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

April 23, 1953

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4640

From: H. D. Keiser, Bureau of Mines Member
Uranium Commodity Committee

Subject: Final report, DMEA Docket 2828, Harris and Lee Shumway, Spring Water Group, San Juan County, Utah.

I have reviewed the subject report and discussed it with Arthur P. Butler, Geological Survey Member, and Joseph O. Hosted, representative of the Atomic Energy Commission.

It is recommended that the report be approved, and that the application involved be denied.

The report has been forwarded to the Chief, Minerals Division, in accord with the routing slip attached thereto.

H. D. Keiser

H. D. Keiser

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 24 1953

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

April 23, 1953

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4640

From: H. D. Keiser, Bureau of Mines Member
Uranium Commodity Committee

Subject: Final report, DMEA Docket 2888, Harris and Lee Shumway, Spring Water Group, San Juan County, Utah.

I have reviewed the subject report and discussed it with Arthur F. Butler, Geological Survey Member, and Joseph O. Hosted, representative of the Atomic Energy Commission.

It is recommended that the report be approved, and that the application involved be denied.

The report has been forwarded to the Chief, Minerals Division, in accord with the routing slip attached thereto.

H. D. Keiser

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 24 1953

3/31/53 gla

STANDARD FORM NO. 64

Office Memorandum UNITED STATES GOVERNMENT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

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

MAR 31 1953

DATE: March 26, 1953

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

SUBJECT: Final Report, DMEA Docket 2828 (Uranium), Harris and Lee Shumway, applicants, Blanding, Utah, Spring Water claim group, San Juan County, Utah.

I have reviewed the final report by the examining members of the Field Team concerning the property identified in the subject above, and concur with their conclusions that the work proposed would be unlikely to find significant amounts of new ore and would not be exploration within the general DMEA definition and, therefore, that Government exploration assistance be denied.

Arthur P. Butler, Jr.

Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1953

E. Wm. Ellis, DMEA Member
Uranium Commodity Committee

March 26, 1953

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

Final Report, DMEA Docket 2828 (Uranium), Harris and Lee Shumway, applicants, Blanding, Utah, Spring Water claim group, San Juan County, Utah.

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Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

E. Wm. Ellis, DMEA Member
Uranium Commodity Committee

March 26, 1953

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

Final Report, DMEA Docket 2828 (Uranium), Harris and Lee Shumway, applicants, Blanding, Utah, Spring Water claim group, San Juan County, Utah.

I have reviewed the final report by the examining members of the Field Team concerning the property identified in the subject above, and concur with their conclusions that the work proposed would be unlikely to find significant amounts of new ore and would not be exploration within the general DMEA definition and, therefore, that Government exploration assistance be denied.

Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

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

224 New Customhouse
Denver 2, Colorado

March 11, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 16 1953

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2828, (Uranium) Harris and Lee Shumway, Spring Water Group, San Juan County, Utah.

Enclosed are four copies of the final report on the subject docket, two copies of Form 3b, and a copy of the letter of denial to the applicant.

for W. H. King

A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
3-20-53
(Date)

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

COPY

224 New Customhouse
Denver 2, Colorado

March 11, 1953.

Mr. Harris Shumway
Mr. Lee Shumway
Blanding, Utah

Re: Docket DMEA-2828

Gentlemen:

Reference is made to your application for Government aid on the Spring Water Group.

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 by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

The map forwarded with your application which you requested to be returned is attached hereto.

Very truly yours,

/s/ John F. Shaw for
W. H. King
Field Team, Region IV

/s/ A. H. Koschmann
Field Team, Region IV

Enclosure
HMC:cwm
cc: Administrator (DMEA)
SRWilson
Subject
Chron.
Koschmann (2)

Reviewed by
DMEA OPERATING COMMITTEE
3-20-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

March 11, 1953.

DEPARTMENT OF THE INTERIOR
Bureau of Mines
RECEIVED
MAR 16 1953

Memorandum

To: DMEA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 8888, (Uranium) Harris and Lee Shumway, Spring Water Group, San Juan County, Utah.

Enclosed are eleven copies of a joint report by the Bureau of Mines and the Geological Survey on the subject docket.

The applicants requested $15,800.00 to sink an inclined shaft to the ore horizon and drift toward two groups of diamond drill holes which the Atomic Energy Commission had drilled and exposed thin beds of uranium ores.

The proposed work is not exploration as defined in DMEA Order-1, and the examiners conclude that only minor ore bodies of low grade ores would be found.

The examiners recommend that the application be denied and we concur in this recommendation.

for John F. Shaw
W. H. King

Enclosures

Reviewed by
DMEA CLEARANCE COMMITTEE
3-20-53
(date)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By C. G. Tillman, B. F. Sorensen and H. K. Thurber, Jr.

Harris and Lee Shumway, both of Blanding, Utah, have applied for a DMEA exploratory loan of $15,200, docket 2828 (uranium) to explore a previously drilled area on the Spring Water group of three claims in the Cottonwood Wash district, San Juan County, Utah. The applicants propose to drive a 500-foot inclined shaft to reach a group of mineralized diamond drill holes.

The uranium mineralization found in the district, in mine workings and drill holes, is in the Salt Wash member of the Upper Jurassic Morrison formation. The Salt Wash member in this area consists of a series of lenticular, brown, conglomeratic sandstones interbedded with lesser thicknesses of red to green mudstone. The uranium minerals observed in near-by mine workings occur with organic matter and as impregnations of sandstone lenses and mudstone.

The Spring Water group was diamond drilled in 1952 by the Atomic Energy Commission, and 33 holes were completed on the three claims. Drill information of the mineralized holes shows an ore reserve of approximately 335 tons of indicated ores with a weighted average grade of 0.21 percent U_3O_8 occurring in three small, widely separated bodies at depths of 97 to 122 feet from the surface. Simple calculations show that probable proceeds from the mining of combined tonnage of the

Reviewed by
DMEA OPERATING COMMITTEE

3-20-53
(date)

three ore bodies at current published prices, including the bonus for production from new producing properties, will not allow a profit to be realized from the operation.

In view of the minor tonnage of relatively low-grade ores developed by Atomic Energy Commission drilling, together with the irregularity of thickness and grade of ores being mined from near-by properties and the depth to the ore horizon, the examining team concludes that further exploration on the Spring Water group will not disclose a significant tonnage of uranium ores, and therefore recommends that the loan application be denied.

HARRIS AND LEE SHUMWAY
SPRING WATER GROUP
SAN JUAN COUNTY, UTAH
DMEA-2828
Uranium

Engineering and Geologic Report

By C. G. Tillman and
B. F. Sorensen
Geologists
Geological Survey

and

H. K. Thurber, Jr.
Mining engineer
Bureau of Mines

HARRIS AND LEE SHUMWAY
SPRING WATER GROUP
SAN JUAN COUNTY, UTAH

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ILLUSTRATIONS

Fig. 1 Location map, Spring Water group, San Juan County, Utah
Fig. 2 Map of claims and indicated ore reserves

INTRODUCTION

Harris and Lee Shumway, of Blanding, Utah, have applied for a loan of $15,200 (DMEA docket 2828, uranium) to explore an area on the Spring Water group of claims in the Cottonwood Wash district, San Juan County, Utah. The applicants propose to drive an inclined shaft to the ore horizon and drift toward two groups of Atomic Energy Commission diamond drill holes which show thin beds of uranium ores.

An examination of the property was requested by the Field Team, Region IV, December 18, 1952. The claims were examined January 15, 1953, by C. G. Tillman and B. F. Sorensen, geologists, Geological Survey, and H. K. Thurber, Jr., mining engineer, Bureau of Mines. Both Harris and Lee Shumway were present during the examination.

HISTORY AND PRODUCTION

Correspondence with the county recorder of San Juan County, Utah, reveals that the Spring Water claims were recorded October 19, 1943, at the county offices in Monticello, Utah. Since the recording date, roads have been built and limited exploration of the exposed parts of the Salt Wash member of the Upper Jurassic Morrison formation has been completed.

No production has been made from this property. The ore horizon in the Salt Wash member, from which ores are presently being mined on near-by properties, varies from 98 feet to 122 feet below the surface.

The ores on these properties are reached by inclined shafts.

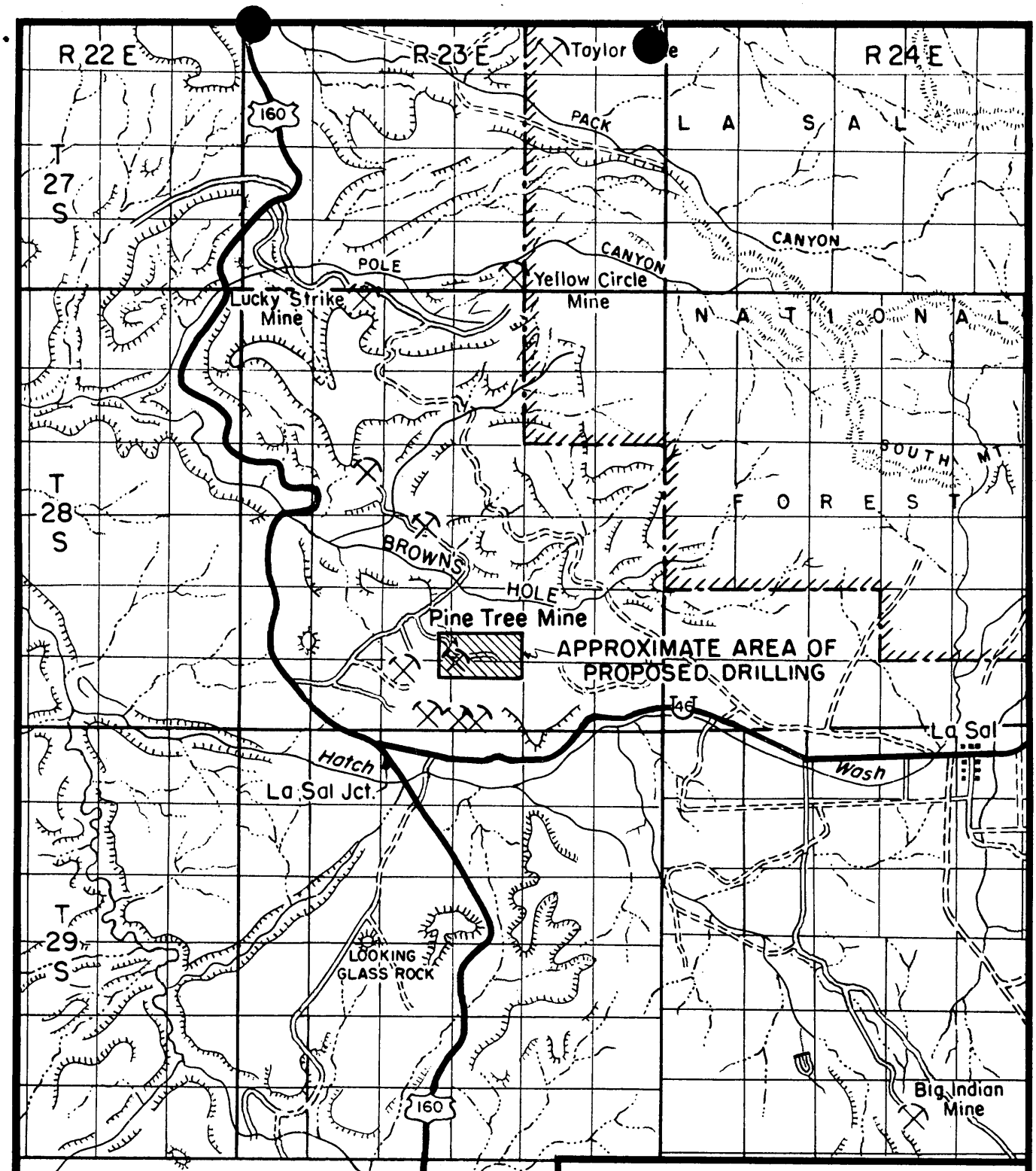
The Atomic Energy Commission, during 1952, drilled 33 diamond drill holes on the Spring Water group. The results of the holes which encountered mineralization are attached as Supplement No. 1, and their locations are shown on Fig. 2.

LOCATION, ACCESSIBILITY, AND PHYSICAL FEATURES

The Spring Water group is located in the Cottonwood Wash district in Brushy Basin Wash, approximately 1/4 mile from its confluence with Cottonwood Wash. Available maps indicate that the claims are situated in Sec. 3, T. 37 S., R. 21 E., S.L.B. & M. This information is shown on Fig. 1, attached.

Access to the area is by Utah State Highway 95, a maintained road between Blanding and White Canyon, and a branch road south to the Cottonwood Wash district. The branch road leaves the State highway approximately 11.5 miles from Blanding, thence approximately 1.5 miles south to a point on the ridge dividing Cottonwood Wash and Brushy Basin Wash. From the ridge a rough truck trail descends easterly into the bottom of Brushy Basin Wash to the property. The three claims of the group lie in the bottom of the wash and extend up the east slope from the wash.

At the time of the examination, water was flowing in Brushy Basin Wash, and it is believed that the stream will run for most of the year. Further, the stream gravels will retain water if the surface flow ceases, thus providing a readily available water supply from a shallow well.



NOTE

DATA TRACED FROM U. S. GRAZING SERVICE, UTAH REGION MAP.

0 1 2 3 4

SCALE OF MILES

U. S. DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

Fig. 1 DMEA Docket No. 2771

Location Map

GRAMLICH MINERALS INC. LEASE

BROWN'S HOLE AREA

SAN JUAN COUNTY, UTAH

ENGINEER: *H. K. Thurber*	DATE: MAR. , 1953
TRACED: FEB., 1953; A.P.T.S.	1900 - 194 - E
CHECKED:	

OWNERSHIP AND EXTENT

The three claims in the Spring Water group were located in 1943 by the applicants, and correspondence with the county clerk of San Juan County shows the following official data:

Claim Name	Recorded in Book	Recorded in Page	Location Date	Recording Date
Spring Water	R-1	386	10/13/43	10/19/43
Spring Water No. 1	R-1	385	10/13/43	10/19/43
Spring Water No. 2	R-1	385	10/13/43	10/19/43

The area of the claims is covered by two Federal land classifications, both of which were impressed subsequent to the 1943 recording date of the claims. The first of these, chronologically, is Public Land Order 565, effective February 25, 1949, which withdraws the land for use of the Atomic Energy Commission. The second is a Federal oil and gas lease No. U-05661, the application for which was filed November 27, 1951.

The above land classification does not effect the area within the claim boundaries, inasmuch as the claims are a prior location. However, the effect is to limit the area in which the applicants may operate to that within the claim boundaries. Apparently no attempt has been made by the applicants to secure control of any land outside their claims by lease from the Atomic Energy Commission.

GEOLOGY

The area is underlain by rocks of the Upper Jurassic Morrison formation that dip gently to the east and strike north.

Gregory (1938, p. 59) subdivided the Morrison formation in this area into four members which are, from bottom to top, (1) Bluff sandstone, (2) Recapture shale, (3) Westwater Canyon sandstone, and (4) Brushy Basin shale. The Westwater Canyon sandstone was tentatively assigned to the position of the Salt Wash member of the Morrison formation as defined by Lupton (1914). Geologists of the AEC have recently concluded that the Westwater Canyon member does not occupy the position of the Salt Wash member, but rather that it overlies the Salt Wash member around Blanding, Utah. Following this interpretation, the ore-bearing horizon in Brushy Basin Wash is the Salt Wash member of the Morrison formation.

The Salt Wash member consists of a series of lenticular, brown, conglomeratic sandstones interbedded with lesser thicknesses of red to green mudstones. Parts of this member have been mineralized locally by uranium-bearing solutions. As much as 15 feet of stream gravel covers the Salt Wash member in Brushy Basin Wash.

ORE DEPOSITS

The drill holes to which the applicants propose to drive, show uranium mineralization at approximately 109 feet from the surface at

the north end of the claims. Other holes drilled near the south end of the group indicate the ore horizon to be approximately 112 feet below the surface. The mineralized holes show a maximum of 1.7 feet of ore, but the average is only 0.33 feet. The assay data of the mineralized holes, obtained from information supplied by the Atomic Energy Commission, are attached as Supplement No. 1.

Ore-bearing strata are not exposed on the Springwater claims, but to the southwest at the mine on the nearby Basin claim, ores occur in small, lenticular bodies in green to gray mudstone. This mudstone, like the ore-bearing unit beneath the Springwater claims, is in the Salt Wash member of the Morrison formation.

Examination of the workings on the Found No. 2 claim shows the ore to occur in the typical, irregular, discontinuous bodies of the Morrison formation, as found in other areas.

Production records of workings on these claims, furnished by Lowell S. Hilpert, Chief, Colorado Plateau Exploration, U. S. Geological Survey, Grand Junction, Colo., show relatively minor production. Mr. Hilpert's letter to Mr. Tillman, geologist member of the examining team, is quoted in part as follows:

> "We have records of production from the Basin, Basin No. 1, and Found claims, but none from the Springwater or Springwater 1 and 2 claims. During the period January 1949 through December 1952, the Basin claim produced 3,610.49 short tons of ore with an average grade of 0.175 percent U_3O_8 and 1.65 percent V_2O_5. In May 1952, the Basin No. 1 claim made one no-pay shipment of

33.67 short tons which averaged 0.050 percent U_3O_8 and 0.47 percent V_2O_5. During October and November 1952, the Found claim produced 60.84 short tons of ore with an average grade of 0.193 percent U_3O_8 and 1.82 percent V_2O_5. We have these records available by months if you wish them."

Although the production reported is from nearby claims, it relates to this report in determining probable ore reserves on the subject claims.

ORE RESERVES

Ore reserve calculations have been made by the geologist members of the examining team from results of Atomic Energy Commission drilling and are listed as follows:

Area	Tons	Percent U_3O_8	Classification
Spring Water No. 2 East Ore Body (Holes 738, 738C, 738E)	280	0.17	Indicated
Spring Water No. 2 West Ore Body (Holes 505, 505D)	40	0.47	Indicated
Spring Water (Hole 855)	15	0.31	Indicated

Ores in the three areas total 335 tons of indicated ores with a weighted average grade of 0.21 percent U_3O_8. This combined tonnage, it will be noted, is not sufficient to warrant the applicant's proposed program if any profit from mining is expected.

PRESENT STATUS

The ore horizon in the area of the Spring Water group is not exposed on the surface; thus there are no workings on the claims and the applicants do not anticipate doing any work in the foreseeable future without DMEA aid.

PROJECT PROPOSALS AND COSTS

The applicants propose to sink an inclined shaft to the ore horizon from a point on the Spring Water No. 1 claim, the shaft to bear approximately N. 05° E. The shaft is proposed to be driven on a 20-percent grade. From the bottom of the shaft a drift is proposed on the ore horizon to the area of Atomic Energy Commission diamond drill holes 505 and 738. This work, totaling approximately 500 feet, is estimated to cost $15,200, including equipment and surface work. This represents an over-all cost of approximately $30 per foot and appears to be slightly high in view of the labor rates prevailing in the Cottonwood Wash district.

The value of the ores already discovered by drilling in the area to be explored by the shaft will not allow repayment of a DMEA loan of this size. The applicants' belief that ores will be encountered before the proposed inclined shaft reaches its objective is not valid, since a plotting of the shaft indicates that the mineralized horizon will not be intersected until the nearest mineralized hole is cut.

An alternate program was considered by the examining team while on the property. This program proposed exploration in certain areas on the claims, with emphasis on the area of the Spring Water claim nearest the Found No. 2 and Basin No. 1 claims. Such a program was considered with the object of finding possible extensions of the ore now being mined on the latter claims. Subsequent review of the drill

records and correspondence with Lowell S. Hilpert, quoted in a foregoing paragraph, shows that this exploratory drilling would be in the realm of speculation, inasmuch as the Atomic Energy Commission drilling in the general area shows only a limited amount of uranium mineralization.

CONCLUSIONS AND RECOMMENDATIONS

A review of the Atomic Energy Commission assay data of the mineralized holes on the Spring Water group (Supplement No. 1) shows that the ore bodies on Spring Water No. 2 claim are of such small size that the applicants' proposal for underground work is not economically sound. Simple calculations indicate that the gross value of ores likely to be developed will not be as large as the applicants' estimated cost of reaching the area by the proposed inclined shaft. As was pointed out in a foregoing paragraph, an incline driven on a 20-percent grade will not reach the ore horizon until the nearest hole is intersected; thus no area south of the hole would be explored by the shaft. Further, since the holes show some ore, a question may rightfully be raised regarding the designation of the applicants' proposal as an exploratory loan rather than a production loan.

Again referring to the diamond drill hole assay data attached and the production records of nearby claims, it is concluded that any drilling on the Spring Water claim would produce only minor ore bodies of low-grade ores.

In view of the above conclusions, it is recommended that the applicants' request for an exploratory loan for work on the Spring Water group of claims be denied.

HARRIS AND LEE SHUMWAY
SPRING WATER GROUP
SAN JUAN COUNTY, UTAH

SUPPLEMENT 1

Drill Hole	Sample Interval, feet From	To	Thickness, feet	Percent U_3O_8	V_2O_5
505	118.3	118.6	0.3	0.01	—
	118.6	118.9	0.3	0.31	1.42
	118.9	119.1	0.2	0.02	—
505A	90.6	91.0	0.4	0.03	—
505D	121.9	122.3	0.4	0.67	1.65
	122.3	122.5	0.2	0.35	0.41
	132.6	133.0	0.4	0.01	—
505G	114.0	115.0	1.0	Tr.	0.06
738	106.8	107.1	0.3	1.21	1.81
738C	96.3	96.5	0.2	0.01	0.63
	96.5	96.75	0.25	Tr.	—
738E	107.7	109.4	1.7	0.24	0.42
855	112.0	112.3	0.3	0.31	3.37
855C	111.2	111.3	0.1	0.13	0.05
	111.3	111.4	0.1	0.58	0.39
	111.4	111.5	0.1	0.07	0.07
855F	120.5	121.1	0.6	0.04	—

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

224 New Customhouse
Denver 2, Colorado

March 11, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 16 1953

BD

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2828, (Uranium) Harris and Lee Shumway, Spring Water Group, San Juan County, Utah.

Enclosed are four copies of the final report on the subject docket, two copies of Form 3b, and a copy of the letter of denial to the applicant.

for W. H. King

A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

3-20-53
(date)

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

224 New Customhouse
Denver 2, Colorado

March 11, 1953.

Mr. Harris Shumway
Mr. Lee Shumway
Blanding, Utah

Re: Docket DMEA-2828

Gentlemen:

Reference is made to your application for Government aid on the Spring Water Group.

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 by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

The map forwarded with your application which you requested to be returned is attached hereto.

Very truly yours,

for John F. Shea
W. E. King
Field Team, Region IV

A. N. Koschmann
A. N. Koschmann
Field Team, Region IV

Enclosure

HMC:cwm

cc: Administratio (DMEA)
SRWilson
Subject
Chron.
Koschmann (2)

Reviewed by
DMEA OPERATING COMMITTEE
3-20-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

March 11, 1953.

DEPARTMENT OF THE INTERIOR
Public Lands Administration
RECEIVED
MAR 16 1953

Memorandum

To: DMEA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2328, (Uranium) Harris and Lee Shumway, Spring Water Group, San Juan County, Utah.

Enclosed are eleven copies of a joint report by the Bureau of Mines and the Geological Survey on the subject docket.

The applicants requested $15,200.00 to sink an inclined shaft to the ore horizon and drift toward two groups of diamond drill holes which the Atomic Energy Commission had drilled and exposed thin beds of uranium ores.

The proposed work is not exploration as defined in DMEA Order-1, and the examiners conclude that only minor ore bodies of low grade ores would be found.

The examiners recommend that the application be denied and we concur in this recommendation.

for John F. Shaw
W. H. King

Enclosures

Reviewed by
DMEA OPERATION COMMITTEE
3-20-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
MAR 13 1953

March 6, 1953

Memorandum

To: W. H. King, Chief, Mining Division, Region IV

From: Chief, Minerals Development Branch, Mining Division, Region IV

Subject: DMEA-2828, Harris and Lee Shumway, Spring Water group, San Juan County, Utah.

Transmitted herewith are the original and 10 copies of an engineering and geologic report covering examination of the subject property. The report was prepared by H. K. Thurber, Jr., of this office, and C. G. Tillman and B. F. Sorensen of the Geological Survey. A section on Summary, Conclusions and Recommendations is also included.

Uranium mineralization on the Spring Water property occurs in the Salt Wash member of the Morrison formation. The uranium minerals are found associated with organic matter and as impregnations of sandstone and mudstone lenses. The Atomic Energy Commission completed 33 diamond drill holes on the property during 1952. The drill hole information indicates a small reserve of ores averaging approximately 0.21 percent U_3O_8. The gross value of the ores indicated is less than the probable cost of reaching the ore areas by underground work.

Because of the grade of the ores indicated by Atomic Energy Commission drilling and the irregular thickness of ore beds, it is concluded that the proposed exploration on the Spring Water property will not disclose additional significant tonnage of ores. It is, therefore, recommended that the loan request be denied. I concur with this recommendation.

The original brochure is attached.

Stephen R. Wilson
Stephen R. Wilson

Enclosure

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By C. G. Tillman, B. F. Sorensen and H. K. Thurber, Jr.

Harris and Lee Shumway, both of Blanding, Utah, have applied for a DMEA exploratory loan of $15,200, docket 2828 (uranium) to explore a previously drilled area on the Spring Water group of three claims in the Cottonwood Wash district, San Juan County, Utah. The applicants propose to drive a 500-foot inclined shaft to reach a group of mineralized diamond drill holes.

The uranium mineralization found in the district, in mine workings and drill holes, is in the Salt Wash member of the Upper Jurassic Morrison formation. The Salt Wash member in this area consists of a series of lenticular, brown, conglomeratic sandstones interbedded with lesser thicknesses of red to green mudstone. The uranium minerals observed in near-by mine workings occur with organic matter and as impregnations of sandstone lenses and mudstone.

The Spring Water group was diamond drilled in 1952 by the Atomic Energy Commission, and 33 holes were completed on the three claims. Drill information of the mineralized holes shows an ore reserve of approximately 335 tons of indicated ores with a weighted average grade of 0.21 percent U_3O_8 occurring in three small, widely separated bodies at depths of 97 to 122 feet from the surface. Simple calculations show that probable proceeds from the mining of combined tonnage of the

Reviewed by
DMEA OPERATING COMMITTEE
3-20-53
(date)

three ore bodies at current published prices, including the bonus for production from new producing properties, will not allow a profit to be realized from the operation.

In view of the minor tonnage of relatively low-grade ores developed by Atomic Energy Commission drilling, together with the irregularity of thickness and grade of ores being mined from near-by properties and the depth to the ore horizon, the examining team concludes that further exploration on the Spring Water group will not disclose a significant tonnage of uranium ores, and therefore recommends that the loan application be denied.

HARRIS AND LEE SHUMWAY
SPRING WATER GROUP
SAN JUAN COUNTY, UTAH
DMEA-2828
Uranium

Engineering and Geologic Report

By C. G. Tillman and
B. F. Sorensen
Geologists
Geological Survey

and

H. K. Thurber, Jr.
Mining engineer
Bureau of Mines

HARRIS AND LEE SHUMWAY
SPRING WATER GROUP
SAN JUAN COUNTY, UTAH

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ILLUSTRATIONS

Fig. 1 Location map, Spring Water group, San Juan County, Utah
Fig. 2 Map of claims and indicated ore reserves

INTRODUCTION

Harris and Lee Shumway, of Blanding, Utah, have applied for a loan of $15,200 (DMEA docket 2828, uranium) to explore an area on the Spring Water group of claims in the Cottonwood Wash district, San Juan County, Utah. The applicants propose to drive an inclined shaft to the ore horizon and drift toward two groups of Atomic Energy Commission diamond drill holes which show thin beds of uranium ores.

An examination of the property was requested by the Field Team, Region IV, December 18, 1952. The claims were examined January 15, 1953, by C. G. Tillman and B. F. Sorensen, geologists, Geological Survey, and H. K. Thurber, Jr., mining engineer, Bureau of Mines. Both Harris and Lee Shumway were present during the examination.

HISTORY AND PRODUCTION

Correspondence with the county recorder of San Juan County, Utah, reveals that the Spring Water claims were recorded October 19, 1943, at the county offices in Monticello, Utah. Since the recording date, roads have been built and limited exploration of the exposed parts of the Salt Wash member of the Upper Jurassic Morrison formation has been completed.

No production has been made from this property. The ore horizon in the Salt Wash member, from which ores are presently being mined on near-by properties, varies from 98 feet to 122 feet below the surface.

The ores on these properties are reached by inclined shafts.

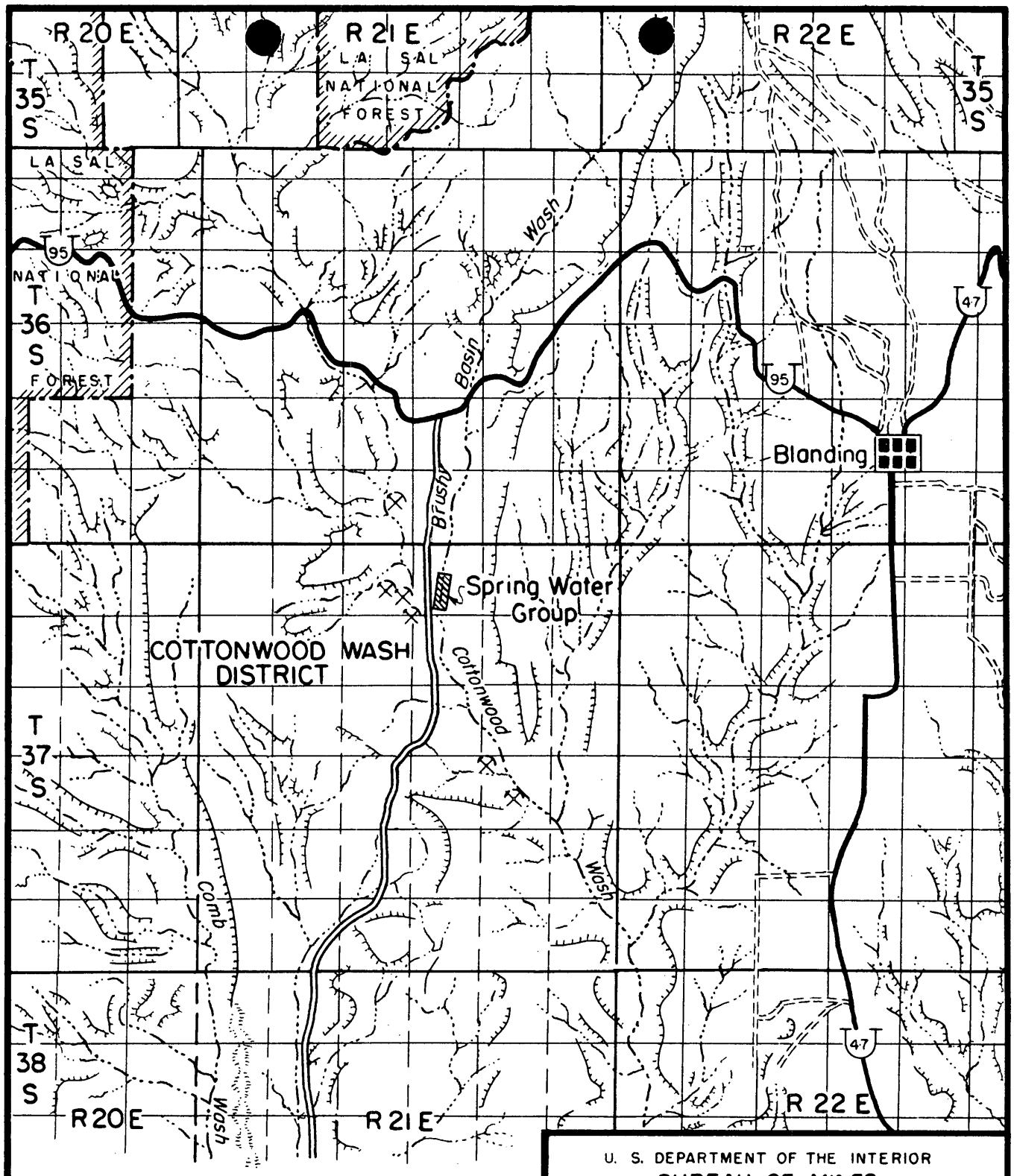
The Atomic Energy Commission, during 1952, drilled 33 diamond drill holes on the Spring Water group. The results of the holes which encountered mineralization are attached as Supplement No. 1, and their locations are shown on Fig. 2.

LOCATION, ACCESSIBILITY, AND PHYSICAL FEATURES

The Spring Water group is located in the Cottonwood Wash district in Brushy Basin Wash, approximately 1/4 mile from its confluence with Cottonwood Wash. Available maps indicate that the claims are situated in Sec. 3, T. 37 S., R. 21 E., S.L.B. & M. This information is shown on Fig. 1, attached.

Access to the area is by Utah State Highway 95, a maintained road between Blanding and White Canyon, and a branch road south to the Cottonwood Wash district. The branch road leaves the State highway approximately 11.5 miles from Blanding, thence approximately 1.5 miles south to a point on the ridge dividing Cottonwood Wash and Brushy Basin Wash. From the ridge a rough truck trail descends easterly into the bottom of Brushy Basin Wash to the property. The three claims of the group lie in the bottom of the wash and extend up the east slope from the wash.

At the time of the examination, water was flowing in Brushy Basin Wash, and it is believed that the stream will run for most of the year. Further, the stream gravels will retain water if the surface flow ceases, thus providing a readily available water supply from a shallow well.



NOTE

DATA TRACED FROM U. S. GRAZING SERVICE, UTAH REGION MAP.

0 1 2 3 4

SCALE OF MILES

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 1 DMEA Docket No. 2828

Location Map

SPRING WATER GROUP

HARRIS AND LEE SHUMWAY

COTTONWOOD WASH AREA

SAN JUAN COUNTY, UTAH

ENGINEER: *H.K. Thurber*	DATE: FEB. 27, 1953
TRACED: FEB., 1953; A.P.T.S.	1900 - 192 - E
CHECKED:	

OWNERSHIP AND EXTENT

The three claims in the Spring Water group were located in 1943 by the applicants, and correspondence with the county clerk of San Juan County shows the following official data:

Claim Name	Recorded in Book	Recorded in Page	Location Date	Recording Date
Spring Water	R-1	386	10/13/43	10/19/43
Spring Water No. 1	R-1	385	10/13/43	10/19/43
Spring Water No. 2	R-1	385	10/13/43	10/19/43

The area of the claims is covered by two Federal land classifications, both of which were impressed subsequent to the 1943 recording date of the claims. The first of these, chronologically, is Public Land Order 565, effective February 25, 1949, which withdraws the land for use of the Atomic Energy Commission. The second is a Federal oil and gas lease No. U-05661, the application for which was filed November 27, 1951.

The above land classification does not effect the area within the claim boundaries, inasmuch as the claims are a prior location. However, the effect is to limit the area in which the applicants may operate to that within the claim boundaries. Apparently no attempt has been made by the applicants to secure control of any land outside their claims by lease from the Atomic Energy Commission.

GEOLOGY

The area is underlain by rocks of the Upper Jurassic Morrison formation that dip gently to the east and strike north.

Gregory (1938, p. 59) subdivided the Morrison formation in this area into four members which are, from bottom to top, (1) Bluff sandstone, (2) Recapture shale, (3) Westwater Canyon sandstone, and (4) Brushy Basin shale. The Westwater Canyon sandstone was tentatively assigned to the position of the Salt Wash member of the Morrison formation as defined by Lupton (1914). Geologists of the AEC have recently concluded that the Westwater Canyon member does not occupy the position of the Salt Wash member, but rather that it overlies the Salt Wash member around Blanding, Utah. Following this interpretation, the ore-bearing horizon in Brushy Basin Wash is the Salt Wash member of the Morrison formation.

The Salt Wash member consists of a series of lenticular, brown, conglomeratic sandstones interbedded with lesser thicknesses of red to green mudstones. Parts of this member have been mineralized locally by uranium-bearing solutions. As much as 15 feet of stream gravel covers the Salt Wash member in Brushy Basin Wash.

ORE DEPOSITS

The drill holes to which the applicants propose to drive, show uranium mineralization at approximately 109 feet from the surface at

the north end of the claims. Other holes drilled near the south end of the group indicate the ore horizon to be approximately 112 feet below the surface. The mineralized holes show a maximum of 1.7 feet of ore, but the average is only 0.33 feet. The assay data of the mineralized holes, obtained from information supplied by the Atomic Energy Commission, are attached as Supplement No. 1.

Ore-bearing strata are not exposed on the Springwater claims, but to the southwest at the mine on the nearby Basin claim, ores occur in small, lenticular bodies in green to gray mudstone. This mudstone, like the ore-bearing unit beneath the Springwater claims, is in the Salt Wash member of the Morrison formation.

Examination of the workings on the Found No. 2 claim shows the ore to occur in the typical, irregular, discontinuous bodies of the Morrison formation, as found in other areas.

Production records of workings on these claims, furnished by Lowell S. Hilpert, Chief, Colorado Plateau Exploration, U. S. Geological Survey, Grand Junction, Colo., show relatively minor production. Mr. Hilpert's letter to Mr. Tillman, geologist member of the examining team, is quoted in part as follows:

> "We have records of production from the Basin, Basin No. 1, and Found claims, but none from the Springwater or Springwater 1 and 2 claims. During the period January 1949 through December 1952, the Basin claim produced 3,610.49 short tons of ore with an average grade of 0.175 percent U_3O_8 and 1.65 percent V_2O_5. In May 1952, the Basin No. 1 claim made one no-pay shipment of

33.67 short tons which averaged 0.050 percent U_3O_8 and 0.47 percent V_2O_5. During October and November 1952, the Found claim produced 60.84 short tons of ore with an average grade of 0.193 percent U_3O_8 and 1.82 percent V_2O_5. We have these records available by months if you wish them."

Although the production reported is from nearby claims, it relates to this report in determining probable ore reserves on the subject claims.

ORE RESERVES

Ore reserve calculations have been made by the geologist members of the examining team from results of Atomic Energy Commission drilling and are listed as follows:

Area	Tons	Percent U_3O_8	Classification
Spring Water No. 2 East Ore Body (Holes 738, 738C, 738E)	280	0.17	Indicated
Spring Water No. 2 West Ore Body (Holes 505, 505D)	40	0.47	Indicated
Spring Water (Hole 855)	15	0.31	Indicated

Ores in the three areas total 335 tons of indicated ores with a weighted average grade of 0.21 percent U_3O_8. This combined tonnage, it will be noted, is not sufficient to warrant the applicant's proposed program if any profit from mining is expected.

PRESENT STATUS

The ore horizon in the area of the Spring Water group is not exposed on the surface; thus there are no workings on the claims and the applicants do not anticipate doing any work in the foreseeable future without DMEA aid.

PROJECT PROPOSALS AND COSTS

The applicants propose to sink an inclined shaft to the ore horizon from a point on the Spring Water No. 1 claim, the shaft to bear approximately N. 05° E. The shaft is proposed to be driven on a 20-percent grade. From the bottom of the shaft a drift is proposed on the ore horizon to the area of Atomic Energy Commission diamond drill holes 505 and 738. This work, totaling approximately 500 feet, is estimated to cost $15,200, including equipment and surface work. This represents an over-all cost of approximately $30 per foot and appears to be slightly high in view of the labor rates prevailing in the Cottonwood Wash district.

The value of the ores already discovered by drilling in the area to be explored by the shaft will not allow repayment of a DMEA loan of this size. The applicants' belief that ores will be encountered before the proposed inclined shaft reaches its objective is not valid, since a plotting of the shaft indicates that the mineralized horizon will not be intersected until the nearest mineralized hole is cut.

An alternate program was considered by the examining team while on the property. This program proposed exploration in certain areas on the claims, with emphasis on the area of the Spring Water claim nearest the Found No. 2 and Basin No. 1 claims. Such a program was considered with the object of finding possible extensions of the ore now being mined on the latter claims. Subsequent review of the drill

records and correspondence with Lowell S. Hilpert, quoted in a foregoing paragraph, shows that this exploratory drilling would be in the realm of speculation, inasmuch as the Atomic Energy Commission drilling in the general area shows only a limited amount of uranium mineralization.

CONCLUSIONS AND RECOMMENDATIONS

A review of the Atomic Energy Commission assay data of the mineralized holes on the Spring Water group (Supplement No. 1) shows that the ore bodies on Spring Water No. 2 claim are of such small size that the applicants' proposal for underground work is not economically sound. Simple calculations indicate that the gross value of ores likely to be developed will not be as large as the applicants' estimated cost of reaching the area by the proposed inclined shaft. As was pointed out in a foregoing paragraph, an incline driven on a 20-percent grade will not reach the ore horizon until the nearest hole is intersected; thus no area south of the hole would be explored by the shaft. Further, since the holes show some ore, a question may rightfully be raised regarding the designation of the applicants' proposal as an exploratory loan rather than a production loan.

Again referring to the diamond drill hole assay data attached and the production records of nearby claims, it is concluded that any drilling on the Spring Water claim would produce only minor ore bodies of low-grade ores.

In view of the above conclusions, it is recommended that the applicants' request for an exploratory loan for work on the Spring Water group of claims be denied.

HARRIS AND LEE SHUMWAY
SPRING WATER GROUP
SAN JUAN COUNTY, UTAH

SUPPLEMENT 1

Drill Hole	Sample Interval, feet From	To	Thickness, feet	Percent U_3O_8	V_2O_5
505	118.3	118.6	0.3	0.01	----
	118.6	118.9	0.3	0.31	1.42
	118.9	119.1	0.2	0.02	----
505A	90.6	91.0	0.4	0.03	----
505D	121.9	122.3	0.4	0.67	1.65
	122.3	122.5	0.2	0.35	0.41
	132.6	133.0	0.4	0.01	----
505G	114.0	115.0	1.0	Tr.	0.06
738	106.8	107.1	0.3	1.21	1.81
738C	96.3	96.5	0.2	0.01	0.63
	96.5	96.75	0.25	Tr.	----
738E	107.7	109.4	1.7	0.24	0.42
855	112.0	112.3	0.3	0.31	3.37
855C	111.2	111.3	0.1	0.13	0.05
	111.3	111.4	0.1	0.58	0.39
	111.4	111.5	0.1	0.07	0.07
855F	120.5	121.1	0.6	0.04	----

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

Minerals Administration
RECEIVED
MAR 1 0 1953

March 6, 1953

Memorandum

To: W. H. King, Chief, Mining Division, Region IV

From: Chief, Minerals Development Branch, Mining Division, Region IV

Subject: DMEA-2828, Harris and Lee Shumway, Spring Water group, San Juan County, Utah.

Transmitted herewith are the original and 10 copies of an engineering and geologic report covering examination of the subject property. The report was prepared by H. K. Thurber, Jr., of this office, and C. G. Tillman and B. F. Sorensen of the Geological Survey. A section on Summary, Conclusions and Recommendations is also included.

Uranium mineralization on the Spring Water property occurs in the Salt Wash member of the Morrison formation. The uranium minerals are found associated with organic matter and as impregnations of sandstone and mudstone lenses. The Atomic Energy Commission completed 33 diamond drill holes on the property during 1952. The drill hole information indicates a small reserve of ores averaging approximately 0.21 percent U_3O_8. The gross value of the ores indicated is less than the probable cost of reaching the ore areas by underground work.

Because of the grade of the ores indicated by Atomic Energy Commission drilling and the irregular thickness of ore beds, it is concluded that the proposed exploration on the Spring Water property will not disclose additional significant tonnage of ores. It is, therefore, recommended that the loan request be denied. I concur with this recommendation.

The original brochure is attached.

Stephen R. Wilson
Stephen R. Wilson

Enclosure

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

224 New Customhouse
Denver 2, Colorado

December 19, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Executive Officer, Field Team, Region IV

Subject: Docketing for Exploration Assistance

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

Jordan Ruiseglu & George Anthony
446 Third Ave.
Detroit 1, Michigan

~~[illegible]~~
~~[illegible]~~

John F. Shaw
John F. Shaw for
W. H. King

Enclosures

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. Dmea - 2828
Metal or Mineral
Date Received 12/29/52
Estimated Cost
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: Harris Shumway, Blanding, Utah
Lee Shumway, Blanding, 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 On unsurveyed land, near mouth of Brushy Basin Canyon, in Cottonwood minning district. Consisting of three claims 600 feet wide by 1500 feet long. Known as the Spring Water group, Spring Water No. 1 and 2. Recorded in Book R-1, Page 385

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

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

(*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 None

(*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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 29 1952

16—66551-1

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

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

(*c*) The work will start within 30 days and be completed within 12 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)? YES

(*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 _____, 195__

Harris Summers
(Applicant)

By _____

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

No. 4, (a) No exploration work has been done except that shown on the accompaning map. Drilling was done by A.E.C. There is a road to where drilling was done.

(b) No minning has ever been done.

(c) There is no way of giving the geologic features except that shown on the map. Our reasons for wishing to explore is because of the showing of ore and mineralization in the A.E.C. drill holes. There is no way of showing the veinted on a map other that the A.E.C. map and sketches accompaning this paper. show

(d) There is a county mantained road within a half mile of the calims. It is about two miles from ~~it~~ there to a state mantained road, and about ten miles from there to Blanding. My residence is in Blanding.
Shipping point: A.E.C. mill in Monticello, Utah 30 miles. U.S.V. receiving station at Thompson, Utah 130 miles, and V.C.A. mill Durango, Colorado 135 miles.

(e) Manpower is plentifull, minning materials supplies, equipment, etc. can be purchased from Western Mine Supply Co in Monticello, Utah. Water is close by, byt there is no power available.

No. 5, The work that we propose to do is running an incline drift, on about a 20% grade, which will nessitate about a 500 foor drift into or near the ore that is shown in the drill holes. The situation of drift is shown on the map.
The applicant has had 20 years experience in uranuim minning, applicants partner has also had 20 years of experience in uranium minning. Operations will be supervised by applicant of partner.

No, 6, The total cost of work will be about $15,200.00. $9,000.00 for drift $200.00 for dozer work and $6,000.00 for necessary machinery. The estimated cost for contract drifting, $18.00 per foot. $11.00 an hour for bulldozer work. $2.50 per hour for machine operator, $2.00 per hour for muckers. Two muckers and one machine man necessary. Applicant will supervise the work

(c) Powder, fuse, caps, drill steel, bits, gas and oil, etc. $3.00 per ~~hour~~.

(d) Compressor, jack hammer, drill steel, hoses, jack tank and necessary items for drilling owned by operator.

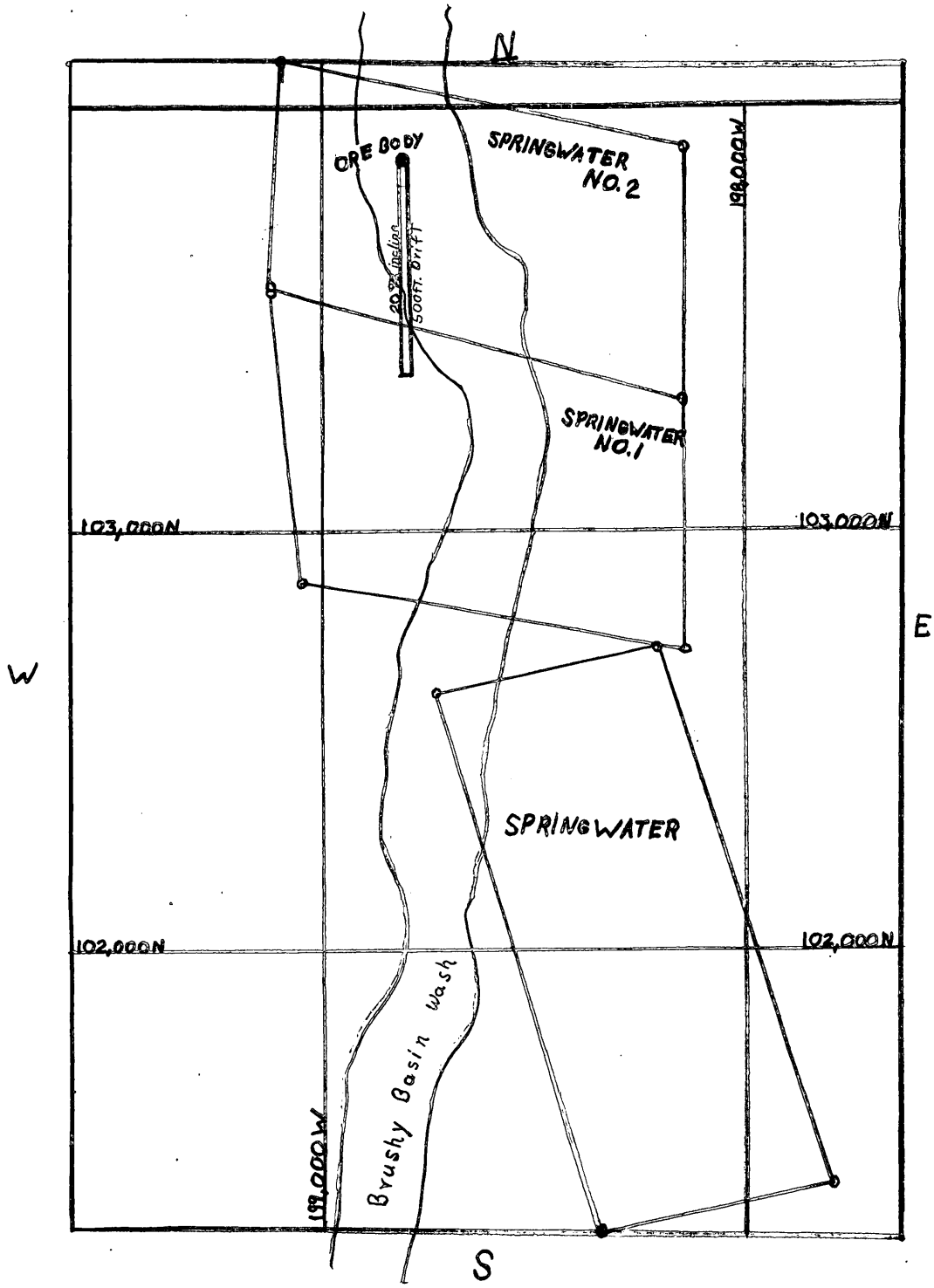
(e) There are no buildings or installations of any kind on the property at present.

(f) New buildings, improvements installations. It will be necessary to purchase hoist, cables, tracks and car at an estimated cost of $6,000.00

(g) The estimated cost of repair on manhinery and equipment about $100.00 a month.

Harris Simmons
Blanding
Utah
Box 45

WMEA-2828


N
ORE BODY
SPRINGWATER NO. 2
198,000W
20° Incline
500 ft. Drift
SPRINGWATER NO. 1
103,000N
103,000N
W
E
SPRINGWATER
102,000N
102,000N
Brushy Basin wash
189,000W
S

1 copy map enclosed
12/30/52

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

OFFICIAL BUSINESS

PAYMENT OF POSTAGE, [illegible]
(MGC)

SPOKANE
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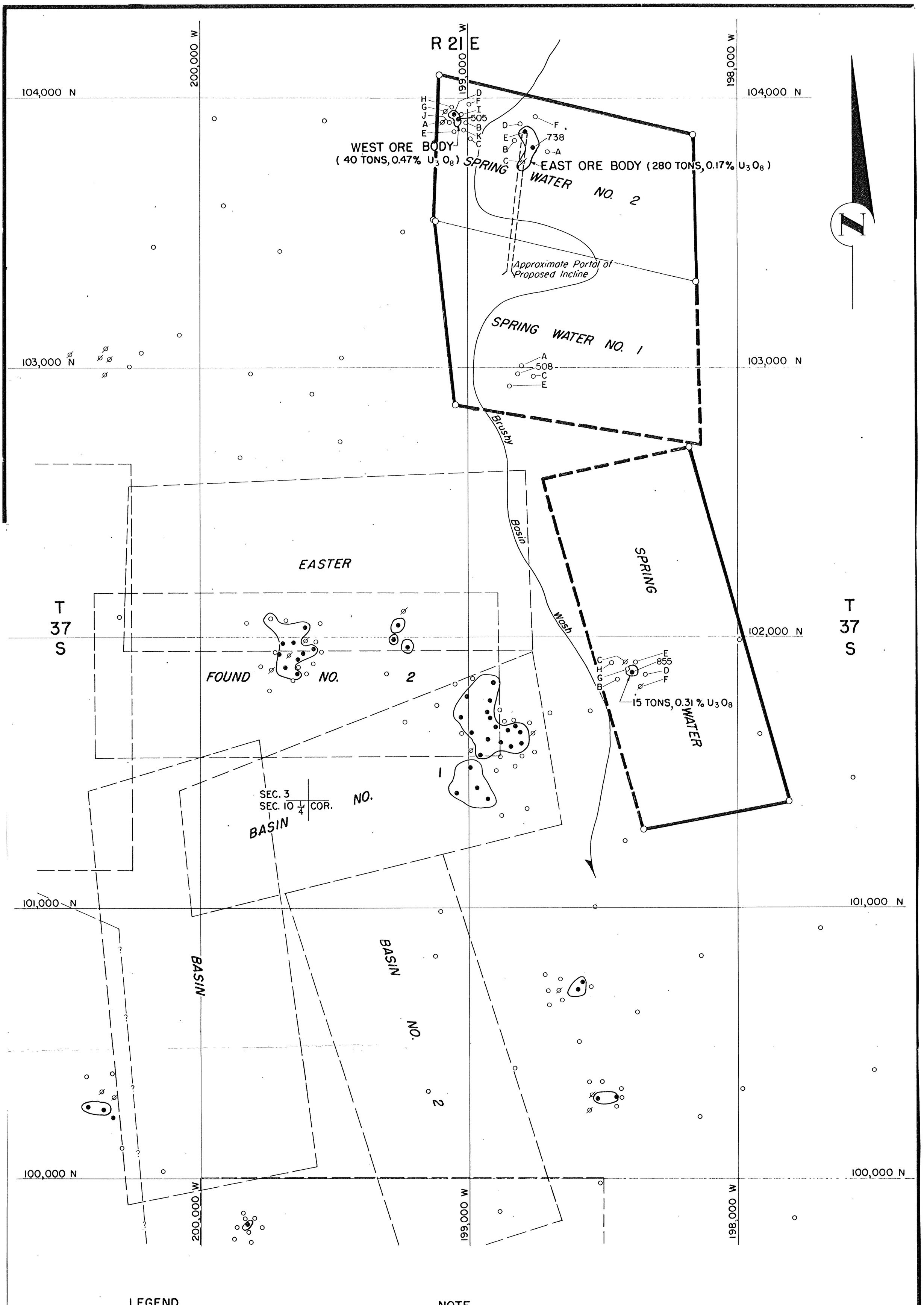
1952
WASH.

Mr. Frank R. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington, D.C.



LEGEND

- ● DIAMOND DRILL HOLE ENCOUNTERING URANIUM ORE
- ⊘ DIAMOND DRILL HOLE ENCOUNTERING URANIUM OF NON-ORE GRADE
- ○ DIAMOND DRILL HOLE ENCOUNTERING NO URANIUM MINERALIZATION
- OUTLINE OF ORE BODY
- ○ CLAIM CORNER

NOTE

TRACED FROM MAP PREPARED BY U. S. G. S. FROM AEC, RMO - 827, MAP NO. 3.

0 200 400 600 800
SCALE OF FEET

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

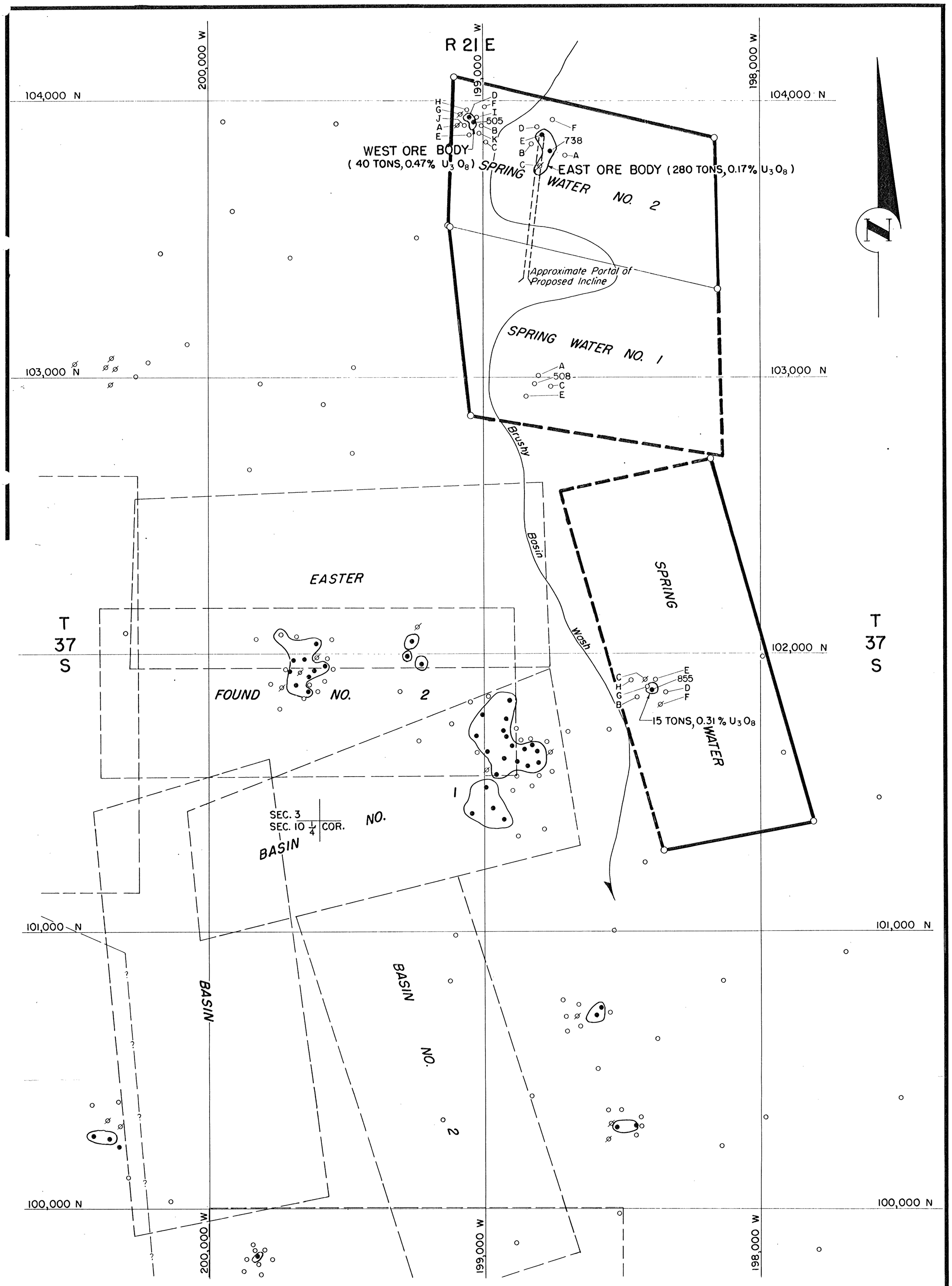
Fig. 2 DMEA Docket No. 2828

Map of Claims and Indicated Ore Reserves

SPRING WATER CLAIMS

COTTONWOOD WASH AREA
SAN JUAN COUNTY, UTAH

ENGINEER: *H. K. Thurber*	DATE: FEB. 26, 1953
TRACED: FEB., 1953; BY: A.P.T.S.	1900 - 193 - C
CHECKED:	



LEGEND

- ● DIAMOND DRILL HOLE ENCOUNTERING URANIUM ORE
- ⌀ DIAMOND DRILL HOLE ENCOUNTERING URANIUM OF NON-ORE GRADE
- ○ DIAMOND DRILL HOLE ENCOUNTERING NO URANIUM MINERALIZATION
- OUTLINE OF ORE BODY
- ○ CLAIM CORNER

NOTE

TRACED FROM MAP PREPARED BY U. S. G. S. FROM AEC, RMO - 827, MAP NO. 3.

0 200 400 600 800
SCALE OF FEET

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMEA Docket No. 2828

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