Total operating equipment (rental)		$45,000.00	

	Total cost of items		Cost per foot
(5) Initial rehabilitation and repairs:			
None			
(6) New buildings, improvements, etc.:			
One Butler 14 x 40 feet for shop and change house	$2,240.00		
One Butler 14 x 20 feet for compressor	1,120.00		
Snow sheds and supply shed	1,200.00		
Total new buildings, improvements, etc.		$4,560.00	$1.01+
(7) Miscellaneous:			
Payroll taxes at $200.00 per month. Workmens compensation and liability insurance at $450.00 per month. Office work and expense at $200.00 per month.			
Total monthly miscellaneous	$850.00		$2.83
Total miscellaneous		$12,735.00	
Total cost of project		$275,820.00	$61.29

Average cost per foot of crosscut and drift is estimated at $\frac{\$275,820}{4,500 \text{ feet}}$ $61.29

The costs appear somewhat high and would be considered a maximum for the job. The applicant's original estimated cost of the project was at $268,035.00 or $59.56 per lineal foot.

CONCLUSIONS AND RECOMMENDATIONS

Because all workings with the exception of a short crosscut are inaccessible and existing records are incomplete and somewhat conflicting, it is concluded that neither the dip of the Frank Hough vein, nor the probable extent and type of the ore deposit can be determined at this time.

Lacking this information, a projection of the known ore bearing structure for 2,300 to 2,800 feet horizontally and 1,200 to 1,400 feet vertically cannot be made with sufficient assurance of accuracy to justify driving the 1,500 feet of crosscut and 3,000 feet of drift requested by the applicant. Therefore, it is recommended that this application be denied without prejudice to the Frank Hough ore body. Should the Frank Hough shaft and levels be rehabilitated and a proposal to explore the ore body from the shaft be submitted, consideration is recommended.

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

RECEIVED
SEP 1 3 1955

September 16, 1955

Yosemite
Betty

Docket

2th New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw
E. N. Harshman

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3965 (Copper-Lead), Mew-Mar Uranium Corporation, Frank Keough Mine, Ouray County, Colorado

Enclosed is a copy of a letter from the Chairman of the Operating Committee with attached pertinent memoranda.

The brochure was forwarded you September 2, 1955 requesting a field examination and suitable report.

W. M. Irwin
W. M. Irwin

Enclosure

WMC:ab
cc: Chair. Opr. Comm. (2)
Docket 3965
Chron.

File Copy
Surname

Samuel
Jones
Selfridge
Kilmer

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

SEP 13 1955

Mr. Wm. L. Branch
Attorney at Law
Farmers Union Building
Denver, Colorado

Re: Docket No. DMEA-3965 (Copper-Lead)
New-Mar Uranium Corporation
Frank Hough Mine
Ouray County, Colorado

Dear Mr. Branch:

Mr. James D. Parriott, Jr. has forwarded me your letter of September 1, regarding the application for the New-Mar Uranium Corporation, for DMEA participation in an exploration project.

We are fowarding it, with a recommendation for a field examination to:

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

We note your request for an early field examination and we are sure that Mr. Traver will do the best he can, within the limits of his work load and his available personnel.

Sincerely yours,

C. O. Mittendorf

Administrator

WRGriswold/er 9/12/55
Copy to: Admr R File
Docket
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

R.C.S.

File Copy
Surname

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

SEP 13 1955

Mr. Ralph E. Simpson, President
New-Mar Uranium Corporation
Post Office Box 1599
Grand Junction, Colorado

Re: Docket No. DMEA-3965 (Copper-Lead)
New-Mar Uranium Corporation
Frank Hough Mine
Ouray County, Colorado

Dear Mr. Simpson:

Your application for Government assistance to explore your property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration and has been referred for a field examination to:

Mr. Wm. H. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

The Regional Office will contact you at an early date as to when an examination is to be made. Any assistance that you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

WRGriswold/er 9/12/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Pennington, USBM
Mr. Kiilsgaard, USGS
Region III, (2)
Chron.

R.C.H.

File Copy
Sunname

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Hiawat
Selfridge
HE Johnson

SEP 13 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-3965 (Copper-Lead)
New-Mar Uranium Corporation
Frank Hough Mine
Ouray County, Colorado

Dear Mr. Traver:

Referring to the cited application, we are enclosing the memorandums of Mr. N. E. Nelson, USGS, dated September 8, and Mr. James W. Pennington, USBM, dated September 9. We are also enclosing copies of a letter from Mr. Wm. L. Branch, dated September 1 and copies of Mr. Parriott's reply, dated September 7.

You will note that both reviewers recommend a field examination in which we concur. With regard to the request that a field examination be made in the very near future, we must leave this to your own good judgment. Beyond doubt the contention that an early examination is desirable, due to climatic conditions, is well founded. Nevertheless, we have no desire to require you to disrupt your orderly and proper procedure in such matters.

With reference to the Applicant's proposal, we are quite in accord with the reviewers that it seems overly ambitious. The idea of drifting and crosscutting some 4,500 feet seems very much like a wild "shot in the dark" in this case. Very likely something more logical could be worked out, if any work seems warranted.

We are enclosing copies of our letter to the Applicant and to Mr. Wm. L. Branch.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (24B)

Enclosures

APPROVED:

P. F. Yopes (24B)
Member, Bureau of Mines

/s/ N. E. Nelson (24S)
Member, Geological Survey

Mr. Pennington, USBM
Mr. Kilsgaard, USGS
Chron.

WRGriswold/er 9/12/55
Copy to: Docket
Admr R. Rile
Op. Committee
Base Metals

RC

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

September 9, 1955

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: DMEA Application, Docket No. 3965 (Copper-Lead), New-Mar Uranium Corp., Frank Hough, No. 549 Mine, Hinsdale and Ouray Counties, Colorado

According to the company's application, it is proposed to drift about 4,500 feet in an estimated 18 months. This represents a rate of 250 feet per month as compared to their estimated monthly footage of 280. At the lower rate the cost per foot would be increased from $55.15 to $56.05. Neither of these is an excessive amount for this area. However, the higher figure would increase the total cost of the project from $268,035 to $272,085.

Available information on this mine differs in a few respects from that supplied with the application. For example, it is stated in the literature that a drift adit 290 feet in length exists at an altitude of 12,660 feet (80 feet lower than the shaft elevation) along the vein to the shaft. This adit is not mentioned in the application. However, the applicants propose to extend an existing 300 foot tunnel, not mentioned in the literature, on the south side of the mountain. Perhaps the location of one of these tunnels has been in error and only one actually exists.

From all indications, the ore produced at the Frank Hough mine was high grade and contained copper, silver, gold and minor amounts of lead and zinc. Prior to 1900, an estimated 2,000 tons of high grade ore was mined. From 1908 to 1920, inclusive, 1,572,824 pounds of copper, 112,224 ounces of silver, 483 ounces of gold, and 226,734 pounds of lead were produced from 3,081 tons of ore.

Although the strike of the vein has been fairly well established on the surface, the dip appears to be indefinite. Determination of the dip seems important in that the applicant proposes to construct the tunnel about 1,500 feet below the surface at the site of the shaft.

To clarify these apparent discrepancies and to obtain essential information of the property, it is recommended that the application be referred to the Field Team for examination.

James W. Pennington

James W. Pennington

Copy to: Division of Minerals
Branch of Base Metals
H. M. Meyer
F i l e s
Thor Kiilsgaard, U. S. G. S.

September 9, 1955

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: DMEA Application, Docket No. 3965 (Copper-Lead), New-Mar Uranium Corp., Frank Hough, No. 549 Mine, Hinsdale and Ouray Counties, Colorado

According to the company's application, it is proposed to drift about 4,500 feet in an estimated 18 months. This represents a rate of 250 feet per month as compared to their estimated monthly footage of 280. At the lower rate the cost per foot would be increased from $55.15 to $56.05. Neither of these is an excessive amount for this area. However, the higher figure would increase the total cost of the project from $268,035 to $272,085.

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To clarify these apparent discrepancies and to obtain essential information of the property, it is recommended that the application be referred to the Field Team for examination.

Signed

James W. Pennington

HWPennington/vr

Copy to: Division of Minerals
Branch of Base Metals
H. M. Meyer
F i l e s
Thor Killsgaard, U. S. G. S.

IN REPLY REFER TO:

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

RECEIVED
SEP - 9 1955
Griswold

September 8, 1955

Re: DMEA 3965
New-Mar Uranium Corp.
Frank Hough Deposit
Ouray Co., Colo.
$268,035 - Copper, Lead

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of application.

The Frank Hough mine is credited with the highest production of the mines of its immediate area -- the Engineer Mountain area. The production from 1908 to 1920, inclusive, amounted to 3,081 tons containing

483.19	ozs.	gold
112,224	"	silver
1,572,824	lbs.	copper
226,734	"	lead.

The total production from 1881, the year of discovery, to 1920 is estimated to be $600,000. Ransome reported (A report on the geology of the Silverton Quadrangle: U. S. Geol. Survey Bull. 182, 1901, p. 190) a production of 2,000 tons of high-grade copper and silver ore up to 1900. The mine is reported to have a 425- or 525-foot shaft with drifts on the 50, 80, 140 and 200-foot levels.

The work program outlined in the application, 3,000 feet of tunnel and 1,500 feet of crosscutting at a depth below the shaft collar of 1,500 feet, is ambitious considering the 5,000 ton production. V. C. Kelley, 1946, Geology, Ore Deposits and Mines of Mineral Point, Poughkeepsie and Upper Uncompahgre Districts, Colo., Colorado Scientific Society, Proceedings, Vol. 14, No. 7, says the dip of the "vein" is not definitely known. One report gives it as 45° northwest, another says the "vein" is horizontal, it is no fissure vein, the orebody is chimney type, etc. Since the location of the stopes are indefinite, the position of a downward extension of the orebody, especially at a point 1,300 feet below, is too indefinite to justify speculation.

If other targets are within the range of possibility such are not mentioned. Apparently the Frank Hough vein is the target.

Referral to the Field Team is recommended. A lesser program involving diamond drilling in the vicinity of the shaft may be warranted.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

September 8, 1955

Re: [redacted] 3965
Ner-Mar Uranium Corp.
Frank Rough Deposit
Ouray Co., Colo.
$268,035 - Copper, Lead

Memorandum

To: W. R. Griswold, Bureau Minerals Exploration Administration

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

Subject: Review of application.

The Frank Rough mine is credited with the highest production of the mines of its immediate area -- the Engineer Mountain area. The production from 1908 to 1920, inclusive, amounted to 3,081 tons containing

463.19	ozs.	gold
112,824	"	silver
1,572,684	lbs.	copper
226,734	"	lead.

The total production from 1881, the year of discovery, to 1920 is estimated to be $600,000. Burnam reported (A report on the geology of the Silverton Quadrangle: U. S. Geol. Survey Bull. 182, 1901, p. 190) a production of 2,000 tons of high-grade copper and silver ore up to 1900. The mine is reported to have a 485- or 585-foot shaft with drifts on the 50, 80, 140 and 200-foot levels.

The work program outlined in the application, 3,000 feet of tunnel and 1,500 feet of crosscutting at a depth below the shaft collar of 1,500 feet, is ambitious considering the 3,000 ton production. V. C. Kelley, 1946, Geology, Ore Deposits and Mines of Niwanal Point, Poughkeepsie and Upper Uncompahgre Districts, Colo., Colorado Scientific Society, Proceedings, Vol. 14, No. 7, says the dip of the "vein" is not definitely known. One report gives it as 45° northwest, another says the "vein" is horizontal, it is no fissure vein, the orebody is chimney type, etc. Since the location of the stopes are indefinite, the position of a downward extension of the orebody, especially at a point 1,300 feet below, is too indefinite to justify speculation.

If other targets are within the range of possibility such are not mentioned. Apparently the Frank Keough vein is the target.

Referral to the Field Team is recommended. A lesser program involving diamond drilling in the vicinity of the shaft may be warranted.

M. E. Nelson

M. E. Nelson

MENelson:iml
G-9/8/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
H. M. Meyer, 3623

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON 25, D. C.

RECEIVED
SEP 9 1955

Greenfield
Betty

September 7, 1955

3965
Docket

Mr. Wm. L. Branch
Attorney at Law
Farmers Union Building
Denver, Colorado

Dear Bill:

I have your letter of September 1, in which you discuss the DMEA application of the New-Mar Uranium Corporation.

I will refer your letter to Mr. C. O. Mittendorf, Administrator of DMEA and I think that he will give it the proper attention. You can probably appreciate the situation with respect to uranium applications in DMEA. The mountain to which you referred does exist and most of the uranium applications in it need expeditious field examination. However, I am sure that Mitt will do his best within the situation.

Please give my best to the family.

Yours faithfully,

James D. Parriott Jr.

James D. Parriott, Jr.
Associate Solicitor
for Public Lands

WM. L. BRANCH
ATTORNEY AND COUNSELOR AT LAW
FARMERS UNION BUILDING
DENVER, COLORADO

RECEIVED
SEP - 8 1955

September 1, 1955

Mr. James D. Parriott
3739 Ingalls Avenue
Alexandria, Virginia

Dear Jim:

New-Mar Uranium Corporation, a company in which I am quite interested, filed yesterday an application for DMEA loan on a copper mine near Ouray. The project appears to be a very worthy one and in preliminary fashion the response of the local Bureau of Mines office was most favorable. The property is in fairly high country. The company would therefore like to expedite the field examination by the bureau engineers, if it is at all possible. In some years the property itself becomes snow-covered around October 1st, although access to the point of proposed work remains good throughout the winter. If there is any way by which field examination could be arranged for prior to other considerations of the application so that the examination could be made prior to October 1st, we would certainly appreciate it.

I hope I am not imposing upon you by asking your advice as to what can be done to obtain early field examination and also by suggesting that you might be able to keep this phase of the company's application from getting buried under a mountain of uranium applications.

Best personal regards,

Bill

Wm. L. Branch

WLB:g

Subject: Exploration
Re: Frank Hough No. 549

New-Mar Uranium Corporation
P.O. Box 1599
Grand Junction, Colorado

September 6, 1955

Gentlemen:

The receipt of your application dated August 15, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3965 and referred to the Base Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

September 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III

DMEA-3965 New-Mar Uranium Corporation

Robert E. Adams,
Chief, Operation's Control
and Statistics Division

September 2, 1955

Memorandum

Docket

Knowles
Betty

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 3965, New-Mar Uranium Corporation (Copper-Lead), Hinsdale and Ouray Counties, Colorado

The Executive Officer has transmitted his office copy of the subject application in the amount of $268,035.00, consisting of the following:

1. Form MF-103 and accompanying information
2. Letter of transmittal from the applicant
3. Copy of lease dated June 14, 1954
4. Copy of Option Agreement dated July 1, 1955
5. Print of claim map showing proposed work
6. Copy of Executive Officer's memo of transmittal

The property included in this application is situated on Engineer Mountain, Ouray and Hinsdale Counties, Colorado at a very high elevation. The Executive Officer suggests that you may deem it advisable to proceed with the examination before the application has been docketed, by the Washington office.

A field examination and suitable report will probably be required. The completed report should be forwarded directly to the Executive Officer with a copy of the memo of transmittal to this office.

W. H. King

W. H. King

Enclosures

Copy to: E. N. Harshman
W. M. Traver (3)
Sec. Op. Comm. (2)

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

RECEIVED
SEP - 6 1955

224 New Customhouse
Denver 2, Colorado

September 1, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Copper-Lead), New-Mar Uranium Corporation, Hinsdale and Ouray Counties, Colorado.

Enclosed are three copies of the subject application in the amount of $268,035.00. One copy of the application is retained in our files.

The applicant has been advised that the difference in cost between a normal exploration drift and the proposed 7 X 8 foot drift would have to be borne entirely by the operator.

W. M. Traver

W. M. Traver

UNITED STATES DEPARTMENT OF THE INTERIOR

RECEIVED
SEP - 6 1955

224 New Customhouse
Denver 2, Colorado

September 1, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Copper-Lead), New-Mar Uranium Corporation, Hinsdale and Ouray Counties, Colorado.

Enclosed are three copies of the subject application in the amount of $268,035.00. One copy of the application is retained in our files.

The applicant has been advised that the difference in cost between a normal exploration drift and the proposed 7 X 8 foot drift would have to be borne entirely by the operator.

W. M. Traver

W. M. Traver

Enclosures

JDC:jy

cc: Harshman
Docket
Chron.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd.
Form Approved.
Budget Bureau No. 42-R1035.2.
SEP 1 1955

RECEIVED
SEP - 6 1955
BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant.

Docket No. 3965
Metal or Mineral Copper Lead
Date Received 9-6-55
Estimated Cost 268,035.00
Participation (Government %) 50

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: New-Mar Uranium Corporation
P.O. Box 1599
Grand Junction, Colorado

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

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

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

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

(*e*) If you own the land, describe any liens or encumbrances on it

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

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

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

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

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

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

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

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

(*c*) The work will start within 30 days and be completed within 18 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated Aug. 15, 1955

New-Mar Uranium Corp.
(Applicant)

By Ralph E. Simpson
Pres.

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

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

NEW-MAR URANIUM CORPORATION

1134 Independent Ave. P.O. Box 1599

Grand Junction, Colorado

RECEIVED SEP - 6 1955

August 15, 1955

U.S. Department of the Interior
Defence Minerals Exploration Adm.
New Customs Building
Denver, Colorado

Gentlemen:

We are herewith submitting an application for D.M.E.A. Loan to drive an exploration tunnel on the South side of Engineer Mountain, in Ouray County, Colorado.

The tunnel site selected is the same site used by the old company when they operated the Frank Hough mine by a shaft on the North side of Engineer Mountain. Due to the extreme elevation of the shaft, the water problem in the shaft, and the squeezy ground the old company started the tunnel that we now propose to extend.

The Frank Hough ore deposit has been described as a chimney type. The main ore body was 12 feet wide at the surface and 57 feet wide at the 200 foot level. At the surface the formation is called Henson Tuff and the tunnel site it appears to be andesite. According to experience in the area there is no evidence to prove that the veins and ore doesn't go down to and below our proposed tunnel site. There are a number of mines close by that are in the Andesite at or near the tunnel elevation. Also, there are mines in the underlying Rhyolite and still lower in the various formations.

According to our calculations the tunnel will be approximately 1500 feet below the collar of the shaft when we reach that point and it will give us about 1000 feet of backs to the lowest workings in the shaft. We believe the distance from the portal of the tunnel to directly under the shaft to be approximately 4000 feet air line.

The approximate distance from the face of the proposed tunnel to where we expect to encounter the Frank Hough vein on the South side of the mountain is 1500 feet. The tunnel was started by the old company who operated the mine and it is 300 feet long. From the place where we expect to find the vein we propose to drive the tunnel 3000 feet along the vein and this should extend the tunnel several hundred feet beyond the old shaft.

While we believe this proposed project to be speculative we think the chances of gain are exceptionally good. If the ore goes down to the tunnel level we estimate the potential ore to be in excess of 500,000 tons of better than $100.00 per ton. So, we think the risk involved is small compared to the possible gain.

Respectfully submitted,

NEW-MAR URANIUM CORPORATION

Ralph E. Simpson

Ralph E. Simpson, President

RES:mf

NEW-MAR URANIUM CORPORATION

D.M.E.A. LOAN APPLICATION

#1 New-Mar Uranium Corporation. 1134 Independent, P.O. Box 1599
Grand Junction, Colorado

#1B A Colorado Corporation

#1C Ralph E. Simpson, President and Treasurer, Grand Junction, Colorado.
Arthur P. Starr, Vice President Austin, Colorado
Harry L. Palmer, Secretary Cedaredge, Colorado

#2 General Instructions.

#3 Patented Claims situated in Hinsdale County, Colorado, in the Gelena Mining District:

Lilly	Survey No.	1023
Frank Hough	"	549
Shiloe	"	1117
Gladiator	"	1118
Corinth	"	1119

Claims in Ouray County, Colorado, Gelena Mining District

Sweet Marie	Survey No.	19597
Shiloe	"	1117
Gladiator	"	1118
Calumet	"	19712
Corinth	"	1119
Colorado	"	19712
Empire	"	19246

#3B Frank Hough, No. 549

#3C Lessee

#3D Copy of lease with application

#3E No liens

#4 No operation on property now. A shaft of 525 feet deep sunk on the Frank Hough vein with four drifts from shaft at various levels - 50, 80, 140 and 200 feet. Altitude at shaft 12,740 feet. No buildings at shaft site now. The shaft is caved and is inaccessible.

#4B We have been unable to obtain correct ore production, but we would like to refer you to - Colorado Scientific Society Proceedings Volume 14, No. 7 by V. C. Kelley.

#4C Please refer to publication described under 4-B for geology, type of deposit, etc.

#4D Our site of proposed exploration work is ten miles from Ouray, Colorado, four miles of which is over oiled road and six miles mountain road up Poughkeepsie Gulch which is passable by car. Shipping point at Ridgeway, Colorado, Rio Grande Railroad standard gauge. Residence at Ouray, Colorado. Supplies at Ouray and Grand Junction, Colorado, the latter is 113 miles.

#4E Manpower at Ouray, Colorado. Water at mine. Will use diesel power.

#5A Minerals to be explored - Copper mainly, Silver, Gold, Lead, Zinc.

#5B A map is herewith provided showing veins, tunnel site and approximately the distance of proposed drifting. About 1500 feet of crosscut tunnel and 3000 feet of exploration on the vein. The tunnelsite is on the South side of Engineer Mountain at about 1500 feet lower elevation than the old shaft. We propose to drift under the shaft and beyond the shaft several hundred feet for a overall total of about 4500 feet.

#5C If loan is approved we will start work within 30 days after approval. We esitmate the work to take 18 months.

#5D Ralph E. Simpson, President and Manager of the company has had twenty years experience in metal mining. H. G. Burgess also has had at least twenty years experience in hard rock mining in the capacity as Foreman or Superintendent. Burgess has been in charge on many tunnel projects. He will supervise the work.

#6 It will, no doubt be more advantageous to estimate the cost of the tunnel on a footage basis and make our application for loan accordingly at so much per foot.

#6A At this time we do not know whether or not we can contract the tunnel work for all or part, therefore, we are making our estimate figuring from a company operation standpoint.

#6B Labor - Drilling - Mucking $20.00 per tunnel foot.
Supervision and Engineering $3.50 per tunnel foot.
Labor - Hanging Vent Line - installing track and air line and tramming per tunnel foot $11.00.

#6C Mine rail 20 lb., plates, bolts, spikes and ties per tunnel foot $1.75. Vent pipe and air line per tunnel foot $4.00. Powder, caps, fues per tunnel foot $4.50. Drill steel and bits per tunnel foot $1.50. Fuel for compressor motor and ventilating motor per tunnel foot $1.20.

#6D Rental compressor per month $750.00. Ventilating blower and motor $300.00, Mucking machine $300.00, 4 Drills, $200.00, Trammer $300.00 and ten mine cars, $300.00, making a total of $2150.00 per month rental for equipment divided by estimated monthly footage of 280 feet equals $7.70 per foot of tunnel.

Recap of 6B,C,D equals $55.15 cost per foot of tunnel construction. Tunnel dimension to be 7 x 8 feet.

#6E Rehabilitation and Repairs - Company doing this at own expense.

#6F New Buildings: Shop and dry room, size 14' x 40', cost $2240.00.
Compressor House, 14' c 20', cost $1120.00.
Snow sheds and timbering at tunnel portal, cost $1200.00.

#6G Accounting, $200.00 per month. Workmens Compensation $450.00 per month. Payroll taxes $200.00 per month.

#6H None

#7A Yes

#7B Money and the use of equipment. We propose to furnish all the required equipment and construct the tunnel on a footage basis.

Total cost of project $ 268,035.00

MINING LEASE

RECEIVED
SEP - 3 1955

THIS AGREEMENT, Made and entered into this 14th day of June, 1955, by and between JOE R. BROWN, Box 173, Montrose, Colorado, hereinafter designated as Lessor, and NEW-MAR URANIUM CORPORATION, a Colorado corporation, of Grand Junction, Colorado, hereinafter designated as Lessee, IS TO WITNESS:

That in consideration of the sum of Seven Thousand Five Hundred ($7500.00) Dollars to be paid as hereinafter provided and the other considerations hereinafter set forth, Lessor does hereby lease and demise unto Lessee the following described Mining Claims situated in Hinsdale County and Ouray County, Colorado, to-wit:

In Hinsdale County:

Claim Name	Survey Number
York Town Lode	12196
Jamestown	12196
Guyandotte	12196
Roanoke	12196
Norfolk	12196
Portsmouth	12196
Richmond	12196
Petersburg	12196
Newportnews	12196
Lilly Lode	1023
Frank Hough	549
Shiloe Lode	1117
Gladiator	1118
Corrinth Lode	6825 or 1119

all of said property being located in the Galena Mining District;

In Ouray County:

Sweet Marie	19597
Shiloe	1117
Gladiator	1118
Calumet	19712
Corinth	1119
Colorado	19712
Empire	19246

That upon the execution of this Lease, Lessee shall pay to Lessor the sum of Five Thousand ($5000.00) Dollars, receipt

of which is hereby acknowledged, and does hereby promise and agree to pay Lessor the further sum of Two Thousand Five Hundred ($2500.00) Dollars on or before July 14, 1955, in cash and, at the option of Lessor and upon his request, to deliver to him Two Thousand Five Hundred ($2500.00) Dollars of common stock in the Lessee Corporation at the rate of Twelve (12¢) Cents per share. In addition to said cash consideration, Lessee further agrees to pay Lessor a Ten (10%) per cent royalty of the net smelter returns on all minerals mined and produced from said Claims, said royalty to be apyable at the smelter direct to said Lessor.

To have and to hold unto Lessee for the purpose of mining, removing and selling ore therefore for a term of Ten (10) years beginning at noon on the day of the date hereof and continuing to and until noon on the 14th day of June 1965, and as long thereafter as ore is mined and produced in commercial quantities unless said Lease is sooner forfeited or terminated in accordance with the terms hereof.

In consideration of such demise and of the covenants mutually to be performed, Lessor and Lessee hereby covenant and agree each with the other as follows, to-wit:

FIRST: That Lessee agrees to enter upon and take possession of the demised premises immediately upon the execution of this Lease and to proceed with due diligence with the commencement of mining operations within Sixty (60) days from this date.

SECOND: Lessor agrees to furnish an Abstract of Title continued to date on the Hinsdale County Mining Claims showing good and merchantable title vested in him and to furnish satisfactory evidence of his ownership of the Ouray County Mining Claims.

THIRD: Lessee agrees to carry and amintain full Workmen's Compensation Insurance in conformity with the laws of the

State of Colorado and to carry and maintain Public Liability Insurance on its operations of said Claims and to fully comply with the Mining Laws of the State of Colorado relating to mining and safety regulations.

FOURTH: Lessee agrees to post notices in at least three conspicuous places on the property showing that the property is being operated by the Leasee and that all creditors must look to the Lessee for payment of any accounts incurred after operations are commenced by the Lessee. Lessee further agrees to hold and save harmless Lessor from any and all claims or demands arising or growing out of the exploration, development and operation of said property by the Lessee.

FIFTH: Lessee agrees to comply with all Federal and State Laws, including any laws relating to Social Security, Unemployment Compensation and Withholding Tax.

SIXTH: Lessee shall allow Lessor or his agent, at all reasonable times to enter upon and into any and every part of said property for the purpose of inspection, sampling and surveying. Lessor shall be furnished duplicates of all maps, engineer reports, core loggings, and assays, including assays of cores and core sludge, and may also examine all cores and loggings upon demand. Lessee shall also furnish Lessor with duplicate copies of all settlement sheets for ores sold from the demised premises.

SEVENTH: Lessee agrees to work said property mine fashion, in manner necessary to good and economical mining so as to take out the greatest amount of ore possible with due regard to the development and preservation of the same as workable mine property. Lessee also agrees to timber underground whenever and wherever necessary, if good mining practice, under the circumstances then obtaining, should so indicate.

EIGHTH: To install and maintain full and complete

books of account covering all phases of development and operation of the mines, mining claims and mining property, which said books shall be open to the inspection of the Lessor at any and all reasonable times, and to furnish the Lessor, after taking possession of the property for mining purposes, a monthly report of all operations.

NINTH: Lessor further agrees that upon the expiration of the ten year primary term of this Lease, that no formal extension shall be required to continue and extend said Lease, provided that Lessee is mining and producing ore in commercial quantities and that this Lease then be in good standing and all of the terms thereof have been performed and are being performed by said Lessee.

TENTH: Lessee will pay all taxes assessed against the demised property and improvements and other property placed thereon by Lessee during the continuance of this Lease and, further, shall pay all taxes and fees levied by any Government or agency thereof by reason of Lessee's operations hereunder.

ELEVENTH: Lessee shall occupy and hold all lodes, spurs or mineral deposits, cross or parallel, of any kind or nature, which may be discovered by said Lessee or any person in privity with it, in any manner, by working within or from the demised ground, as the property of the said Lessor, with the privilege to the said Lessee to work and mine the same as part of the aforesaid demised premises.

TWELFTH: In the event Lessee elects to terminate this Lease upon the expiration of the primary term, then said Lessee shall deliver all of the property hereinabove described, together with the appurtenances and improvements now on the property or hereafter to be constructed or installed thereon by Lessee during its possession of said property in as good order and condition, ordinary wear and tear excepted, as the premises were

in at the beginning of the term hereof and the mine or mines ready for continual work, acts of God, unavoidable actions of the elements and accidents not arising from negligence excepted.

THIRTEENTH: It is agreed that should the Lessee desire to surrender this Mining Lease and all of its rights hereunder unto the Lessor at any time during the term of this Lease, prior to any such surrender, the Lessee shall give the Lessor Sixty (60) days written notice of Lessee's intention to terminate said Lease and surrender up said leased premises, provided, however, that such surrender or termination of said Lease shall not operate to release or discharge the Lessee of liability for default upon its part occurring prior to the time of such surrender or termination, but shall only relieve Lessee of the obligation of further development of the demised premises. The Lessee shall have the right following surrender of the demised premises, whether at the end of the term hereof or upon prior termination of this Lease for any cause, or upon forfeiture or surrender thereof, to remove from said premises as its property all supplies, tools, mining machinery and equipment placed on said property by and at the expense of Lessee within thirty (30) days after such surrender. Lessee's failure to remove said property from the demised premises within the period allowed shall forfeit its right to remove the same; whereupon said property shall revert to and without further consideration become the property of the Lessor.

FOURTEENTH: Every covenant and agreement of this Lease to be kept and performed by Lessee is hereby declared to be a condition of this Lease, for the breach of which Lessor shall have the power to terminate this Lease and the right to re-enter the demised premises without prejudice to any and all claims for damages which Lessor may have by reason of the violation of any covenant hereof by Lessee. By the re-entry of Lessor upon a breach of

condition, Lessee shall be dispossessed of all its possessory rights and estate hereunder, and Lessor shall be thereby seized of and returned to his former estate, free and clear of all rights, liens or claims, by reason of this instrument. In the event of the breach of any covenant or condition of this Lease by Lessee to be kept and performed, Lessor shall, in order to enforce forfeiture of said Lease, Notify Lessee in writing of Lessor's intention to enforce forfeiture because of Lessee's default, such default to be specified in said notice, and if Lessee, within thirty (30) days after mailing or delivery of said written notice, shall not have remedied the default so specified, Lessor may then forthwith declare forfeiture and may then consider Lesse and all persons found in occupation of the premises herein demised as guilty of unlawful detainer, and proceed against them accordingly. Time is of the essence of this Lease. Lessor hereby expressly reserves to himself the property and rights of property in all minerals to be extracted from said premises during the term of this Lease.

FIFTEENTH: This Lease may not be assigned, nor the demised premises sublet, in whole or in part, without the express written consent of the Lessor.

SIXTEENTH: Any notice to be given pursuant to this Lease may be given by registered mail and in the case of the Lessor, such notice to be addressed to the New-Mar Uranium Corporation, Box 1599, Grand Junction, Colorado, and in the case of the Lessee, such notice shall be addressed to Joe R. Brown, Box 173, Montrose, Colorado.

SEVENTEENTH: Each and every clause and covenant of this Lease shall be held and deemed to extend to and be binding upon the heirs, personal representatives of the Lessor and the

successors and assigns of the Lessee.

IN WITNESS WHEREOF, the parties have hereunto executed this Lease in duplicate as of the day year first above written.

/s/ JOE R. BROWN (SEAL)
Lessor

NEW-MAR URANIUM CORPORATION, Lessee

By /s/ Ralph E. Simpson
President

Attest:

/s/ A. P. Starr
Acting Secretary.

STATE OF COLORADO)
: ss.
COUNTY OF DELTA)

The foregoing instrument was acknowledged before me this 14th day of June, 1955, by Joe R. Brown, Lessor.

Witness my hand and official seal.

My commission expires: February 1, 1959.

/s/ A. Allen Brown
Notary Public

STATE OF COLORADO)
: ss.
COUNTY OF DELTA)

The foregoing instrument was acknowledged before me this 14th day of June, 1955, by R. E. Simpson, President, and A. P. Starr, Acting Secretary of New-Mar Uranium Corporation, Lessee.

Witness my hand and official seal.

/s/ A. Allen Brown
Notary Public

A G R E E M E N T

THIS AGREEMENT, Made and entered into this 1st day of July, 1955, by and between J. F. ANDERSON, of Montrose, Colorado, (hereinafter referred to as "Anderson"), and JOE R. BROWN, of Montrose, Colorado, (hereinafter referred to as "Brown"), IS TO WITNESS:

That WHEREAS, the parties hereto amde and entered into an Option Agreement on March 24, 1955, in connection with the sale of Anderson's one-half interest in fourteen (14) patented Mining Claims in Hinsdale County, Colorado and seven (7) Mining Claims (six listed) in Ouray County, Colorado, for certain considerations, and thereafter amended said agreement, whereby Anderson reserved the right to take Five Hundred ($500.00) Dollars worth of capital stock of any corporation formed by Joe R. Brown to acquire title on said Mining Claims; and

WHEREAS, the said Brown has subsequently and on the 14th day of June, 1955, made and entered into a Mining Lease with New-Mar Uranium Corporation of Grand Junction, Colorado; and

WHEREAS, the said Brown has elected to exercise his option of purchase of the Anderson one-half interest in said Claims by making the initial payment of Five Thousand ($5000.00) Dollars on this date, receipt of which is hereby acknowledged; and

WHEREAS, the New-Mar Uranium Corporation has requested the said Anderson to confirm and ratify said Mining Lease.

NOW, THEREFORE, for and in consideration of the transfer of Four Thousand (4000) shares of common stock in the New-Mar Uranium Corporation by the said Brown to the said Anderson and the payment of the sum of Five Thousand ($5000.00) Dollars in conformity with the terms of the Option Agreement, the said J. F.

Anderson does hereby ratify, confirm and approve the Mining Lease between Joe R. Brown and the New-Mar Uranium Corporation and does hereby covenant and agree that his interest in said Mining Claims are subject to said Lease and the said Anderson hereby agrees to be bound by the terms and conditions thereof.

Also in consideration of the transfer of the said Four Thousand (4000) shares of the common stock of the New-Mar Uranium Corporation, the said J. F. Anderson does hereby release to the said Joe R. Brown the provisions of the amendment to said option giving the said Anderson the right to Five Hundred ($500.00) Dollars worth of stock in any corporation which might be formed by the said Brown to acquire title to said mining properties.

The parties further hereby ratify and confirm the terms and conditions of said option, except for said amendment and agree that the same is in full force and effect insofar as the parties, their heirs, personal representatives and assigns are concerned, and that the next payment on said option is the sum of Ten Thousand ($10,000.00) Dollars due on or before January 2, 1956.

Further, that the said New-Mar Uranium Corporation, Lessee, may make all payments and royalties set forth in its Mining Lease to Joe R. Brown without liability to Anderson until said option is completed and in the event said option is not completed, any royalties or further payments accruing after January 2, 1956, shall then be divided in proportion to Anderson's interest in said Claims.

It is further agreed that a copy of this Agreement shall be furnished to the New-Mar Uranium Corporation to be attached to and made a part of the Mining Lease dated June 14,

1955, as above mentioned.

IN WITNESS WHEREOF, said parties have hereunto set their hand and seals on the day and year hereinabove written.

/s/ J.F. Anderson (SEAL)

/s/ Joe R. Brown (SEAL)

STATE OF COLORADO)
: ss.
COUNTY OF DELTA)

The foregoing instrument was acknowledged before me this 1st day of July, 1955, by J. F. Anderson and Joe R. Brown.

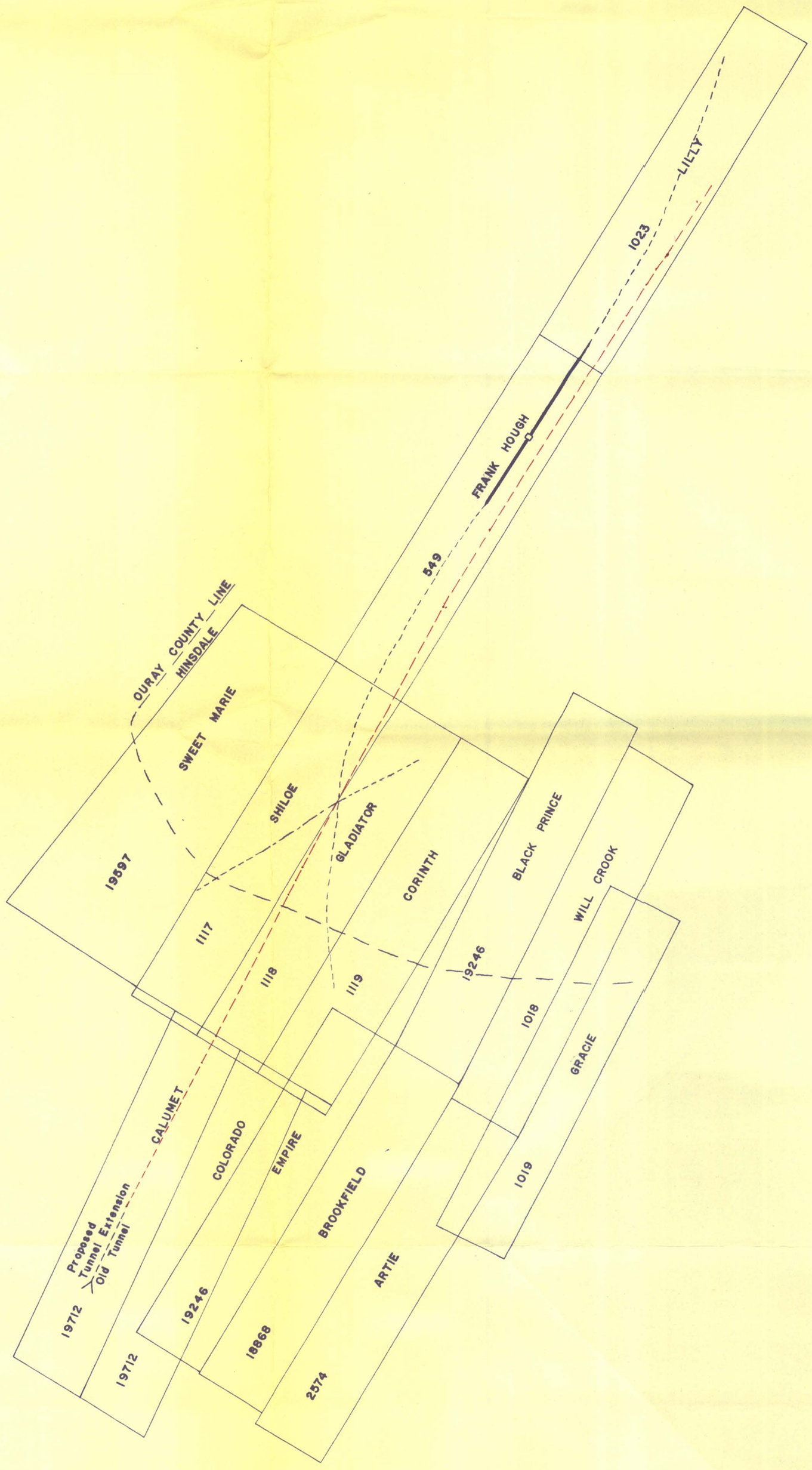
Witness my hand and official seal.
My commission expires; February 1, 1959

/s/ A. Allen Brown
Notary Public

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
420 CUSTOM HOUSE
555 BATTERY STREET
SAN FRANCISCO 11, CALIF.
OFFICIAL BUSINESS

AIR MAIL

Mr. E. D. Zalbert, Acting Chief
Contract Administration and Audit Division
Defense Minerals Exploration Administration
Interior Building
Washington 25,
D.C.



LEGEND

- SHAFT
- WIDE VEIN
- NARROW VEIN
- MINERALIZED FISSURE
- OLD TUNNEL
- PROPOSED TUNNEL

FRANK HOUGH CLAIM GROUP
SEC. 24, 25, T.43N. R.7W.
Scale: 300' = 1"
NEW-MAR URANIUM CORP.
GRAND JUNCTION, COLO.