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DEFENSE MINERALS ADMINISTRATION
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Cys to USBM & USGS

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8-20-54
A.C.

D FORM NO. 64

# Office Memorandum • UNITED STATES GOVERNMENT

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

DATE: August 17, 1954

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

SUBJECT: Field Team Report of Examination, DMEA Docket 3353 (uranium), Midland Uranium, Inc., applicant; Phillips Petroleum Bldg., Salt Lake City, Utah; Dewey Rim Mining claims, Secs. 11 and 12, T. 23 S., R. 23 E., and Sec. 7, T 23 S., R. 24 E., Grand County, Utah

As the result of examination of the property identified above, the examining members of the Field Team recommended denial of the application for Government assistance in exploration. The application was denied in Region IV.

Concentrations of uranium minerals in the Salt Wash member of the Morrison formation occur at scattered points within a few small scattered patches of favorable ground on the applicant's property. Examination disclosed that about 30 tons of ore had been shipped from one claim and 7 tons from another, both lots containing less than 0.20 percent $U_3O_8$. Distribution and extent of mineralized ground as observed and the failure to extend mining into ground already drilled also suggested that any ore bodies that might be explored would be small, not more than a few tens of tons in size, and scattered. Finding such small scattered bodies would require an impractical amount of drilling.

Denial of the application was therefore recommended and made in the region. I concur in the conclusions and actions of the Field Team.

Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

400

Denial

3552

Excerpt from September 1955 issue of "Mining World", page 104.

The PONY TUNGSTEN ENTERPRISE COMPANY has done considerable development work on the second level of the old STRAWBERRY mine near Pony, Montana, and some stopes are being readied for production. The ore is ground in an old stamp mill and concentration is done on tables.

3-1100

Talked to Broadgate
9/16/54
Told him it was
really rocky
WSM

R. Wm. Ellis, DMEA Member, Uranium Community Committee

August 17, 1954

Arthur F. Butler, Jr., USGS Member, Uranium Community Committee

Field Team Report of Inspection, DMEA Docket 3383 (uranium), Midland Uranium, Inc., applicant; Phillips Petroleum Mfg., Salt Lake City, Utah; Penny Rim Mining claims, Secs. 11 and 12, T. 23 S., R. 23 E., and Sec. 7, T 23 S., R. 24 E., Grand County, Utah

As the result of examination of the property identified above, the assigning members of the Field Team recommended denial of the application for Government assistance in exploration. The application was denied in Region IV.

Concentrations of uranium minerals in the Salt Wash member of the Morrison formation occur at scattered points within a few small scattered patches of favorable ground on the applicant's property. Examination disclosed that about 30 tons of ore had been shipped from one claim and 7 tons from another, both late containing less than 0.20 percent $U_3O_8$. Distribution and extent of mineralized ground as observed and the failure to extend mining into ground already drilled also suggested that any ore bodies that might be explored would be small, not more than a few tens of tons in size, and scattered. Finding such small scattered bodies would require an impractical amount of drilling.

Denial of the application was therefore recommended and made in the region. I concur in the conclusions and opinions of the Field Team.

Copy to: R. Wm. Ellis (2)

SEP 1 0 1954

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. DMEA 3352 - Tungsten
Strawberry property
Madison County, Montana

Dear Mr. Clary:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-named property have been reviewed.

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

Careful study of all our information, although noting small amounts of tungsten mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise, under these circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
FT, Reg. 2
Code 400
Adm. Min Read.File
Oper. Committee
R. W. Geehan, USBM
E. L. Newcomb, USGS

FARutledge/ls
9-7-54

E. Wm. Ellis, DMEA Member, Uranium Commodity Committee

August 17, 1954

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

Field Team Report of Examination, DMEA Docket 3353 (uranium), Midland Uranium, Inc., applicant; Phillips Petroleum Bldg., Salt Lake City, Utah; Dusty Rim Mining claims, Secs. 11 and 12, T. 23 S., R. 23 E., and Sec. 7, T 23 S., R. 24 E., Grand County, Utah

As the result of examination of the property identified above, the examining members of the Field Team recommended denial of the application for Government assistance in exploration. The application was denied in Region IV.

Concentrations of uranium minerals in the Salt Wash member of the Morrison formation occur at scattered points within a few small scattered patches of favorable ground on the applicant's property. Examination disclosed that about 30 tons of ore had been shipped from one claim and 7 tons from another, both lots containing less than 0.20 percent $U_3O_8$. Distribution and extent of mineralized ground as observed and the failure to extend mining into ground already drilled also suggested that any ore bodies that might be explored would be small, not more than a few tens of tons in size, and scattered. Finding such small scattered bodies would require an inordinate amount of drilling.

Denial of the application was therefore recommended and made in the region. I concur in the conclusions and actions of the Field Team.

Copy to: E. Wm. Ellis (2)

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
So. 157 Howard Street
Spokane 4, Washington

June 8, 1954

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. DMEA 3352 (tungsten)
Strawberry Property
Madison County, Montana

Dear Mr. Clary:

This is to advise that DMEA field representatives will contact you or your representative at Pony, Montana, on or about June 15, 1954, in order to examine the Strawberry property with reference to your DMEA loan application. Any assistance that you or your representative can render the field representatives will be appreciated.

Yours truly,

3278

James J. Quinlan
For: A. V. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Quinlan

JUN 11 1954

Copy retained at

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

224 New Customhouse
Denver 2, Colorado

August 3, 1954.

Mr. Richard G. Allen, President
Midland Uranium, Inc.
308-9 Phillips Petroleum Building
Salt Lake City, Utah

Re: DMEA Docket 3353 (Uranium),
Midland Uranium, Inc.
(Dewey Rim mining claims),
Grand County, Utah

Dear Mr. Allen:

Reference is made to your application for Government assistance to explore your Dewey Rim mining claims for uranium.

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

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

Very truly yours,

W H King

W. H. King
DMEA Field Team, Region IV

RDB:cwm

cc: Docket 3353
Administrator, DMEA
WMTraver
WPWilliams
AHKoschmann
ERGordon
Chron.

E. M. Hawkman
for A. H. Koschmann
DMEA Field Team, Region IV

Reviewed by
DMEA OPERATING COMMITTEE

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
~~xxxxxxxxxxxxxxxxxx~~
So. 157 Howard Street
Spokane 4, Washington

May 12, 1954

dmea 3352

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: DMEA application (tungsten)
Pony Tungsten Enterprise
Pony, Montana

Dear Mr. Selfridge:

Enclosed are the original and two copies of an application for a DMEA contract, submitted by Pony Tungsten Enterprise, a Montana corporation. One copy of the application has been retained for the files of this office.

We have a considerable amount of information on tungsten properties of the Pony district in Montana; however, we are not informed on the subject property. We shall, therefore, have to conduct a field examination of the property to evaluate the application. The Field Team's report on the application will be forwarded to the Operating Committee as soon as possible.

Sincerely yours,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: USBM (2)

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

224 New Customhouse
Denver 2, Colorado

July 29, 1954.

Memorandum

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

From: DMEA Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3353 (Uranium), Midland Uranium, Inc., (Dewey Rim claims), Grand County, Utah.

Enclosed are four copies of the Report of Examination on the subject property, a copy of the letter of denial to the applicant and two copies of Form 3b.

W. H. King

W. H. King

E. N. Hardman
for A. H. Koschmann

Enclosures

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
~~xxxxxxxxxxxxxxxxxx~~
No. 157 Howard Street
Spokane 4, Washington

August 24, 1954

WGM

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3352 (tungsten)
Poly Tungsten Enterprises
Strawberry Property
Madison County, Montana

Dear Mr. Selfridge:

Enclosed are four copies of a report on a field examination of the above-cited property written by J. J. Quinlan, Geological Survey, and J. E. McNabb, Bureau of Mines.

In view of the wide discrepancy between the applicant's assay results and the assays of samples taken by McNabb and Quinlan, it was deemed advisable to have check assays made on the pulps by Union Assay Office, Salt Lake City, Utah. These assay results checked the assays done by the Montana Laboratory Company of Philipsburg, Montana.

The Field Team concurs with the recommendation in the report that this application for a contract should be denied.

By Field Team, Region II

H. L. Heissenbottel, Executive Officer
U. S. Geological Survey

Walter G. Agnew, Member
U. S. Bureau of Mines

Enclosure
cc: USBM (2)
Quinlan

Reviewed by
DMEA OPERATING COMMITTEE
9-1-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

224 New Customhouse
Denver 2, Colorado

July 29, 1954.

Memorandum

To: DMEA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Engineering Report of Examination - DMEA Docket 3353 (Uranium), Midland Uranium, Inc., (Dewey Rim claims), Grand County, Utah.

Enclosed are eleven copies of the Engineering Report of Examination on the subject docket.

The applicant requested $11,918.00 to explore the Dewey Rim claims by 9,200 feet of wagon drilling and core drilling.

The examining team does not believe that the property has enough merit to justify Government participation in an exploration project and recommends denial of the application.

We concur in this recommendation.

W. H. King

W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

Defense Minerals Administration
RECEIVED
AUG 27 1954

August 16, 1954

Memorandum

To: DMEA Field Team, Region II

From: J. J. Quinlan, Geologist, U. S. Geological Survey, and John S. McNabb, Jr., Engineer, U. S. Bureau of Mines

Subject: Field Examination, Docket No. DMEA-3352 (tungsten), Pony Tungsten Enterprise, Strawberry property, Madison County, Montana.

## INTRODUCTION

The Strawberry property, Madison County, Montana, was examined by the authors on June 15 and 16, 1954, with reference to the subject loan application, Docket No. DMEA-3352 (tungsten). This is the second application submitted by Pony Tungsten Enterprise for Government assistance to explore the Strawberry property. The original application, Docket No. DMEA-3135 (tungsten), was denied in October 1953, because the probability of disclosing minable ore reserves by the applicant's proposed exploration program was not considered sufficiently promising to justify Government participation in it.

The property was examined by Howard B. Nickelson, Geological Survey, July 10, 11, and 12, 1953, with reference to the original application. Mr. Nickelson's memorandum of July 30, 1953, with reference to the original application reports the results of this examination and describes the property and its geology. This memorandum is intended to serve as a supplement to Mr. Nickelson's memorandum and is prepared in order to summarize work completed since the property was examined by Mr. Nickelson and to recommend disposition of the second application. It is also intended that it should serve as an independent analysis of the tungsten possibilities of the property.

## RECOMMENDATION

It is recommended that Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, for Government assistance to explore the Strawberry property for tungsten be denied.

## WORK COMPLETED SINCE PROPERTY LAST EXAMINED BY DMEA

Since the property was examined by Mr. Nickelson in July 1953, the applicant has completed the following work:

Reviewed by
DMEA OPERATING COMMITTEE
9-1-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
July 19, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3353 (Uranium) Midland Uranium, Inc., (Dewey Rim mining claims) Grand County, Utah

Enclosed are the original and 10 copies of a Summary, Conclusions, and Recommendations by M. H. Salsbury, Bureau of Mines, and C. M. Mobley, Geological Survey, and of M. H. Salsbury's engineering report on the loan application on the above docket.

Salsbury concludes the mineralization shown by rim exposures, previous incomplete drilling results and insignificant production on the applicant company's Dewey Rim mining claims indicates there is little likelihood of exploration resulting in the discovery of any ore bodies except by extremely close spaced drilling. The results of such work could not possibly be commensurate with its cost. Denial of the application is recommended.

I concur in the conclusions and approve the recommendations.

The brochure furnished with your memorandum of May 10, 1954, instructing us to make a field examination and submit a report is also enclosed.

W. M. Traver

W. M. Traver

Enclosures

WMT/ici

cc: 10
DMEA 3353
DMEA Chron.

(1) The drift along the Strawberry vein on the 50-foot adit level has been extended 25 feet west. (See geology map accompanying Nickelson's memorandum, and geologic and assay plan of 50-foot adit level drift on Strawberry vein accompanying this memorandum.)

(2) The 150-foot adit level, essentially a crosscut which bears N. 10° W. and is 150 feet in length, has been partially rehabilitated to explore the Strawberry vein which crosses the adit at 110 feet. The portal of this adit is located 520 feet S. 74° E. of the 50-foot adit and is 115 feet lower in altitude. It is shown on the map entitled "Surface and Underground Exposure of Scheelite, Pony Tungsten Enterprise, Keystone-Strawberry Group" accompanying the report by George S. Gluck which is a part of the application.

(3) One additional trench on the Strawberry vein 300 feet northeast of the 50-foot adit level portal has been completed.

(4) The small gold mill on the property has been rehabilitated and revamped in an attempt to utilize it as a tungsten concentrator. At the present time the mill has a capacity of 36 tons per 24-hour shift. Equipment consists of a 9" by 15" crusher, one battery of 5 stamps, a small homemade classifier (dewaterer), one double Jig, and two tables. The operator intends to double the capacity of the mill by adding another battery of stamps and two more tables to the circuit, and by making use of both sides of the double Jig. An 8-hour per day milling operation is planned.

## BRIEF DESCRIPTION OF SCHEELITE OCCURRENCE

Of the two important vein structures, the Keystone and Strawberry veins, explored on the Strawberry property, scheelite has been found only along the Strawberry vein. This vein strikes west to N. 65° W. and dips 55° to 65° S. or SW. For the most part, it appears to parallel roughly the gneissic banding in rocks of the Pony Series which enclose the vein. However, in places it apparently cut the gneissic banding at a very low angle. Detailed mapping would be required to establish this relationship definitely.

The distinguishing feature of the Strawberry vein is a blue-gray fault gouge which marks the footwall of the vein. This gouge zone varies in width from about 5 inches to over 4 feet. Overlying the fault gouge is a hard band of silicified gneiss. In places silicification appears to be almost complete, thus forming a quartz vein in the immediate hanging wall of the fault gouge. This silicified band generally is about 1 to 3 feet wide, but in places widens to over 5 feet.

The immediate hanging wall area of the silicified band is sheared over a width of several feet. Scheelite occurs as thin discontinuous stringers and disseminated fine grains at several places within this hanging wall shear zone. However, it is apparent that

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

June 18, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3353, Midland Uranium, Inc., Dewey Rim mining claims, Thompson District, Grand County, Utah

Enclosed are 11 copies of the geologic report by C. M. Mobley of the U. S. Geological Survey covering the above docket.

Mr. Mobley concludes that no significant deposits of uranium ore will be discovered by the exploration proposed by the applicant and thus recommends denial.

E. M. Hawkman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

the distribution of scheelite within the hanging wall shear zone is very erratic, and there are large areas along the vein completely devoid of scheelite. Even within those areas where the scheelite does occur the zone of stringers and disseminated grains is very erratic and discontinuous. This erratic nature is illustrated on the map of the 50-foot adit level, but it was also apparent at every known exposure of scheelite along the vein. In most places the zone of scheelite within the hanging wall shear is only a few inches wide; however, there are exceptions where the zone widens to slightly over a foot. The scheelite stringers within this zone are also narrow, varying in width from about one-sixteenth to three-eights of an inch, with the narrower stringers predominating.

The map entitled "Map of Surface and Underground Exposure of Scheelite, Pony Tungsten Enterprise, Keystone-Strawberry Group" accompanying G. S. Gluck's report on the applicant's properties illustrates a theory that the scheelite is not related to the Strawberry vein. Instead it is postulated that there are two separate scheelite veins which cut the Strawberry vein at a small angle. We could find no evidence to support this theory. Every known occurrence of scheelite is directly related to the Strawberry vein which is an easily distinguishable structure, being marked as it is by the blue-gray footwall gouge zone.

## SAMPLING UNDERTAKEN DURING EXAMINATION

The drift along the Strawberry vein on the 50-foot adit level was mapped and the distribution of scheelite carefully noted during the examination. Scheelite was noted only in that portion of the drift west of the adit level crosscut to the vein. The scheelite exposed in this drift is considered to be fairly representative of the occurrence of scheelite along the Strawberry vein. Samples were cut at 10-foot intervals for a distance of 60 feet along the vein exposed in the west drift. The hanging wall shear zone in which the scheelite occurs was sampled separately from the footwall gouge zone and silicified band. Sample series 21 through 26 represents samples cut across the hanging wall shear, whereas sample series 21A through 25A represents samples cut across the footwall gouge zone and silicified band. All samples were assayed for gold and tungsten. The location and assay results of these samples are shown on the map attached to this memorandum.

It is apparent from the results of this sampling that the tungsten and gold values of the vein in this area are very low. The highest gold assay was only 0.017 ounce per ton. The highest tungsten assay was 0.216 percent tungsten trioxide, and the remaining tungsten samples assayed less than 0.032 percent tungsten trioxide.

At the time of the examination the applicant was attempting to mill material obtained from the west drift along the Strawberry vein on the 50-foot adit level. Material from this drift was divided into two fractions, coarse and fine, depending on whether it would pass through a 1¼ inch grizzly at the mill. A sample of the coarse

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
GRAND JUNCTION, COLO.

June 11, 1954

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: W. P. Williams, Colorado Plateau District

Subject: Geologic report of field examination, DMEA 3353, Midland Uranium, Inc., Dewey Rim mining claims, Thompson District, Grand County, Utah

Transmitted herewith are eleven copies of the geologic report prepared by C. M. Mobley, covering a field examination of the above-referenced property.

As a result of field examination, it has been determined that prospects on the Dewey Rim mining claims are not favorable enough to warrant approval of a DMEA contract at this time.

WPWilliams

W. P. Williams
Geologist

WPW/mlr

mill feed assayed 0.001 ounce gold per ton and 0.038 percent tungsten trioxide. A sample of the fine mill feed assayed 0.001 ounce gold per ton and 0.014 percent tungsten trioxide.

An assay plan of the west drift along the Strawberry vein on the 50-foot adit level and of the open cut approximately 120 feet east of the adit has been added to the folder containing G. S. Gluck's report on the applicant's properties. Lamping and sampling of the west drift along the Strawberry vein on the 50-foot adit level show that sample data on this map are grossly in error. To illustrate, three of the applicant's samples cut over widths varying from 16 to 18 inches assayed 1.0 percent, 3.62 percent, and 6.1 percent tungsten trioxide.

Samples were also cut across the vein exposed in the trench 300 feet northeast of the portal of the 50-foot adit level. This is the trench that was completed after Nickelson examined the property. A 6.3-foot sample across the fault zone and silicified band at this location assayed 0.008 ounce gold per ton and no tungsten. A 0.8-foot sample across the hanging wall shear assayed 0.001 ounce gold per ton and 0.030 percent tungsten trioxide.

As a further check on the scheelite showing along the Strawberry vein in the 450-foot adit level, the vein was sampled in the vicinity of the small tungsten showing, approximately 90 feet east of the crosscut to the vein. The footwall gouge zone was not exposed in the drift where the sample was cut but is only a few feet in the wall of the drift. A 3.7-foot sample across the silicified band exposed in the drift assayed 0.045 ounce gold per ton and no tungsten. A 1.7-foot sample across the hanging wall shear assayed 0.012 ounce gold per ton and no tungsten. Nickelson sampled the scheelite zone in this same area. His sample, No. 434, was cut at three places across the scheelite zone, along a 15-foot section of drift. The average width of the sample was 0.8 foot, and it assayed 0.74 percent tungsten trioxide. The sample cut by Nickelson and the sample cut by us in this area illustrate the erratic distribution of scheelite even within those areas where it does occur.

## CONCLUSION

Lamping and sampling of the scheelite exposures along the Strawberry vein indicate that the deposit is of no economic importance. For this reason it is recommended that the Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, for Government assistance to explore the Strawberry property for tungsten be denied.

Enclosure 1
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Quinlan
Docket
Nickelson

UNITED STATES

DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

# DMEA 3353

## Dewey Rim Mining Claims

## Midland Uranium, Inc.

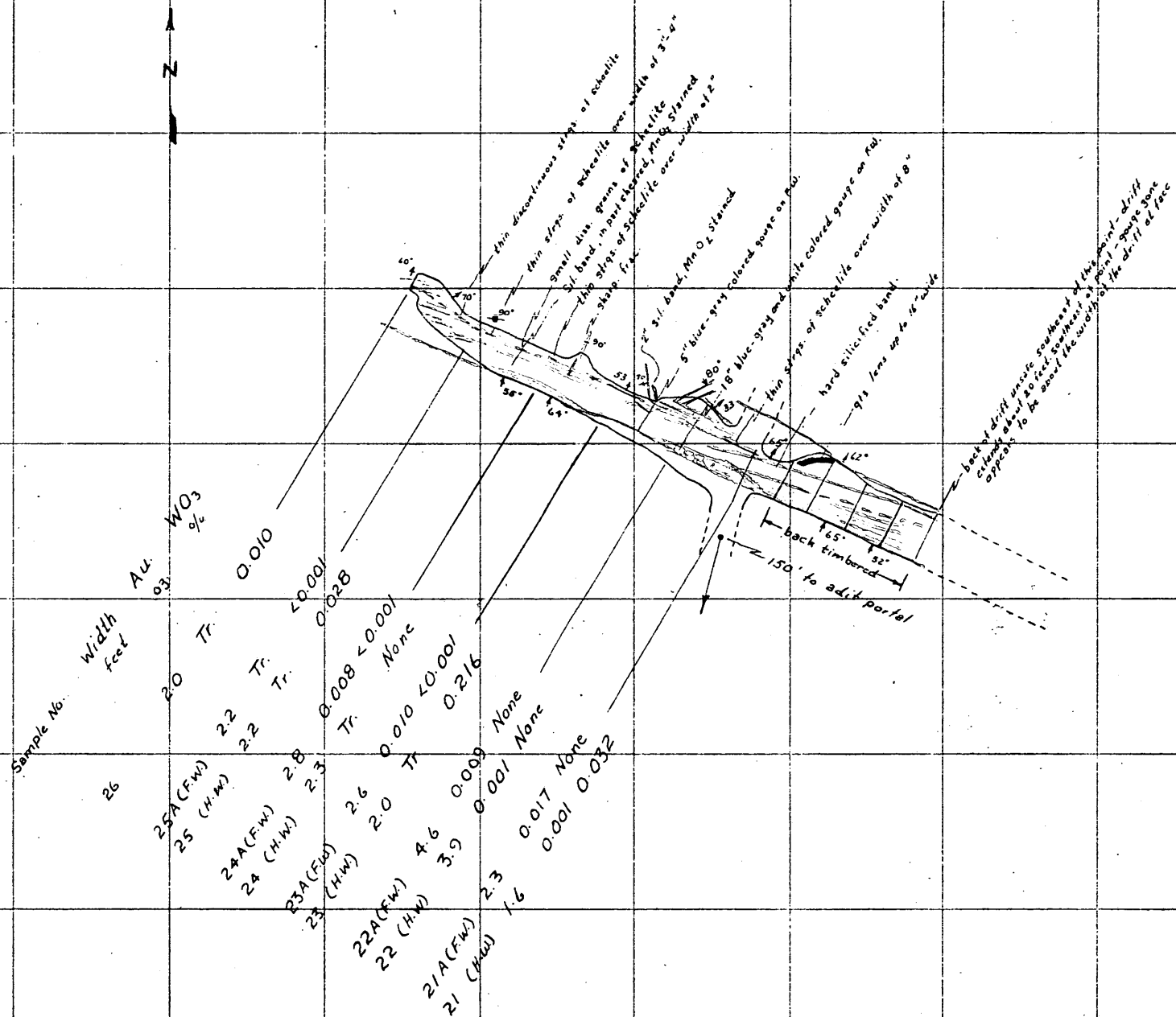
## Grand County, Utah

Uranium

M. H. Salsbury, Mining Engineer
Bureau of Mines

C. M. Mobley, Geologist
Geological Survey

July 7, 1954




| Sample No. | Width feet | Au. oz. | $WO_3$ % |
|---|---|---|---|
| 26 | 2.0 | Tr. | 0.010 |
| 25A (F.W.) | 2.2 | | <0.001 |
| 25 (H.W.) | 2.2 | Tr. | 0.028 |
| 24A (F.W.) | 2.8 | 0.008 | <0.001 |
| 24 (H.W.) | 2.3 | Tr. | None |
| 23A (F.W.) | 2.6 | 0.010 | <0.001 |
| 23 (H.W.) | 2.0 | Tr. | 0.216 |
| 22A (F.W.) | 4.6 | 0.009 | None |
| 22 (H.W.) | 3.9 | 0.001 | None |
| 21A (F.W.) | 2.3 | 0.017 | None |
| 21 (H.W.) | 1.6 | 0.001 | 0.032 |

# GEOLOGIC and ASSAY PLAN - 50 FOOT ADIT LEVEL DRIFT on STRAWBERRY VEIN

## STRAWBERRY PROPERTY, MADISON COUNTY, MONTANA

SCALE 1" = 20'

J.J.Q. & J.S.M. June 1954

"ALBANENE" No. 196M K&E CO., N.Y. REG. U.S. PAT. OFF.

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

## Summary, Conclusions, and Recommendations

By M. H. Salsbury
Mining Engineer
Bureau of Mines

and

C. M. Mobley
Geologist
Geological Survey

September 7, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance in the amount of $56,960.00
Docket No. DMEA 3352 - Tungsten
Pony Tungsten Enterprise
Strawberry property
Madison County, Montana

The denial of the subject application by this Division is based on the following information:

The Strawberry property was the subject of an application for exploration assistance under Docket No. DMEA 3138 which was denied October 8, 1953, following the recommendation of Mr. Howard B. Nickelson, Geological Survey.

Since the property was examined by Mr. Nickelson in July 1953, the applicant has completed the following work:

1. Extended the drift on Strawberry vein on the 50-foot level a distance of 25 feet.

2. Partially rehabilitated the 150-foot adit level.

3. Excavated an additional trench 300 feet northeast of the 50-foot adit level portal.

4. Rehabilitated and revamped a small gold mill for use as a tungsten concentrator.

Of the two important vein structures, the Keystone and Strawberry veins, explored on the Strawberry property, scheelite has been found only along the Strawberry vein. Scheelite occurs as thin discontinuous stringers and disseminated fine grains at several places within the hanging wall shear zone.

Eleven samples were taken along the Strawberry vein on the 50-foot adit level. All were assayed for gold and tungsten. The highest gold assay was 0.017 ounces per ton and the highest tungsten assay was 0.216 percent tungsten trioxide. The remaining samples assay less than 0.032 percent $WO_3$.

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By M. H. Salsbury and C. M. Mobley

Midland Uranium, Inc., lessees of the Dewey Rim mining claims in Thompson mining district, Grand County, Utah, have applied for Government exploration assistance in exploring their property for uranium at an estimated cost of $11,918.00--Government participation 75 percent, or $8,938.50.

The property was examined on May 19, 1954, by a DMEA examining team, in company with W. P. Williams and E. S. Santos of the Geological Survey, and J. E. Gonyer, representing the applicant. The 13 unlocated claims in the group are owned by L. E. Busey and leased to the applicants with an option to purchase. Complete information on validity of the locations or on the lease terms was not furnished with the copy of the application used by the Bureau of Mines member of the examining team. For the purposes of this report, further investigation of these matters was not considered necessary.

The ore deposits of the area are found in the Salt Wash member of the Jurassic Morrison formation. On the Dewey Rim mining claims, the two lower sandstone beds of the Salt Wash member, at an estimated drilling depth of from 39 feet to 125 feet, are the favorable host rocks for uranium. In accordance with criteria established by the Geological Survey, the lowest sandstone bed on the Cuesta No. 3 claim, and the next to lowest bed on the Arnite No. 10

A sample of coarse mill feed assayed 0.001 oz./ton in gold and 0.028% $WO_3$; the fine mill feed assayed 0.001 oz./ton in gold and 0.014% $WO_3$.

A 6.3 foot sample across the fault zone and silicified band in the new trench assayed 0.008 oz./ton in gold and no tungsten. A 0.8 foot samples across the hanging wall shear assayed 0.001 oz./ton in gold and 0.030% $WO_3$.

In the 450-foot adit level two samples were taken and gave the following results:

| No. | Description | Gold oz./ton | $WO_3$ % |
|---|---|---|---|
| 1. | 3.7' across silicified band in drift | 0.045 | None |
| 2. | 1.7' across H.W. shear | 0.012 | None |

The Field Team concludes that lamping and sampling of the scheelite exposures along the Strawberry vein indicate that the deposit is of no economic importance.

For this reason it was recommended that the Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, be denied.

The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the denial.

F. A. Rutledge, Acting Chief
Iron and Ferro-Alloys Division

cc: Docket
Code 400
Adm. Read. File
Oper. Committee

JHopkins/ls
9-7-54

claim are "the ore-bearing sandstones". As indicated by rim exposures, several of which have produced small amounts of low-grade ore, the ore occurs in small lenses trending northwest. There have been only a few small deposits mined, several in outcrops exposed by rim stripping, and one found on the adjoining Last Dollar claim, which is controlled by the applicants, but is not included in the proposed exploration project. All of these were of minor grade and extent. The favorable sandstone, as exposed at the rim, is as much as 500 feet wide on the Cuesta No. 3 claim, and is underlain by up to 3 feet of gray-green mudstone, which is considered to be the ore indicator. The sandstone is as much as 30 feet thick and contains carbonaceous material, both favorable indications. However, experience so far in the vicinity of this property, has indicated that individual ore bodies within the favorable sandstone are likely to contain only a few tons of ore each, and the ore produced to date has barely been of commercial grade.

The claims have been developed by rim stripping and a small amount of mining at the rim on the Cuesta No. 3 claim. Some wagon drilling has been done behind the rim by previous operators, but the results of this work were either not recorded or have been lost. It can be assumed that ore indications were poor for they were not followed up.

The applicants' proposal called for 1,200 feet of core drilling and 8,000 feet of wagon drilling in a three phased program based on a drilling sequence which the Geological Survey has not found to be effective.

A revised program was considered by the examining team which the applicants' representative would have accepted, but it was

IN REPLY REFER TO:

400

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

September 7, 1954

Re: DMEA-3352
Pony Tungsten Enterprise
Strawberry Property
Madison Co., Montana
Tungsten

Memorandum

To: W. S. Martin
Defense Minerals Exploration Administration

From: E. L. Newcomb
U. S. Geological Survey

Subject: Concurrence with Field Team recommendation for denial

The Strawberry property was originally docketed as DMEA-3135. An examination report was prepared and the application was denied by DMEA.

The above-captioned docket is a new application for the same property. A second examination report has been submitted which recommends the Strawberry mine be denied exploration assistance.

Sampling results and detailed mapping indicate this deposit does not contain significant amounts of tungsten mineralization.

I concur with the Field Team's conclusions and recommend this application be denied.

E. L. Newcomb

ELNewcomb:hlm
G-9/7/54

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
R. W. Geehan, 3513

concluded that the chances for a significant uranium discovery were poor, and that a drilling program with hole spacing close enough to insure discovery of the small ore bodies likely to occur was not economically feasible.

Denial of the application of Midland Uranium, Inc., is recommended.

400

DOCKET
Surname:

Rutledge
Kuchler
Kuilsgaard
Hedges
Tetbridge
Johnson

SEP 1 0 1954

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. DMEA 3352 - Tungsten
Strawberry property
Madison County, Montana

Dear Mr. Clary:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-named property have been reviewed.

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

Careful study of all our information, although noting small amounts of tungsten mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise, under these circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
FT, Reg. 2
Code 400
Adm. ~~Mix~~ Read.File
Oper. Committee
R. W. Geehan, USBM
E. L. Newcomb, USGS

FARutledge/ls
9-7-54

R.C.G.

UNITED STATES DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

# DMEA 3353, Midland Uranium, Inc., Dewey Rim Mining Claims, Thompson district, Grand County, Utah

Uranium

Geologic Report

By

C. M. Mobley
U.S. Geological Survey

June 11, 1954

DOCKET
Surname:
Hyde
Rutledge
Kudlich

September 7, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance in the amount of $56,960.00
Docket No. DMEA 3352 - Tungsten
Pony Tungsten Enterprise
Strawberry property
Madison County, Montana

The denial of the subject application by this Division is based on the following information:

The Strawberry property was the subject of an application for exploration assistance under Docket No. DMEA 3135 which was denied October 8, 1953, following the recommendation of Mr. Howard B. Nickelson, Geological Survey.

Since the property was examined by Mr. Nickelson in July 1953, the applicant has completed the following work:

1. Extended the drift on Strawberry vein on the 50-foot level a distance of 25 feet.

2. Partially rehabilitated the 150-foot adit level.

3. Excavated an additional trench 300 feet northeast of the 50-foot adit level portal.

4. Rehabilitated and revamped a small gold mill for use as a tungsten concentrator.

Of the two important vein structures, the Keystone and Strawberry veins, explored on the Strawberry property, scheelite has been found only along the Strawberry vein. Scheelite occurs as thin discontinuous stringers and disseminated fine grains at several places within the hanging wall shear zone.

Eleven samples were taken along the Strawberry vein on the 50-foot adit level. All were assayed for gold and tungsten. The highest gold assay was 0.017 ounces per ton and the highest tungsten assay was 0.216 percent tungsten trioxide. The remaining samples assay less than 0.032 percent $WO_3$.

DMEA 3353

## INTRODUCTION AND SUMMARY

Midland Uranium, Inc., of Salt Lake City, Utah, has a lease-purchase contract on the Dewey Rim mining claims, Thompson district, Grand County, Utah (fig. 1). They have applied (Docket 3353) to the Defense Minerals Exploration Administration for a loan to explore for uranium.

The claims were examined on May 19, 1954, in company with E. S. Santos and on May 20, 1954, in company with M. H. Salsbury, engineer, U. S. Bureau of Mines, W. P. Williams and E. S. Santos, geologists, U. S. Geological Survey, and J. E. Gonyer, representative for Midland Uranium, Inc.

Two small favorable areas are present on the Dewey Rim mining claims. One of the favorable areas has been wagon drilled without finding a significant uranium deposit. The ore, found in the lower two beds of the Salt Wash member of the Jurassic Morrison formation, is discontinuous and is associated with pockets of carbonaceous trash. The deposits to be expected in this area are probably less than 10 tons each.

As a result of the field examination, it is recommended that the Government not enter into a contract with the applicant to do the proposed exploration. This was agreed upon by M. H. Salsbury, and was acceptable to J. E. Gonyer.

A sample of coarse mill feed assayed 0.001 oz./ton in gold and 0.028% $WO_3$; the fine mill feed assayed 0.001 oz./ton in gold and 0.014% $WO_3$.

A 6.3 foot sample across the fault zone and silicified band in the new trench assayed 0.008 oz./ton in gold and no tungsten. A 0.8 foot samples across the hanging wall shear assayed 0.001 oz./ton in gold and 0.030% $WO_3$.

In the 450-foot adit level two samples were taken and gave the following results:

| No. | Description | Gold oz./ton | $WO_3$ % |
|---|---|---|---|
| 1. | 3.7' across silicified band in drift | 0.045 | None |
| 2. | 1.7' across H.W. shear | 0.012 | None |

The Field Team concludes that lamping and sampling of the scheelite exposures along the Strawberry vein indicate that the deposit is of no economic importance.

For this reason it was recommended that the Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, be denied.

The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the denial.

F. A. Rutledge, Acting Chief
Iron and Ferro-Alloys Division

cc: Docket
Code 400
Adm. Read. File
Oper. Committee

JHopkins/ls
9-7-54

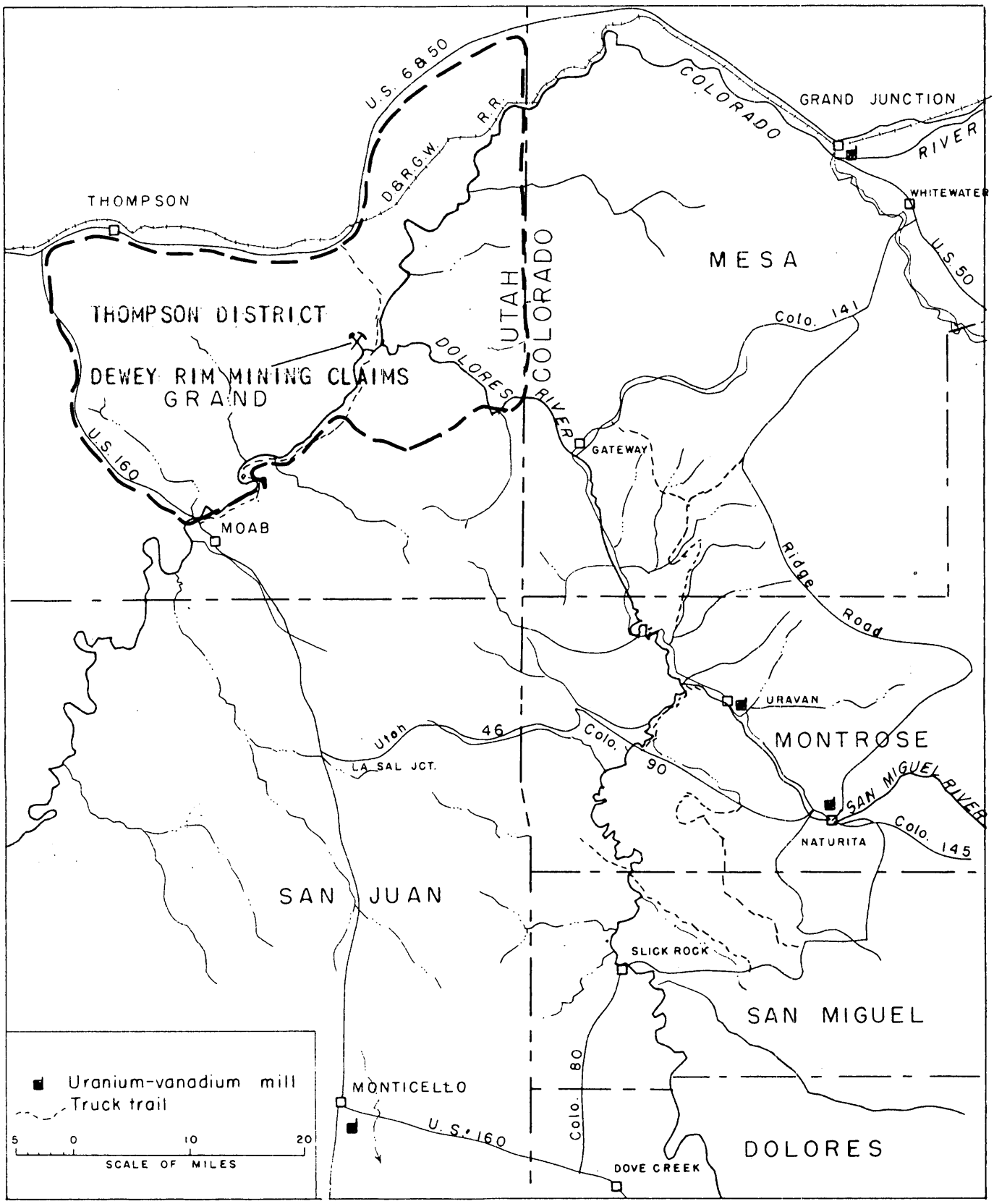



Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE APPROXIMATE LOCATION OF THE DEWEY RIM MINING CLAIMS, THOMPSON DISTRICT, GRAND COUNTY, UTAH

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

September 7, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance in the amount of $56,960.00
Docket No. DMEA 3352 - Tungsten
Pony Tungsten Enterprise
Strawberry property
Madison County, Montana

The denial of the subject application by this Division is based on the following information:

The Strawberry property was the subject of an application for exploration assistance under Docket No. DMEA 3135 which was denied October 8, 1953, following the recommendation of Mr. Howard B. Nickelson, Geological Survey.

Since the property was examined by Mr. Nickelson in July 1953, the applicant has completed the following work:

1. Extended the drift on Strawberry vein on the 50-foot level a distance of 25 feet.

2. Partially rehabilitated the 150-foot adit level.

3. Excavated an additional trench 300 feet northeast of the 50-foot adit level portal.

4. Rehabilitated and revamped a small gold mill for use as a tungsten concentrator.

Of the two important vein structures, the Keystone and Strawberry veins, explored on the Strawberry property, scheelite has been found only along the Strawberry vein. Scheelite occurs as thin discontinuous stringers and disseminated fine grains at several places within the hanging wall shear zone.

Eleven samples were taken along the Strawberry vein on the 50-foot adit level. All were assayed for gold and tungsten. The highest gold assay was 0.017 ounces per ton and the highest tungsten assay was 0.216 percent tungsten trioxide. The remaining samples assay less than 0.032 percent $WO_3$.

## GEOLOGY

The exposed rocks in the vicinity of the Dewey Rim mining claims range from the Jurassic Entrada formation to the Cretaceous Dakota formation and contain continuous exposures of the Jurassic Summerville formation, the Salt Wash and the Brushy Basin members of the Jurassic Morrison formation, and the Cretaceous Burro Canyon formation. The Salt Wash member here is about 200 feet thick, and consists of four or more light-red to light-gray discontinuous sandstone beds, or lenses, which are from a few feet to more than 30 feet in thickness and are more than 1,000 feet wide. These lenses are separated by red-brown mudstone and reddish, thin, interbedded layers of sandstone and siltstone. The gray-green mudstone present under some of the sandstone lenses is from a few inches to more than 3 feet in thickness. The exposed rocks strike about N. 45° W. and dip about 5° NE.

In this area all of the known deposits of minable grade are in the lower two sandstone beds of the Salt Wash member. The Cuesta No. 3 deposits (fig. 2) are located in the lowest sandstone bed and the Arnite No. 10 deposits are located in the next to the lowest sandstone bed. These sandstone beds are called the "ore-bearing sandstone". The ore-bearing sandstone is present as lenses trending northwest.

A sample of coarse mill feed assayed 0.001 oz./ton in gold and 0.028% $WO_3$; the fine mill feed assayed 0.001 oz./ton in gold and 0.014% $WO_3$.

A 6.3 foot sample across the fault zone and silicified band in the new trench assayed 0.008 oz./ton in gold and no tungsten. A 0.8 foot samples across the hanging wall shear assayed 0.001 oz./ton in gold and 0.030% $WO_3$.

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The Field Team concludes that lamping and sampling of the scheelite exposures along the Strawberry vein indicate that the deposit is of no economic importance.

For this reason it was recommended that the Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, be denied.

The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the denial.

F. A. Rutledge

F. A. Rutledge, Acting Chief
Iron and Ferro-Alloys Division

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3353

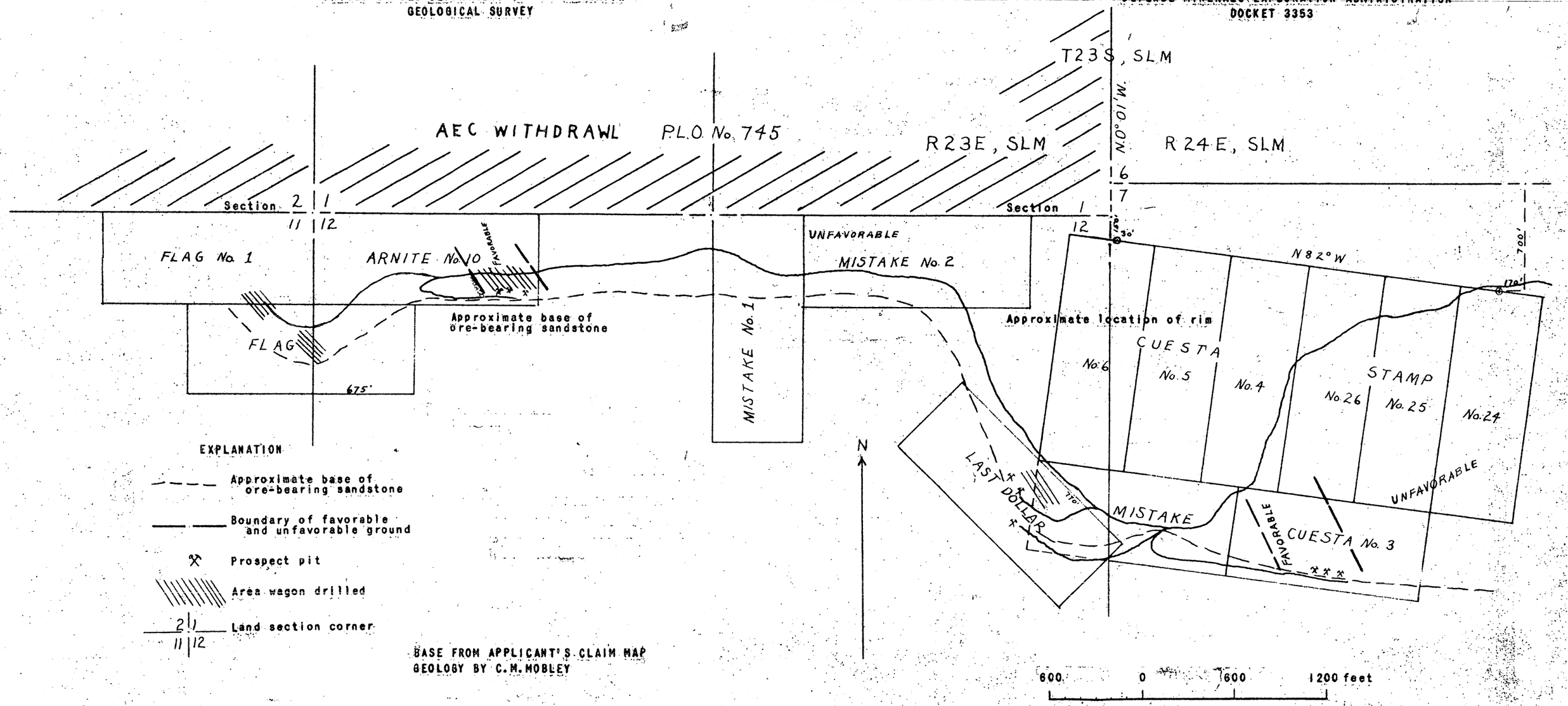


Figure 2. SKETCH MAP OF THE DEWEY RIM MINING CLAIMS, THOMPSON DISTRICT, GRAND COUNTY, UTAH

Docket

IN REPLY REFER TO:

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

September 7, 1954

Re: DMEA-3352
Pony Tungsten Enterprise
Strawberry Property
Madison Co., Montana
Tungsten

Memorandum

To: W. S. Martin
Defense Minerals Exploration Administration

From: E. L. Newcomb
U. S. Geological Survey

Subject: Concurrence with Field Team recommendation for denial

The Strawberry property was originally docketed as DMEA-3135. An examination report was prepared and the application was denied by DMEA.

The above-captioned docket is a new application for the same property. A second examination report has been submitted which recommends the Strawberry mine be denied exploration assistance.

Sampling results and detailed mapping indicate this deposit does not contain significant amounts of tungsten mineralization.

I concur with the Field Team's conclusions and recommend this application be denied.

E L Newcomb
E. L. Newcomb

According to the criteria developed by the U. S. Geological Survey _/, only a small portion of the ore-bearing sandstone on

_/ Weir, D. B., Geologic guides to prospecting for carnotite deposits on the Colorado Plateau: U. S. Geol. Survey Bull. 988-B, 1952.

the Dewey Rim mining claims can be classed as favorable for uranium deposits (fig. 2).

On the basis of outcrop examination, favorable sandstone lies on the southeastern part of the Arnite No. 10 claim and on the central and northwestern parts of the Cuesta No. 3 claim. The remaining sandstone on the applicant's claims is classed as unfavorable.

The favorable sandstone consists of lenses of light-gray sandstone, 10 to 30 feet thick and about 500 feet wide, underlain in places by gray-green mudstone more than 3 feet thick. Some carbonaceous material, limonite stain, and gray-green mudstone seams and pebbles are present in the sandstone. The unfavorable sandstone consists of beds of light-red and light-gray sandstone, 2 to 10 feet thick, underlain by red-brown mudstone.

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

August 24, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

WSM

Re: Docket No. DMEA-3352 (tungsten)
Pony Tungsten Enterprise
Strawberry Property
Madison County, Montana

Dear Mr. Selfridge:

Enclosed are four copies of a report on a field examination of the above-cited property written by J. J. Quinlan, Geological Survey, and J. S. McNabb, Bureau of Mines.

In view of the wide discrepancy between the applicant's assay results and the assays of samples taken by McNabb and Quinlan, it was deemed advisable to have check assays made on the pulps by Union Assay Office, Salt Lake City, Utah. These assay results checked the assays done by the Montana Laboratory Company of Philipsburg, Montana.

The Field Team concurs with the recommendation in the report that this application for a contract should be denied.

By Field Team, Region II

Reviewed by
DMEA OPERATING COMMITTEE
9-1-54
(date)

A. E. Weissenborn
A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure
cc: USBM (2)
Quinlan

Cleared D.C.
9-1-54
JAR.

## ORE DEPOSITS

Three deposits were examined on the Cuesta No. 3 claim (fig. 2). Two of the deposits were fossil logs, trending N. 75° W., about 8 inches in diameter. The center 6 inches is silicified. Some carnotite stain is associated with the carbonaceous material surrounding the fossil logs. The logs have been prospected for about 3 feet. The other prospect consists of a 20-foot drift in which some carnotite and vanadium ore was observed. The ore appears to be spotty, and the higher values are found with pockets of carbonaceous trash.

The three deposits examined on the Arnite No. 10 claim (fig.2) were similar to the deposits on the Cuesta No. 3 claim.

The grade of the ore is estimated to average about 0.10 percent $U_3O_8$ and 1.0 percent $V_2O_5$. The applicant's brochure states, "several loads of marginal ore were shipped from these deposits". According to AEC files, about seven tons of ore averaging 0.10 percent $U_3O_8$ and 0.40 percent $V_2O_5$ were shipped from the Cuesta No. 3 claim. There is no recorded production from the Arnite No. 10 claim. According to AEC files, the Last Dollar claim, located nearby, has produced about 33 tons of ore averaging 0.19 percent $U_3O_8$ and 1.30 percent $V_2O_5$. The ore is associated with carbonaceous material and appears discontinuous.

Several areas have been wagon drilled (fig. 2) by Midland Uranium, Inc., and by other owners. Drilling on very close-spaced centers (less than 50 feet) has indicated mineralized material in the favorable ground behind the prospects on the Arnite No. 10 claim, but no significant deposit was found.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

AUG 27 195

August 16, 1954
Reviewed by
DMEA OPERATING COMMITTEE
9-1-54
(date)

Memorandum

To: DMEA Field Team, Region II

From: J. J. Quinlan, Geologist, U. S. Geological Survey, and John S. McNabb, Jr., Engineer, U. S. Bureau of Mines

Subject: Field Examination, Docket No. DMEA-3352 (tungsten), Pony Tungsten Enterprise, Strawberry property, Madison County, Montana.

## INTRODUCTION

The Strawberry property, Madison County, Montana, was examined by the authors on June 15 and 16, 1954, with reference to the subject loan application, Docket No. DMEA-3352 (tungsten). This is the second application submitted by Pony Tungsten Enterprise for Government assistance to explore the Strawberry property. The original application, Docket No. DMEA-3135 (tungsten), was denied in October 1953, because the probability of disclosing minable ore reserves by the applicant's proposed exploration program was not considered sufficiently promising to justify Government participation in it.

The property was examined by Howard B. Nickelson, Geological Survey, July 10, 11, and 12, 1953, with reference to the original application. Mr. Nickelson's memorandum of July 30, 1953, with reference to the original application reports the results of this examination and describes the property and its geology. This memorandum is intended to serve as a supplement to Mr. Nickelson's memorandum and is prepared in order to summarize work completed since the property was examined by Mr. Nickelson and to recommend disposition of the second application. It is also intended that it should serve as an independent analysis of the tungsten possibilities of the property.

## RECOMMENDATION

It is recommended that Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, for Government assistance to explore the Strawberry property for tungsten be denied.

## WORK COMPLETED SINCE PROPERTY LAST EXAMINED BY DMEA

Since the property was examined by Mr. Nickelson in July 1953, the applicant has completed the following work:

The deposits to be expected in this area are probably less than 10 tons each.

In all of these deposits it has been necessary to mine with a large degree of selectivity to maintain a grade above 0.20 percent $U_3O_8$ and 1.0 percent $V_2O_5$.

## PROPOSED EXPLORATION

The applicant has proposed exploration by both wagon and diamond drilling in three separate phases. Approximately 20 diamond-drill holes, totaling 1,200 feet, on wide-spaced centers (about 1,000 ft.) would be drilled during phase I. About 75 wagon-drill holes, totaling 3,000 feet, on moderate-spaced centers (about 500 ft.) would be drilled during phase II. The favorable ground found by phases I and II would be wagon drilled on close-spaced centers (about 50 ft.) during phase III to develop the deposits. As part of the phase III drilling, it was proposed to perform drilling along the rims where outcrops of mineralized material are found. A maximum of 5,000 feet would be required for phase III.

A total of 1,200 feet of diamond drilling and 8,000 feet of wagon drilling, costing about $11,918.00, was proposed by the applicant.

(1) The drift along the Strawberry vein on the 50-foot adit level has been extended 25 feet west. (See geology map accompanying Nickelson's memorandum, and geologic and assay plan of 50-foot adit level drift on Strawberry vein accompanying this memorandum.)

(2) The 150-foot adit level, essentially a crosscut which bears N. 10° W. and is 150 feet in length, has been partially rehabilitated to explore the Strawberry vein which crosses the adit at 110 feet. The portal of this adit is located 520 feet S. 74° E. of the 50-foot adit and is 115 feet lower in altitude. It is shown on the map entitled "Surface and Underground Exposure of Scheelite, Pony Tungsten Enterprise, Keystone-Strawberry Group" accompanying the report by George S. Gluck which is a part of the application.

(3) One additional trench on the Strawberry vein 300 feet northeast of the 50-foot adit level portal has been completed.

(4) The small gold mill on the property has been rehabilitated and revamped in an attempt to utilize it as a tungsten concentrator. At the present time the mill has a capacity of 36 tons per 24-hour shift. Equipment consists of a 9" by 15" crusher, one battery of 5 stamps, a small homemade classifier (dewaterer), one double Jig, and two tables. The operator intends to double the capacity of the mill by adding another battery of stamps and two more tables to the circuit, and by making use of both sides of the double Jig. An 8-hour per day milling operation is planned.

## BRIEF DESCRIPTION OF SCHEELITE OCCURRENCE

Of the two important vein structures, the Keystone and Strawberry veins, explored on the Strawberry property, scheelite has been found only along the Strawberry vein. This vein strikes west to N. 65° W. and dips 55° to 65° S. or SW. For the most part, it appears to parallel roughly the gneissic banding in rocks of the Pony Series which enclose the vein. However, in places it apparently cut the gneissic banding at a very low angle. Detailed mapping would be required to establish this relationship definitely.

The distinguishing feature of the Strawberry vein is a blue-gray fault gouge which marks the footwall of the vein. This gouge zone varies in width from about 5 inches to over 4 feet. Overlying the fault gouge is a hard band of silicified gneiss. In places silicification appears to be almost complete, thus forming a quartz vein in the immediate hanging wall of the fault gouge. This silicified band generally is about 1 to 3 feet wide, but in places widens to over 5 feet.

The immediate hanging wall area of the silicified band is sheared over a width of several feet. Scheelite occurs as thin discontinuous stringers and disseminated fine grains at several places within this hanging wall shear zone. However, it is apparent that

## CONCLUSIONS AND RECOMMENDATIONS

The uranium deposits on the Dewey Rim mining claims are in the lower two beds of the Salt Wash member of the Jurassic Morrison formation. These beds are called the ore-bearing sandstone. According to AEC files, about 40 tons of ore averaging 0.19 percent $U_3O_8$ and 1.30 percent $V_2O_5$ have been shipped from the vicinity. Most of this ore has come from the Last Dollar claim. The ore is associated with pockets of carbonaceous trash and is discontinuous. Some mineralized material is associated with partly silicified fossil logs.

Close-spaced drilling in the favorable ground behind the deposits on the Arnite No. 10 claim failed to penetrate a significant deposit. The discovery of significant deposits in the favorable ground on the Cuesta No. 3 claim would require drilling on a very closely-spaced pattern with results unlikely to justify the costs.

Therefore, it is recommended that the Government not enter into a contract with the applicant to do the proposed exploration.

the distribution of scheelite within the hanging wall shear zone is very erratic, and there are large areas along the vein completely devoid of scheelite. Even within those areas where the scheelite does occur the zone of stringers and disseminated grains is very erratic and discontinuous. This erratic nature is illustrated on the map of the 50-foot adit level, but it was also apparent at every known exposure of scheelite along the vein. In most places the zone of scheelite within the hanging wall shear is only a few inches wide; however, there are exceptions where the zone widens to slightly over a foot. The scheelite stringers within this zone are also narrow, varying in width from about one-sixteenth to three-eights of an inch, with the narrower stringers predominating.

The map entitled "Map of Surface and Underground Exposure of Scheelite, Pony Tungsten Enterprise, Keystone-Strawberry Group" accompanying G. S. Gluck's report on the applicant's properties illustrates a theory that the scheelite is not related to the Strawberry vein. Instead it is postulated that there are two separate scheelite veins which cut the Strawberry vein at a small angle. We could find no evidence to support this theory. Every known occurrence of scheelite is directly related to the Strawberry vein which is an easily distinguishable structure, being marked as it is by the blue-gray footwall gouge zone.

## SAMPLING UNDERTAKEN DURING EXAMINATION

The drift along the Strawberry vein on the 50-foot adit level was mapped and the distribution of scheelite carefully noted during the examination. Scheelite was noted only in that portion of the drift west of the adit level crosscut to the vein. The scheelite exposed in this drift is considered to be fairly representative of the occurrence of scheelite along the Strawberry vein. Samples were cut at 10-foot intervals for a distance of 60 feet along the vein exposed in the west drift. The hanging wall shear zone in which the scheelite occurs was sampled separately from the footwall gouge zone and silicified band. Sample series 21 through 26 represents samples cut across the hanging wall shear, whereas sample series 21A through 25A represents samples cut across the footwall gouge zone and silicified band. All samples were assayed for gold and tungsten. The location and assay results of these samples are shown on the map attached to this memorandum.

It is apparent from the results of this sampling that the tungsten and gold values of the vein in this area are very low. The highest gold assay was only 0.017 ounce per ton. The highest tungsten assay was 0.216 percent tungsten trioxide, and the remaining tungsten samples assayed less than 0.032 percent tungsten trioxide. 11 Samples

At the time of the examination the applicant was attempting to mill material obtained from the west drift along the Strawberry vein on the 50-foot adit level. Material from this drift was divided into two fractions, coarse and fine, depending on whether it would pass through a 1¼ inch grizzly at the mill. A sample of the coarse

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

Engineering Report

By M. H. Salsbury
Mining Engineer
Bureau of Mines

mill feed assayed 0.001 ounce gold per ton and 0.038 percent tungsten trioxide. A sample of the fine mill feed assayed 0.001 ounce gold per ton and 0.014 percent tungsten trioxide.

An assay plan of the west drift along the Strawberry vein on the 50-foot adit level and of the open cut approximately 120 feet east of the adit has been added to the folder containing G. S. Gluck's report on the applicant's properties. Lamping and sampling of the west drift along the Strawberry vein on the 50-foot adit level show that sample data on this map are grossly in error. To illustrate, three of the applicant's samples cut over widths varying from 16 to 18 inches assayed 1.0 percent, 3.62 percent, and 6.1 percent tungsten trioxide.

Samples were also cut across the vein exposed in the trench 300 feet northeast of the portal of the 50-foot adit level. This is the trench that was completed after Nickelson examined the property. A 6.3-foot sample across the fault zone and silicified band at this location assayed 0.008 ounce gold per ton and no tungsten. A 0.8-foot sample across the hanging wall shear assayed 0.001 ounce gold per ton and 0.030 percent tungsten trioxide.

As a further check on the scheelite showing along the Strawberry vein in the 450-foot adit level, the vein was sampled in the vicinity of the small tungsten showing, approximately 90 feet east of the crosscut to the vein. The footwall gouge zone was not exposed in the drift where the sample was cut but is only a few feet in the wall of the drift. A 3.7-foot sample across the silicified band exposed in the drift assayed 0.045 ounce gold per ton and no tungsten. A 1.7-foot sample across the hanging wall shear assayed 0.012 ounce gold per ton and no tungsten. Nickelsen sampled the scheelite zone in this same area. His sample, No. 434, was cut at three places across the scheelite zone, along a 15-foot section of drift. The average width of the sample was 0.8 foot, and it assayed 0.74 percent tungsten trioxide. The sample cut by Nickelson and the sample cut by us in this area illustrate the erratic distribution of scheelite even within those areas where it does occur.

## CONCLUSION

Lamping and sampling of the scheelite exposures along the Strawberry vein indicate that the deposit is of no economic importance. For this reason it is recommended that the Pony Tungsten Enterprise's second application, Docket No. DMEA-3352, for Government assistance to explore the Strawberry property for tungsten be denied.

Enclosure 1
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Quinlan
Docket
Nickelson

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

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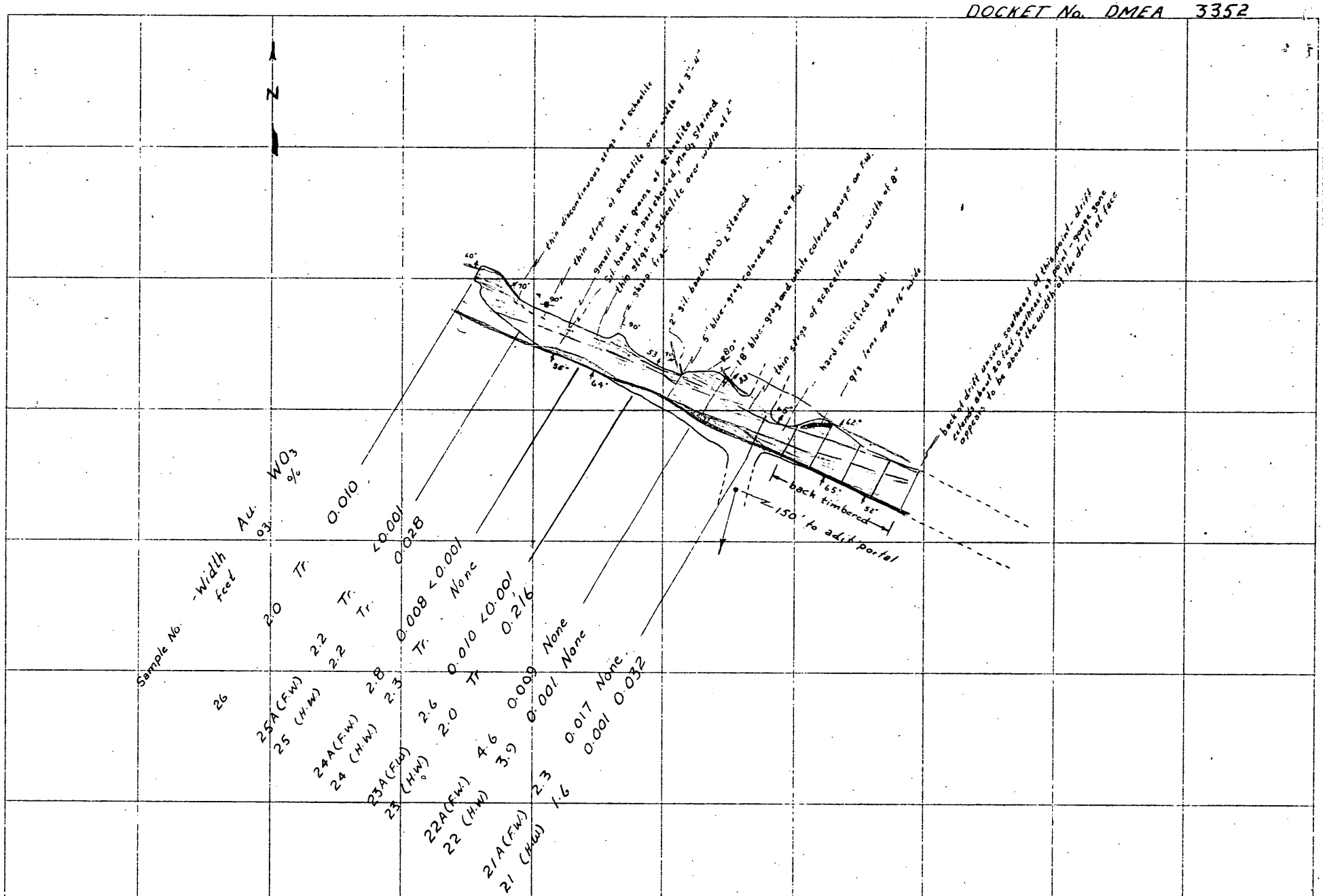
## ILLUSTRATIONS


Figure — Follows page

1. Location map, Dewey Rim mining claims, Midland Uranium, Inc., Grand County, Utah..... 2

2. See Geologic report

DOCKET No. DMEA 3352




GEOLOGIC and ASSAY PLAN - 50 FOOT ADIT LEVEL DRIFT on STRAWBERRY VEIN

STRAWBERRY PROPERTY, MADISON COUNTY, MONTANA

SCALE 1" = 20'

J.J.Q & J.S.M. June 1954

"ALBANENE" No. 195M K&E CO., N.Y. REG. U.S. PAT. OFF.

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

## ENGINEERING REPORT

By

M. H. Salsbury

## INTRODUCTION

Midland Uranium, Inc., 308 Phillips Petroleum Building, Salt Lake City, Utah, has applied for a Defense Mineral Exploration Administration loan to explore for uranium in 13 unpatented claims in Thompson mining district, Grand County, Utah on which they hold a lease. A program calling for 1,200 feet of core drilling and 8,000 feet of wagon drilling was outlined at an estimated cost of $11,918.00--Government participation 75 percent, or $8,938.50.

The property was examined on May 19, 1954, by a DMEA examining team, in company with W. P. Williams and E. S. Santos of the Geological Survey, and J. E. Gonyer, representing the applicant.

## ACKNOWLEDGEMENTS

Data on the property were obtained from the application and from C. E. Mobley, the Geological Survey member of the examining team, who is in charge of the nearby Yellow Cat field camp for the Survey, and is familiar with the geology and ore deposits of the area. Information on production at an adjoining property was furnished by the Atomic Energy Commission. They were also contacted through

DOCKET

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
Rm. 157 Howard Street
Spokane 4, Washington

June 3, 1954

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

WSM

Re: Docket No. DMEA 3552 (tungsten)
Strawberry Property
Madison County, Montana

Dear Mr. Clary:

This is to advise that DMEA field representatives will contact you or your representative at Pony, Montana, on or about June 15, 1954, in order to examine the Strawberry property with reference to your DMEA loan application. Any assistance that you or your representative can render the field representatives will be appreciated.

Yours truly,

James J. Quinlan
For: A. L. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Quinlan

JUN 1 1954

Lou Garbrecht but no specific information pertaining to the property was available in their files.

## LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Dewey Rim mining claims are located in secs. 11 and 12, T. 23 S. R. 23 E., and sec. 7, T. 23 S., R. 24 E. Salt Lake meridian, Thompson mining district, Grand County Utah (fig. 1). The property is on the south rim of a mesa 400 feet above, and overlooking the Colorado River and the Dewey Bridge. The climate of the region, at an altitude of 4,500 feet, is hot and dry in summer, and moderate to severe in winter with occasional severe storms. Year around operations are feasible with few interruptions from bad weather.

The claims are on a poor access road 3 miles from graded Utah State Highway 128 and U. S. Highway 50. Moab is 35 miles southwest of the property on Utah State Highway 128, which follows the Colorado River.

Complete stocks of mining supplies are maintained at Grand Junction. Scheduled motor freight lines serve Cisco, the nearest town. The nearest receiving stations for uranium ores are at Grand Junction, and Moab. At Thompson, a station on the Denver and Rio Grande Western railroad, there are Atomic Energy Commission facilities for transferring truck shipments to railroad cars.

Water for mining purposes must be hauled 5 miles from the Colorado River. Timber is obtainable in Grand Junction or Moab. Power must be provided by the individual operator.

## LABOR AND LIVING CONDITIONS

Demand for labor is increasing in the area, but small crews can still be obtained without much difficulty. The prevailing wage

400

Docket
Martin

Guild
Hedges
Thayer
Selfridge
F. Johnson

MAY 20 1954

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. DMEA 3352 - Tungsten
Strawberry, et al. claims
Madison County, Montana

Dear Mr. Clary:

The above-docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and has been referred to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II, South 157 Howard Street, Spokane 4, Washington, for a field examination of the property.

Any assistance that you can render the members of the Field Team will be appreciated.

Sincerely yours,
C. O. Mittendorf

Administrator

cc: DOCKET
FIELD TEAM, REG. II
CODE 400
ADM. READ. FILE
OPER. COMM.
R. W. GEEHAN, USBM
T. P. THAYER, USGS

WSMartin/ls
5/19/54

R.C.G.

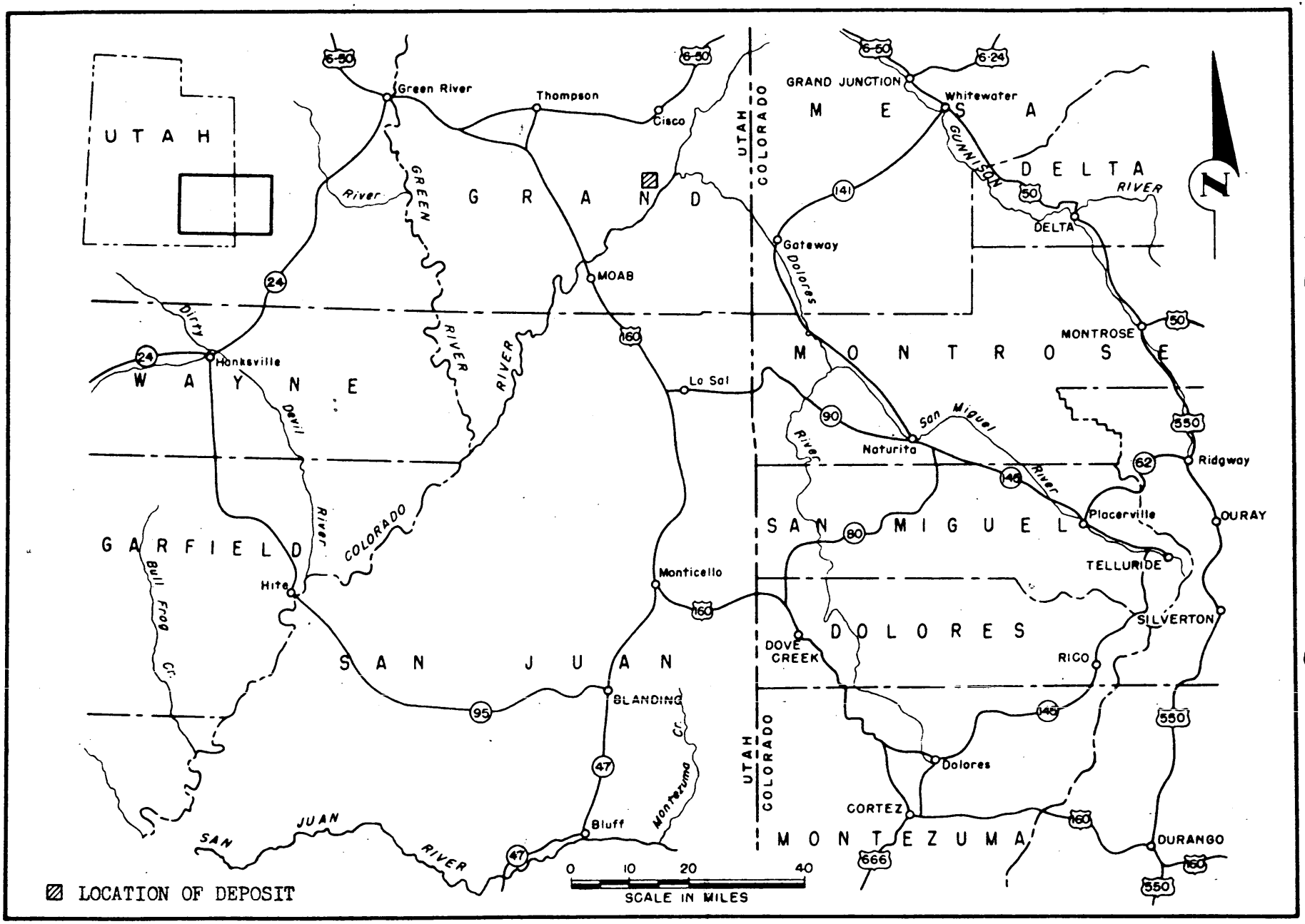



FIGURE 1 - LOCATION MAP, DEWEY RIM MINING CLAIMS, MIDLAND URANIUM, INC., GRAND COUNTY, UTAH (DMEA 3353)

400

Docket
Martin
Guild
Thayer
Selfridge
H. Johnson

MAY 20 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 3352 - tungsten
Pony Tungsten Enterprise
Strawberry, et al. claims
Madison County, Montana

Dear Mr. Weissenborn:

Reference is made to your letter of May 12, 1954, forwarding the application of the Pony Tungsten Enterprise to this office.

As you are scheduling a field examination of the property, we will hold the subject application in abeyance until we receive the Field Team's report.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

J. H. Hedges (JHB)

Member, Bureau of Mines

T. P. Thayer (JHB)

Member, Geological Survey

cc: DOCKET
FIELD TEAM, REG. II
CODE 400
OPER. COMM.
ADM. READ. FILE
R. W. GEEHAN, USBM
T. P. THAYER, USGS

WSMartin/ls
5/19/54

P.S. We have already received a Congressional inquiry about the subject application.

R.C.S.

rate for semi-skilled labor is $1.75 to $2.00 per hour.

There are no living accommodations at the property, and housing facilities, probably in the form of house trailers, might have to be provided. At most seasons, the claims could be reached by commuters from Cisco, or even Thompson, Utah.

## HISTORY, PRODUCTION, AND OWNERSHIP

Exploration of the Thompson mining district dates from 1950. Operations in the vicinity of the Dewey Rim claims have not been extensive or very productive to date. A small operation on the Last Dollar claim, adjoining the Mistake claim on the west, both company owned claims has provided minor production and is now active. Other work to date in the immediate area has consisted of rim stripping and wagon drilling.

The Atomic Energy Commission reports production of 33 tons of ore from the Last Dollar claim, averaging 0.19 percent $U_3O_8$ and 1.30 percent $V_2O_5$. A production of 7 tons of ore averaging 0.10 percent $U_3O_8$ and 0.40 percent $V_2O_5$ is reported from small ore bodies, consisting mostly of two fossil logs, found in rim outcrops on the Cuesta No. 3 claim, one of those included in the application. The estimated production of 150 tons of ore from the area reported by the applicants is not substantiated by available records.

The thirteen Dewey Rim mining claims included in this application are owned by L. E. Busey, the original locator, and are under lease and option to Midland Uranium, Inc., a Utah corporation, Richard G. Allen, President, 308-9 Phillips Petroleum Building, Salt Lake City, Utah.

11:15

Mr. Broadgate of Senator Murray's office said he would call you again this afternoon and wanted to talk with you about DMEA 3135, which is the former number of Pony Tungsten Enterprise's application which was denied because applicant lacked funds, although a project was recommended by Field Team.

No! Denied on basis data available previous examinations and little chance of making significant discovery

F.A.R.

ls

Note news item put in old docket in Dec.

The claims are shown on figure 2 with the geologic report. They are recorded in the Grand County courthouse, Monticello, Utah, in Books 9-L and 9-N. The recording dates and the terms of the lease from Busey were not shown in the application. For the purposes of this report, further data on ownership were not required and validity of the claims was not investigated.

## DESCRIPTION OF THE DEPOSITS

The ore on the Dewey Rim mining claims occurs in the two lower sandstone beds of the Salt Wash member of the Jurassic Morrison formation, which forms the mesa top in the proposed exploration area. The favorable host rock here consists of discontinuous lenses of light-gray sandstone 10 to 30 feet thick and as much as 500 feet wide, underlain in places by gray-green mudstone up to 3 feet thick. Carbonaceous material, limonite stain and gray-green mudstone seams and pebbles are present in the sandstone. According to criteria developed by the Geological Survey, the gray-green discoloration of the mudstone is good evidence of nearby ore deposition. The light-gray colored sandstone is not, in itself, necessarily an indication of uranium mineralization unless it occurs in conjunction with a substantial thickness, shows carbonaceous content, and accompanys gray-green mudstone. Light-red or light-gray sandstone, underlain by red-brown mudstone is considered an unfavorable host rock.

Applying these criteria to the outcrop exposures, the lowest sandstone bed on the Cuesta No. 3 and the next to lowest sandstone on the Arnite No. 10 claims are the only favorable ore horizons on the property.

Judges 2 v 8

There are three minor showings in the outcrop on the Cuesta No. 3 claim which has been stripped (figure 2 with the geologic report). Two of these were fossil logs about 8 inches in diameter trending N. 75° W. Only the outer part has been replaced by uranium minerals. In the other rim deposit, the ore has been explored by a 20 foot drift following slight uranium and vanadium mineralization. Occurrences were extremely spotty with a few high-grade pockets. Deposits on the Arnite No. 10 were similar.

Geological considerations suggests a possible ore trend of 10 to 20 degrees west of north. Judging from the ore occurrences on the Last Dollar claim, individual ore bodies are not likely to average over 10-15 tons each and the ore would have to be mined selectively to produce a shipping grade.

Evidence of deposits of this size might easily be missed in a drilling pattern with holes on a spacing of 50 feet or even less. The depth to the ore horizon within the proposed drilling area varies from 39 feet to 125 feet. The examining team checked this by hand leveling. This compares with a maximum of 100 feet estimated by the applicants.

## MINEABLE ORE RESERVES

There are no mineable ore reserves on the property. The ore found along the rim was barely of commercial grade.

## PRESENT STATUS

### Exploration and Development

The property has been explored by rim stripping and an estimated 2,000 feet of wagon drilling back of rim exposures on the

May 17, 1954

Subject: DMEA-3352
Re: Exploration Assistance
Stawberry Mine

Pony Tungsten Enterprise
Pony
Montana

Gentlemen:

The receipt of your application dated May 3, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3352 and referred to the Iron & Ferro Alloys Division.

Kindly refer to DMEA-3352 in any future correspondence relating to your application.

Sincerely yours,

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

Arnite No. 10 and Flag claims. Much of the drilling was done by previous operators and was not logged or mapped properly. The applicants stated that there were available data on the mineralized holes and the depth to the mineralization, but no specific holes were mentioned except in the case of 2 holes on the Flag claim which were probed and readings obtained that checked previous logs showing approximately 0.08 percent uranium. These and other holes drilled prior to the current operation were reported to have outlined "a lenticular mineralized body on the Flag claim approximately 150 feet by 100 feet, varying from a thickness of 8 inches to 12 inches on the edges, to approximately 3 feet through the center at a depth of 39 feet." Evidently values were not good enough to follow up by underground exploration.

On the adjoining Last Dollar claim, not included in the application, Midland Uranium, Inc. has done about 1,000 feet of wagon drilling which resulted in finding 2 mineralized areas, one of which was mined by the White Arrow Mining Company, a sub-lessee. An exploration drift to the other area was being driven at the time of this examination. The ore found in this operation to date, as listed under production, has been insignificant.

## Mining and Milling Equipment and Other Facilities

The applicants proposed contract work for both wagon and core drilling, and no other equipment would be required.

There are no buildings or other facilities at the property. Presumably, drilling contractors would furnish their own living accommodations.

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

May 17, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region II

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 II.

DMEA - 3352 Pony Tungsten Enterprise

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

## PROJECT PROPOSALS WITH COSTS

The applicants proposed a combined core and wagon drilling program in 3 phases as follows:

Phase I. Approximately 20 core drill holes totaling 1,200 feet on wide spaced centers for geological evaluation based on thickness and color of sandstone, underlying mudstone, and presence of carbonaceous material.

Phase II. Approximately 75 wagon drill holes totaling 3,000 feet on 500 foot centers. Information from drill cuttings and probing, together with geological evaluation of holes in Phase I would eliminate unfavorable areas.

Phase III. An indefinite number of holes, totaling an estimated 5,000 feet of wagon drilling on a maximum of 50 foot centers, to explore favorable areas indicated by Phases I and II. Additional drilling back of mineralized outcrops was also proposed in Phase III. The estimated cost was $11,918.00--Government participation 75 percent, or $8,938.50. Estimate footage costs were $3.00 for core drilling and $1.03 for wagon drilling, including supervision and technical services.

The applicants' proposal was based on a plan and sequence of exploration which the Geological Survey has not found to be effective under similar conditions. The drilling pattern appears to have been set up to explore the property without regard to the rim exposures. Logically, the areas back of the mineralization at the rim should be drilled in the first phase in order to establish possible ore trends and guide subsequent drilling. Some of the rim drilling has been done but would have to be duplicated because no worthwhile information was obtained. A revised program providing for drilling in back of the rim during the first phase was considered tentatively by the DMEA examining team, and it was found that drilling only the areas behind mineralized sections of the outcrops, with subsequent holes located in relation to the information obtained from the first holes, would require a minimum of 6,000 feet of drilling

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

May 12, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: DMEA application (tungsten)
Pony Tungsten Enterprise
Pony, Montana

Dear Mr. Selfridge:

Enclosed are the original and two copies of an application for a DMEA contract, submitted by Pony Tungsten Enterprise, a Montana corporation. One copy of the application has been retained for the files of this office.

We have a considerable amount of information on tungsten properties of the Pony district in Montana; however, we are not informed on the subject property. We shall, therefore, have to conduct a field examination of the property to evaluate the application. The Field Team's report on the application will be forwarded to the Operating Committee as soon as possible.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: USBM (2)

Copy retained

at a cost of at least $7,500.00. This program would not permit hole spacing close enough to insure finding the small ore bodies, which are likely to occur. The cost of holes spaced closely enough to do this would be prohibitive.

Many of the hole locations would be at points where the depth to the favorable ore horizon is more than the feasible depth for wagon drilling and some core drilling would be required.

## CONCLUSIONS

The uranium mineralization on the Dewey Rim mining claims, as exposed along the rim, indicated by previous incomplete drilling results, and shown by the small production from minor ore bodies mined on the Cuesta No. 3 and the adjoining Last Dollar claims, is very low grade. Individual ore bodies found to date are small and scattered. It is doubtful that ore of profitable grade or significant size would be found by further exploration, or even that there would be a reasonable certainty of locating the probable small ore bodies with a hole spacing of 50 feet, which is the least that is economically feasible. The cost of adequate exploration cannot be justified on the basis of probable discoveries.

## RECOMMENDATIONS

It is recommended that the application of Midland Uranium, Inc. for Government-assisted exploration of the Dewey Rim mining claims under the Defense Minerals Exploration Administration be denied.

MF-103
(Revised April 1952)

# UNITED STATES DEPARTMENT OF THE INTERIOR
## DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
MAY 7 1954
DEPARTMENT OF THE INTERIOR
U. S. G. S.
SPOKANE, WASH.

MAY 17 1954

## 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. 3352
Metal or Mineral Tungsten
Date Received
Estimated Cost $56,960
Participation (Government %)

## INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Pony Tungsten Enterprise
Pony, Montana

(A Montana Corporation)

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

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

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

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

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

(*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 See Attached papers

(*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 Not Applicable

(*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.

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

224 New Customhouse
Denver 2, Colorado

May 14, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

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

Midland Uranium, Inc.
308-9 Phillips Petroleum Bldg.,
Salt Lake City, Utah (Uranium)

Paragon Mines, Inc.
Ophir, Colo. (Lead-Zinc-Copper)

Lowell A. Griffith Associates
Uravan, Colorado (Uranium)

John F. Shaw
John F. Shaw
For W. H. King

Enclosures

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

(*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 15 days and be completed within 6 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

[X] Money [X] Use of equipment owned by you [ ] 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 May 3, 1954

Pony Tungsten Enterprise
(Applicant)

By Emmett J. Clary, President

Emmett J. Clary

**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

**MIDLAND URANIUM, INC.**

~~504 FELT BLDG.~~ SALT LAKE CITY, UTAH

PHONE 22-0291

308-9 Phillips Petroleum Building

Exploration & Mining

Mining Division

Date received

MAY 10 1954

BUREAU OF MINES
Denver, Colorado

May 7, 1954

Executive Officer
DMEA
224 New Customhouse Building
Denver 2, Colorado

Dear Sir:

We are enclosing herewith in quadruplicate application for a DMEA participation on our property known as Dewey Rim.

If this application meets with your approval, will you please advise us at our offices, and if you desire to have your men in the field look this ground over, we will arrange to have one of our men meet with them.

We wish to thank you in advance for any consideration you may show our application, and also will you advise us if you need any additional information which we will furnish at once.

Very truly yours,

MIDLAND URANIUM, INC.

By Richard G. Allen,
Pres.

RGA:mo
Encls.

1. Pony Tungsten Enterprise, a corporation organized under the laws of the State of Montana; Pony, Montana.

| | |
|---|---|
| Emmett J. Clary, | President |
| Emmett Clary, | Secretary-Treasurer |
| Fred Box, | Vice-President |

All of Pony, Montana.

3. (a) The mining property upon which the exploration shall be performed and which may be benefited by the exploration consists of six patented claims:

| | | | |
|---|---|---|---|
| Rustler | M.S.2617 | (W.) Strawberry | M.S. 780 |
| (E.) Strawberry | M.S. 551 | Strawberry Ext. | M.S. 781 |
| Keystone | M.S. 728 | Edison | M.S 5301 |

and is situated in the northern half of Section 14, T2S, R3W, Principal Meridian of Montana.

(b) This property has been known as the Strawberry Mine.

(c) The applicant is the lessee and purchaser under contract.

(d) A copy of the lease and contract is attached herewith.

(e) Not applicable.

(f) Not applicable.

4. (a) The existing mine workings consist of the 450 ft. Level Adit which cuts the Strawberry vein at 975 feet from the portal, with East and West drifts, each about 100 ft. long, along the vein; the 50-ft. Level Adit, 215 feet long, with short drifts both east and west along the Strawberry vein, and a number of intermediate adits.

The Applicant repaired all access roads to old mine workings; opened up and retimbered the caved in portal of the 450-ft. Level Adit, made accessible for examination the West and East drifts on this level, opened up and repaired the 50-ft. Level Adit, laid tracks and air line for a distance of over 200 ft., extended the West drift on this level along Scheelite vein, for a distance of about 40 ft., cleaned the East drift for a distance of about 30 feet, erected an ore bin at the portal. Opened up and repaired the portal of the 150 ft.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

*Not to be filled in by applicant*

Docket No. 3353
Metal or Mineral Uranium
Date Received
Estimated Cost $11,918
Participation (Government %)

## INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Midland Uranium, Inc.
308-9 Phillips Petroleum Building
Salt Lake City, Utah

(*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.

Level Adit.

A prospecting trench was dug and a number of test pits were sunk to trace the Scheelite vein along the surface, for about 800 ft. along the strike.

The Applicant also had a commercial laboratory (The Galigher Company of Salt Lake City, Utah) to perform metallurgical tests on representative samples of Scheelite ore, repaired the existing mill building and set up a small pilot mill utilizing, for the present, available second hand machinery.

(b) Past exploration was confined to the search for gold. Presence of Scheelite was apparently unknown to past operators. All tungsten ore reserves are probable, with the exception of a block of ground above the 50 ft. level and west of the Adit which may be considered proven.

(c) The property and the surrounding country has been examined and described by a number of mining engineers and geologists.

First reference to the Strawberry Mine was made by A. C. Peale in 1896 (U.S.G.S. Geol. Atlas, Three Forks Folio #24). Later A. N. Winchell (1914) described the property in U.S.G.S. Bull. 574.

In 1933, Bureau of Mines and Geology, State of Montana, made a geological reconnaissence of the district and published its findings in Memoir No. 9.

In addition, J. H. Warner, E.M. in 1909 and E. P. Scallon, E.M. in 1936 examined the property for eastern financial interests, and recently (1953) Winston M. Sahinen, geologist,and George S. Gluck, consulting mining engineer examined the mine and adjacent ground for the applicant.

The major geological features of the area are relatively simple in that the surface is occupied by only two important rock types, pre-Beltian metamorphic rocks of the Pony series, gneisses and schists, and quartz-monzonite (grano-diorite) intrusion.

Pegmatites and dikes of aplite are common.

The contact between these two major types of rocks generally extends

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

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

(*c*) The work will start within _____ days and be completed within _____ 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 May 7, 1964

Midland Uranium Inc.
(Applicant)

By R B Allen
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

east-west. The principal fissures are closely parellel to the contact and in general they conform to the bending of the gneiss. It seems the deposits of the region are closely associated with pegmatite dikes.

The Strawberry vein strikes about East-West and dips 60-70 North. On the upper level it is about 4 feet wide, with one to three feet of fault gouge along the footwall. The fault gouge, with some quartz and very little sulphides is also present in the lower level.

The presence of tungsten was first discovered by Emmett J. Clary, of Pony, Montana and Lloyd E. Frizzell of Three Hills, Alta., Canada, both students of Montana School of Mines, whose attention was attracted by large epidote crystals in association with a light colored mineral which on investigation proved to be scheelite.

(d) The property is located about 2 miles west of Pony and is easily accessible via a county road. Nearest shipping point is Harrison, about 8 miles, on the spur of the Northern Pacific R.R. Nearest supply point is Butte, about 60 miles away, although lumber and some minor supplies may be obtained at Harrison and at local saw-mills. Pony has sufficient accommodations for men required for exploration and for initial stages of mining.

(e) There are 10-12 men in Pony available for mining.

Adequate water and timber are found on the property to supply mining operations.

It is proposed to use gasoline engines to supply power required in exploration work.

No electric power is available at present, although a cleared right-of-way is available from Pony to the portal of the Lower Adit.

5. (a) Tungsten (Scheelite).

Application for Aid in an Exploration Project, Pursuant to DMEA Order 1, Under the Defense Production Act of 1950, as Amended

1. b. Incorporated in the State of Utah

c. Richard G. Allen, President, 308-9 Phillips Petroleum Building, Salt Lake City, Utah

H. C. Nell, Vice-President, 308-9 Phillips Petroleum Building, Salt Lake City, Utah

R. G. Fugate, Secretary-Treasurer, 308-9 Phillips Petroleum Building, Salt Lake City, Utah.

3. a. The properties to be explored consist of thirteen (13) unpatented lode mineral claims located in Sections 11 and 12, Township 23 South, Range 23 East, and Section 7, Township 23 South, Range 24 East, Salt Lake Base & Meridian, Thompson Mining District, Grand County, Utah, (as per the attached sketch entitled "Dewey Kim Mining Claims").

The claims are identified and recorded with the Grand County Recorder as follows:

| Claim | Book No. | Page No. |
|---|---|---|
| 1. Flag | 9-L | 383 |
| 2. Flag No. 1 | 9-L | 344 |
| 3. Arnite No. 10 | 9-L | 294 |
| 4. Mistake | 9-N | 156 |
| 5. Mistake No. 1 | 9-N | 162 |
| 6. Mistake No. 2 | 9-N | 163 |
| 7. Cuesta No. 3 | 9-L | 246 |
| 8. Cuesta No. 4 | 9-L | 165 |
| 9. Cuesta No. 5 | 9-L | 166 |
| 10. Cuesta No. 6 | 9-L | 167 |
| 11. Stamp No. 24 | 9-L | 187 |
| 12. Stamp No. 25 | 9-L | 188 |
| 13. Stamp No. 26 | 9-L | 189 |

b. See (a) above.

c. All of the properties being considered under this application are held by Midland Uranium, Inc., under a Lease-Purchase Contract.

d. Contract is appended to this application.

e. Purchase contract provides for an overriding royalty of five (5) percent.

f. See (a) above.

(b) 50 ft. Level -- Extend West Drift 200 ft., drive 2 raises to surface, total of 130 ft.

150 ft. Level --Extend the Adit to intersection with the Scheelite vein, drive drifts East and West along the vein. Total X-cutting and drifting -- 900 ft. Drive 4 raises, total amount of raising 470 ft.

All proposed work is indicated on the map attached hereto.

(c) 15 days 6 months, working 2 shifts a day, 5 days per week. See Time and Cost Schedule attached to the Engineer's report.

(e) All exploration work will be done under supervision of Emmett Clary, mine operator with long experience in exploitation of narrow vein deposits of the district.

George S. Gluck, graduate mining engineer, with over 20 years experience is retained by the Applicant as a consulting engineer.

6. (a) All drifting and raising shall be done by the Applicant on the unit cost basis:

| | Total Length | Cost/foot | Total Cost |
|---|---|---|---|
| Drifts | 1100 | $31.00 | $34,100 |
| Raises | 600 | 24.00 | 14,400 |
| | | | $48,500 |

The above cost to include all labor, materials, supplies and rentals of operating equipment, but not to include cost of supervision and administration, and the estimate is based on:

| | | |
|---|---|---|
| Miners wages . . . . . | $14.11 | per day |
| Rentals on equipment (compressor, drills, mucking machine) . . . . . | 475.00 | per month |
| 7/8 Drill steel . . . . . | 61.75 | per set |
| Carbide Bits . . . . . | 11.05 | each |
| Dynamite . . . . . | 22.45 | per 100 lbs. |
| Caps . . . . . | 22.90 | per 1000 |
| Fuse . . . . . | 12.30 | per 1000 ft. |
| Rails . . . . . | 10.35 | per 100 lbs. |
| Splice plates . . . . . | 0.50 | per pair |
| Spikes . . . . . | 13.70 | per 100 lbs. |

4. a. Approximately 2,000 feet of wagon drilling has been performed on these properties in the past by other owners. Accurate logs and locations of these borings were not recorded and the only information available is a list of mineralized borings and depth of mineralization. Most of this drilling was performed on the Flag and Arnite No. 10 mining claims. Records indicate the presence of a lenticular mineralized body on the Flag claim, approximately 150 feet by 100 feet, varying from a thickness of 8 inches to 12 inches on the edges to approximately 3 feet through the center, at a depth of 39 feet. Recently two of these borings which had not caved were probed and readings correlated with old records at approximately 0.08 percent uranium. Drilling records also indicate the presence of mineralized borings along the rim on Arnite No. 10--along which occur several outcrops of ore grade which are generally found in the thinner sands and are associated with carbonized organic materials. A limited amount of rim stripping and exploratory mining has been carried out on both Arnite No. 10 and Cuesta No. 3 but this work has failed to develop commercially exploitable ore although several loads of marginal ore was shipped as the result of this work.

This company has performed about 1,000 feet of wagon drilling on the Last Dollar claim, which adjoins and laps the Mistake claim. This drilling resulted in two mineralized areas, one of which is now being worked under lease by the White Arrow Mining Company, while a drift is being completed to the other area. This Company controls the Last Dollar through a mineral lease and the workings are readily accessible for inspection.

b. To the present time an estimated 150 tons of ore has been shipped from the general area, with the bulk of the production from the Last Dollar Mine. In all cases to date it has been necessary to mine with a large degree of selectivity to maintain a grade average of 0.20+ percent uranium and 1 to 2 percent vanadium.

c. The following is an excerpt from a geologic report to Midland Uranium, Inc., by J. A. Tavelli, Consulting Geologist, Grand Junction, Colorado, dated April 15, 1954:

> <u>Regional Geology</u>: Rock formations exposed at the locality of the claims range from the Jurassic Entrada formation to the Cretaceious Dakota formation and incorporate continuous exposures of both the Salt Wash and The Brushy Basin members of the Morrison formation. The Salt Wash of this area consists of 4 to 5 distinct but discontinuous sandstone rims of up to 20 feet in thickness which are

| | |
|---|---|
| Bolts . . . . . | $20.30 per 100 lbs. |
| Carbide . . . . . | 8.75 per 100 lbs. |
| 2" pipe . . . . . | 37.50 per 100 ft. |
| 1" pipe . . . . . | 17.85 per 100 ft. |
| Lumber . . . . . | 65.00 per 1000 ft. |
| Gas consumption . . . . . | 9 gal per hour |
| Insurance and Taxes . . . . . | 11% of payroll |

(b) Cost of supervision:

| | |
|---|---|
| Superintendent | $500.00 per month |
| Junior Engineer (sampling and surveying) | 350.00 per month |
| Clerk-Timekeeper | 300.00 per month |
| | $1,150.00 per month |

Total for 6 months -- $6,900.00

(c) Included in Unit Cost.

(d) Included in Unit Cost.

(f) New Buildings:

| | |
|---|---|
| 14 x 16 Dry House | $250.00 |
| 10 x 10 Compressor House | 125.00 |
| | $375.00 |

(g) Miscellaneous:

| | |
|---|---|
| Assaying | $ 835.00 |
| 2-Black light with spare batteries | 150.00 |
| Freight of rented equipment and supplies | 200.00 |
| | $1,185.00 |

Total Cost of Project $56,960.00

(4-c cont.)

separated by thin interbedded layers of sand and mudstone. They produce a series of steep escarpments at the top of the cuesta ridge, and above the scarp the relatively flat dip slope benches are uniformly striking No. 45° W., and dipping away from the scarp to the northeast at about 5°. The bedding attitude throughout the immediate area of the properties is quite uniformly regular. Structurally this locality is a part of the northwest limb of the Salt Valley anticline.

Mineral Deposits: The Salt Wash sandstone in this vicinity is the potentially ore bearing rock unit. To the west along the strike of the structure, the Squaw Park and the Yellow Cat districts are proven areas of production. To the east, Polar Mesa is the closest noteworthy production. In the immediate vicinity an operation is now in progress on the Last Dollar claim which adjoins the property being investigated. This operation shipped a few loads of relatively low grade material and is now engaged in drifting toward two small ore bodies which have been developed through wagon drilling. The ore is in the second rim from the base of the Salt Wash and is found in thin seams of organic material over a zone of up to four feet in thickness. The mineralized zones appear lenticular and discontinuous. Individual hand specimens of mineral approaching one percent can be selected; however over a mining width the values appear to be marginal. The vanadium content is relatively high. A second small operation has been started on the rim of the Flag claim, one of the group now under consideration. Here small discontinuous rim exposures of mineral have been opened. The present status of the work has not proceeded beyond rim stripping, and the showings exposed are not as yet commercially exploitable.

Potential of Claims: A reconnaissance spot checking of the rim exposures and topographic features of the three groups of claims resulted in the observations that follow. The total Salt Wash section in this area is only about 125 in maximum thickness.

In much of the area the top one or two sand rims have been stripped by erosion. The individual sand ledges attain a maximum thickness of about 20 feet. The color of the sands where exposed on the rim is predominantly tan to brown; however, locally the more white colored, coarse grained, and permeable appearing outcrops, considered a criteria for ore localization, can be observed. The mineral that is exposed on the rim is found exclusively in the thin sand interbeds that are associated with thin green mudstones. The more massive sands appear barren,

Report on Mining Properties
of Pony Tungsten Enterprise, Inc.
Pony, Montana
by George S. Gluck, E.M.

October, 1953. Ramsay, Montana

The properties of Pony Tungsten Enterprise, Inc. comprise 4 groups consisting of both patented and unpatented claims as follows:

1. Multimetal group - northmost part of the properties consisting of 2 unpatented claims.

2. Strawberry-Keystone group - central part of the properties consisting of 7 patented claims.

3. Marus group - southern portion of the properties consisting of 3 unpatented claims.

4. Placer group - a forklike piece of ground consisting of 18 unpatented claims. The north fork of this group lies between the Multimetal and Strawberry-Keystone groups, and the south fork between the Strawberry-Keystone and the Marus groups.

All these claims are located in Sections 13 and 14 of T 2 S, R 3 W, Principal Meridian of Montana, with the exception of portions of the Multimetal and Marus groups that are in Sections 10 and 11, and Section 23 respectively of the same township, about 2 miles west of Pony, Madison county, Montana at elevation of 6500 to 7500 ft. above sea level, and as shown on the claim map attached to this report.

Good gravel road connects Pony with state Highway Truck line at Harrison, 8 miles eastward, the nearest shipping point on the spur of the Northern Pacific RR. Nearest supply point is Butte, about 65 miles distant, although lumber and minor supplies may be obtained at Harrison and local saw mills.

Pony has sufficient accommodations for men required for mining and milling operations. There are 10-12 men available locally. The wages are governed by Butte Union scales, being usually about $1.00 - $1.50 lower than at Butte.

Adequate water and timber are available on the property to meet all mining and milling requirements. The Montana Power Co. at request of the Pony Tungsten Enterprise, is conducting at present a survey to bring 3 phase line to the mill building located on the Strawberry-Keystone group at the portal of the lower adit.

Geology.

As may be seen from the geologic map of the region, attached to this report, the claims are almost entirely within the area of Archean metamorphic rocks, known as Pony Series, hemmed in between bodies of quartz-monzonite, which apparently have a sub-surface connection with the Tobacco Root Batholith, further south.

and void of carbon and organic trash. The mineral where observed is intimately associated with carbonized plant remains in this seams along bedding planes. These factors mitigate the potential for development of orebodies having appreciable mining width or very large tonnages.

The topography and location of the claims are very favorable for a program of drilling exploration. Much of the flat topped bench above the Salt Wash rim is accessible ; without preparation of roads or drill sights. Depths of drilling requisite for penetration to the underlying Summerville formation should not exceed 100 feet, and much of the area can be drilled with 50 to 60 foot holes. Water for core drilling operations is available from the Colorado River, a haulage distance of about two miles.

d. Access roads to the properties consist of a truck trail from Utah Highway No. 128 at a point approximately 10 miles south of the junction of Utah 128 and US 50. The properties are located about three miles off Utah 128. Distances to the various shipping, supply and residence points are as follow: Thompson, Utah, 45 miles; Cisco, Utah, 16 miles; Grand Junction, Colorado, 72 miles; and Moab, Utah, 37 miles.

e. Manpower is readily available at Moab, Utah and Grand Junction, Colorado, as are such other services as supplies, tools, and equipment. The nearest residence point is Cisco, Utah. The distance to drilling water is about three miles and about five miles to a portable water supply.

5. a. The proposed exploration will be conducted for the purpose of discovering carnotite ore in commercial grades and quantities.

b. It is proposed to carry out the exploration project as a three-phase project in the manner indicated below:

<u>Phase I</u>: Approximately twenty (20) core drill borings, aggregating 1200 feet, will be made on very wide-spaced centers, as indicated on the accompanying sketch. These borings will be used for geological evaluation controls which may be applied in correllation;with non-core borings. The core borings will be evaluated for the thickness and color of sands, and the presence of carbonaceous materials and green muds--all criteria for the probable presence of mineral bearing areas.

<u>Phase II</u>: Upon completion of the core drilling it is proposed to wagon-drill approximately seventy-five (75) non-core borings, aggregating about 3000 feet, from which cuttings will be sampled and all borings probed for the presence of radio-active minerals. These borings will be made on approximately 500 feet centers and at the completion

On the Strawberry-Keystone group the core of the Pony Series is a bed of dark hornblende gneiss with minor amounts of feldspar and quartz. This bed can be readily traced along the West Strawberry, East Strawberry and Strawberry Extension claims.

It strikes N 72 W and dips steeply north. Flanks of this core are formed by light gray or light brown quartz-feldspar gneiss with subordinate hornblende and mica and narrow bands of black hornblende schist and dark brown mica-garnet schist.

It is my opinion that the mineralization of this area in this group occurred in the following sequence:

A. The intrusion of quartz monzonite caused folding of the Pony Series the structure of which might have been already quite complex due to intrusion of earlier sills. Pegmatitic dikes, acidic phase of magmatic differentiation, which cross the core of the Series almost at right angle, brought along mineralizers carrying tungsten. These mineralizers channeled into openings formed in gneisses by folding and gave rise to formation of scheelite by chemical interaction between mineralizers and lime carrying constituents of the gneisses.

B. Subsequent cooling of intruded igneous mass accompanied by its shrinkage caused fracturing and faulting of the host rocks (Pony Series) both at a sharp angle to the banding of gneisses, in places paralleling to it, and at some angle to the first set of fractures.
Hydro-thermal solutions ascending along these two sets of fault planes formed two sets of veins carrying gold pyrite and chalcopyrite, one set being represented by Strawberry and Keystone veins and the other by the Crevice and minor cross veins.
Position of these two sets of fault veins in respect to the dark horn-blende gneiss bed is shown on the map of Strawberry-Keystone group attached to this report.

Correct interpretation of genetic relationship between scheelite deposit and the Strawberry-Keystone veins is of utmost importance for successful exploration of ground beyond the known boundaries of scheelite.

Description of geological features of other groups I shall, for the present, limit to brief quotations from the geological report by Mr. Winston H. Mahinen who examined the properties in July, 1953.

Multinatal group - "The most outstanding feature of this area is a cupola-like mass of highly altered and silicified wallrock containing irregular masses of coarsely crystalline epidote, tremolite-actinolite, garnet and quartz, with minor amounts of scheelite and sphene. An altered granodiorite appears to sheathe this zone, and fresh granodiorite outcrops nearby. This feature appears to be a "blowout" that allowed the channeling of the mineralizing solutions through a small area".

Rarus group - "Cut F on the Rarus claim again shows an east-striking, north-dipping structure, similiar, and probably related to the Strawberry vein. Mineralization is less intense, but contact metamorphic effects appear to be more pronounced. In addition to the usual mineral assemblage, magnetite was

of this phase it should be possible, through geologic evaluation, to delete from the program those areas which are not geologically favorable for the presence of commercial quality and quantity ore deposits.

Phase III: In such areas as the presence of thicker sands, carbon content, and mineralization indicate the possibility of developing ore--a program of non-core drilling will be initiated as a development phase of the program. This drilling will be closely spaced, a maximum of 50 foot centers, for surface geology indicates that the probable target size in this area is relatively small. It is difficult to estimate the amount of drilling which may be necessary for this third phase, but a probable maximum of 5,000 feet should be adequate.

As a part of the third phase drilling it is proposed to perform drilling along the rims where outcrops of mineralized sand may be found to determine to what extent mineralization is present. At the convenience of the company, this portion of the drilling may be performed simultaneously with earlier phases of the proposed project.

c. This work will start within 30 days and be completed within five (5) months from date of an exploration contract.

d. This work to be contracted out to a reputable drilling company.

6. a. This company proposes to obtain and execute this exploration contract on the basis of a "short form" contract wherein all estimated costs and the cost of independent contracts are submitted as a unit price--as below:

Core Drilling:

| | | |
|---|---|---|
| 1. | Contract for performance of drilling | $ 2.500/ft. |
| 2. | Contract for Geological Consultant | 0.175/ft. |
| 3. | Contract for Engineering Consultant, includes logging, sampling, and surveying | 0.410/ft. |
| | Total cost per foot | $ 3.085 |

Wagon Drilling:

| | | |
|---|---|---|
| 1. | Contract for performance of drilling | $ 0.750/ft. |
| 2. | Contract for Geological Consultant | 0.057/ft. |
| 3. | Contract for Engineering Consultant | 0.072/ft. |
| 4. | Furnish qualified field man to log borings, take samples, and probe borings (Employee, complete w/tools, transportation and equipment | 0.145/ft. |
| | Total cost per foot | $ 1.027/ft. |

observed to be much more plentiful. The scheelite content here was lower than at the other exposures. The wallrock in this deposit is an altered gneiss similar to that found at the Strawberry."

Development:

Development of the properties is mainly confined to the Strawberry-Keystone group, due to former activities in gold mining, and consists of the 450-ft. Level Adit, 975 ft. long, with drifts along both the Keystone and Strawberry veins, the 50 ft. Level Adit, 200 ft. long with short drifts near its face, both ways along the Strawberry vein, and a few intermediate X-cut Adits with some lateral work.

The Pony Tungsten Enterprise repaired all access roads to old mine workings and opened up and retimbered the 50 ft. Level, 150-ft. Level and 450-ft. Level Adits, traces Scheelite vein on the surface by cuts and test pits for a distance of some 800 ft., and extended West Drift of the 50 ft. Level for a distance of about 40 ft.

The difference in vertical elevations between the 50 ft. and 450 ft. Levels is 419 ft. and between the 50 ft. Level and the surface ranges from 45 to 60 ft.

With the dip of 60 to 65° this provides 460 ft. of backs between these two levels and from 50 to 70 ft. of backs between the 50-ft. level and the surface.

Systematic sampling of all openings where "lamping" disclosed Scheelite was made by channel cuts. Location of sampling channels, width of the vein and $WO_3$ content are shown on the assay map.

Scheelite seems to follow the schistosity planes of gneiss. It is of a granular character and easily responds to panning. Under the ultraviolet light it displays a typical bright blue color indicating freedom from molybdenum.

Development work on other three groups consists of discovery bulldozer cuts and pits where "lamping" proved presence of Scheelite, no systematic sampling, however, was done.

Metallurgical tests conducted by the Galigher Company of Salt Lake City on representative samples of ore indicate possible recovery of tungsten up to 87% of $WO_3$ by gravity concentration, with concentrates containing up to 57% $WO_3$.

Recommendations:

In planning future exploration and development of the properties, first consideration should be given to the Strawberry-Keystone group.

In order to facilitate future mining, the exploration of this group should be carried on 4 levels, as follows:

50 ft. level -- continue the West Drift to a point designated on the map as a "Probable Fault" -- a distance of 200 ft. or about. Two raises to the surface would be required on this level, both to explore the ground above the level and to provide ventilation. Inasmuch as the supply of mine timber is located westward of this level, one of these raises may later be utilized as a passage way for timber for lower workings.

Midland Uranium, Inc.

**Total Estimated Costs of Exploration:**

| | | |
|---|---|---|
| 1. | Phase I: 1200 ft. @ 3.085 per ft. | $ 3702.00 |
| 2. | Phase II: 3000 ft. @ 1.027 per ft. | 3081.00 |
| 3. | Phase III: 5000 ft. @ 1.027 per ft. | 5135.00 |
| | | 11,918-00 |

b. through f. -- not applicable.

g. Accounting costs charged at five (5) percent of work performed.

h. Contingencies:

1. From the reports of past drilling in this area it is expected that in some instances water may be encountered which will prevent wagon-drilling. In the event that this problem arises it will be necessary to substitute core drilling for wagon drilling at the cost stated in (a) above.

2. The need for drill site preparation may arise during the performance of the third phase of the exploration project. It is not possible to estimate the amount of work which might be necessary, but it will be limited and will be charged at the cost, of such work, prevailing in the area at the time of performance.

7. a. This company is prepared to furnish its share of the cost of the proposed project in accordance with regulations on Government participation (Sec. 7, DMEA No. 1).

b. This company's share of the cost will be furnished through monetary payment of its share of the program.

150 ft. level — Continue with the adit to intersect the Scheelite vein, an estimated distance of about 30 ft. Next, open drifts both East and West. Drive the West Drift to the point reached correspondingly by the West Drift on the 50-ft. level, and drive the East drift to hole to the surface.

Along both drifts raises should be driven to the surface or to the level above, both as means of exploration between two levels and as means of ventilation.

Exploration work on these two levels can and should be carried simultaneously.

Cost of this part of exploration work, required time and tonnage of ore expected to be proven are tabulated in the "Schedule of Cost and Time" attached to this report.

The second stage of exploration work of this group should include the exploration of 300 ft. and 450 ft. levels.

After the East Drift of the 150 ft. level is holed through to the surface, the Scheelite vein should be traced on the surface eastward to a point about 150 ft. lower than the portal of the 150 ft. level. At this point the adit should be started and driven westward to the point where it can be conveniently connected both with the 150 ft. level above and the 450 ft. level below.

Inasmuch as the results of exploration of the 150 ft. level would have bearings on the details of exploration of two lower levels, this stage of exploration should not be undertaken until these results are known, however, it should not be delayed longer than necessary.

Following this pattern of exploration, the existing 450 ft. level, eventually will serve as a main haulage level, thus eliminating trucking of ore from different levels, which is quite an expensive operation particularly in winter. At the same time raise chutes would provide ample ore storage facilities, and construction of large ore bins at portals would not be required.

Marus group — appears to be the next in importance to the Strawberry-Keystone group for the reason of geological similarity of these two groups, as well as due to its proximity to the mill where in the future ores from both groups may be treated.

However, like in the case of the other remaining groups, the exploration work should be limited until the Strawberry-Keystone group is ready for production.

Inasmuch as the present knowledge of the deposit of this group is very limited, the exploration should mostly be confined to tracing scheelite on the surface from the present discovery out down the hillside to a point where future underground exploration may be commenced.

Placer group — as this group consists of 18 claims, and the annual assessment work would cost close to $2,000, I would recommend that a small washing plant should be erected, and the placer ground tested either by pits or by churnholes of a large diameter. All material excavated from these pits or holes should be treated as individual samples. In this manner more valuable parts would be delineated for further detailed testing, and valueless claims eliminated from future assessment work.

Multimetal group — for the present, work on this group should be limited to the annual assessment work.

8/13/54 ugh

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

224 New Customhouse
Denver 2, Colorado

July 29, 1954.

Memorandum

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

From: DMEA Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3353 (Uranium), Midland Uranium, Inc., (Dewey Rim claims), Grand County, Utah.

Enclosed are four copies of the Report of Examination on the subject property, a copy of the letter of denial to the applicant and two copies of Form 3b.

W. H. King
W. H. King

E. N. Kuchman
for A. H. Koschmann

Enclosures

RDB:cvm

cc: Administrator, DMEA
Docket 3353
WMTraver w/copy of Report of Examination
WPWilliams " " " " "
AHKoschmann " " " " "
ERGordon " " " " "
DMEA " " " " "
Mining Div. " " " " "
AHKoschmann
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

Milling — Representative samples of ore from the Strawberry-Keystone group were submitted to the Galigher Company of Salt Lake City for metallurgical tests with results which indicate a possible recovery of 87% by gravity concentration, obtained concentrates assaying 57% $WO_3$.

Although there is on the market crushing and grinding machinery that is much better adapted for treatment of Scheelite ores than the gravity stamps, the decision to set up a small pilot mill utilizing the available stamps should not be condemned, as exercising certain precautions, the recovery of tungsten may prove satisfactorily for the present to defray a part of exploration expenses, and the stamp tailings may be retreated later at a more modern mill when the erection of such a mill will be justified by the results of exploration work.

George S. Gluck, E. M.

Geo. S. Gluck

COPY

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

August 3, 1954

224 New Customhouse
Denver 2, Colorado

Mr. Richard G. Allen, President
Midland Uranium, Inc.
308-9 Phillips Petroleum Building
Salt Lake City, Utah

Re: DMEA Docket 3353 (Uranium),
Midland Uranium, Inc.
(Dewey Rim mining claims),
Grand County, Utah

Dear Mr. Allen:

Reference is made to your application for Government assistance to explore your Dewey Rim mining claims for uranium.

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

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

Very truly yours,

/s/ W. H. KING
W. H. King
DMEA Field Team, Region IV

/s/ E. N. HARSHMAN
for A. H. Koschmann
DMEA Field Team, Region IV

RDB:cwm

cc: Docket 3353
Administrator, DMEA
WMTraver
WPWilliams
AHKoschmann
ERGordon
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

# TIME AND COST SCHEDULE

| | | Advance ft. | | | Cost $ | | | |
|---|---|---|---|---|---|---|---|---|
| | | 50 ft.level | 150 ft.level | Total | Labor & Supplies | Assaying | Supervision | Total |
| June, 1954 | Drifting | 120 | 210 | 330 | 10230 | 205 | 1150 | 13,625 |
| | Raising | #1-60-C | #1-25 | 85 | 2040 | | | |
| July " | Drifting | 80-C | 190 | 270 | 8370 | 185 | 1150 | 12,225 |
| | Raising | #2-20 | #1-60-C<br>#2-25 | 105 | 2520 | | | |
| August " | Drifting | -- | 125 | 125 | 3875 | 135 | 1150 | 8,760 |
| | Raising | #2-50-C | #2-100-C | 150 | 3600 | | | |
| Sept. " | Drifting | -- | 125 | 125 | 3875 | 110 | 1150 | 7,535 |
| | Raising | -- | #3-100 | 100 | 2400 | | | |
| Oct. " | Drifting: | -- | 125 | 125 | 3875 | 90 | 1150 | 6,555 |
| | Raising | -- | #3-40-C<br>#4-20 | 60 | 1440 | | | |
| Nov. " | Drifting | -- | 125-C | 125 | 3875 | 110 | 1150 | 7,535 |
| | Raising | -- | #4-100-C | 100 | 2400 | | | |
| Total | Drifting | | | 1100 | 48500 | 835 | 6900 | 56,235 |
| | Raising | | | 600 | | | | |

C = Completed

| | | |
|---|---|---|
| Area explored above 150 foot level | | 116,000sq. ft. |
| Prospective tonnage (av. width = 1.5 ft.) (13 cu. ft.= 1 ton ) | | 13,400 tons |
| Cost of explorations, per ton | | $420 |
| No. of units of $WO_3$ (av. assey = 0.6%) | | 8000 |
| Less loss, 20% (mining and milling) | | 1600 |
| Net | | 6400 units |
| Value (@ $63. per unit) | | $403,000 |
| Less,cost of exploration | 56,000 | |
| mining and milling | 200,000 | |
| royalties | 40,000 | |
| | 296,000 | |
| Net profit | | $107,000. |

Time for mining and milling--1 year

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

224 New Customhouse
Denver 2, Colorado

July 29, 1954.

Memorandum

To: DMEA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Engineering Report of Examination - DMEA Docket 3353 (Uranium), Midland Uranium, Inc., (Dewey Rim claims), Grand County, Utah.

Enclosed are eleven copies of the Engineering Report of Examination on the subject docket.

The applicant requested $11,918.00 to explore the Dewey Rim claims by 9,200 feet of wagon drilling and core drilling.

The examining team does not believe that the property has enough merit to justify Government participation in an exploration project and recommends denial of the application.

We concur in this recommendation.

W. H. King

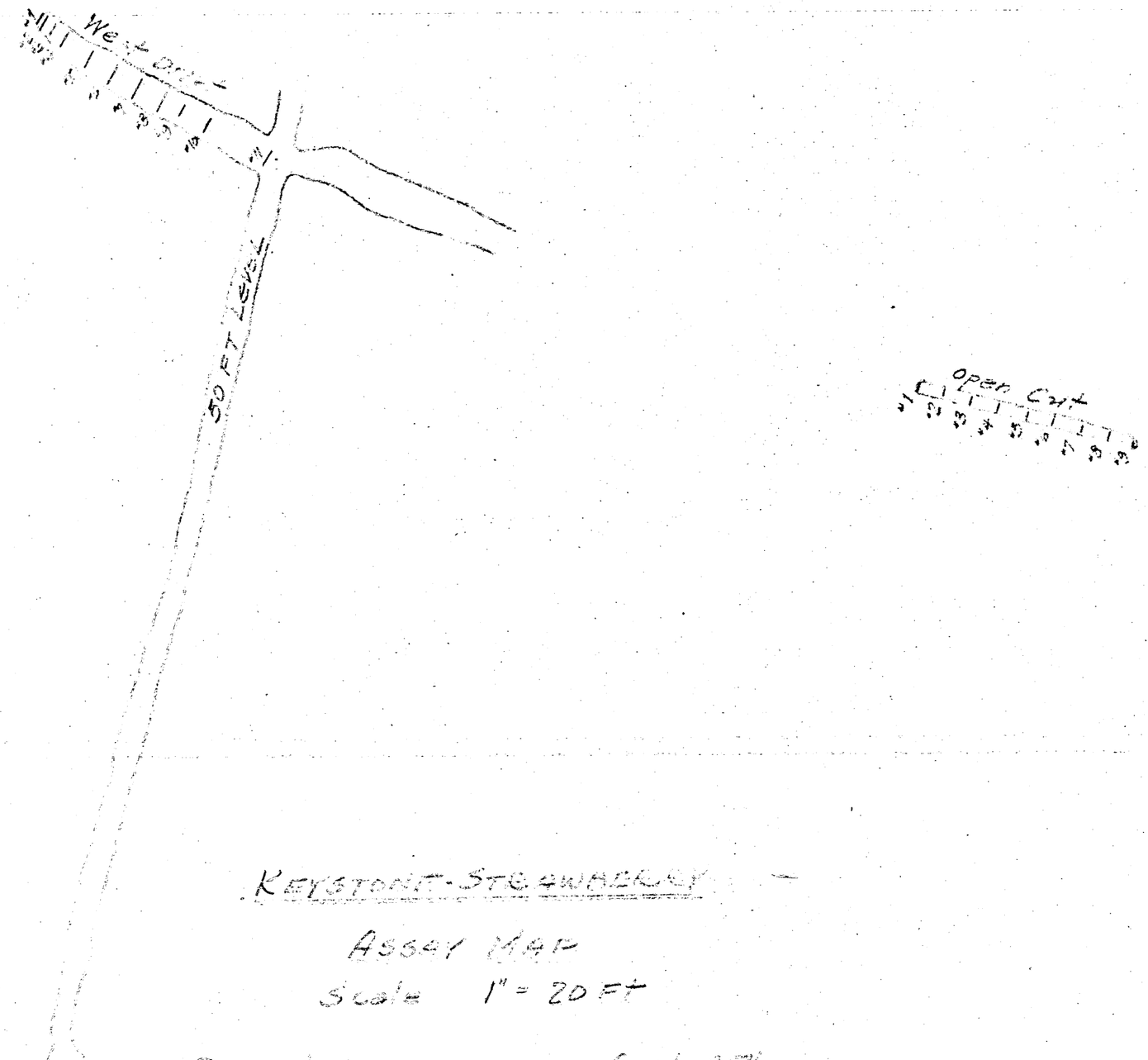
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(Date)

## Sample List

| No | Location | Width | Ag | Remarks |
|---|---|---|---|---|
| | Surface | | | |
| 1 | [illegible] | 15.10 | 1.65 | |
| 2 | " " | 18 | 0.1 | |
| 3 | " " | 18 | 0.2 | |
| 4 | " " | 18 | 0.5 | |
| 5 | " " | 18 | 0.1 | |
| 6 | " " | 18 | 0.14 | |
| 7 | " " | 18 | 0.14 | |
| 8 | " " | 15 | 0.5 | |
| 9 | " " | 6 | 4.1 | |
| | | | | |
| 1 | West Cut | 12 | 1.6 | See Geol. Map |
| 2 | " " | 18 | [illegible] | " " |
| 3 | " " | [illegible] | 1.7 | " " |
| | | | | |
| 1 | 50 Ft Level | 30 | 0.93 | |
| 2 | " " | 54 | 0.21 | |
| 3 | " " | 54 | 0.46 | |
| 4 | " " | 54 | 0.24 | |
| 5 | " " | 54 | 0.61 | |
| 6 | " " | 54 | 0.55 | |
| 7 | " " | 54 | 0.10 | |
| 8 | " " | 18 | 0.4 | |
| 9 | " " | 6 | 2.49 | |
| 10 | " " | 12 | 6.1 | |
| 11 | " " | 18 | 1.3 | |
| | | | | |
| 1 | [illegible] | 14 | 0.3 | [illegible] |




KEYSTONE-STEWARTLEY

Assay Map

Scale 1" = 20 Ft

Pony Mat

April 1934

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
July 19, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3353 (Uranium) Midland Uranium, Inc., (Dewey Rim mining claims) Grand County, Utah

Enclosed are the original and 10 copies of a Summary, Conclusions, and Recommendations by M. H. Salsbury, Bureau of Mines, and C. M. Mobley, Geological Survey, and of M. H. Salsbury's engineering report on the loan application on the above docket.

Salsbury concludes the mineralization shown by rim exposures, previous incomplete drilling results and insignificant production on the applicant company's Dewey Rim mining claims indicates there is little likelihood of exploration resulting in the discovery of any ore bodies except by extremely close spaced drilling. The results of such work could not possibly be commensurate with its cost. Denial of the application is recommended.

I concur in the conclusions and approve the recommendations.

The brochure furnished with your memorandum of May 10, 1954, instructing us to make a field examination and submit a report is also enclosed.

W. M. Traver

W. M. Traver

Enclosures

WMT/iei

cc: 10
DMEA 3353
DMEA Chron.

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

June 18, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3353, Midland Uranium, Inc., Dewey Rim mining claims, Thompson District, Grand County, Utah

Enclosed are 11 copies of the geologic report by C. M. Mobley of the U. S. Geological Survey covering the above docket.

Mr. Mobley concludes that no significant deposits of uranium ore will be discovered by the exploration proposed by the applicant and thus recommends denial.

E. N. Hawkman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
GRAND JUNCTION, COLO.

June 11, 1954

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: W. P. Williams, Colorado Plateau District

Subject: Geologic report of field examination, DMEA 3353, Midland Uranium, Inc., Dewey Rim mining claims, Thompson District, Grand County, Utah

Transmitted herewith are eleven copies of the geologic report prepared by C. M. Mobley, covering a field examination of the above-referenced property.

As a result of field examination, it has been determined that prospects on the Dewey Rim mining claims are not favorable enough to warrant approval of a DMEA contract at this time.

WPWilliams

W. P. Williams
Geologist

WPW/mlr

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

UNITED STATES

DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3953

Denver Rim Mining Claims

Midland Uranium, Inc.

Grand County, Utah

Uranium

M. H. Salsbury, Mining Engineer
Bureau of Mines

C. M. Mahley, Geologist
Geological Survey

July 7, 1954

8-13-54

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

## Summary, Conclusions, and Recommendations

By M. H. Salisbury
Mining Engineer
Bureau of Mines

and

C. M. Mobley
Geologist
Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

DMEA 3353

DEWEY RIM MINING CLAIMS
MIDLAND URANIUM, INC.
GRAND COUNTY, UTAH

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By M. H. Salsbury and C. M. Hobley

Midland Uranium, Inc., lessees of the Dewey Rim mining claims in Thompson mining district, Grand County, Utah, have applied for Government exploration assistance in exploring their property for uranium at an estimated cost of $11,918.00--Government participation 75 percent, or $8,938.50.

The property was examined on May 19, 1954, by a DMEA examining team, in company with W. P. Williams and E. S. Santos of the Geological Survey, and J. E. Gonyer, representing the applicant. The 13 unlocated claims in the group are owned by L. E. Busey and leased to the applicants with an option to purchase. Complete information on validity of the locations or on the lease terms was not furnished with the copy of the application used by the Bureau of Mines member of the examining team. For the purposes of this report, further investigation of these matters was not considered necessary.

The ore deposits of the area are found in the Salt Wash member of the Jurassic Morrison formation. On the Dewey Rim mining claims, the two lower sandstone beds of the Salt Wash member, at an estimated drilling depth of from 39 feet to 125 feet, are the favorable host rocks for uranium. In accordance with criteria established by the Geological Survey, the lowest sandstone bed on the Cuesta No. 3 claim, and the next to lowest bed on the Armite No. 10

claim are "the ore-bearing sandstones". As indicated by rim exposures, several of which have produced small amounts of low-grade ore, the ore occurs in small lenses trending northwest. There have been only a few small deposits mined, several in outcrops exposed by rim stripping, and one found on the adjoining Last Dollar claim, which is controlled by the applicants, but is not included in the proposed exploration project. All of these were of minor grade and extent. The favorable sandstone, as exposed at the rim, is as much as 500 feet wide on the Cuesta No. 3 claim, and is underlain by up to 3 feet of gray-green mudstone, which is considered to be the ore indicator. The sandstone is as much as 30 feet thick and contains carbonaceous material, both favorable indications. However, experience so far in the vicinity of this property, has indicated that individual ore bodies within the favorable sandstone are likely to contain only a few tons of ore each, and the ore produced to date has barely been of commercial grade.

The claims have been developed by rim stripping and a small amount of mining at the rim on the Cuesta No. 3 claim. Some wagon drilling has been done behind the rim by previous operators, but the results of this work were either not recorded or have been lost. It can be assumed that ore indications were poor for they were not followed up.

The applicants' proposal called for 1,200 feet of core drilling and 8,000 feet of wagon drilling in a three phased program based on a drilling sequence which the Geological Survey has not found to be effective.

A revised program was considered by the examining team which the applicants' representative would have accepted, but it was

concluded that the chances for a significant uranium discovery were poor, and that a drilling program with hole spacing close enough to insure discovery of the small ore bodies likely to occur was not economically feasible.

Denial of the application of Midland Uranium, Inc., is recommended.

UNITED STATES DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

# DMEA 3353, Midland Uranium, Inc., Dewey Rim Mining Claims, Thompson district, Grand County, Utah

Uranium

Geologic Report

By

C. M. Mobley
U.S. Geological Survey

June 11, 1954

Reviewed by
DMEA OPERATING COMMITTEE
8-13-54
(date)

DMEA 3353

## INTRODUCTION AND SUMMARY

Midland Uranium, Inc., of Salt Lake City, Utah, has a lease-purchase contract on the Dewey Rim mining claims, Thompson district, Grand County, Utah (fig. 1). They have applied (Docket 3353) to the Defense Minerals Exploration Administration for a loan to explore for uranium.

The claims were examined on May 19, 1954, in company with E. S. Santos and on May 20, 1954, in company with M. H. Salsbury, engineer, U. S. Bureau of Mines, W. P. Williams and E. S. Santos, geologists, U. S. Geological Survey, and J. E. Gonyer, representative for Midland Uranium, Inc.

Two small favorable areas are present on the Dewey Rim mining claims. One of the favorable areas has been wagon drilled without finding a significant uranium deposit. The ore, found in the lower two beds of the Salt Wash member of the Jurassic Morrison formation, is discontinuous and is associated with pockets of carbonaceous trash. The deposits to be expected in this area are probably less than 10 tons each.

As a result of the field examination, it is recommended that the Government not enter into a contract with the applicant to do the proposed exploration. This was agreed upon by M. H. Salsbury, and was acceptable to J. E. Gonyer.

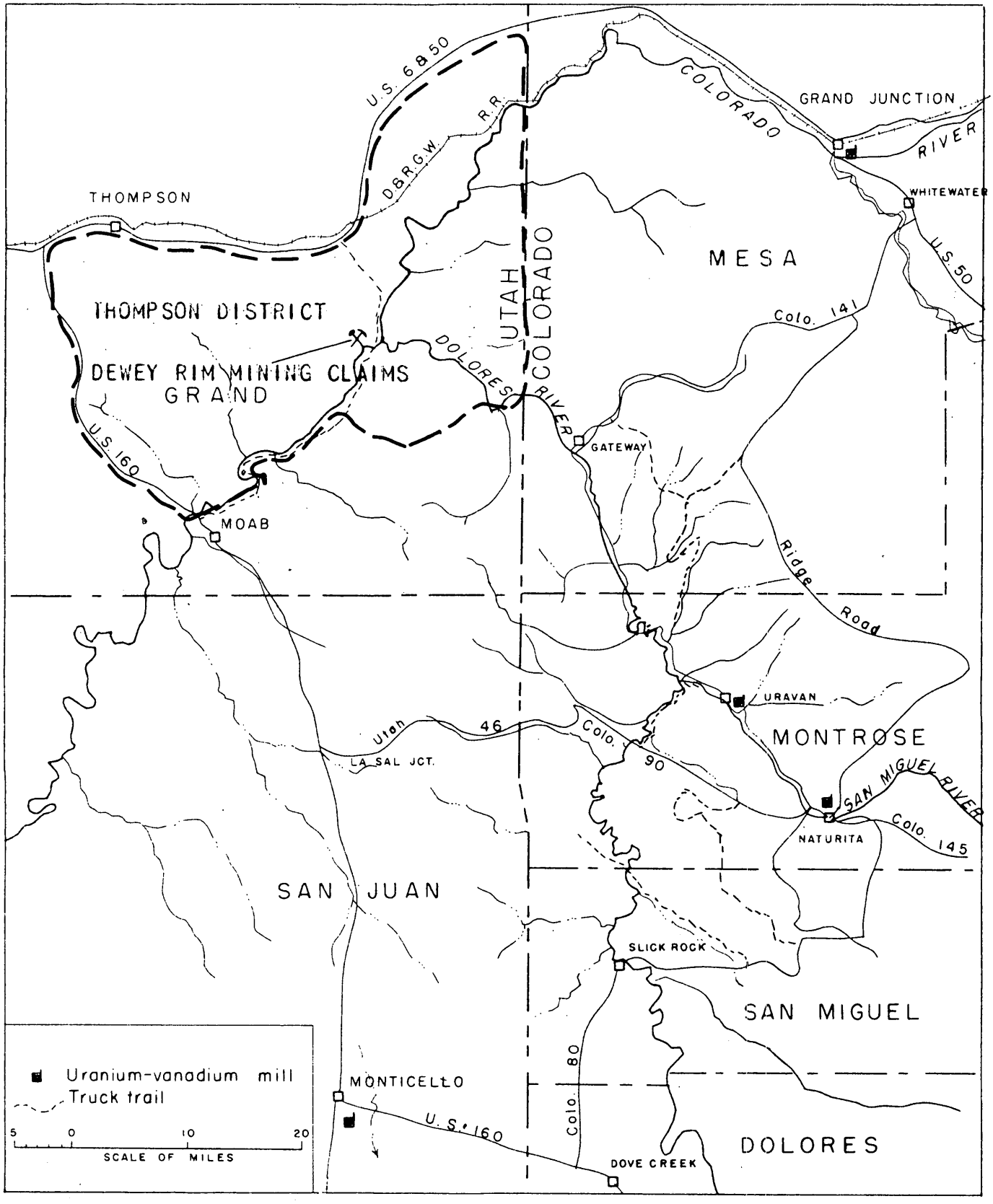



Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE APPROXIMATE LOCATION OF THE DEWEY RIM MINING CLAIMS, THOMPSON DISTRICT, GRAND COUNTY, UTAH

## GEOLOGY

The exposed rocks in the vicinity of the Dewey Rim mining claims range from the Jurassic Entrada formation to the Cretaceous Dakota formation and contain continuous exposures of the Jurassic Summerville formation, the Salt Wash and the Brushy Basin members of the Jurassic Morrison formation, and the Cretaceous Burro Canyon formation. The Salt Wash member here is about 200 feet thick, and consists of four or more light-red to light-gray discontinuous sandstone beds, or lenses, which are from a few feet to more than 30 feet in thickness and are more than 1,000 feet wide. These lenses are separated by red-brown mudstone and reddish, thin, interbedded layers of sandstone and siltstone. The gray-green mudstone present under some of the sandstone lenses is from a few inches to more than 3 feet in thickness. The exposed rocks strike about N. 45° W. and dip about 5° NE.

In this area all of the known deposits of minable grade are in the lower two sandstone beds of the Salt Wash member. The Cuesta No. 3 deposits (fig. 2) are located in the lowest sandstone bed and the Arnite No. 10 deposits are located in the next to the lowest sandstone bed. These sandstone beds are called the "ore-bearing sandstone". The ore-bearing sandstone is present as lenses trending northwest.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3353

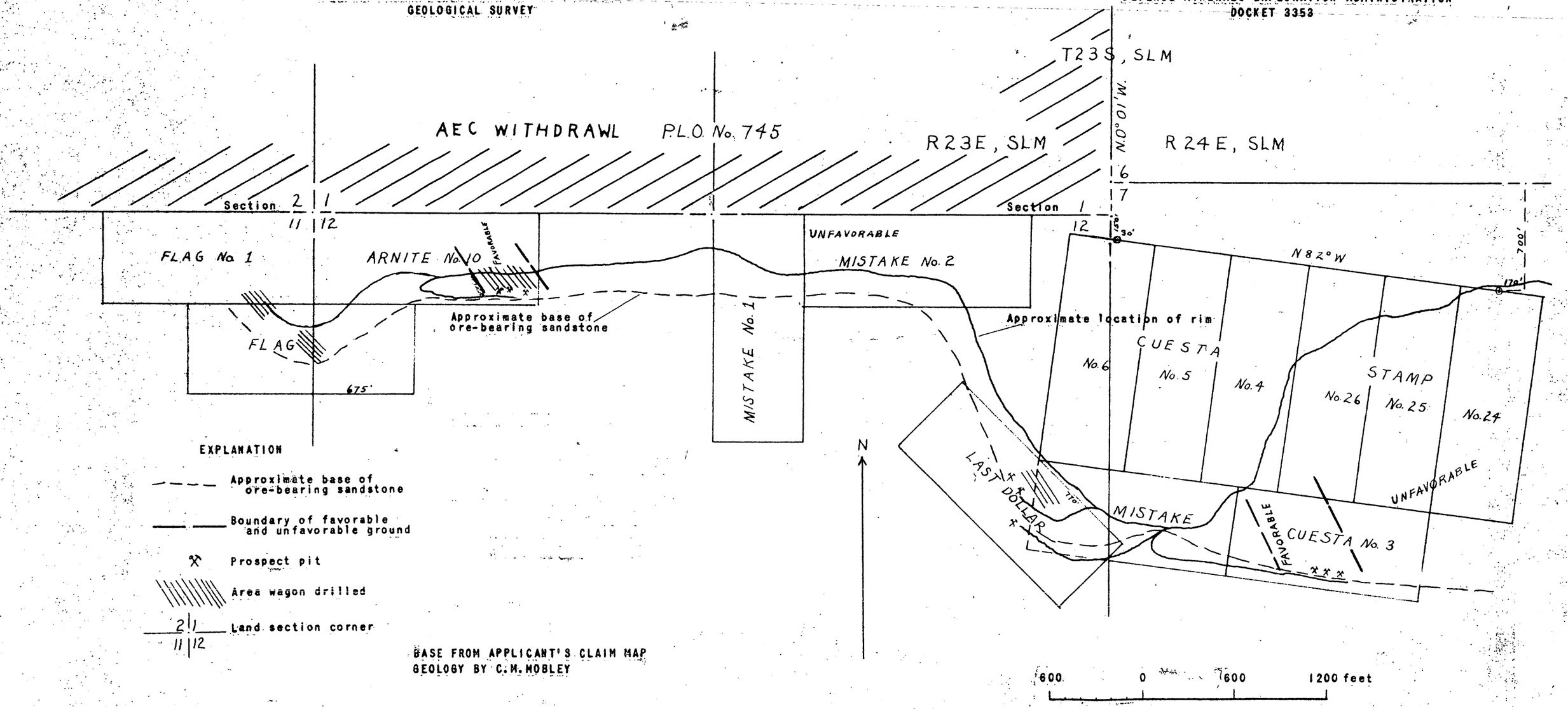



Figure 2. SKETCH MAP OF THE DEWEY RIM MINING CLAIMS, THOMPSON DISTRICT, GRAND COUNTY, UTAH

According to the criteria developed by the U. S. Geological Survey _/, only a small portion of the ore-bearing sandstone on

_/ Weir, D. B., Geologic guides to prospecting for carnotite deposits on the Colorado Plateau: U. S. Geol. Survey Bull. 988-B, 1952.

the Dewey Rim mining claims can be classed as favorable for uranium deposits (fig. 2).

On the basis of outcrop examination, favorable sandstone lies on the southeastern part of the Arnite No. 10 claim and on the central and northwestern parts of the Cuesta No. 3 claim. The remaining sandstone on the applicant's claims is classed as unfavorable.

The favorable sandstone consists of lenses of light-gray sandstone, 10 to 30 feet thick and about 500 feet wide, underlain in places by gray-green mudstone more than 3 feet thick. Some carbonaceous material, limonite stain, and gray-green mudstone seams and pebbles are present in the sandstone. The unfavorable sandstone consists of beds of light-red and light-gray sandstone, 2 to 10 feet thick, underlain by red-brown mudstone.

## ORE DEPOSITS

Three deposits were examined on the Cuesta No. 3 claim (fig. 2). Two of the deposits were fossil logs, trending N. 75° W., about 8 inches in diameter. The center 6 inches is silicified. Some carnotite stain is associated with the carbonaceous material surrounding the fossil logs. The logs have been prospected for about 3 feet. The other prospect consists of a 20-foot drift in which some carnotite and vanadium ore was observed. The ore appears to be spotty, and the higher values are found with pockets of carbonaceous trash.

The three deposits examined on the Arnite No. 10 claim (fig.2) were similar to the deposits on the Cuesta No. 3 claim.

The grade of the ore is estimated to average about 0.10 percent $U_3O_8$ and 1.0 percent $V_2O_5$. The applicant's brochure states, "several loads of marginal ore were shipped from these deposits". According to AEC files, about seven tons of ore averaging 0.10 percent $U_3O_8$ and 0.40 percent $V_2O_5$ were shipped from the Cuesta No. 3 claim. There is no recorded production from the Arnite No. 10 claim. According to AEC files, the Last Dollar claim, located nearby, has produced about 33 tons of ore averaging 0.19 percent $U_3O_8$ and 1.30 percent $V_2O_5$. The ore is associated with carbonaceous material and appears discontinuous.

Several areas have been wagon drilled (fig. 2) by Midland Uranium, Inc., and by other owners. Drilling on very close-spaced centers (less than 50 feet) has indicated mineralized material in the favorable ground behind the prospects on the Arnite No. 10 claim, but no significant deposit was found.

The deposits to be expected in this area are probably less than 10 tons each.

In all of these deposits it has been necessary to mine with a large degree of selectivity to maintain a grade above 0.20 percent $U_3O_8$ and 1.0 percent $V_2O_5$.

## PROPOSED EXPLORATION

The applicant has proposed exploration by both wagon and diamond drilling in three separate phases. Approximately 20 diamond-drill holes, totaling 1,200 feet, on wide-spaced centers (about 1,000 ft.) would be drilled during phase I. About 75 wagon-drill holes, totaling 3,000 feet, on moderate-spaced centers (about 500 ft.) would be drilled during phase II. The favorable ground found by phases I and II would be wagon drilled on close-spaced centers (about 50 ft.) during phase III to develop the deposits. As part of the phase III drilling, it was proposed to perform drilling along the rims where outcrops of mineralized material are found. A maximum of 5,000 feet would be required for phase III.

A total of 1,200 feet of diamond drilling and 8,000 feet of wagon drilling, costing about $11,918.00, was proposed by the applicant.

## CONCLUSIONS AND RECOMMENDATIONS

The uranium deposits on the Dewey Rim mining claims are in the lower two beds of the Salt Wash member of the Jurassic Morrison formation. These beds are called the ore-bearing sandstone. According to AEC files, about 40 tons of ore averaging 0.19 percent $U_3O_8$ and 1.30 percent $V_2O_5$ have been shipped from the vicinity. Most of this ore has come from the Last Dollar claim. The ore is associated with pockets of carbonaceous trash and is discontinuous. Some mineralized material is associated with partly silicified fossil logs.

Close-spaced drilling in the favorable ground behind the deposits on the Arnite No. 10 claim failed to penetrate a significant deposit. The discovery of significant deposits in the favorable ground on the Cuesta No. 3 claim would require drilling on a very closely-spaced pattern with results unlikely to justify the costs.

Therefore, it is recommended that the Government not enter into a contract with the applicant to do the proposed exploration.

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

## Engineering Report

By M. H. Salsbury
Mining Engineer
Bureau of Mines

DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

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DMEA 3353

# DEWEY RIM MINING CLAIMS
# MIDLAND URANIUM, INC.
# GRAND COUNTY, UTAH

## ENGINEERING REPORT

By

M. H. Salsbury

## INTRODUCTION

Midland Uranium, Inc., 308 Phillips Petroleum Building, Salt Lake City, Utah, has applied for a Defense Mineral Exploration Administration loan to explore for uranium in 13 unpatented claims in Thompson mining district, Grand County, Utah on which they hold a lease. A program calling for 1,200 feet of core drilling and 8,000 feet of wagon drilling was outlined at an estimated cost of $11,918.00--Government participation 75 percent, or $8,938.50.

The property was examined on May 19, 1954, by a DMEA examining team, in company with W. P. Williams and E. S. Santos of the Geological Survey, and J. E. Gonyer, representing the applicant.

## ACKNOWLEDGEMENTS

Data on the property were obtained from the application and from C. E. Hobley, the Geological Survey member of the examining team, who is in charge of the nearby Yellow Cat field camp for the Survey, and is familiar with the geology and ore deposits of the area. Information on production at an adjoining property was furnished by the Atomic Energy Commission. They were also contacted through

Lou Garbrecht but no specific information pertaining to the property was available in their files.

## LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Dewey Rim mining claims are located in secs. 11 and 12, T. 23 S. R. 23 E., and sec. 7, T. 23 S., R. 24 E. Salt Lake meridian, Thompson mining district, Grand County Utah (fig. 1). The property is on the south rim of a mesa 400 feet above, and overlooking the Colorado River and the Dewey Bridge. The climate of the region, at an altitude of 4,500 feet, is hot and dry in summer, and moderate to severe in winter with occasional severe storms. Year around operations are feasible with few interruptions from bad weather.

The claims are on a poor access road 3 miles from graded Utah State Highway 128 and U. S. Highway 50. Moab is 35 miles southwest of the property on Utah State Highway 128, which follows the Colorado River.

Complete stocks of mining supplies are maintained at Grand Junction. Scheduled motor freight lines serve Cisco, the nearest town. The nearest receiving stations for uranium ores are at Grand Junction, and Moab. At Thompson, a station on the Denver and Rio Grande Western railroad, there are Atomic Energy Commission facilities for transferring truck shipments to railroad cars.

Water for mining purposes must be hauled 5 miles from the Colorado River. Timber is obtainable in Grand Junction or Moab. Power must be provided by the individual operator.

## LABOR AND LIVING CONDITIONS

Demand for labor is increasing in the area, but small crews can still be obtained without much difficulty. The prevailing wage

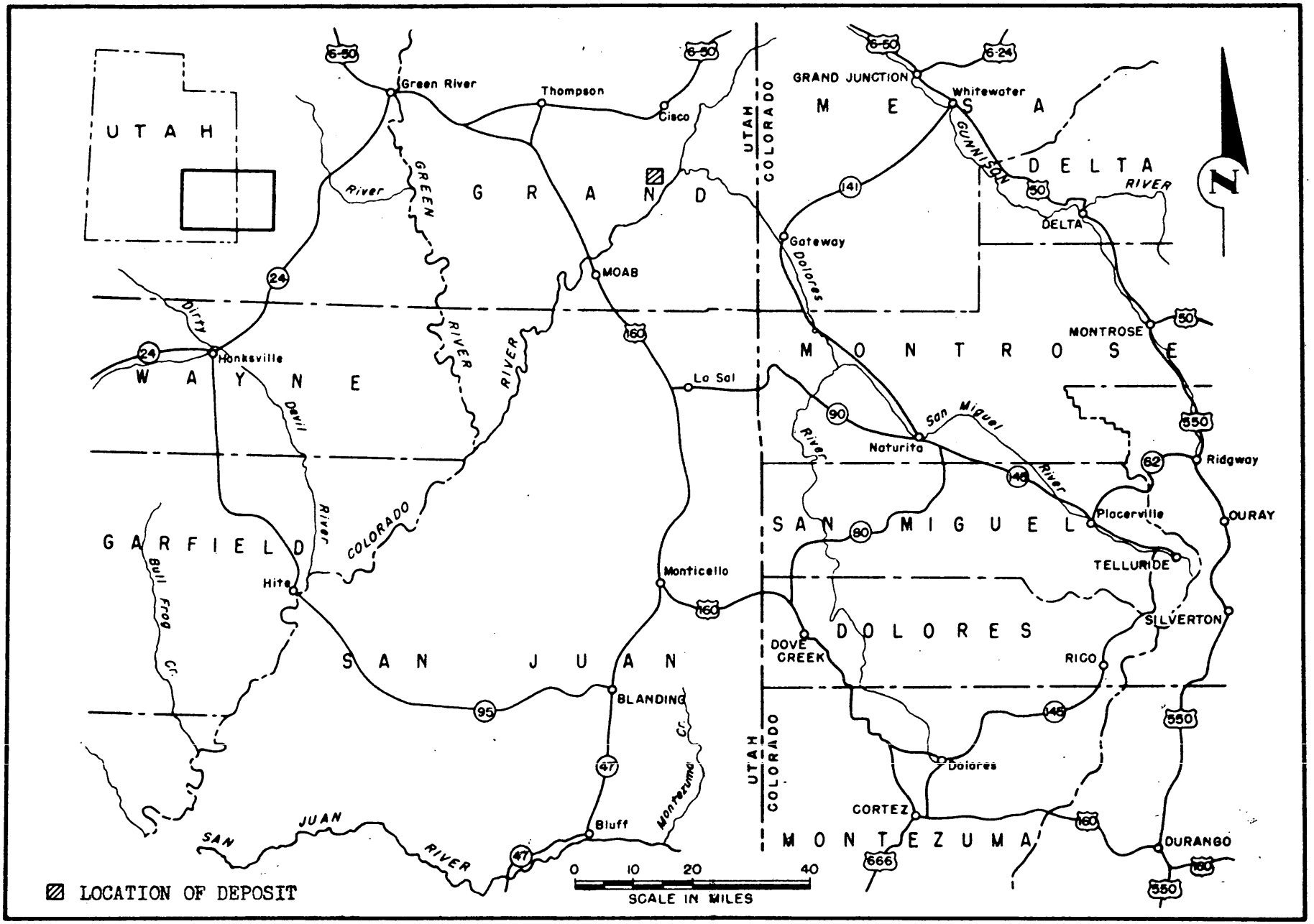



FIGURE 1 - LOCATION MAP, DEWEY RIM MINING CLAIMS, MIDLAND URANIUM, INC., GRAND COUNTY, UTAH (DMEA 3353)

rate for semi-skilled labor is $1.75 to $2.00 per hour.

There are no living accommodations at the property, and housing facilities, probably in the form of house trailers, might have to be provided. At most seasons, the claims could be reached by commuters from Cisco, or even Thompson, Utah.

## HISTORY, PRODUCTION, AND OWNERSHIP

Exploration of the Thompson mining district dates from 1950. Operations in the vicinity of the Dewey Rim claims have not been extensive or very productive to date. A small operation on the Last Dollar claim, adjoining the Mistake claim on the west, both company owned claims has provided minor production and is now active. Other work to date in the immediate area has consisted of rim stripping and wagon drilling.

The Atomic Energy Commission reports production of 13 tons of ore from the Last Dollar claim, averaging 0.19 percent $U_3O_8$ and 1.30 percent $V_2O_5$. A production of 7 tons of ore averaging 0.10 percent $U_3O_8$ and 0.40 percent $V_2O_5$ is reported from small ore bodies, consisting mostly of two fossil logs, found in rim outcrops on the Cuesta No. 3 claim, one of these included in the application. The estimated production of 150 tons of ore from the area reported by the applicants is not substantiated by available records.

The thirteen Dewey Rim mining claims included in this application are owned by L. N. Busey, the original locator, and are under lease and option to Midland Uranium, Inc., a Utah corporation, Richard G. Allen, President, 308-9 Phillips Petroleum Building, Salt Lake City, Utah.

The claims are shown on figure 2 with the geologic report. They are recorded in the Grand County courthouse, Monticello, Utah, in Books 9-L and 9-N. The recording dates and the terms of the lease from Busey were not shown in the application. For the purposes of this report, further data on ownership were not required and validity of the claims was not investigated.

## DESCRIPTION OF THE DEPOSITS

The ore on the Dewey Rim mining claims occurs in the two lower sandstone beds of the Salt Wash member of the Jurassic Morrison formation, which forms the mesa top in the proposed exploration area. The favorable host rock here consists of discontinuous lenses of light-gray sandstone 10 to 30 feet thick and as much as 500 feet wide, underlain in places by gray-green mudstone up to 3 feet thick. Carbonaceous material, limonite stain and gray-green mudstone seams and pebbles are present in the sandstone. According to criteria developed by the Geological Survey, the gray-green discoloration of the mudstone is good evidence of nearby ore deposition. The light-gray colored sandstone is not, in itself, necessarily an indication of uranium mineralization unless it occurs in conjunction with a substantial thickness, shows carbonaceous content, and accompanys gray-green mudstone. Light-red or light-gray sandstone, underlain by red-brown mudstone is considered an unfavorable host rock.

Applying these criteria to the outcrop exposures, the lowest sandstone bed on the Cuesta No. 3 and the next to lowest sandstone on the Arnite No. 10 claims are the only favorable ore horizons on the property.

There are three minor showings in the outcrop on the Cuesta No. 3 claim which has been stripped (figure 2 with the geologic report). Two of these were fossil logs about 8 inches in diameter trending N. 75° W. Only the outer part has been replaced by uranium minerals. In the other rim deposit, the ore has been explored by a 20 feet drift following slight uranium and vanadium mineralization. Occurrences were extremely spotty with a few high-grade pockets. Deposits on the Arnite No. 10 were similar.

Geological considerations suggests a possible ore trend of 10 to 20 degrees west of north. Judging from the ore occurrences on the Last Dollar claim, individual ore bodies are not likely to average over 10-15 tons each and the ore would have to be mined selectively to produce a shipping grade.

Evidence of deposits of this size might easily be missed in a drilling pattern with holes on a spacing of 50 feet or even less. The depth to the ore horizon within the proposed drilling area varies from 39 feet to 125 feet. The examining team checked this by hand leveling. This compares with a maximum of 100 feet estimated by the applicants.

## MINEABLE ORE RESERVES

There are no mineable ore reserves on the property. The ore found along the rim was barely of commercial grade.

## PRESENT STATUS

### Exploration and Development

The property has been explored by rim stripping and an estimated 2,000 feet of wagon drilling back of rim exposures on the

Arnite No. 10 and Flag claims. Much of the drilling was done by previous operators and was not logged or mapped properly. The applicants stated that there were available data on the mineralized holes and the depth to the mineralization, but no specific holes were mentioned except in the case of 2 holes on the Flag claim which were probed and readings obtained that checked previous logs showing approximately 0.06 percent uranium. These and other holes drilled prior to the current operation were reported to have outlined "a lenticular mineralized body on the Flag claim approximately 150 feet by 100 feet, varying from a thickness of 8 inches to 12 inches on the edges, to approximately 3 feet through the center at a depth of 39 feet." Evidently values were not good enough to follow up by underground exploration.

On the adjoining Last Dollar claim, not included in the application, Midland Uranium, Inc. has done about 1,000 feet of wagon drilling which resulted in finding 2 mineralized areas, one of which was mined by the White Arrow Mining Company, a sub-lessee. An exploration drift to the other area was being driven at the time of this examination. The ore found in this operation to date, as listed under production, has been insignificant.

## Mining and Milling Equipment and Other Facilities

The applicants proposed contract work for both wagon and core drilling, and no other equipment would be required.

There are no buildings or other facilities at the property. Presumably, drilling contractors would furnish their own living accommodations.

## PROJECT PROPOSALS WITH COSTS

The applicants proposed a combined core and wagon drilling program in 3 phases as follows:

Phase I. Approximately 20 core drill holes totaling 1,200 feet on wide spaced centers for geological evaluation based on thickness and color of sandstone, underlying mudstone, and presence of carbonaceous material.

Phase II. Approximately 75 wagon drill holes totaling 3,000 feet on 500 feet centers. Information from drill cuttings and probing, together with geological evaluation of holes in Phase I would eliminate unfavorable areas.

Phase III. An indefinite number of holes, totaling an estimated 5,000 feet of wagon drilling on a maximum of 50 feet centers, to explore favorable areas indicated by Phases I and II. Additional drilling back of mineralized outcrops was also proposed in Phase III. The estimated cost was $11,918.00--Government participation 75 percent, or $8,938.50. Estimate footage costs were $3.00 for core drilling and $1.03 for wagon drilling, including supervision and technical services.

The applicants' proposal was based on a plan and sequence of exploration which the Geological Survey has not found to be effective under similar conditions. The drilling pattern appears to have been set up to explore the property without regard to the rim exposures. Logically, the areas back of the mineralization at the rim should be drilled in the first phase in order to establish possible ore trends and guide subsequent drilling. Some of the rim drilling has been done but would have to be duplicated because no worthwhile information was obtained. A revised program providing for drilling in back of the rim during the first phase was considered tentatively by the DMEA examining team, and it was found that drilling only the areas behind mineralized sections of the outcrops, with subsequent holes located in relation to the information obtained from the first holes, would require a minimum of 6,000 feet of drilling

at a cost of at least $7,500.00. This program would not permit hole spacing close enough to insure finding the small ore bodies, which are likely to occur. The cost of holes spaced closely enough to do this would be prohibitive.

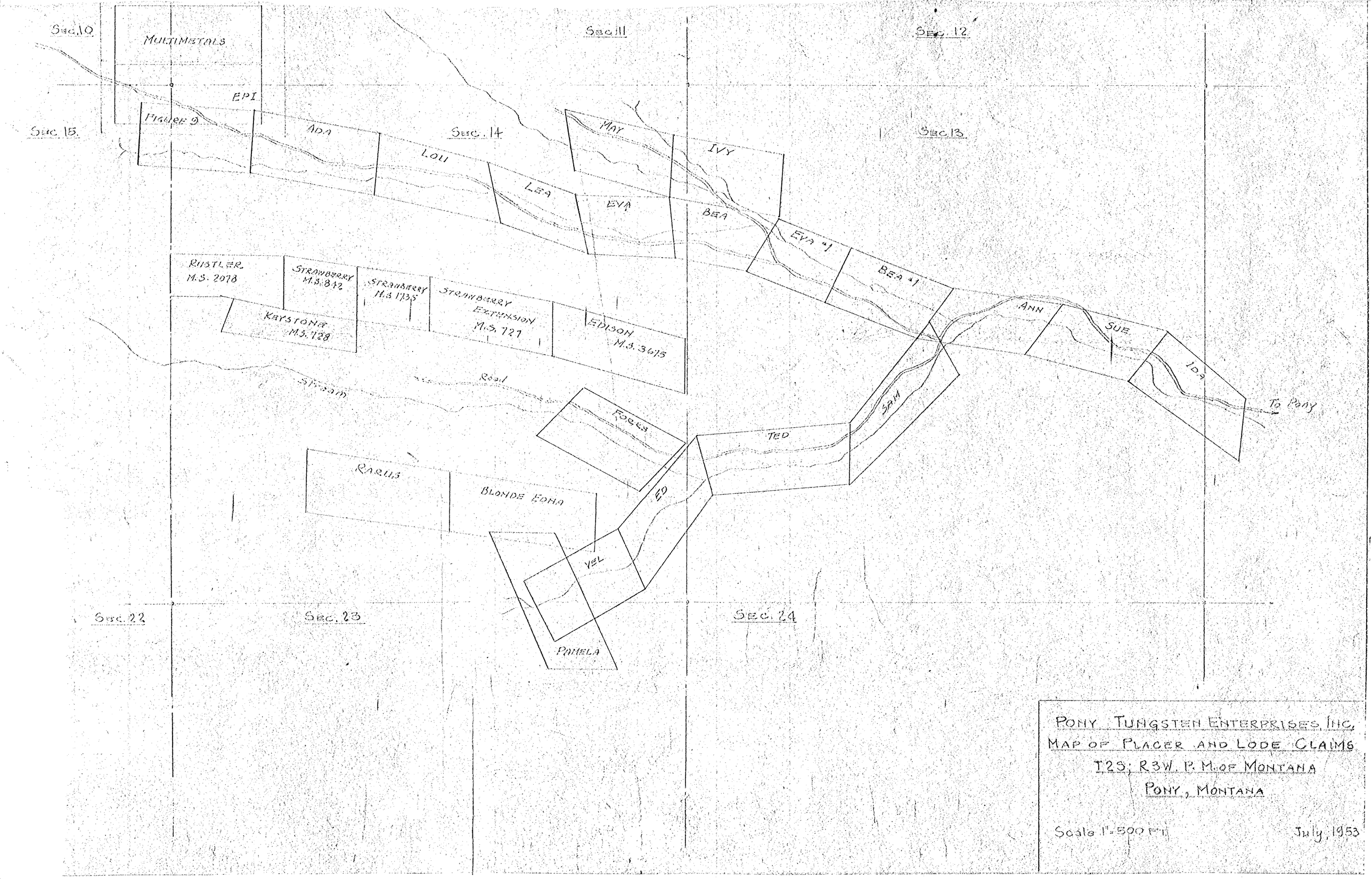
Many of the hole locations would be at points where the depth to the favorable ore horizon is more than the feasible depth for wagon drilling and some core drilling would be required.

## CONCLUSIONS

The uranium mineralization on the Dewey Rim mining claims, as exposed along the rim, indicated by previous incomplete drilling results, and shown by the small production from minor ore bodies mined on the Cuesta No. 3 and the adjoining Last Dollar claims, is very low grade. Individual ore bodies found to date are small and scattered. It is doubtful that ore of profitable grade or significant size would be found by further exploration, or even that there would be a reasonable certainty of locating the probable small ore bodies with a hole spacing of 50 feet, which is the least that is economically feasible. The cost of adequate exploration cannot be justified on the basis of probable discoveries.

## RECOMMENDATIONS

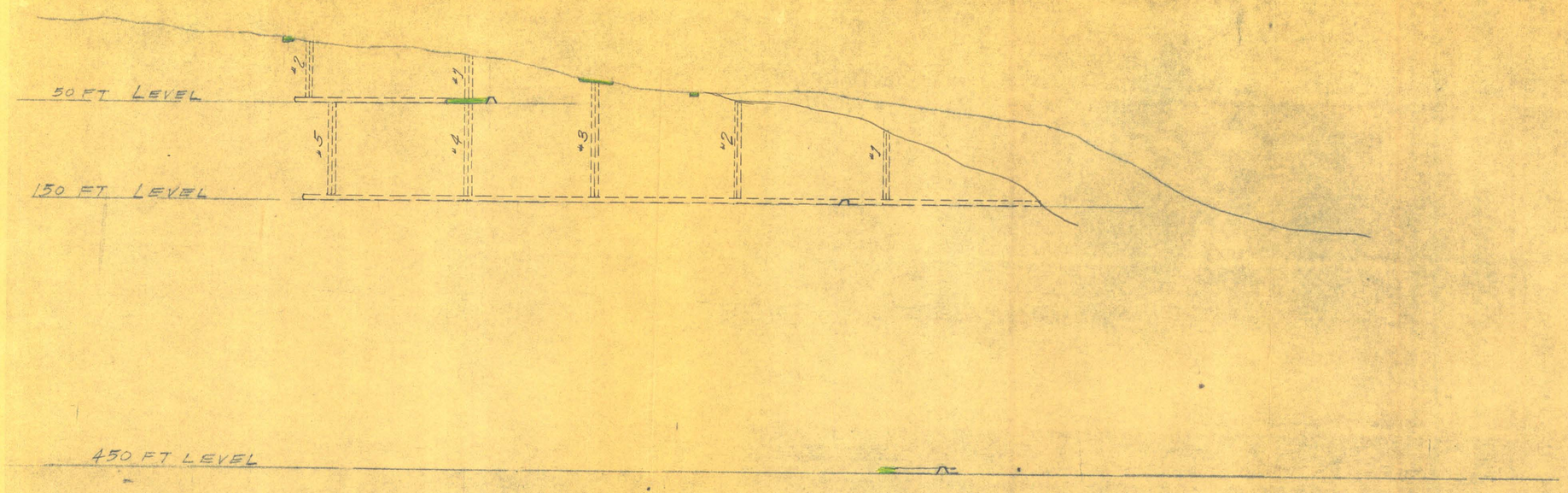
It is recommended that the application of Midland Uranium, Inc. for Government-assisted exploration of the Dewey Rim mining claims under the Defense Minerals Exploration Administration be denied.



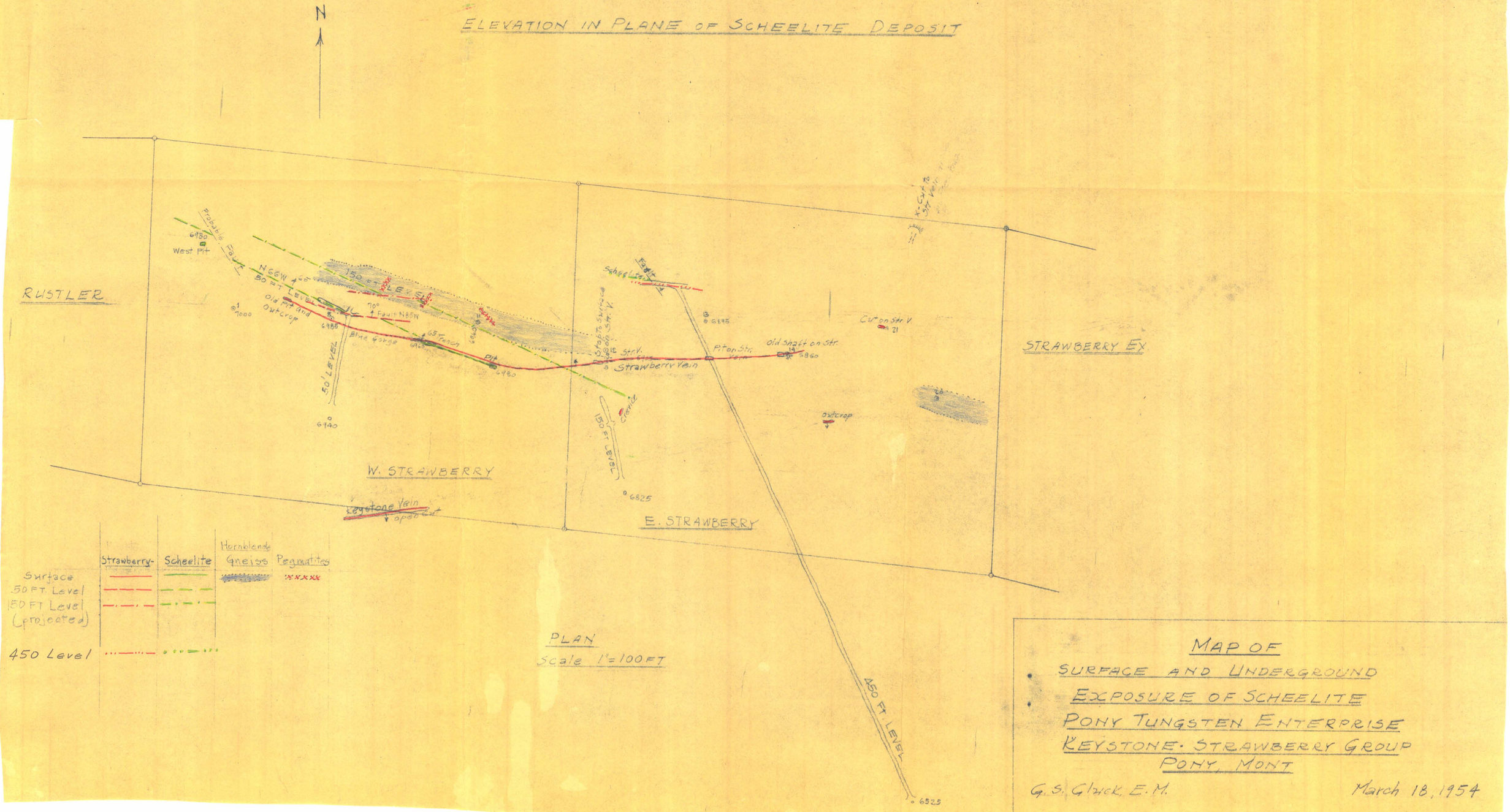

PONY TUNGSTEN ENTERPRISES, INC.
MAP OF PLACER AND LODE CLAIMS
T2S; R3W, P.M. OF MONTANA
PONY, MONTANA

Scale 1"=500 Ft.

July, 1953




ELEVATION IN PLANE OF SCHEELITE DEPOSIT




MAP OF
SURFACE AND UNDERGROUND
EXPOSURE OF SCHEELITE
PONY TUNGSTEN ENTERPRISE
KEYSTONE-STRAWBERRY GROUP
PONY, MONT

G.S. Glock, E.M.

March 18, 1954

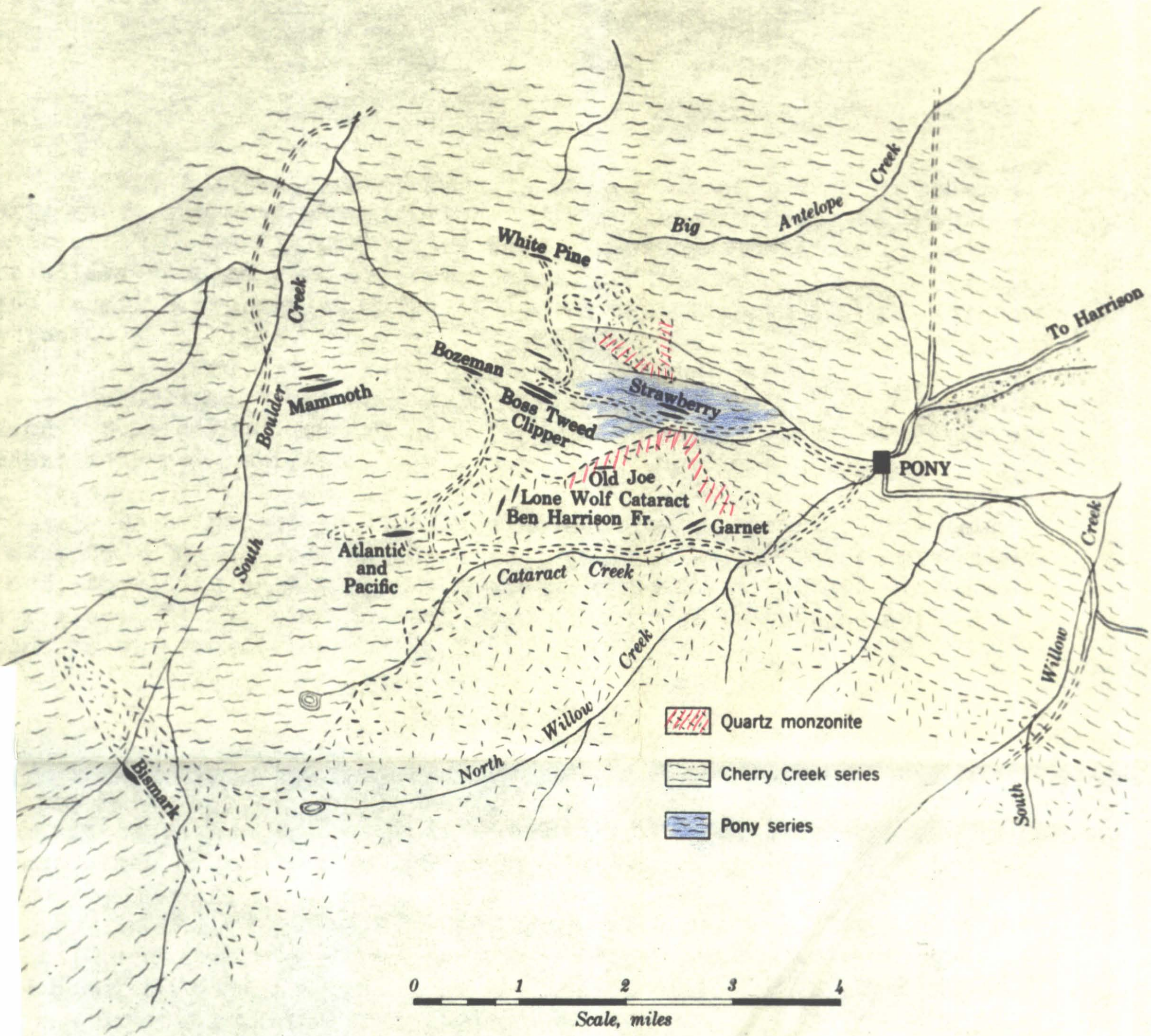
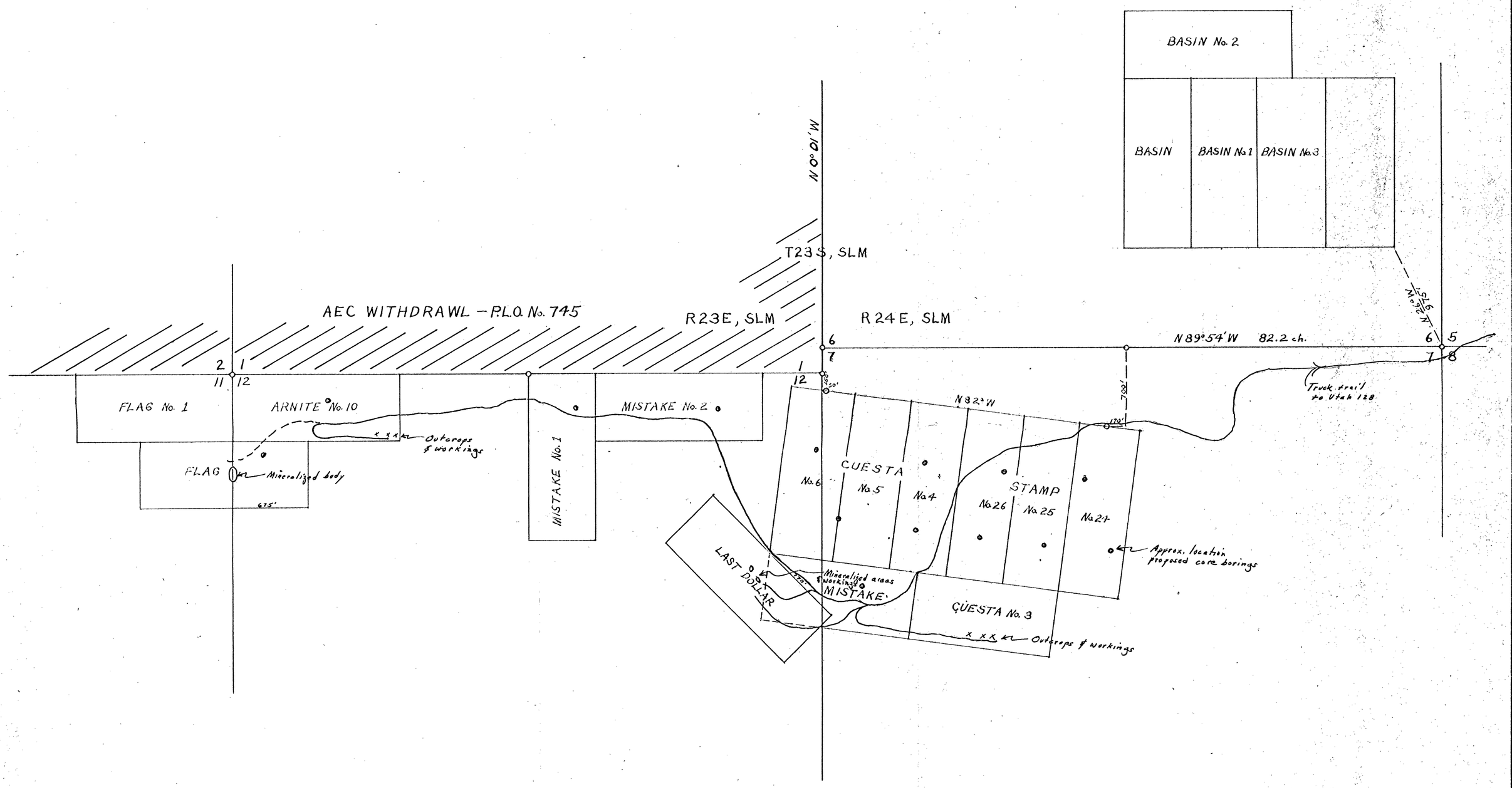



Figure 4.—Geological sketch, Pony district (after Tansley, Schafer, and Hart).




MIDLAND URANIUM INC.

| | | |
|---|---|---|
| SCALE: 1" = 600' | APPROVED BY: | DRAWN BY J.E.G. |
| DATE: Dec. 1953 | | REVISED |

DEWEY RIM MINING CLAIMS

Survey: Compass & Pace

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