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DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 3973

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Exploration

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Routing Slip

To:	Rare & Misc. Min. Div.	Date	9/9/55
To:	Operating Com.	Date	10/10/55
To:	Oper. Com.	Date	1-27-56
To:	J. E. Johnson	Date	1-30-56
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700

FILE COPY
Surname
Murphy
Ellis
Dechow
Kilgaard
Selfridge
Johnson

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

JAN 30 1956

Mr. John I. Schumacher
Strategic Minerals Exploration Company
Post Office Box 1648
Grand Junction, Colorado

Re: Docket No. DMEA-3973 (Uranium)
Nipples, South Slope, et al., Claims
San Juan County, Utah

Dear Mr. Schumacher:

Reference is made to your application for Government aid in an exploration project on the above-named groups of claims.

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 that two small deposits of uranium ore were mined out on the Nipples and South Slope claims, indicates to us that the possibility of disclosing significant ore reserves on your claims is not sufficiently promising to justify Government participation in an exploration program. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

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

Sincerely yours,

O. O. Mitchell

Administrator

FMMurphy/izm 1-27-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Docket Copy
700
Murphy

January 27, 1956

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-3973

Commodity: Uranium

Applicant: Strategic Minerals Exploration Company, a partnership
Post Office Box 1648
Grand Junction, Colorado

Property: Owner of Yellowstone Nos. 1, 2, 3; Nipples and Nipples Nos. 1, 2, 3; Mary Louise Nos. 1, 2, 3; South Slope, South Slope Nos. 1, 2, situated in Secs. 18 and 19, T. 31 S., R. 25 E., San Juan County, Utah.

Date of Application: August 31, 1955

Grand Junction joint memorandum received: September 22, 1955

Field Team Report received: January 16, 1956

Field Examination made: October 26, 1955

Amount of Application: $29,748.75

Work Proposed: 60 holes, plug and core-bit drilling.

Estimated Costs:

6,375 feet plug drilling @ $2.17/ft.	$13,833.75	
3,000 feet core drilling @ $3.1425/ft.	9,427.50	
Bulldozer (access roads) 300 hrs. @ $12/hr.	3,600.00	
Engineer, 3 months part time	1,200.00	
Sampler, 3 months @ $400/mth.	1,200.00	
25 core boxes @ $3.50 each	87.50	
Pickup, depreciation and operating expenses, 1,500 miles @ 10¢/mile	150.00	
Sample analyses, 20 @ $5 each	100.00	
Accounting, 3 months @ $50/mth.	150.00	
Total		$29,748.75

Excerpts from Field Team Report:

The subject claims are located on the northeast side of East Canyon. The Brushy Basin and Salt Wash members of the Jurassic Morrison formation are exposed on the property.

The topmost sandstone unit of the Salt Wash is the potential ore-bearing horizon of the area. It is exposed the length of the claims and has an observed thickness of from 5 to 20 feet with very thin underlying green mudstone. Criteria for favorable sandstone developed by the USGS list, among other factors, sandstone thickness of at least 50 feet and a substantial thickness of underlying green mudstone.

It appears that habit of ore deposition in this unfavorable area is for small widely scattered lenses or "rolls" similar to the 350-ton ore body mined at the rim on the Nipples claim. It is believed that to search for deposits of this class, as proposed by the Applicant, cannot be justified.

It is recommended that the subject application be denied.

Commodity Members' Comments: (excerpts)

USGS, N. E. Nelson, January 20, 1956:

The Nipples (350 tons - 0.19% U_3O_8) and the South Slope (14 tons - 0.14% U_3O_8) ore bodies outcropped and mining exhausted the ore. No other ore bodies are known to outcrop, so the Applicant proposes to drill back of the rim to explore for possible ore deposits. Apparently there are enough exposures of the ore-bearing unit to justify the examiners application of thickness and related criteria ~~relating~~ to the favorable ore-bearing sandstone and associated mudstone.

~~I~~ Concurs in the Field Team's recommendation of denial.

USBM, J. E. Crawford, January 25, 1956:

Concurs in the Field Team's recommendation to deny the application.

Rare and Miscellaneous Metals Division, F. M. Murphy, January 27, 1956:

This Division concurs in the field examiners conclusion, that a DMEA type of contract is not applicable to the subject property and that the best way to explore the minor mineralization found at several points on the rim would be by stripping, possibly followed by underground operations just as was done at the two small deposits that were mined out. Therefore, we concur in the Field Team's recommendation to deny the subject application.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

1-26-56 [illegible]

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

RECEIVED
JAN 26 1956

January 25, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Report of Examination, DMEA Docket 3973, Strategic Minerals Exploration Company, Nipples, South Slope, Yellowstone, and Mary Louis claims, San Juan County, Utah

I have reviewed the report of examination of DMEA Docket 3973, dated January 11, and received in this office on January 24, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

Strategic Minerals Exploration Company applied for Federal exploration assistance to explore for uranium on the Nipples, South Slope, Yellowstone, and Mary Louise claims, San Juan County, Utah, by 6,375 feet of plug-bit and 3,000 feet of core-drilling at an estimated cost of $29,748.75.

An examination of subject claims by DMEA personnel was conducted on October 26, 1955. The field examiners recommend that the application be denied because the property is lithologically unfavorable for significant uranium ore deposits.

We concur in the recommendation of the field team that the application for DMEA assistance be denied. Although the applicant has mined a 350-ton ore body which averaged 0.19 percent U_3O_8 and 1.40 percent V_2O_5 near the outcrop, a profitable operation on similar scattered deposits at some distance from the rim is questionable due to the increased mining costs.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E Crawford
John E. Crawford

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

RECEIVED
JAN 26 1956

January 25, 1956

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

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JAN 26 1956

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The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E. Crawford

1-20-56 dgm

IN REPLY REFER TO:

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

RECEIVED
JAN 20 1956

January 20, 1956

Re: DMEA 3973
Strategic Minerals Exploration Company
Nipples mine and other claims
San Juan County, Utah
$29,748.55 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant requested aid in exploring by core and non-core drilling parts of a group of 13 claims.

The claims are in an area in which there are 8 small mines, and 2 small ore bodies in the applicant's claims have been mined out. The Nipples ore body yielded 350 tons of 0.19% U_3O_8 and the South Slope ore body, 14 tons of 0.14% U_3O_8. The largest producer in the general vicinity is credited with 7,906 tons of 0.29% U_3O_8 and 1.84% V_2O_5.

The Nipples and South Slope ore bodies outcropped and mining has exhausted the ore. No other ore bodies are known to outcrop so the applicant proposed drilling back from the rim in an attempt to locate other ore bodies, but the examiners, applying the criteria used in judging ground, conclude that the cost of prospecting for and developing and mining the small ore bodies, characteristic of the relatively thin ore-bearing unit of the Salt Wash member, is disproportionate to their value, if found. Apparently there are many exposures of the ore-bearing unit and enough measurements or estimates of its thickness were made to justify application of the thickness and related criteria.

I agree with the reasoning of the examiners and concur with the recommendation of denial of the Field Team.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
JAN 20 1956

January 20, 1956

Re: DMEA 3973
Strategic Minerals Exploration Company
Nipples mine and other claims
San Juan County, Utah
$89,748.55 - Uranium

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N. E. Nelson

N. E. Nelson

NENelson:iml
G-1/20/56
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641; J. O. Hosted, 3210

IN REPLY REFER TO:

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

RECEIVED
JAN 20 1956

January 20, 1956

Re: DMEA 3973
Strategic Minerals Exploration Company
Nipples mine and other claims
San Juan County, Utah
$29,748.55 - Uranium

Memorandum

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Subject: Review of Field Team report.

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NENelson:iml
G-1/20/56
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641; J. O. Hosted, 3210

IN REPLY REFER TO:

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

RECEIVED
JAN 20 1956

January 20, 1956

Re: DMEA 3973
Strategic Minerals Exploration Company
Nipples mine and other claims
San Juan County, Utah
$29,748.55 - Uranium

Memorandum

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N. E. Nelson

N. E. Nelson

NENelson:iml
G-1/20/56
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641; J. O. Hosted, 3210

1-23-56 [illegible]

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

RECEIVED
JAN 16 1956

January 11, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 3973 (Uranium), Strategic Minerals Exploration Company, Nipples, South Slope, Yellowstone, and Mary Louise claims, San Juan County, Utah

Enclosed are the original and three copies of a Joint Report of Examination on the subject docket.

The field examiners concluded that there was little possibility of discovering a significant amount of uranium on this property, and they recommend that the application be denied. We concur in this recommendation.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(date)

RECEIVED
JAN 16 1956

DMEA
Date Rec'd.
JAN 11 1956
BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
January 10, 1956

TRANSMITTED
JAN 11 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman
John F. Shaw

Subject: Examination Report, Docket No. DMEA 3973 (Uranium)
Strategic Minerals Exploration Company
Nipples, South Slope, Yellowstone and
Mary Louise claims, San Juan County, Utah

Enclosed are the original and 9 copies of a Joint Engineering and Geologic Report by D. B. Haynes, Geologist, and M. H. Salsbury, Mining Engineer, covering Docket No. DMEA 3973.

Strategic Minerals Exploration Company applied for exploration assistance to explore the Nipples, South Slope, Yellowstone and Mary Louise claims by 6,375 feet of plug-bit and 3,000 feet of core-drilling at an estimated cost of $29,748.75.

Field Examination was made on October 26, 1955, by D. B. Haynes, Geologist, and M. H. Salsbury, Mining Engineer. The examining team concluded that there was little possibility of discovering a significant amount of uranium on this property. It is recommended that the application be denied.

E. N. Harshman

E. N. Harshman
Member Field Team

John F. Shaw

John F. Shaw
Supervising Mining Engineer

Enclosures

cc 9
EHHarshman
JWHasler
DMEA 3973
Chron

JFS:ph

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(date)

MINERAL DEPOSITS
DMEA
RECEIVED
DEC 29 1955
U. S.
GEOLOGICAL SURVEY,
DENVER, COLORADO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
GRAND JUNCTION, COLORADO

RECEIVED
JAN 16 1956

December 27, 1955

TRANSMITTED
JAN 11 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler

Through: E. N. Harshman DHH for EHH

Subject: DMEA 3973, Strategic Minerals Exploration Company, Nipples, South Slope, Yellowstone, and Mary Louise claims, San Juan County, Utah

Transmitted herewith are 12 copies of a joint report by M. H. Salsbury and D. D. Haynes covering a field examination of the above-referenced property.

The subject property is considered unfavorable for significant uranium ore deposits for several geologic reasons: The topmost Salt Wash sandstone unit is less than 20 feet thick. The mudstone lenses both above and below the ore-bearing unit are red in color. Any deposit that may be found in this area would be very small. For these and other geologic reasons contained in their report, Haynes and Salsbury recommend that the application for Government assistance under DMEA docket 3973 be denied. I concur with their recommendations.

As noted in the report, the U. S. Atomic Enery Commission has assisted in evaluating the applicant's property.

We are returning herewith the brochure covering this application.

D. D. Haynes for
J. William Hasler,
Geologist

DDH/mlr
Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
JAN 16 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED
JAN 11 1956

DMEA 3973

STRATEGIC MINERALS EXPLORATION COMPANY

NIPPLES, SOUTH SLOPE, YELLOWSTONE AND MARY LOUISE CLAIMS

SAN JUAN COUNTY, UTAH

Uranium

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(date)

Joint Engineering and Geologic Report

By

D. D. Haynes, Geologist
Geological Survey

M. H. Salsbury, Mining Engineer
Bureau of Mines

January 7, 1956

DMEA 3973

STRATEGIC MINERALS EXPLORATION COMPANY
NIPPLES, SOUTH SLOPE, YELLOWSTONE AND MARY LOUISE CLAIMS
SAN JUAN COUNTY, UTAH

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Geology 6
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TABLE

No.

1. Production from a number of East Canyon properties through October 1, 1955 4

ILLUSTRATIONS

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1. Location map, Strategic Minerals Exploration Company, Nipples, South Slope, Yellowstone and Mary Louise claims, San Juan County, Utah, DMEA 3973 3
2. Map showing Yellowstone, Nipples, Mary Louise and South Slope groups of claims, Strategic Minerals Exploration Company, San Juan County, Utah, DMEA 3973 3

DMEA 3973

RECEIVED
JAN 16 1956

STRATEGIC MINERALS EXPLORATION COMPANY
NIPPLES, SOUTH SLOPE, YELLOWSTONE AND MARY LOUISE CLAIMS
SAN JUAN COUNTY, UTAH

INTRODUCTION AND SUMMARY

On September 2, 1955, Strategic Minerals Exploration Company, P. O. Box 1648, Grand Junction, Colorado, a partnership, applied for Defense Minerals Exploration Administration assistance to explore their claims in East Canyon, San Juan County, Utah. The proposal consisted of 6,375 feet of plug-bit and 3,000 feet of core-drilling in 60 holes to be done in three stages at an estimated cost of $29,748.75. Government participation at 75 percent would be $22,311.56.

A field examination was made on October 26, 1955, in company with John I. Schumacher, a partner and Robert Taylor, an engineer employed by the applicants.

The subject claims are located on the northeast side of East Canyon. The Brushy Basin and Salt Wash members of the Jurassic Morrison formation are exposed on the property. There are mines with a record of moderate production within two miles. The applicants suggest that the claims lie in a favorable zone between the Jimbo Bob and Waterfall group to the north, and the Windfall and Sunset mines to the south. However, the proposed favorable zone is based solely on location and not on favorability criteria used by the Geological Survey and the Atomic Energy Commission. The topmost sandstone unit of the Salt Wash member of the Jurassic Morrison formation is the potential ore-bearing horizon of the area. It is exposed the length

of the claims and has an observed thickness of from 5 to 20 feet with very thin underlying green mudstone. Criteria for favorable sandstones developed by the Geological Survey list, among other factors, sandstone thicknesses of at least 50 feet and a substantial thickness of underlying green mudstone. These conditions are found in the larger mines of the area, but the potential ore-bearing sandstone on the subject claims does not attain this thickness in any place.

It is concluded that the 350-ton ore body which averaged 0.19 percent U_3O_8 and 1.40 percent V_2O_5, mined from a small "roll" developed by shallow rim workings on the Nipples claim, is probably typical of deposits likely to be present on the subject claims. Near an outcrop, ore of the grade found to date can be mined profitably, even in small quantities, if the initial production bonus is in effect. A profitable operation on similar scattered deposits at some distance from the rim is unlikely because exploration and development cost would be too high in comparison with probable return. Under these conditions, the probability of an ore discovery which could be considered significant is unlikely and denial of the application under DMEA 3973 is recommended.

ACKNOWLEDGMENTS

The application submitted included pertinent information, maps, and cost estimates of the proposed exploration. The Atomic Energy Commission was consulted and furnished data on their exploration projects in adjoining areas together with production and ore reserve figures on known deposits in the general area.

LOCATION TOPOGRAPHY AND PHYSICAL FEATURES

The Nipples, South Slope, Yellowstone, and Mary Louise claims in

secs. 18 and 19, T. 31 S., R. 25 E., Salt Lake Meridian, San Juan County, Utah, are nine miles east of an access road junction with U. S. Highway 160, sixteen miles north of the county seat at Monticello, Utah (figure 1 and 2). There is an ore buying station for uranium ores at Monticello. Limited quantities of mining equipment and supplies are available at Monticello. More complete stocks are maintained at Grand Junction, Colo., a distance of 175 miles from the property.

The claims are on the moderately precipitous northeast flank of East Canyon at an altitude of about 7,000 feet and about 400 feet above the valley floor. Many of the proposed drill sites would be expensive to prepare and those indicated on the applicant's map would not necessarily be feasible at the locations chosen.

Water for mining purposes is obtainable from springs or surface flow in East Canyon and tributaries. Timber is obtainable from suppliers operating in the La Sal Mountains. Power needs must be met by the individual operator. The proposed exploration is planned as an operation by a drilling contractor who would furnish all necessary labor, and also living accommodations if a camp at the site were established in preference to commuting from Monticello.

HISTORY PRODUCTION AND OWNERSHIP

Mining operations for vanadium have been carried on in the East Canyon area since the 1920's. Most of the drilling exploration has been done by private operators. The Atomic Energy Commission carried on a drilling project about one and one-half miles north of the subject claims which resulted in discovery of a deposit which has since been developed

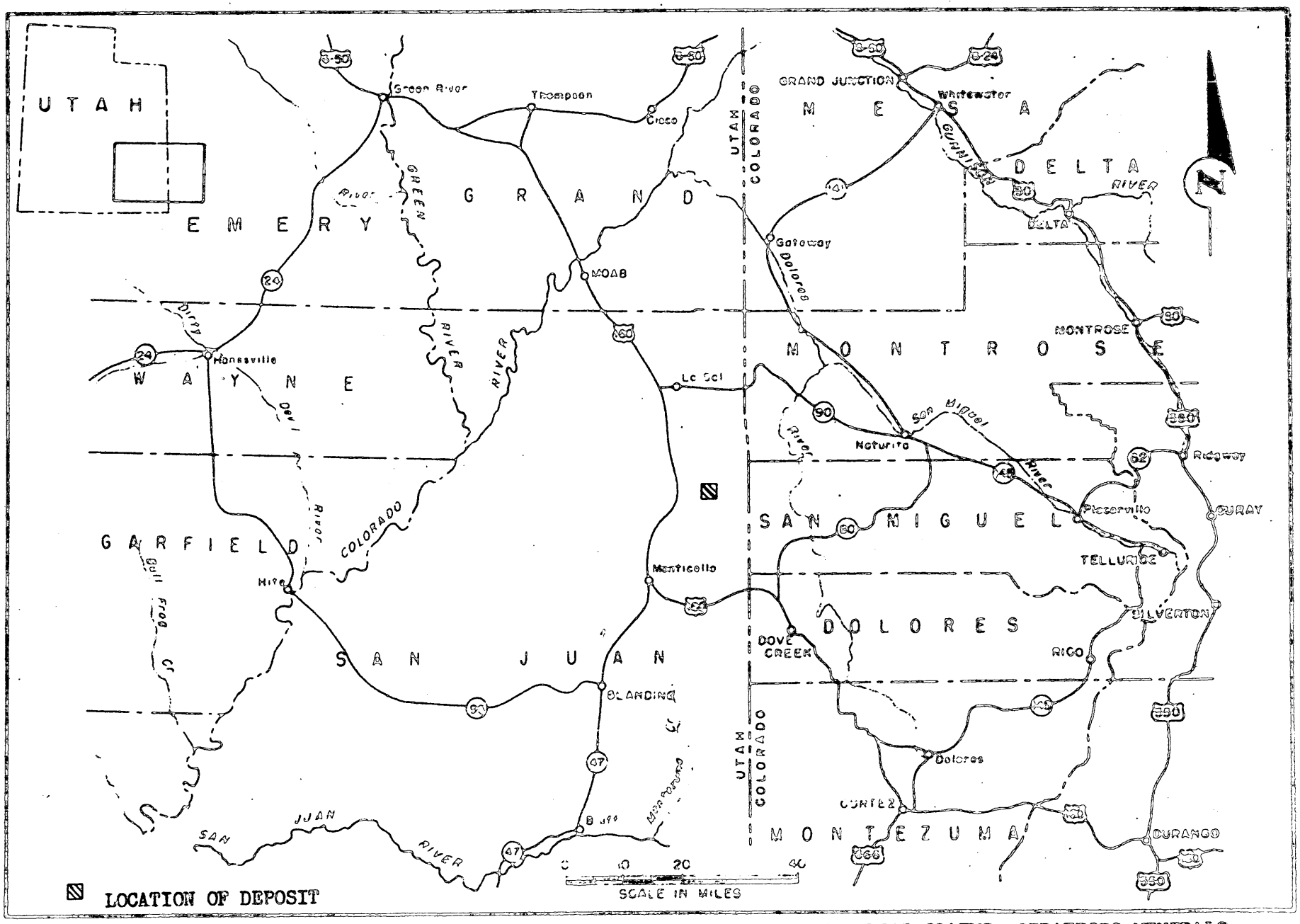
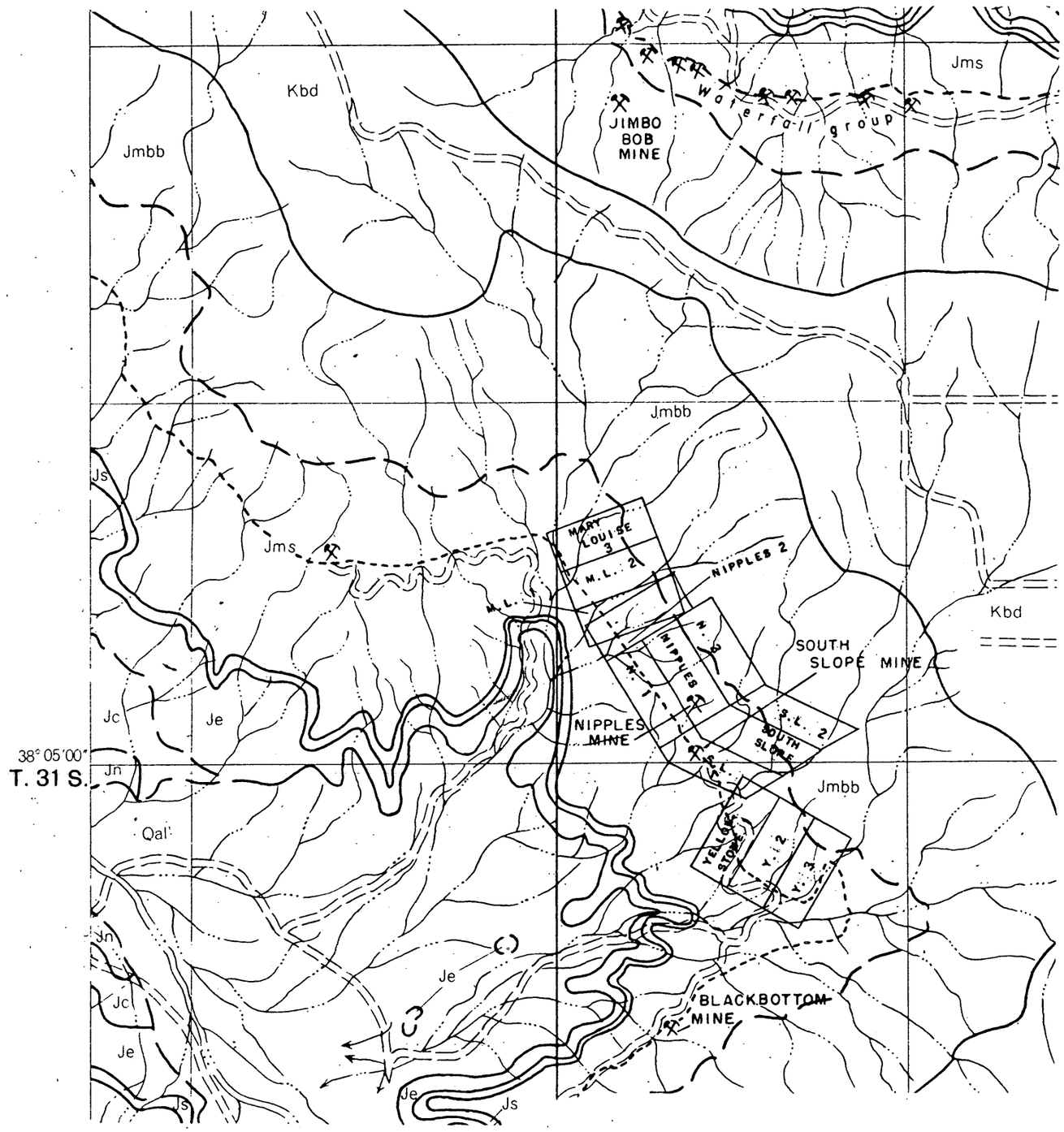


FIGURE 1 - LOCATION MAP, NIPPLES, SOUTH SLOPE, YELLOWSTONE, AND MARY LOUISE CLAIMS, STRATEGIC MINERALS EXPLORATION COMPANY, SAN JUAN COUNTY, UTAH. DMEA 3973



EXPLANATION

Kbd	CRETACEOUS BURRO CANYON AND DAKOTA FORMATION, UNDIFFERENTIATED
Jmbb	JURASSIC BRUSHY BASIN MEMBER OF MORRISON FORMATION
Jms	JURASSIC SALT WASH MEMBER OF MORRISON FORMATION
Js	JURASSIC SUMMERVILLE FORMATION
Je	JURASSIC ENTRADA SANDSTONE

GEOLOGIC CONTACT, DASHED WHERE APPROXIMATELY LOCATED

MINE OR PROSPECT

Note: BASE FROM U.S. GEOLOGICAL SURVEY PHOTOGEOLOGIC QUADRANGLE MAP, MT. PEALE 15. CLAIM BOUNDARIES FROM APPLICANTS MAP.

N

2 000 0 6 000 FEET

Figure 2. MAP SHOWING YELLOWSTONE, NIPPLES, MARY LOUISE AND SOUTH SLOPE GROUPS OF CLAIMS, STRATEGIC MINERALS EXPLORATION COMPANY, SAN JUAN COUNTY, UTAH

RECEIVED
JAN 16 1956

at the Jimbo Bob mine, owned by the Homestake Mining Company and leased to Roger Conrow. The Jimbo Bob, Profit, and Windfall mines are presently being operated on a small scale.

No exploration by drilling has been done on the applicants claims. A small amount of lateral work has been done on mineralized outcrops on the Nipples and South Slope claims, resulting in minor production.

Following is a list showing the production from a number of East Canyon properties through October 1, 1955. The list is not complete but covers all the larger mines and some of the smaller ones.

Table 1. Mine	Production tons	Percent U_3O_8	Percent V_2O_5
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Woodrow Wilson	312	0.13	--
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South Slope Nos. 1 and 2	2	July 31, 1954	139	435-436
	13			

San Juan County records show that the Yellowstone claims and the Mary Louise claims 1, 2 and 3, which are part of a group of 21 claims, were located and filed by W. C. Weaver acting for Strategic Minerals Exploration Company. The South Slope and Nipples claims were owned by Carl Nyman of Price, Utah, who sold them, subject to 5 percent royalty on ore returns, to Strategic Minerals Exploration Company. Other parties appear to have been interested in Nyman's claims but the extent is not clear. There is a quit claim deed from David and Eva Torres of Monticello, Utah, to Nyman recorded in Book 139, page 438. Donald and Arlene Rogers were the original locators of the South Slope claim according to the record (Book 15, page 57A). Location procedures on all claims appear to have been valid and claim corners and discoveries were marked on the ground. However, a detailed check was not made.

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Exploration to date has consisted of 160 feet of lateral workings following a roll discovered at the outcrop of the topmost Salt Wash sandstone on the Nipples claim, shallow outcrop workings on the South Slope claims and a small amount of trenching to investigate mineralized outcrops on the Mary Louise No. 3 and Yellowstone No. 2 claim. All commercial ore discovered in the Nipple and South Slope workings has been mined.

Mining and Milling Equipment and other Facilities

There are no buildings or equipment on the property.

GEOLOGY

Formations exposed in the vicinity of the subject claims are shown on the following stratigraphic column.

Generalized stratigraphic column of the East Canyon area, San Juan County, Utah

Age	Formational units	Lithology	Average thickness
Cretaceous	Dakota sandstone	SS	100
	Burro Canyon formation	SS, MS	135
	Morrison formation:		
	Brushy Basin member	MS, ST	415
Jurassic	Salt Wash member	SS, MS	365
	Summerville formation	SS, ST	75

Only that formation with which we will be concerned, the Morrison formation of Jurassic age, will be discussed in detail in this report.

The Morrison formation, of Jurassic age, is comprised of two members, the Salt Wash and the Brushy Basin. The Salt Wash member is about 365

feet thick and consists of interbedded sandstones, shales and mudstones. The uppermost sandstone lens of the Salt Wash is the major ore producing horizon of the area. On the subject claims the potential ore bearing unit ranges in thickness from 20 to less than 5 feet. At the Nipples mine, the ore-bearing sandstone has a thickness of about 16 feet, but about 150 feet northwest of the mine the sandstone has pinched to a thickness of 5 feet and 300 feet northwest of the mine the sandstone thickness has again increased to 12 feet. A sandstone unit favorable for the occurrence of uranium ore deposits may be very lenticular but unlike the upper Salt Wash sandstone present on the subject claims the thickness should be 50 feet or more.

The Brushy Basin member overlies the Salt Wash member and is about 415 feet thick. The Brushy Basin consists of interbedded shales, mudstones, and siltstones with numerous thin sandstone and conglomerate lenses.

ORE DEPOSITS

As can be seen from Table 1, the tonnages produced from the mines vary considerably. Large mines, such as the Jimbo Bob No. 13, the Sunset and the Frisco are located in areas where the ore-bearing sandstone attains thicknesses of 50 feet or more and the sandstone is underlain by a considerable thickness of green mudstone. The smaller mines, such as the South Slope and the Nipples, are located in an area where the ore-bearing sandstone has a thickness of less than 20 feet and is underlain by very little green mudstone.

The total production from the Nipples mine has come from one "roll"

type of deposit that trends approximately east-west. The minable ore in the "roll" covered an area about 160 feet long, ranged from 10 to 25 feet in width and was from 6 inches to 3 feet thick. The average grade of the ore was 0.19 percent U_3O_8 and 1.40 percent V_2O_5.

The production from the South Slope mine was also from an ore "roll" but it was much smaller than the one at the Nipples mine.

These ore "rolls" are typical of the ore deposits of the area, but in the larger mines such as the Frisco and the Dime, the "rolls" occur in clusters or are close enough together to be mined from one shaft or incline.

The Jimbo Bob No. 13 mine is producing from three ore bodies discovered by Atomic Energy Commission drilling. The AEC calculated ore reserves of about 1,450 tons in these three ore bodies before the development drilling completely delineated the ore bodies. These three ore bodies are about 1,100 feet apart. Since that time, drilling has proven the three ore bodies to contain about 3,300 tons of indicated reserves with production to date amounting to 1,882 tons. This may be considered one of the larger mines in the area but, as stated previously, the ore-bearing sandstone in the immediate vicinity of the mine attains a thickness of 50 feet or more.

On the subject claims the potential ore-bearing horizon is considered too thin to be favorable for the occurrence of large deposits of uranium ore. As drilling depths approach 175 feet on the subject claims, it could not be considered economical to explore for ore deposits that would contain no more than 400 tons of ore grade material if they were present at all on the subject claims.

ORE RESERVES

There are no known ore reserves on the subject property. The Atomic Energy Commission reports, in the general area, reserves of 3,300 tons of ore containing 0.25 percent U_3O_8 in the Jimbo Bob mine, 1,000 tons, no value assigned at the Frisco mine, and 125 tons of ore averaging 0.29 percent U_3O_8 at the Windfall mine.

No sampling was done during the field examination but mineralization showing in outcrops and in mine workings was tested radiometrically. The chemical results reported by the applicants for 7 samples taken in outcrops and the Nipples mine working were substantiated. The outcrop samples do not represent ore in place.

PROPOSED EXPLORATION

The applicant's exploration proposal includes three stages of drilling with 6,375 feet of plug-bit and 3,000 feet of core-drilling in 60 holes averaging 156 feet in depth. The estimated cost is $29,748.75 in which Government participation at 75 percent would be $22,311.56. The estimated time for the entire program, if completed, is estimated at three months.

The proposed first stage of drilling calling for holes on 500-foot centers, is designed to explore the "favorable ore horizon". Actually this stage appears to be prospecting, as it is not based on substantiated ore trends or the observed mineralization in the outcrops.

The applicants' Stages II and III would correspond to normal DMEA Stages I and II which are usually proposed to explore ground in which there were definite ore trends or other favorable geologic or physical evidence.

For the purposes of this report, an engineering cost estimate by the examining team is not necessary.

Proposed Financing

The applicants propose to furnish their share of the cost in money. Inasmuch as they would utilize their own technical staff, part of their share would probably be furnished as services rendered.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the potential ore horizon on the property is unfavorable for uranium deposits according to the criteria used by the Geological Survey. A supposed favorable trend crossing the property as suggested by the applicants, is based solely on location and not on geological evidence. It appears that habit of ore deposition in this unfavorable area is for small widely scattered lenses or "rolls" similar to the 350-ton ore body mined at the rim on the Nipples claim. It is ~~not~~ believed that the proposed project can not be justified to search for deposits of this class which are hardly significant unless they are close to outcrops and thus easily accessible. The best way to explore further the mineralization found at several points along the rim would be by stripping, possibly followed by underground operations just as was done at the small occurrence on the Nipples claim.

It is recommended that the application under DMEA 3973 be denied.

1-17-56

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

January 11, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
JAN 16 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 3973 (Uranium), Strategic Minerals Exploration Company, Nipples, South Slope, Yellowstone, and Mary Louise claims, San Juan County, Utah

Enclosed are the original and three copies of a Joint Report of Examination on the subject docket.

The field examiners concluded that there was little possibility of discovering a significant amount of uranium on this property, and they recommend that the application be denied. We concur in this recommendation.

DMEA Field Team, Region III

By W. M. Trever
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(date)

DMEA
Date Rec'd
JAN 10 1956
BUREAU OF MINES
Denver, Colorado

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JAN 16 1956

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
January 10, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman
John F. Shaw

TRANSMITTED
JAN 11 1956

Subject: Examination Report, Docket No. DMEA 3973 (Uranium)
Strategic Minerals Exploration Company
Nipples, South Slope, Yellowstone and
Mary Louise claims, San Juan County, Utah

Enclosed are the original and 9 copies of a Joint Engineering and Geologic Report by D. D. Haynes, Geologist, and M. N. Salsbury, Mining Engineer, covering Docket No. DMEA 3973.

Strategic Minerals Exploration Company applied for exploration assistance to explore the Nipples, South Slope, Yellowstone and Mary Louise claims by 6,375 feet of plug-bit and 3,000 feet of core-drilling at an estimated cost of $29,748.75.

Field Examination was made on October 26, 1955, by D. D. Haynes, Geologist, and M. N. Salsbury, Mining Engineer. The examining team concluded that there was little possibility of discovering a significant amount of uranium on this property. It is recommended that the application be denied.

E. N. Harshman

E. N. Harshman
Member Field Team

John F. Shaw

John F. Shaw
Supervising Mining Engineer

Enclosures

cc 9
EHHarshman
JWHasler
DMEA 3973
Chron

JFS:ph

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(date)

MINERAL DEPOSITS
DMEA
DEC 1955

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
GRAND JUNCTION, COLORADO

RECEIVED GEOLOGICAL SURVEY
JAN 16 1956

December 27, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

TRANSMITTED
JAN 11 1956

From: J. William Hasler

Through: E. N. Harshman EHH for ENH

Subject: DMEA 3973, Strategic Minerals Exploration Company, Nipples, South Slope, Yellowstone, and Mary Louise claims, San Juan County, Utah

Transmitted herewith are 12 copies of a joint report by M. H. Salsbury and D. D. Haynes covering a field examination of the above-referenced property.

The subject property is considered unfavorable for significant uranium ore deposits for several geologic reasons: The topmost Salt Wash sandstone unit is less than 20 feet thick. The mudstone lenses both above and below the ore-bearing unit are red in color. Any deposit that may be found in this area would be very small. For these and other geologic reasons contained in their report, Haynes and Salsbury recommend that the application for Government assistance under DMEA docket 3973 be denied. I concur with their recommendations.

As noted in the report, the U. S. Atomic Enery Commission has assisted in evaluating the applicant's property.

We are returning herewith the brochure covering this application.

D. D. Haynes for
J. William Hasler,
Geologist

DDH/mlr
Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-20-56
(Date)

RECEIVED
JAN 16 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED
JAN 11 1956

DMEA 3973

STRATEGIC MINERALS EXPLORATION COMPANY

WIPPLES, SOUTH SLOPE, YELLOWSTONE AND MARY LOUISE CLAIMS

SAN JUAN COUNTY, UTAH

Uranium

Released by
DMEA GRANTEE COMPANY
1-20-56

Joint Engineering and Geologic Report

By

D. D. Haynes, Geologist
Geological Survey

M. H. Salsbury, Mining Engineer
Bureau of Mines

January 7, 1956

DMRA 3973

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JAN 16 1956

STRATEGIC MINERALS EXPLORATION COMPANY
NIPPLES, SOUTH SLOPE, YELLOWSTONE AND MARY LOUISE CLAIMS
SAN JUAN COUNTY, UTAH

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Acknowledgments..... 2
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History production and ownership..... 3
Present status..... 6
Exploration and development..... 6
Mining and milling equipment and other facilities..... 6
Geology..... 6
Ore deposits..... 7
Ore reserves..... 9
Proposed exploration..... 9
Proposed financing..... 10
Conclusions and recommendations..... 10

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2. Map showing Yellowstone, Nipples, Mary Louise and South Slope groups of claims, Strategic Minerals Exploration Company, San Juan County, Utah, DMRA 3973..... 3

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DMEA 3973

STRATEGIC MINERALS EXPLORATION COMPANY
NIMPLES, SOUTH SLOPE, YELLOWSTONE AND MARY LOUISE CLAIMS
SAN JUAN COUNTY, UTAH

INTRODUCTION AND SUMMARY

On September 2, 1955, Strategic Minerals Exploration Company, P. O. Box 1648, Grand Junction, Colorado, a partnership, applied for Defense Minerals Exploration Administration assistance to explore their claims in East Canyon, San Juan County, Utah. The proposal consisted of 6,375 feet of plug-bit and 3,000 feet of core-drilling in 60 holes to be done in three stages at an estimated cost of $29,748.75. Government participation at 75 percent would be $22,311.56.

A field examination was made on October 26, 1955, in company with John I. Schumacher, a partner and Robert Taylor, an engineer employed by the applicants.

The subject claims are located on the northeast side of East Canyon. The Brushy Basin and Salt Wash members of the Jurassic Morrison formation are exposed on the property. There are mines with a record of moderate production within two miles. The applicants suggest that the claims lie in a favorable zone between the Jimbo Bob and Waterfall group to the north, and the Windfall and Sunset mines to the south. However, the proposed favorable zone is based solely on location and not on favorability criteria used by the Geological Survey and the Atomic Energy Commission. The topmost sandstone unit of the Salt Wash member of the Jurassic Morrison formation is the potential ore-bearing horizon of the area. It is exposed the length

of the claims and has an observed thickness of from 5 to 20 feet with very thin underlying green mudstone. Criteria for favorable sandstones developed by the Geological Survey list, among other factors, sandstone thicknesses of at least 30 feet and a substantial thickness of underlying green mudstone. These conditions are found in the larger mines of the area, but the potential ore-bearing sandstone on the subject claims does not attain this thickness in any place.

It is concluded that the 390-ton ore body which averaged 0.19 percent U_3O_8 and 1.40 percent V_2O_5, mined from a small "roll" developed by shallow rim workings on the Nipples claim, is probably typical of deposits likely to be present on the subject claims. Near an outcrop, ore of the grade found to date can be mined profitably, even in small quantities, if the initial production bonus is in effect. A profitable operation on similar scattered deposits at some distance from the rim is unlikely because exploration and development cost would be too high in comparison with probable return. Under these conditions, the probability of an ore discovery which could be considered significant is unlikely and denial of the application under DMRA 3973 is recommended.

ACKNOWLEDGMENTS

The application submitted included pertinent information, maps, and cost estimates of the proposed exploration. The Atomic Energy Commission was consulted and furnished data on their exploration projects in adjoining areas together with production and ore reserve figures on known deposits in the general area.

LOCATION TOPOGRAPHY AND PHYSICAL FEATURES

The Nipples, South Slope, Yellowstone, and Mary Louise claims in

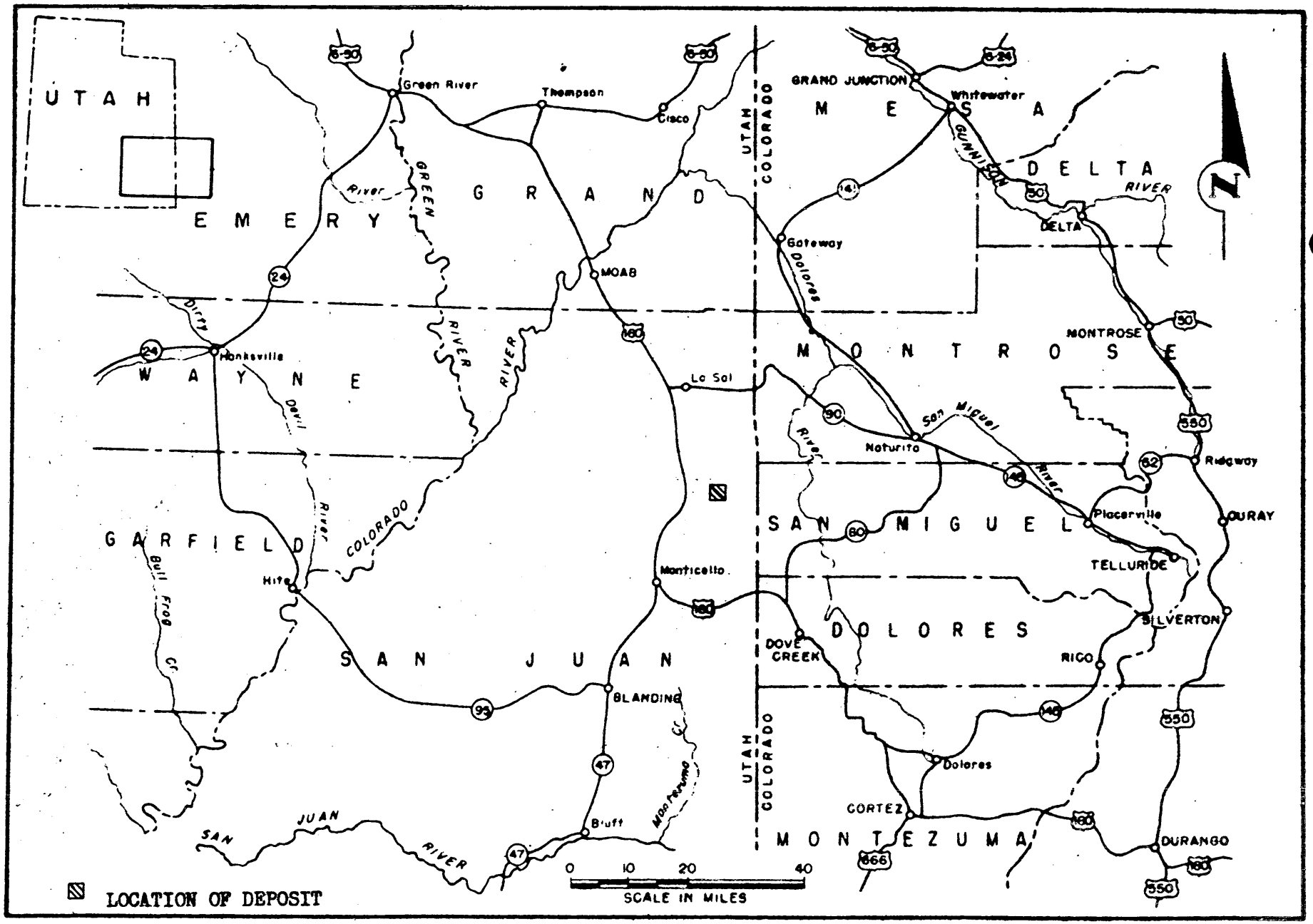
secs. 18 and 19, T. 31 S., R. 25 E., Salt Lake Meridian, San Juan County, Utah, are nine miles east of an access road junction with U. S. Highway 160, sixteen miles north of the county seat at Monticello, Utah (figure 1 and 2). There is an ore buying station for uranium ores at Monticello. Limited quantities of mining equipment and supplies are available at Monticello. More complete stocks are maintained at Grand Junction, Colo., a distance of 175 miles from the property.

The claims are on the moderately precipitous northeast flank of East Canyon at an altitude of about 7,000 feet and about 400 feet above the valley floor. Many of the proposed drill sites would be expensive to prepare and those indicated on the applicant's map would not necessarily be feasible at the locations chosen.

Water for mining purposes is obtainable from springs or surface flow in East Canyon and tributaries. Timber is obtainable from suppliers operating in the La Sal Mountains. Power needs must be met by the individual operator. The proposed exploration is planned as an operation by a drilling contractor who would furnish all necessary labor, and also living accommodations if a camp at the site were established in preference to commuting from Monticello.

HISTORY PRODUCTION AND OWNERSHIP

Mining operations for vanadium have been carried on in the East Canyon area since the 1920's. Most of the drilling exploration has been done by private operators. The Atomic Energy Commission carried on a drilling project about one and one-half miles north of the subject claims which resulted in discovery of a deposit which has since been developed



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No sampling was done during the field examination but mineralization showing in outcrops and in mine workings was tested radiometrically. The chemical results reported by the applicants for 7 samples taken in outcrops and the Nipples mine working were substantiated. The outcrop samples do not represent ore in place.

PROPOSED EXPLORATION

The applicant's exploration proposal includes three stages of drilling with 6,375 feet of plug-bit and 3,000 feet of core-drilling in 60 holes averaging 156 feet in depth. The estimated cost is $89,748.75 in which Government participation at 75 percent would be $82,311.56. The estimated time for the entire program, if completed, is estimated at three months.

The proposed first stage of drilling calling for holes on 500-foot centers, is designed to explore the "favorable ore horizon". Actually this stage appears to be prospecting, as it is not based on substantiated ore trends or the observed mineralization in the outcrops.

The applicants' Stages II and III would correspond to normal DMEA Stages I and II which are usually proposed to explore ground in which there were definite ore trends or other favorable geologic or physical evidence.

For the purposes of this report, an engineering cost estimate by the examining team is not necessary.

Proposed Financing

The applicants propose to furnish their share of the cost in money. Inasmuch as they would utilize their own technical staff, part of their share would probably be furnished as services rendered.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the potential ore horizon on the property is unfavorable for uranium deposits according to the criteria used by the Geological Survey. A supposed favorable trend crossing the property as suggested by the applicants, is based solely on location and not on geological evidence. It appears that habit of ore deposition in this unfavorable area is for small widely scattered lenses or "rolls" similar to the 350-ton ore body mined at the rim on the Nipples claim. It is not believed that the proposed project can be justified to search for deposits of this class which are hardly significant unless they are close to outcrops and thus easily accessible. The best way to explore further the mineralization found at several points along the rim would be by stripping, possibly followed by underground operations just as was done at the small occurrence on the Nipples claim.

It is recommended that the application under DMEA 3973 be denied.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

RECEIVED
OCT 1 9 1955

So. 157 Howard Street
Spokane 4, Washington

3973

October 17, 1955

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

Re: New application (uranium & zirconium)
American Strategic Minerals Corp.
Riverside claims
Okanogan County, Washington

Dear Mr. Selfridge:

This is a further comment about the American Strategic Metals Corporation application.

Mr. Price showed us a copy of a geologic report by Mr. Forbes Robertson on his property and said copies had been sent to Washington. The report seemed quite complete and as we have confidence in Mr. Robertson's geology, we would appreciate having a copy.

Very truly yours,

Verne C. Fryklund Jr.

Verne C. Fryklund, Jr.
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW Dist.

cc: USBM (2)
Kellum

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

RECEIVED
OCT 19 1955

224 New Customhouse
Denver 2, Colorado

October 17, 1955

Memorandum

To: John F. Shaw
J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company; Nipples, South Slope et al claims, San Juan County, Utah

Enclosed are copies of the following items which were received after the application was forwarded to the field for examination.

(a) Letter dated October 10, 1955 from Chairman, Operating Committee to Executive Officer, DMEA Field Team, Region III

(b) Memorandum dated October 5, 1955 from John E. Crawford to Earnest Williams Ellis - Review of Application

(c) Memorandum dated October 6, 1955 from N. E. Nelson to E. W. Ellis - Review of Application

W. M. Traver

W. M. Traver

Enclosures
JDC:jy
cc: Docket DMEA-3973
Sec. Op. Comm. (2)
Harshman
Connors
Chron.

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

RECEIVED
OCT 1 9 1955

224 New Customhouse
Denver 2, Colorado

October 17, 1955

Memorandum

To: John F. Shaw
J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

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W. M. Traver

W. M. Traver

Enclosures
JDC:jy
cc: Docket DMEA-3973
Sec. Op. Comm. (2)
Harshman
Connors
Chron.

Surname copy 700

Murphy
Ellis
Stephen
Selfridge
Nilson.

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

OCT 10 1955

Mr. John L. Schumacher
Strategic Minerals Exploration Company
P. O. Box 1648
Grand Junction, Colorado

Re: Docket No. DMEA-3973 (Uranium)
Nipples, South Slope, et al., claims
San Juan County, Utah

Dear Mr. Schumacher:

The application for assistance in exploring the subject property under the captioned docket number has been reviewed by the Rare and Miscellaneous Metals Division.

The DMEA Field Team, Region III, Mr. W. M. Traver, Executive Officer, 224 New Customhouse Building, Denver 2, Colorado, will schedule a field examination of your property in the near future if it has not already done so.

Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

Frank E. Johnson

Acting Administrator

FMMurphy/gla
10-10-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Code 700
Mr. Murphy
DMEA Field Team, Region III (2)

R.C.

Surname copy

700

Murphy
Elis
Selfridge

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

OCT 10 1955

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

Re: Docket No. DMEA-3973 (Uranium)
Strategic Minerals Exploration Company
Nipplam, South Slope, et al. claims
San Juan County, Utah

Dear Mr. Traver:

This is to acknowledge your memorandum, dated September 26, in which you concur with the Grand Junction Office in recommending a field examination of the captioned property.

Enclosed are copies of memoranda, dated October 4 and 6, 1955, by J. E. Crawford, USGS, and N. E. Nelson, USGS, respectively, relating to the subject application.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines (RWG)

N. E. Nelson

Member, Geological Survey (NEN)

FMMurphy/gla
10-10-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Murphy

R.C.S.

10/7/55 gla

IN REPLY REFER TO:

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

RECEIVED
OCT 7 - 1955

October 6, 1955

Re: DMEA 3973
Strategic Minerals Expl. Co.
East Canyon Group (Nipples mine)
San Juan County, Utah
$29,748.55 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of application.

A field examination of this property has probably been scheduled so referral is a formality.

The application requests assistance (principally) in drilling, core (3000') and non-core (6375'), on a group of 13 claims. From two claims, Nipples and South Slope, relatively small amounts of ore have been shipped, but no reserves are claimed. Seven neighboring and adjoining properties have produced an estimated 17,400 tons of ore.

One hole of the Phase I drilling would test ground behind the outcrop on the Yellowstone 1 & 2 claims from which 2 cut samples 4 and 5 were taken. These showed:

No. 4 - 10" cut 0.19% U_3O_8, 1.33% V_2O_5

No. 5 - 5" " 0.09% " , 0.33% "

Otherwise the target of the Phase I drilling would be general (prospective?) rather than specific. The Phase II and Phase III drilling would, if justified, have specific targets. Perhaps the Phase III drilling is too specific since the stated purpose is to block out ore.

The proposed field examination is warranted.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
OCT 7 - 1955

October 6, 1955

Re: DMEA 3973
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East Canyon Group (Nipples mine)
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The proposed field examination is warranted.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-10/6/55
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641; J. O. Hosted, 3210

10/5/55-gh

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

October 4, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Application for assistance, Docket DMEA 3973 (Uranium)
Strategic Minerals Exploration Company, San Juan County, Utah

I have reviewed the application of the Strategic Minerals Exploration Company, San Juan County, Utah, and I have discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

A memorandum dated September 26, 1955, from the Field Team, Region III, to the chairman of the Operating Committee was attached to the application. The memorandum indicates the DMEA Grand Junction office has determined that a field examination of the Strategic Minerals Exploration Co. claims in San Juan County, Utah, is warranted, and that such an examination will be scheduled as soon as possible.

We concur that the merits of the subject claims are such as to warrant an examination. Significant mineralization is present in several outcrops on the property. Assay results and other data provided in the application support the belief that the claims lie in a favorable geologic belt.

Costs for exploratory drilling as described by the applicant are reasonable and depths involved are not severe.

We find the applicant's general approach in phase one and two drilling satisfactory, but we do not agree that in phase three "drilling would be used to block out the ore bodies found with the second phase drilling program. An additional 20 holes would be necessary to prove sufficient ore reserves to warrant a mining operation." I do not believe it is the prerogative or desire of the DMEA to financially assist in establishing ore re-

serves for industry under the existing law.

We are forwarding the application to Thor Kilsgaard of the Geological Survey.

John E Crawford

John E. Crawford

9/28/55 gla

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

RECEIVED
SEP 28 1955

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

Enclosed are four copies of a review of the subject application by the Grand Junction office. We concur in their recommendation that a field examination is required.

Our copy of the brochure has been forwarded to the Bureau of Mines and an examination will be scheduled on the subject property as soon as possible.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

DMEA
Date Rec'd.
SEP 23 1955
BUREAU OF MINES
Denver, Colorado

September 22, 1955

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team Region III

From: J. W. Hasler USGS
M. H. Salsbury USBM

Subject: DMEA 3973 (uranium) Strategic Minerals Exploration Company, San Juan County, Utah

Subject company has applied for Government assistance to explore for uranium on 13 unpatented mining claims in Secs. 18 and 19, T. 31 S., R. 25 E., San Juan County, Utah. The 13 claims lie in a favorable belt of mineralization and have a fair possibility of containing ore bodies of commercial size and grade. In considering the examination of this property, drilling depths may not be too great to explore for ore bodies of the size that may be expected in this area.

It is concluded that property being located in this favorable belt warrants a field examination. An examination will be scheduled on the subject property as soon as possible.

J. William Hasler
J. William Hasler
Geologist

M. H. Salsbury by JWH
M. H. Salsbury
Mining Engineer

JWH/vll

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

RECEIVED
SEP 28 1955

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

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Our copy of the brochure has been forwarded to the Bureau of Mines and an examination will be scheduled on the subject property as soon as possible.

W. M. Traver
W. M. Traver

E. N. Harshman
E. N. Harshman

Enclosures

DMEA
Date Rec'd
SEP 23 1955
BUREAU OF MINES
Denver, Colorado

RECEIVED
SEP 26 1955

September 22, 1955

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team Region III

From: J. W. Hasler USGS
M. H. Salsbury USBM

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J. William Hasler
J. William Hasler
Geologist

M. H. Salsbury by JWH
M. H. Salsbury
Mining Engineer

JWH/vll

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

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: W. H. King

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

Enclosed is the subject application in the amount of $29,143.75.

The brochure consists of:

1. Form MF-103 and accompanying answer sheets.

2. Report on the East Canyon area by John I. Schumacher and Harold C. Anderson.

3. Three maps.

A field examination and suitable report are required.

Enclosures

W. M. Traver

HMC:pw

cc: DMEA-3973
Chron
Harshman
Hasler
Sec.Op.Comm. (2)

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

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: W. H. King

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

Enclosed is the subject application in the amount of $29,748.75.

The brochure consists of:

1. Form MF-103 and accompanying answer sheets.

2. Report on the East Canyon area by John I. Schumacher and Harold C. Anderson.

3. Three maps.

A field examination and suitable report are required.

W. M. Traver

Enclosures

HMC:pw

cc: DMEA-3973
Chron
Harshman
Hasler
Sec.Op.Comm. (2)

10/5/55 gla

September 28, 1955

Memorandum

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

The subject application in the amount of $29,748.75 is enclosed herewith. The brochure consists of:

1. Form MF-103 and information sheets
2. Report on East Canyon group by John I. Schaumacher and Harold C. Anderson
3. Three maps are enclosed with the report
4. Copy of Executive Officer's memo of transmittal to this office

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

W. H. King

Enclosures

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

September 28, 1955

Memorandum

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

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W. H. King

Enclosures

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

Subject: Exploration
Re: Nipples Mine and
South Slope Mine

Strategic Minerals Exploration Co.
P.O. Box 1648
Grand Junction, Colorado.

September 9, 1955

Gentlemen:

The receipt of your application dated August 31, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3973 and referred to the Rare & Miscellaneous Minerals Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

September 9, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 3973 Strategic Minerals Exploration Co.

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

Copy to Mr. Hasslet

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

224 New Customhouse
Denver 2, Colorado

September 2, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah.

Enclosed are two copies of the subject application in the amount of $29,748.75.

One copy of the application has been forwarded to the Grand Junction office for study and recommendations.

W. M. Traver

UNITED STATES DEPARTMENT OF THE INTERIOR

224 New Customhouse
Denver 2, Colorado

September 2, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah.

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W. W. Craver

Enclosures

JDC:jy

cc: Harshman
Hasler
Docket
Chron.

UNITED STATES DEPARTMENT OF THE INTERIOR

224 New Customhouse
Denver 2, Colorado

September 2, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah.

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W. M. Traver

Enclosures

JDC:jy

cc: Harshman
Hasler
Docket
Chron.

UNITED STATES DEPARTMENT OF THE INTERI

224 New Customhouse
Denver 2, Colorado

September 2, 1955

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From: Executive Officer, DMEA Field Team, Region III

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W. A. Traver

Enclosures

JDC:jy

cc: Harshman
Hasler
Docket
Chron.

UNITED STATES DEPARTMENT OF THE INTERIOR

224 New Customhouse
Denver 2, Colorado

September 2, 1955

Memorandum

To: J. N. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMA aid (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah.

Enclosed is a copy of the subject application in the amount of $29,748.75.

Please study this application and discuss it with the AEC and Bureau of Mines representatives in Grand Junction, and forward this office eight copies of your recommendations regarding a field examination of the property.

W. M. TRAVER,

W. M. Traver

Enclosures

JDC:jy

cc: Sec. Oper. Comm. (4)
Harshman
Docket
Chron

UNITED STATES DEPARTMENT OF THE INTERIOR

224 New Customhouse
Denver 2, Colorado

September 2, 1955

Memorandum

To: J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah.

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W. M. Traver

Enclosures

JDC:jy

cc: Sec. Oper. Comm. (4)
Harshman
Docket
Chron

UNITED STATES DEPARTMENT OF THE INTERIOR

224 New Customhouse
Denver 2, Colorado

September 2, 1955

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W. M. TRAVER,

W. M. Traver

Enclosures

JDC:jy

cc: Sec. Oper. Comm. (4)
Harshman
Docket
Chron

UNITED STATES DEPARTMENT OF THE INTERIOR

224 New Customhouse
Denver 2, Colorado

September 2, 1955

Memorandum

To: J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah.

Enclosed is a copy of the subject application in the amount of $29,740.75.

Please study this application and discuss it with the AEC and Bureau of Mines representatives in Grand Junction, and forward this office eight copies of your recommendations regarding a field examination of the property.

W. M. TRAVER,

W. M. Traver

Enclosures

JDC:jy

cc: Sec. Exer. Coms. (4)
Harshman
Docket
Chron

RECEIVED

SEP - 9 1955

P.O. Box 1648
Grand Junction, Colorado
September 1, 1955

Mr. Milton Fraver
Executive Officer, D.M.E.A.
U. S. Bureau of Mines
324 New Customhouse
Denver, Colorado

Dear Bill:

Attached is an application for a D.M.E.A. Loan and a report covering the claims. If any additional information is needed, please contact me at my home, 1251 Ute Avenue, Grand Junction, Colorado, phone 2909, or at our office which we are establishing at the Uranium Engineering Building, 2nd and Colorado, Grand Junction, Colorado.

Sincerely,

John I. Schumacher

JOHN I. SCHUMACHER
for Strategic Minerals Exploration
Company

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
SEP - 9 1955

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

SEP 2 1955
BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. 3973
Metal or Mineral Uranium
Date Received 9-9-55
Estimated Cost 29,748.75
Participation (Government %) 75

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: .....

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. *The exploration project.*—(*a*) [redacted]e the mineral or minerals for which you wi[redacted] 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 ....., 195...

(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

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

1. (a) [illegible]
[illegible]
[illegible], Colorado

RECEIVED
[illegible]

(b) [illegible]

(c) [illegible]

(d) [illegible]

Name of [illegible]	Address
Mrs. [illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

2. [illegible]

3. (a) [illegible]

[illegible]	[illegible]	[illegible]
[illegible] No. 1	[illegible]	[illegible]
[illegible] No. 2	[illegible]	[illegible]
[illegible] No. 3	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible] No. 1	[illegible]	[illegible]
[illegible] No. 2	[illegible]	[illegible]
[illegible] No. 3	[illegible]	[illegible]
[illegible] No. 1	[illegible]	[illegible]
[illegible] No. 2	[illegible]	[illegible]
[illegible] No. 3	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible] No. 1	[illegible]	[illegible]
[illegible] No. 2	[illegible]	[illegible]

(b) [illegible]

(c) [illegible]

(d) [illegible]

(e) See (c) above

[illegible]

4. (a) [illegible]

(b) [illegible]

(c) [illegible]

(d) [illegible]

(e) [illegible]

5. (a) [illegible]

(b) [illegible]

(c) [illegible]

(d) [illegible]

6. [illegible]

[illegible] - [illegible]
[illegible] - U. S. [illegible]
[illegible]
[illegible] - [illegible]
[illegible]
[illegible] - U. S. Army
[illegible] - U. S. [illegible] - [illegible]
[illegible] - U. S. [illegible] - [illegible]
[illegible] - [illegible]
[illegible] - [illegible]
[illegible]
[illegible] (Summary [illegible])
[illegible]
[illegible]

7. [illegible]

[illegible] - [illegible] - [illegible]
[illegible] - [illegible] - [illegible]
[illegible]
[illegible] - [illegible]
[illegible]

8. Robert Sayles

[illegible] - [illegible]
1910-1919 - [illegible]
1920-1931 - [illegible]
1931-1933 - [illegible]
1933-Present - [illegible]
[illegible]

[illegible]

[illegible]

5. (a) [illegible]

[illegible]

(2) [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	
(3) [illegible]	[illegible]	0.50
[illegible]	[illegible]	
6. (b) (1) [illegible]	[illegible]	0.15
(2) [illegible]	[illegible]	0.15
(3) [illegible]	[illegible]	0.1
(4) [illegible]	[illegible]	0.02
(5) [illegible]		
(6) [illegible]		
(7) [illegible]		
(8) [illegible]	[illegible]	0.02
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	
[illegible]	[illegible]	

7. (a) [illegible]

(b) [illegible]

John T. Schumacher
[illegible]

Harold C. Anderson
[illegible]

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

RECEIVED
SEP 27 1955

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA-3973 (Uranium), Strategic Minerals Exploration Company, San Juan County, Utah

Enclosed are four copies of a review of the subject application by the Grand Junction office. We concur in their recommendation that a field examination is required.

Our copy of the brochure has been forwarded to the Bureau of Mines and an examination will be scheduled on the subject property as soon as possible.

W. M. Traver
W. M. Traver

E. N. Harshman
E. N. Harshman

Enclosures

DMEA
Date Rec'd.
SEP 23 1955
BUREAU OF MINES
Denver, Colorado

September 22, 1955

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team Region III

From: J. W. Hasler USGS
M. H. Salsbury USBM

Subject: DMEA 3973 (uranium) Strategic Minerals Exploration Company, San Juan County, Utah

Subject company has applied for Government assistance to explore for uranium on 13 unpatented mining claims in Secs. 18 and 19, T. 31 S., R. 25 E., San Juan County, Utah. The 13 claims lie in a favorable belt of mineralization and have a fair possibility of containing ore bodies of commercial size and grade. In considering the examination of this property, drilling depths may not be too great to explore for ore bodies of the size that may be expected in this area.

It is concluded that property being located in this favorable belt warrants a field examination. An examination will be scheduled on the subject property as soon as possible.

J. William Hasler
J. William Hasler
Geologist

M. H. Salsbury by JWH
M. H. Salsbury
Mining Engineer

JWH/vll

[illegible]

[illegible]

P.O. Box 1609
Grand Junction, Colorado
September 1, 1953

Mr. William [illegible]
Executive Officer, D.M.E.A.
U. S. Bureau of Mines
[illegible] New Custom House
Denver, Colorado

Dear Bill:

Attached [illegible] D.M.E.A. loan [illegible] report concerning the claim. If any additional information is needed, [illegible] Grand Junction, Colorado, Phone [illegible], or to our office which [illegible] of the [illegible] Building, [illegible], Grand Junction, Colorado.

Sincerely,

John I Schumacher

JOHN I. SCHUMACHER
[illegible]
Company

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Date Rec'd.
SEP 2 1955
BUREAU OF MINES
Denver, Colorado

RECEIVED
SEP - 9 1955

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. 3973
Metal or Mineral Uranium
Date Received 9-9-55
Estimated Cost 29,748.55
Participation (Government %) 75

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: [illegible]

(*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 [illegible]

(*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 Owner [illegible]

(*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. [illegible]

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

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

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

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

5. *The exploration project.*—(*a*) [illegible]e 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 30 days and be completed within 8 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 August 22, 1955

Strategic Minerals Exploration Company
(Applicant)

By John I. Schumacher
JOHN I. SCHUMACHER, Managing Partner

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

Form MM-103

Strategic Minerals Exploration Co.
P.O. Box 1648
Grand Junction, Colorado

INTERROGATORIES

1. (a) Strategic Minerals Exploration Company
P.O. Box 1648
Grand Junction, Colorado

Received
SEP - 7 1955

(b) Partnership.

(c) Not applicable

(d) Below is listed the name and address of each partner in Strategic Minerals Exploration Company:

Name of each partner	Address
Hon. Charles P. Schumacher	16 Wonderly, Dayton, Ohio
Claire C. Schumacher	16 Wonderly, Dayton, Ohio
Dr. James C. Schumacher	100 Schantz Ave., Dayton, Ohio
Paul J. Schumacher	5516 Marley Rd., Dayton, Ohio
John I. Schumacher	1251 Elm Avenue, Grand Jct., Colo.
Philip K. Schumacher	37 Knob Hill Drive, Virginia, Minn.
Dr. James Smith	1423 North 122nd St., Milwaukee, Wis.
John Hill	7600 Normandy Lane, Dayton, Ohio

2. See attached sheets.

3. (a) The following lode mining claims are located in Sections 18 and 19, Township 31 South, Range 25 East, S.L.M. in San Juan County, Utah and the location certificates are recorded in the said records of San Juan County.

Claim	Book	Page
Yellowstone No. 1	23	117
Yellowstone No. 2	23	117
Yellowstone No. 3	23	118
Nipples	15	57
Nipples No. 1	139	437
Nipples No. 2	139	437
Nipples No. 3	139	438
Mary Louise No. 1	23	118
Mary Louise No. 2	23	119
Mary Louise No. 3	23	119
South Slope	15	57
South Slope No. 1	139	436
South Slope No. 2	139	436

(b) Nipples Mine and South Slope Mine

(c) Owner

(d) 5% royalty interest in Nipples and South Slope Groups owned by Carl Eyman, Dr., 73 West Main Street, Price, Utah

(e) See (a) above

Form MT-10X

Strategic Minerals Exploration Co.
P.O. Box 1316
Grand Junction, Colorado

4. (a) See attached report

(b) See attached report

(c) See attached report

(d) See attached report

(e) See attached report

5. (a) Uranium and vanadium

(b) See attached report

(c) See Form MT 10B

(d) Experience of Applicant

John I. Schwendau, Managing Partner
1947 - Degree in Mining Engineering, University of Alaska
1943-1944 - U. S. Bureau of Mines, Assistant Project Engineer
Phelps Dodge Corporation - Asst Engineer Morenci, Arizona
1944-1946 - U. S. Army
1946-1948 - U. S. Bureau of Mines - Project Engineer
1948-1961 - U. S. Geological Survey - Colorado Plateau Project - Chief Engineer
1981-Present - Managing Partner, Strategic Minerals Exploration
Operation Ringtail Mine (Company owned)
Yellow Cat Mining District
Consulting for various mining companies

Harold G. Anderson
1944-1945 - National Lead Co. - Metallurgist
1948-1953 - Denaburg Mining Co. - Partner, Mining and Leasing
1984-Present - Strategic Minerals Exploration Company Engineer

I. Robert Sayler
-1948 - Degree in Mining Engineering, Colorado School of Mines
1948-1949 - Park Utah Cons. Mines Co., Park City, Utah, Miner and Shift Boss
1949-1951 - Idarado Mining Company, Ouray, Colorado, Mine Engineer and Shift Boss
1951-1953 - U. S. Atomic Energy Commission, Grand Jct., Colorado, Mining Engineer
1953-Present - Strategic Minerals Exploration Company, Grand Jct., Colorado, Mine Supt., Ringtail Mine.

Form III 102

Strategic Minerals Exploration Company
P.O. Box 1[illegible]
Grand Junc[illegible]n, Colorado

6. (a) Estimate of Cost

All costs are computed on the basis that the exploration program will continue for 3 months.

	Total Cost	Cost/Ft.
(1) Drilling		
Core drilling 3000' @	9427.50	3.40
Non-core drilling 6075' @	15323.75	
(2) Bulldozer 500 hrs. @ $12.00	6000.00	0.58
Total contract cost	26061.25	
6. (b) (1) Engineer - 3 months part time	1200.00	0.13
(2) Geologist - 3 month @ $400.00	1200.00	0.13
(c) Core boxes - 25 boxes @ $3.50	87.50	0.01
(d) Pickup depreciation and operating expense 1500 miles @ $0.10 per mile	150.00	0.02
(e) None		
(f) None		
(g) None		
(h) Sample analysis 20 @ $5.00	100.00	0.01
Accounting 3 months @ $50.00/mo.	150.00	0.02
Total	29748.75	3.17
Governments 75% participation	22311.56	
Owners 25% participation	7437.19	

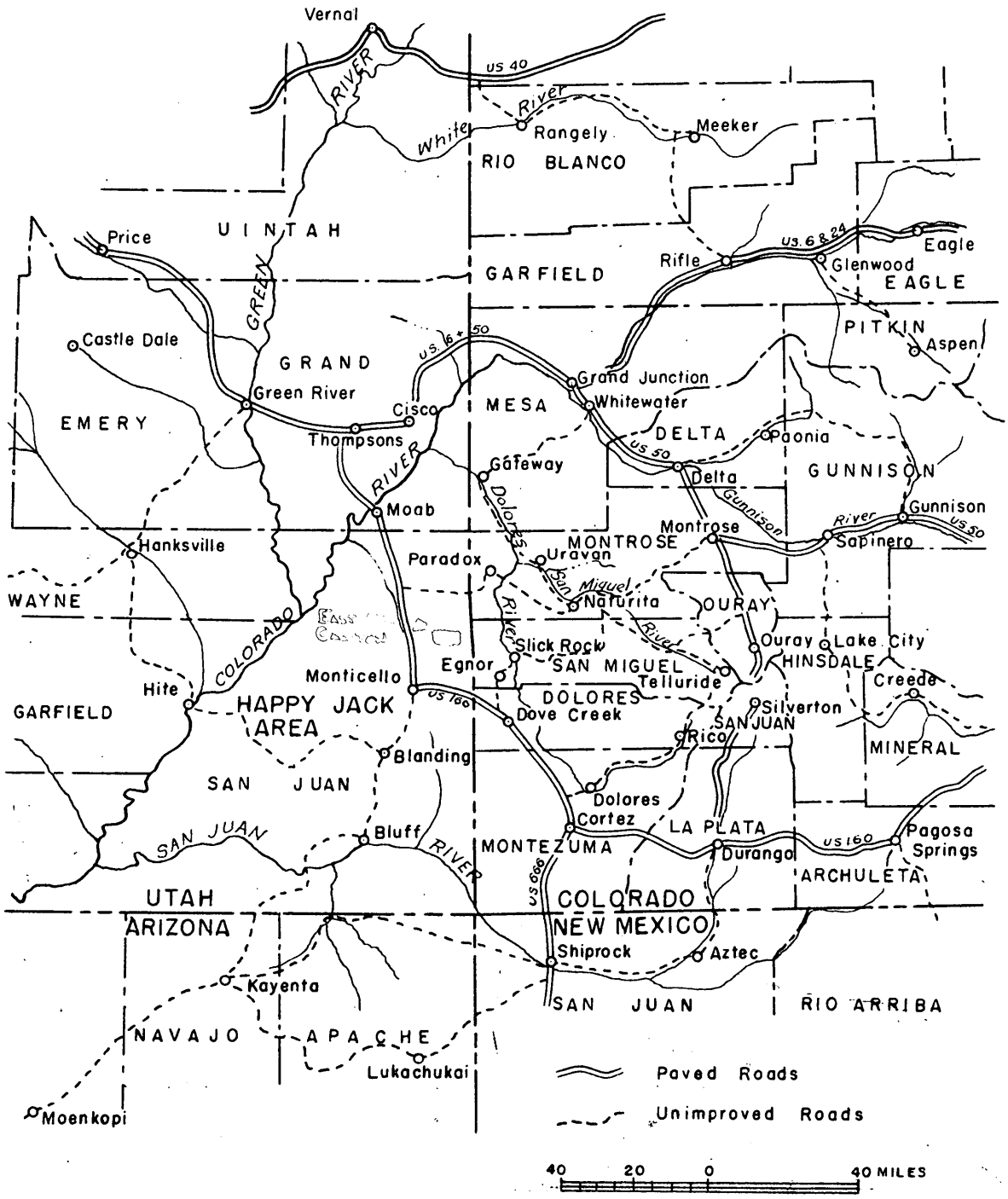
7. (a) Yes

(b) Money

John I. Schmoetzer
JOHN I. SCHMOETZER

Harold C. Anderson
HAROLD C. ANDERSON

Mr



INDEX MAP OF COLORADO PLATEAU

RECEIVED
SEP - 9 1955

Form UP 102

Starbogle Minerals Exploration Co.
P.O. Box 1340
Grand Junction, Colorado

[illegible] OF [illegible] AREA
[illegible], UTAH

RECEIVED
SEP - 9 1955

Introduction

This report covers the examination of the following claims in the [illegible] Canyon Area of San Juan County, Utah:

[illegible]
[illegible]
[illegible]
[illegible]

These claims, lie in Sections 2, 11, and 12, Township 32 South, Range 22 West, [illegible] Principal Meridian, San Juan County, Utah.

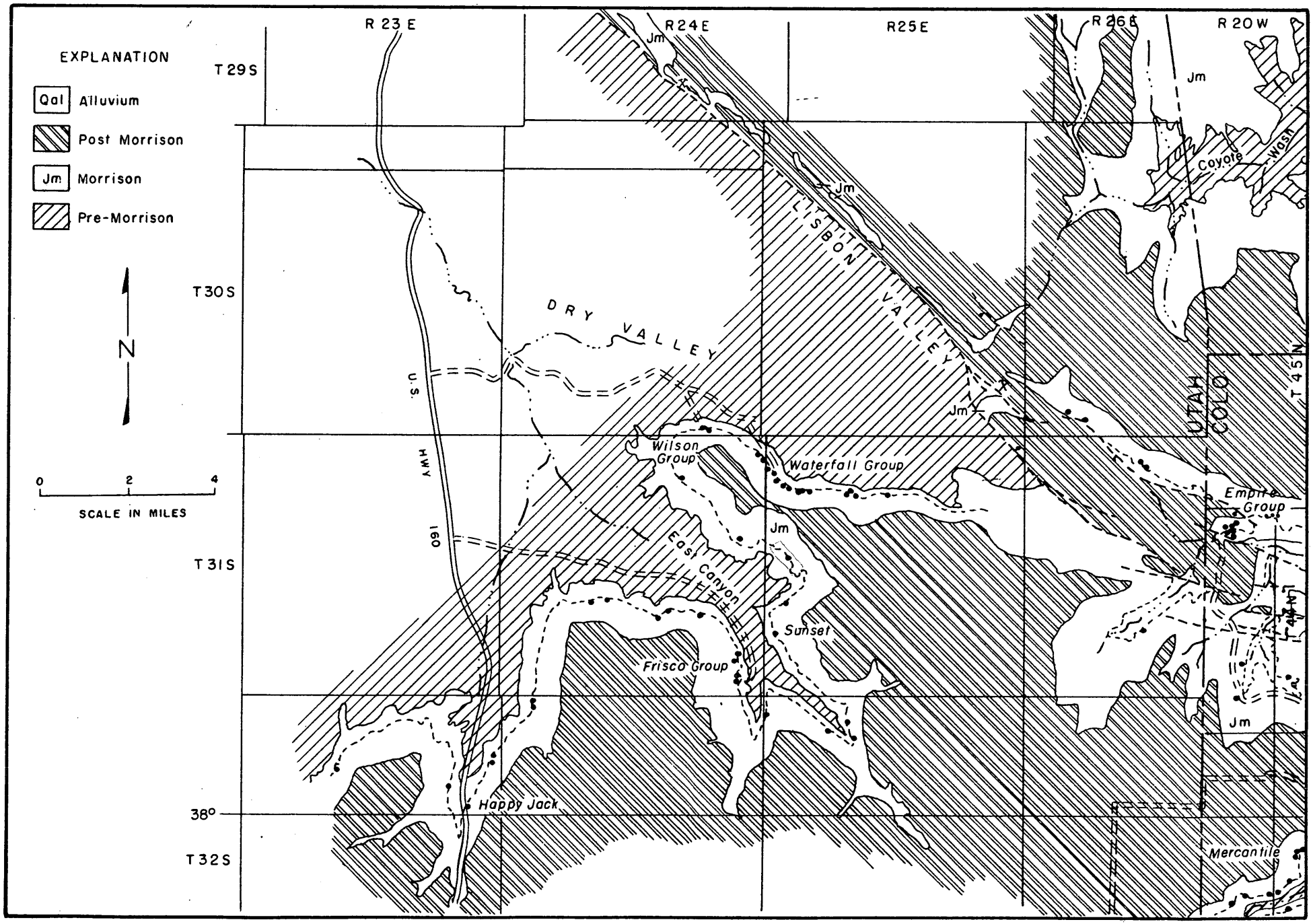
The [illegible] and [illegible] Groups were located by Starbogle Minerals Exploration Company and the [illegible] and [illegible] Groups were originally located by [illegible] on [illegible] and were purchased by Starbogle Minerals Exploration Company.

Physiography and Location

The claims located above are in the [illegible] Canyon Area of San Juan County, Utah, approximately 25 miles southeast of [illegible], Utah and 57 miles southeast of Monticello, Utah.

Approximately 18 miles of unimproved access road connect the group with U. S. Highway 160.

The area is typical of the ore producing Moenkopi formation of the Colorado Plateau. The topography is characterized by the steep walled, erosion resistant mesas and the plains and other several miles on the top bench of the [illegible] and the family [illegible] of the Chinle Formation. The elevation ranges from [illegible] to [illegible] feet. The precipitation rarely exceeds 10 inches per year and usually is less than half an inch in normal climate. Production of ore from the area continues throughout the winter except the short [illegible] spring thaw.


EXPLANATION
Qal Alluvium
Post Morrison
Jm Morrison
Pre-Morrison
N
0 2 4
SCALE IN MILES
R 23 E
R24E
R25E
R 26 E
R 20 W
T29S
T30S
T31S
38°
T32S
T 45 N
T 44 N
U.S. HWY 160
DRY VALLEY
LISBON VALLEY
Coyote Wash
UTAH
COLO
Jm
Wilson Group
Waterfall Group
Empire Group
East Canyon
Sunset
Frisco Group
Happy Jack
Mercantile

Strategic Minerals Exploration Company
P.O. Box 1142
Fort Collins, Colorado

Geology:

Formations exposed in the vicinity of the claims range from Precambrian age to Jurassic age in Jurassic Dakota and Morrison and alluvial and Quaternary age. The Precambrian is represented in the lower and upper gneiss and the Dakota, sandstone, shale, the top shale of which forms the cuesta. The are Jurassic formations represented at the upper Morrison beds, shale and the lower Salt Wash member. Most of the commercial are deposits are found in the upper Salt Wash member.

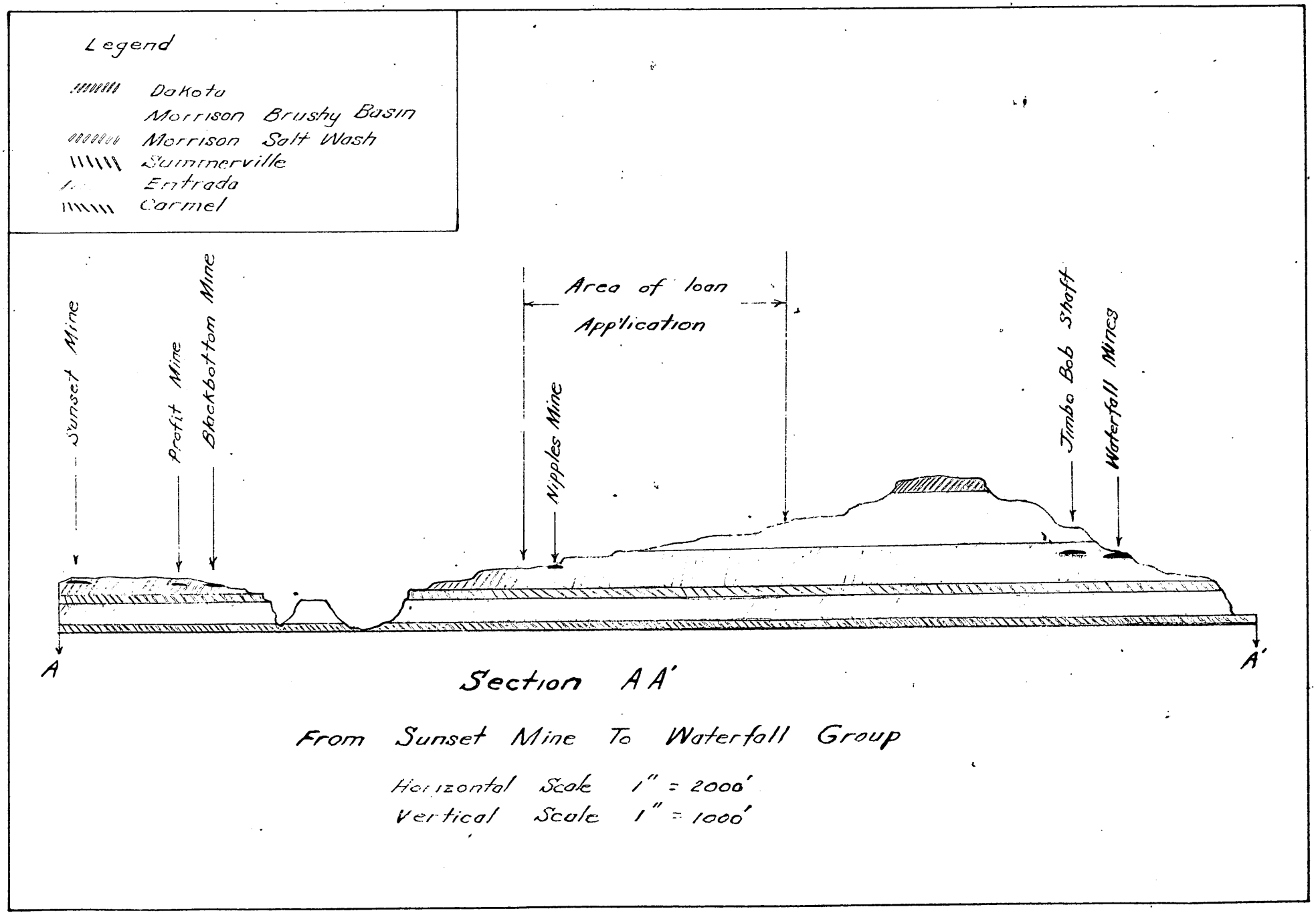
The area which has long been used as a quarry and excavation pit. Geologist visited the property twice in December and found that outcrops of the Morrison beds on the north (see attached map). Since the report of other geologist beside myself is already made to the Vanadium Corporation. The Government Vanadium Corporation owns the claims in question and operates.

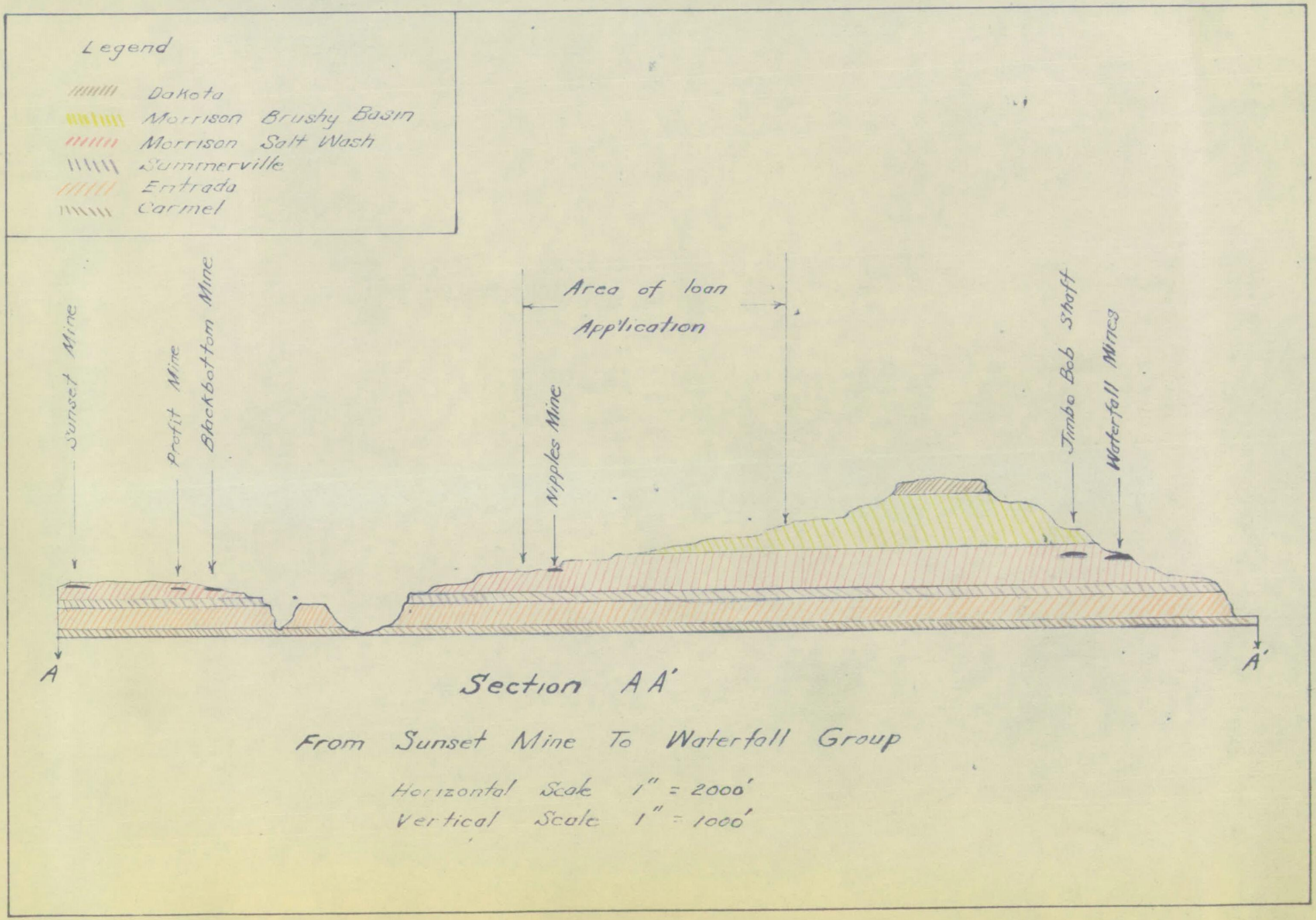
The thickness of the Salt Wash and other a should appear to be more than the exploitation of the ore. It also appears that the area better to the south the ridge and the ore appears to be the well-defined position of the ore and found.

The area is approximately 3 miles from the Dolores River and the local dip of the beds is approximately 1 to 3 degrees to the northwest. On the south side of the Dolores, the beds appear to be almost horizontal 1 mile south. Further south of the beds is to dip in the opposite direction to the northwest.

Mining and Exploration

The 7 claims in question are in a 160 acre mining center group (Sec. 1 (Sec. 6)) were located in March 1955 by Strategic Minerals Exploration Company.


Legend
Dakota
Morrison Brushy Basin
Morrison Salt Wash
Summerville
Entrada
Carmel
Sunset Mine
Profit Mine
Blackbottom Mine
Nipples Mine
Area of loan Application
Timbo Bob Shaft
Waterfall Mines
A
A'
Section AA'
From Sunset Mine To Waterfall Group
Horizontal Scale 1" = 2000'
Vertical Scale 1" = 1000'


Legend
Dakota
Morrison Brushy Basin
Morrison Salt Wash
Summerville
Entrada
Carmel
Sunset Mine
Profit Mine
Blackbottom Mine
Nipples Mine
Area of loan Application
Jimbo Bob Shaft
Waterfall Mines
A
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From Sunset Mine To Waterfall Group
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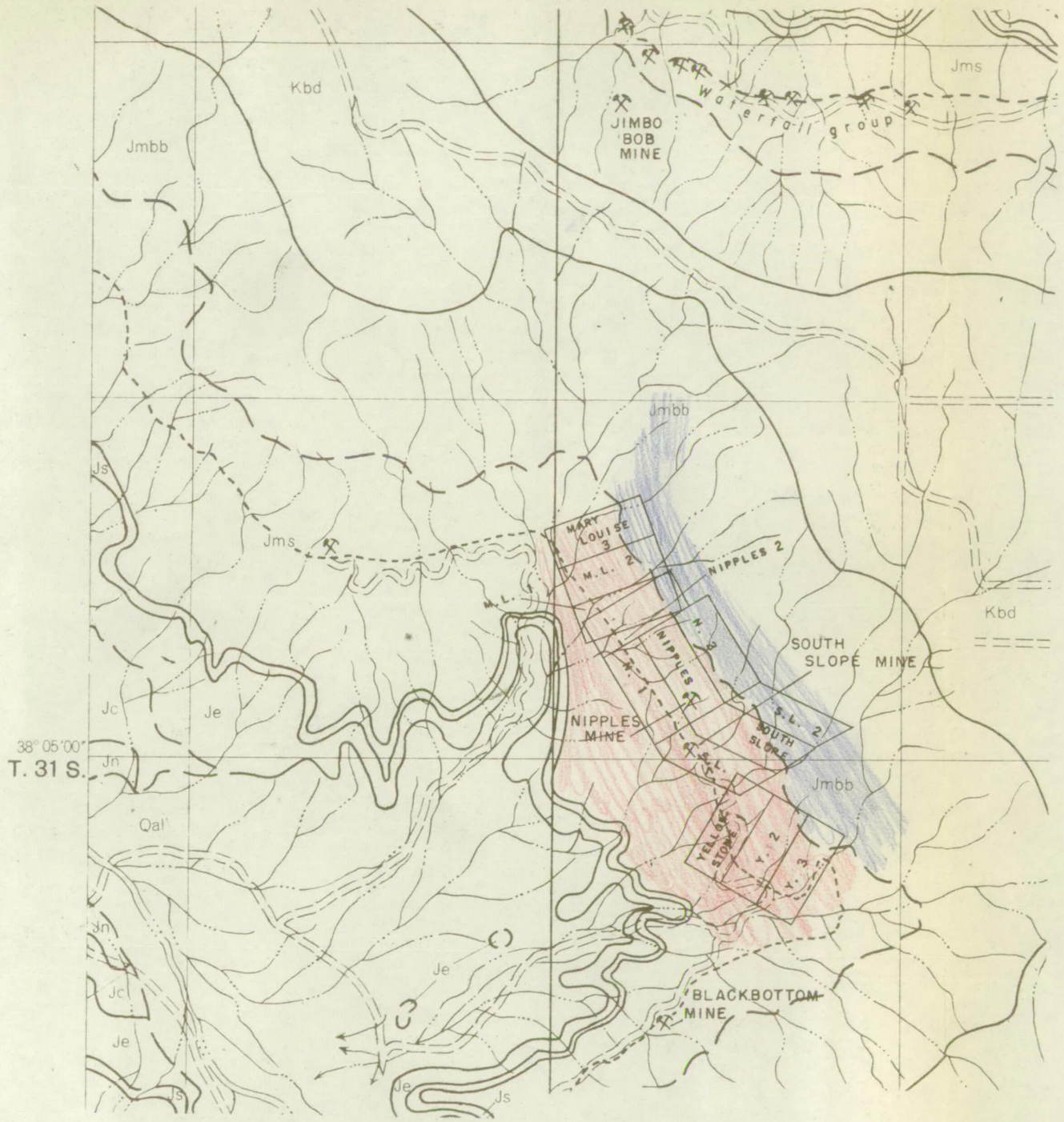
Vertical Scale 1" = 1000'

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3973 NOVEMBER 1955



EXPLANATION

Kbd	CRETACEOUS BURRO CANYON AND DAKOTA FORMATION, UNDIFFERENTIATED
Jmbb	JURASSIC BRUSHY BASIN MEMBER OF MORRISON FORMATION
Jms	JURASSIC SALT WASH MEMBER OF MORRISON FORMATION
Js	JURASSIC SUMMERVILLE FORMATION
Je	JURASSIC ENTRADA SANDSTONE

GEOLOGIC CONTACT, DASHED WHERE APPROXIMATELY LOCATED

MINE OR PROSPECT

Note: BASE FROM U.S. GEOLOGICAL SURVEY PHOTOGEOLOGIC QUADRANGLE MAP, MT. PEALE 15. CLAIM BOUNDARIES FROM APPLICANTS MAP.

N

2 000 0 6 000 FEET

Figure 2. MAP SHOWING YELLOWSTONE, NIPPLES, MARY LOUISE AND SOUTH SLOPE GROUPS OF CLAIMS, STRATEGIC MINERALS EXPLORATION COMPANY, SAN JUAN COUNTY, UTAH

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Strategic Minerals Exploration Co.
P.O. Box 1648
Grand Junction, Colorado

(continued - History and Production)

The remaining Mary Louise claims were located in June 1954 by the same locators. It should be noted, however, that only the Mary Louise No. 1 through 3 are included in this report for application as they are thought to be most favorable for immediate production. If these claims prove to be favorable it would be well to include the remaining Mary Louise Claims No. 4 through 8 at a later date.

Two exposed ore rolls were found on the Mary Louise No. 3. These outcrops are approximately 100 feet apart and separated by a shallow draw. The exposures are in the same horizon and are probably the same ore deposit. Sample No. 1 was taken on the outcrop on the west side of the draw and sample No. 2 and 3 were cut from the ore outcrop on the east side of the draw.

A mineralized outcrop can be traced for approximately 100 feet on the Yellowstone No. 1 and No. 2 claims. The exact thickness of this deposit has not been determined as the surface is talus covered and large boulders are common. Samples No. 4, No. 5 and No. 6 were taken from this outcrop.

The Nipples Mine has produced a relatively small tonnage of uranium and vanadium ore and has been certified for bonus by the Atomic Energy Commission. It is reported by the former owner that the bonus received from ore shipped amounted to approximately $100.00. One sample as shown on the sketch of the mine workings shows considerable vanadium content. All ore left in the mine is on the thinning edge of rolls and does not infer any reserves. A sketch of the underground workings of the Nipples Mine is enclosed with this report.

There are some minor underground and surface workings on the South Claims but little ore production is believed to have come from this claim.

Strategic Minerals Exploration Co.
P.O. Box 1648
Grand Junction, Colorado

Production from Waterfall-Post Canyon Area

The Waterfall-Post Canyon Area has long been known as producing areas. Initial production from the Waterfall mine was persistently high in vanadium and, primarily and vanadium mill was operated until 1941 in the Waterfall area. More recent production behind the mine has been lead ore which is uranium.

Early large producers were the Time Line in the Waterfall Group, which produced in excess of 1000 tons. The Harvey Allen Line to the south and east of the Waterfall Group is estimated to have produced in excess of 500 tons. Sunset Mine operated by U.C.A. and the Prince Group are estimated to have produced at least 5000 tons each. Since no accurate records are available the above mentioned figures are estimates based on verbal reports and mine examinations.

More recent production has come from the Jim Bob No. 1 Mine which lies to the south of the Waterfall workings. It is reported by the operators that 5000 tons have been shipped to date. This operation started about one year ago. The mine is owned by Homestake Mining Company and is under lease to Bo and Charney.

The Profit No. 1 lies to the south of the Jim Bob and recently started production and has produced over 500 tons. The Waterfall behind the Prince which was also started recently has also produced 500 tons. Both are owned by Homestake Mining Company and both due to production.

Guides to Exploration

Favorable geologic criteria to intelligently guide an exploration program is evident from present open areas and mine workings. A drilling program in three phases is recommended. The first phase drilling in mine workings will show favorable and unfavorable areas. Thickness of the

(continued - Guides to Exploration)

sandstone, alteration of the clay above and below the sandstone and the carbon found in the sand will determine the favorability of the area. Favorable drill holes are off-set on closer spacing in the second stage drilling and are holes found in this phase of the project are offset to outline the ore bodies.

Exploration Plans

Exploration would consist of core drilling in the areas behind the mine workings and mineralized outcrops. Proposed preliminary drill sites are shown on Fig. 4. The holes are proposed to test the ore bearing body behind the outcrops on the Yellowstone Group. These holes will average 150 feet in depth. Other holes proposed will vary from 150 feet to 175 feet in depth and will test the ore horizon of the mines and outcrops exposed. Thirteen holes will average 150 feet in depth and the remaining five holes will average 175 feet in depth. Drilling depths were determined by a transit and stadia survey of the area.

First Phase Drilling

Drilling will be done on 250 feet centers to explore the favorable ore horizon.

15 holes averaging 150 feet or	2250 feet	
5 holes averaging 175 feet or	875 feet	
Total	3125 feet	

Second Phase Drilling

After the first phase drilling is completed, the favorable holes would be offset on 250 feet centers. Assuming five of the first phase holes to be favorable, an additional 10 holes would be needed for this phase.

15 holes averaging 150 feet or	2250 feet	
5 holes averaging 175 feet or	875 feet	
Total	3125 feet	

Strategic Minerals Exploration Co.
P.O. Box 1545
Grand Junction, Colorado

(continued - Exploration Plans)

Third Phase Drilling

This drilling would be used to block out the ore bodies found with the second phase drilling program. An additional 20 holes would be necessary to prove sufficient ore reserves to warrant a mining operation.

Using the average depth of holes

15 holes averaging 150 feet or	2250 feet	
5 holes averaging 175 feet or	875 feet	
Total	3125 feet	

A total of 170 holes with a total footage of 6375 feet. Core-drilling the bottom 50 feet of each hole and non-core drilling the upper part of each hole would then give the following totals:

Core drilling	3000 feet
Non-core	3375 feet

Drilling Bids

Below are listed the prices of three representative companies of drilling for core and non-core at various depths:

Depth	Johnsen & Yeuven		Minerals Engineering		Sprague & Norwood	
	Core	Non-Core	Core	Non-Core	Core	Non-core
0-150	2.50	2.00	3.00	2.75	3.75	1.75
150-300	3.00	2.00	4.00	3.00	3.75	1.75
300-450	3.50	2.50	5.00	-	4.50	2.00

Since it is difficult to determine which contractor would be available at the time of drilling, an average cost figure is used for appropriate depths. It is estimated that the bottom 50 feet of each hole would be cored.

Plug bit drilling 0-150 ft. (6375 ft.) Average price $2.17/ft.	$ 13,833.75
Core drilling	
45 holes cored 100-150 (2250 ft.) Average price 3.08/ft.	3,330.00
15 holes (Cored 125-150 (375 ft.) (Average price 3.08	1,155.00
(Cored 150-175 (375 ft.) (Average price 3.50	1,312.50
Total drilling cost	$ 23,231.25

Strategic Minerals Exploration Company
P.O. Box 1[illegible]
Grand Junction, Colorado

Labor and Living Conditions

Contract bulldozing and core drilling will be done on a bid basis and the accepted contractors will furnish the labor and probably house the men in a temporary camp.

General Supplies

Fuel, oil, powder, groceries and general supplies can be purchased in Manticello, Utah, 22 miles from the East Canyon area claim groups. Heavy mining supplies and equipment can be purchased in either Manticello or Moab, Utah, 80 miles distant. Water for domestic use is available at a well, 4 miles distant. Drilling water is available at the well or can be developed in the bottom of East Canyon during most seasons of the year.

Conclusions

The claims are situated favorably, both geologically and topographically in an area that has produced a large tonnage of uranium ore with distinction. The Utaco 11 Group to the north and the Prince Group to the south have been large producers of ore. Other mines in the general area include the Wilson and Sunset. The Black Bottom Mine in Section 17 to the south has had considerable production and recent drilling has proved more reserves. A new inclined shaft is being driven on this property.

John I. Schmacher
JOHN I. SCHMACHER
REG ENGR STATE OF COLORADO

Harold C. Anderson
HAROLD C. ANDERSON

MF 103

Strategic Minerals Exploration Company
P.O. Box 1043
Grand Junction, Colorado

ASSAY RESULTS

Following is a list of samples taken from the outcrops on the Mary Louise and Yellowstone Claims with the assay results and a description of the samples:

Sample No.	U_3O_8	V_2O_5	Description
1	0.09	1.05	10 inch sample across carnotite roll on Mary Louise No. 5 - east side of draw
2	0.51	1.15	12 inch sample across carnotite roll on Mary Louise No. 3 - east side of draw.
3	0.30	1.59	12 inch sample across edge carnotite roll on Apple No. 3
4	0.10	1.87	10 inch cut sample from mineralized zone on Yellowstone No. 1
5	0.09	0.35	5 inch cut sample from outcrop on Yellowstone No. 2.
6	0.10	0.52	Surface float from Yellowstone No. 1
7	Trace	1.65	2 feet cut sample Nipples Mine. Location shown on sketch.

Samples were chemically assayed by Brown Laboratories, Grand Junction, Colorado.

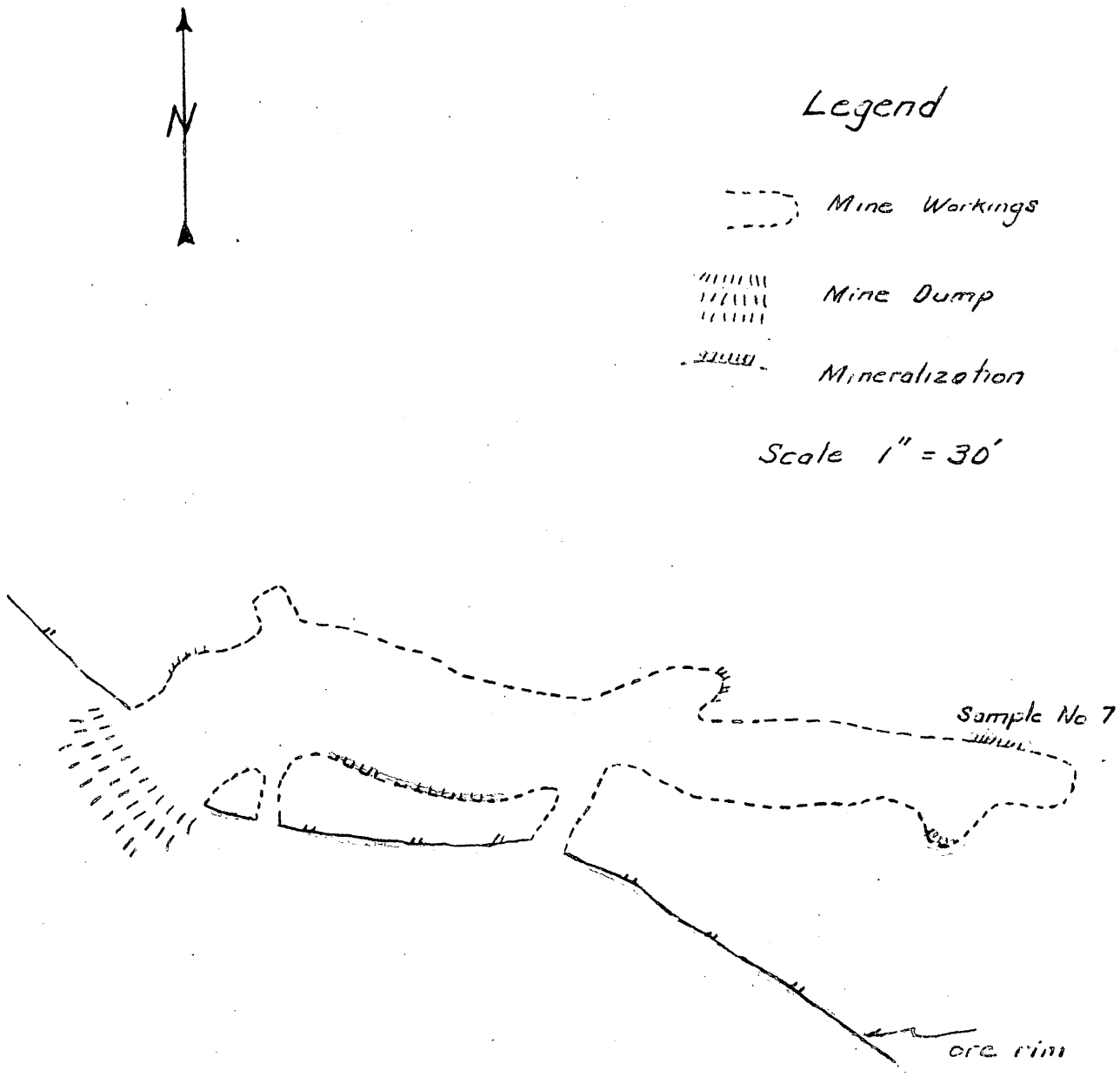
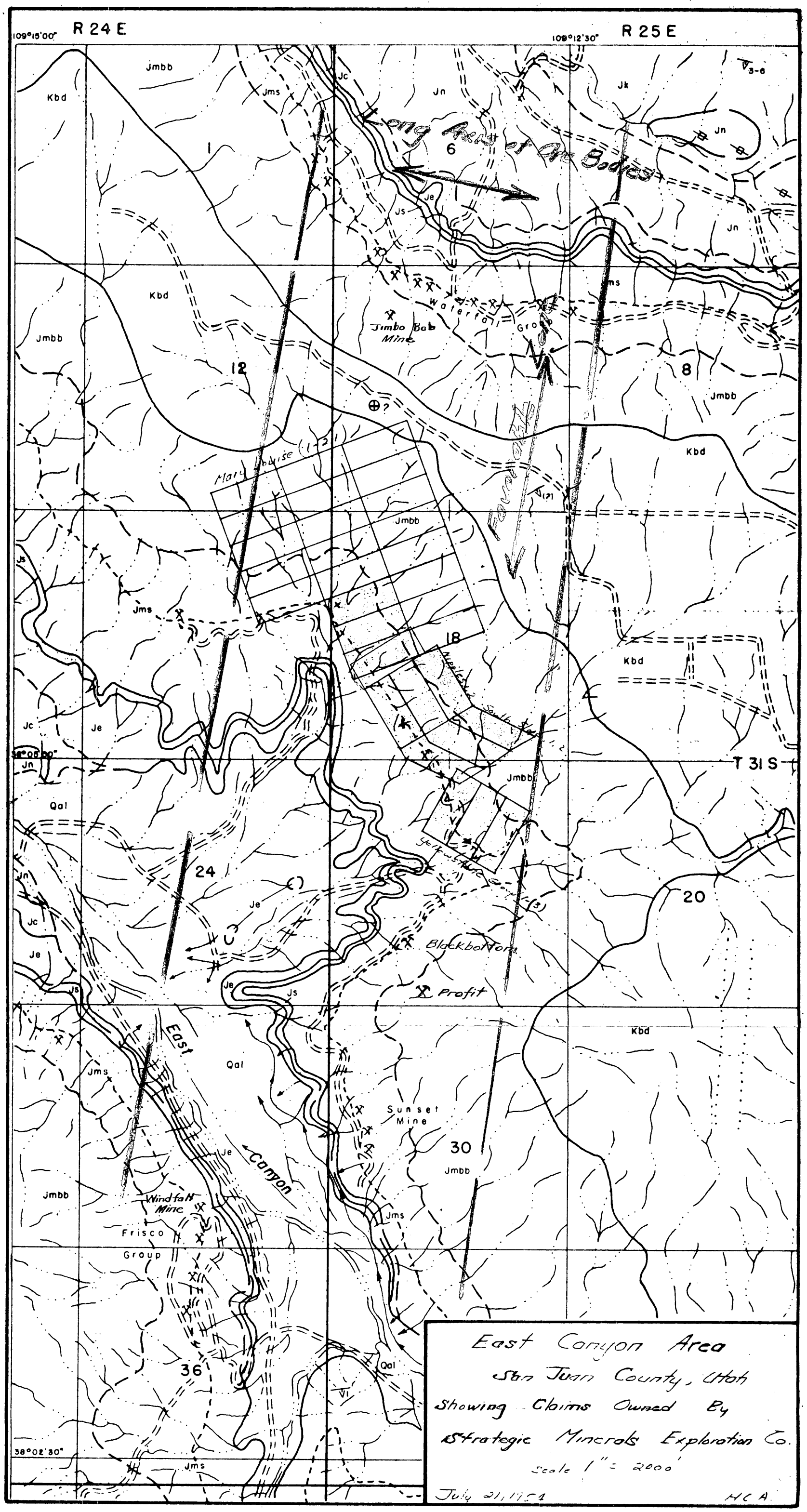
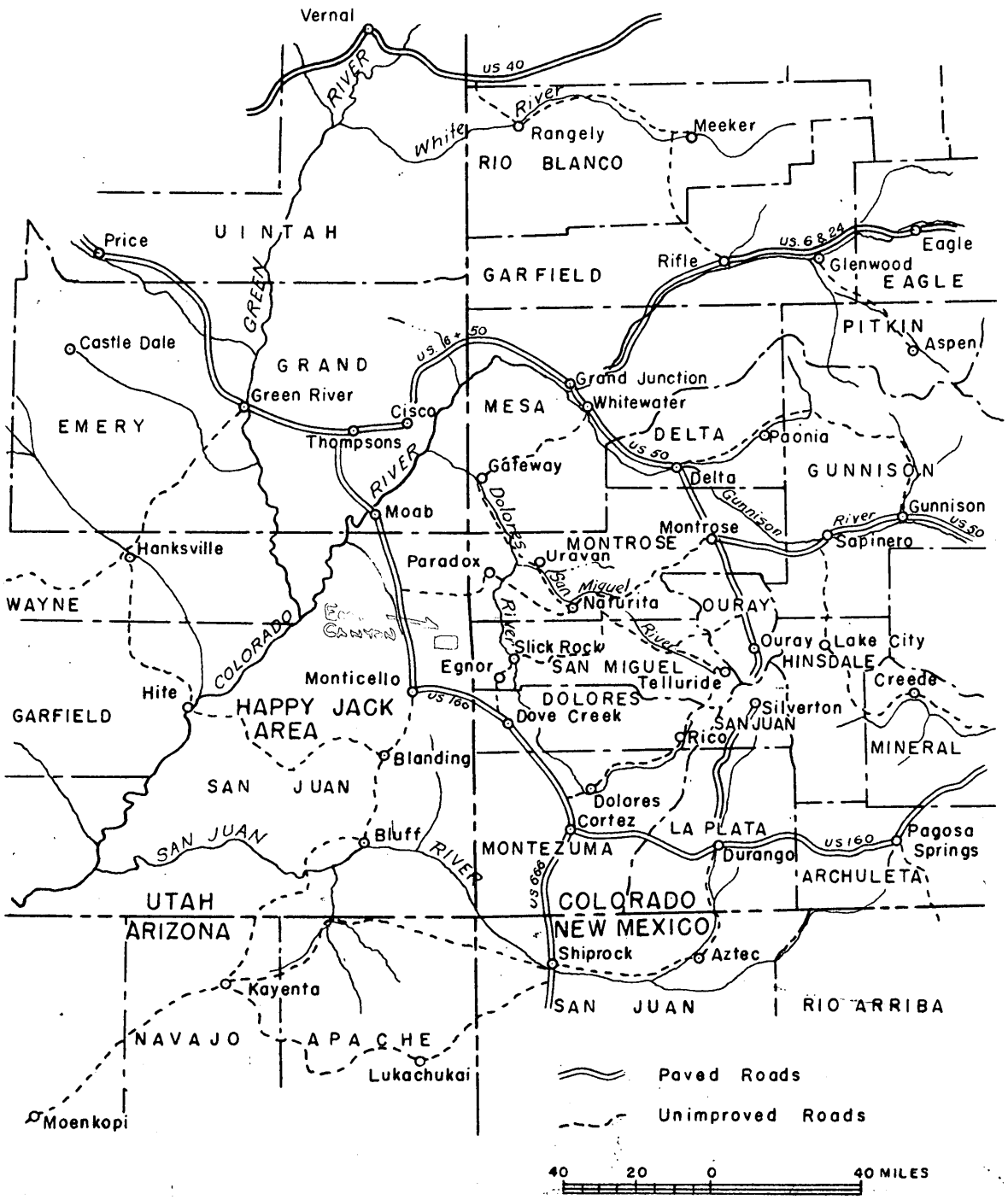


Fig. 5
Nipples Mine



East Canyon Area
San Juan County, Utah
Showing Claims Owned By
Strategic Minerals Exploration Co.
Scale 1" = 2000'
July 21, 1954 HCA



INDEX MAP OF COLORADO PLATEAU

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Strategic Minerals Exploration Co.
P.O. Box 1648
Grand Junction, Colorado

REPORT ON EAST CANYON AREA, SAN JUAN COUNTY, UTAH

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Introduction

This report covers the examination of the following claims in the East Canyon Area of San Juan County, Utah:

Mary Louise No. 1 thru No. 3
Yellowstone No. 1, No. 2, No. 3
South Slope, South Slope No. 1, No. 2
Nipples, Nipples No. 1, No. 2, No. 3

These claims lie in Sections 7, 18, and 19, Township 31 South, Range 22 East, Salt Lake Principal Meridian, San Juan County, Utah.

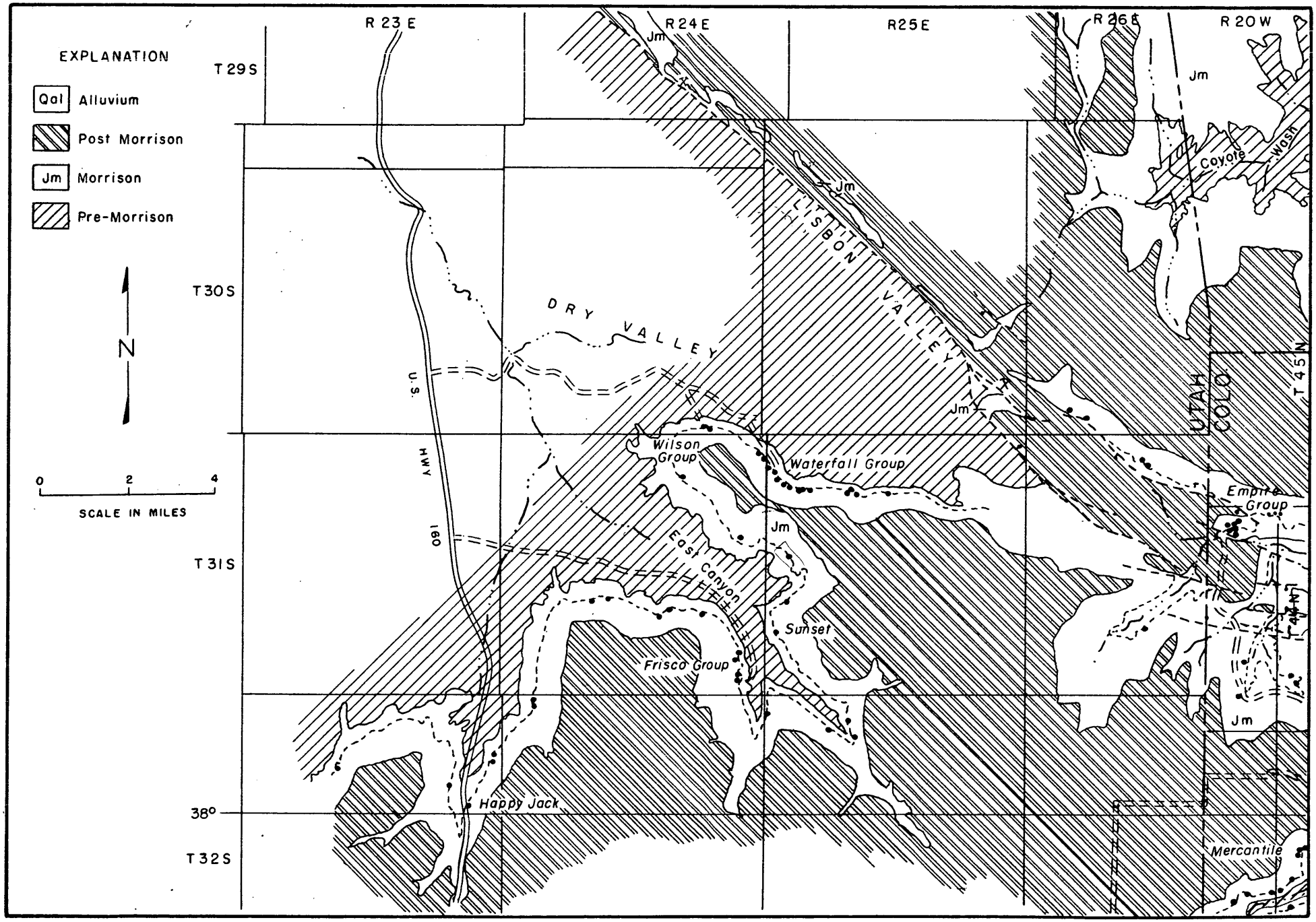
The Mary Louise and Yellowstone Groups were located by Strategic Minerals Exploration Company and the Nipples and South Slope Groups were originally located by David Herres and Carl Hyman and were purchased by Strategic Minerals Exploration Company.

Physiography and Location

The claims listed above are in the East Canyon Area of San Juan County, Utah, approximately 53 miles southeast of Moab, Utah and 27 miles northeast of Monticello, Utah.

Approximately 12 miles of unsurfaced access road connect the groups with U. S. Highway 160.

This area is typical of the ore producing Morrison formation of the Colorado Plateau. The topography is characterized by the steep walled, capped sandstone rims and the pinon and cedar covered flats on the top bench of the Salt Wash and the Brushy Basin member of the Morrison formation. The elevation ranges from 5500 to 6500 feet. The precipitation seldom exceeds 12 inches per year and snowfall is less than one foot in normal winters. Production of ores from the area continues throughout the winter except for short periods during spring thaws.


EXPLANATION
Qal Alluvium
Post Morrison
Jm Morrison
Pre-Morrison
N
0 2 4
SCALE IN MILES
R 23 E
R 24 E
R 25 E
R 26 E
R 20 W
T 29 S
T 30 S
T 31 S
38°
T 32 S
T 45 N
T 44 N
Jm
DRY VALLEY
LISBON VALLEY
U.S. HWY 160
Wilson Group
Waterfall Group
East Canyon
Sunset
Frisco Group
Happy Jack
Empire Group
Mercantile
Coyote Wash
UTAH
COLO

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P.O. Box 1648
Grand Junction, Colorado

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Geology

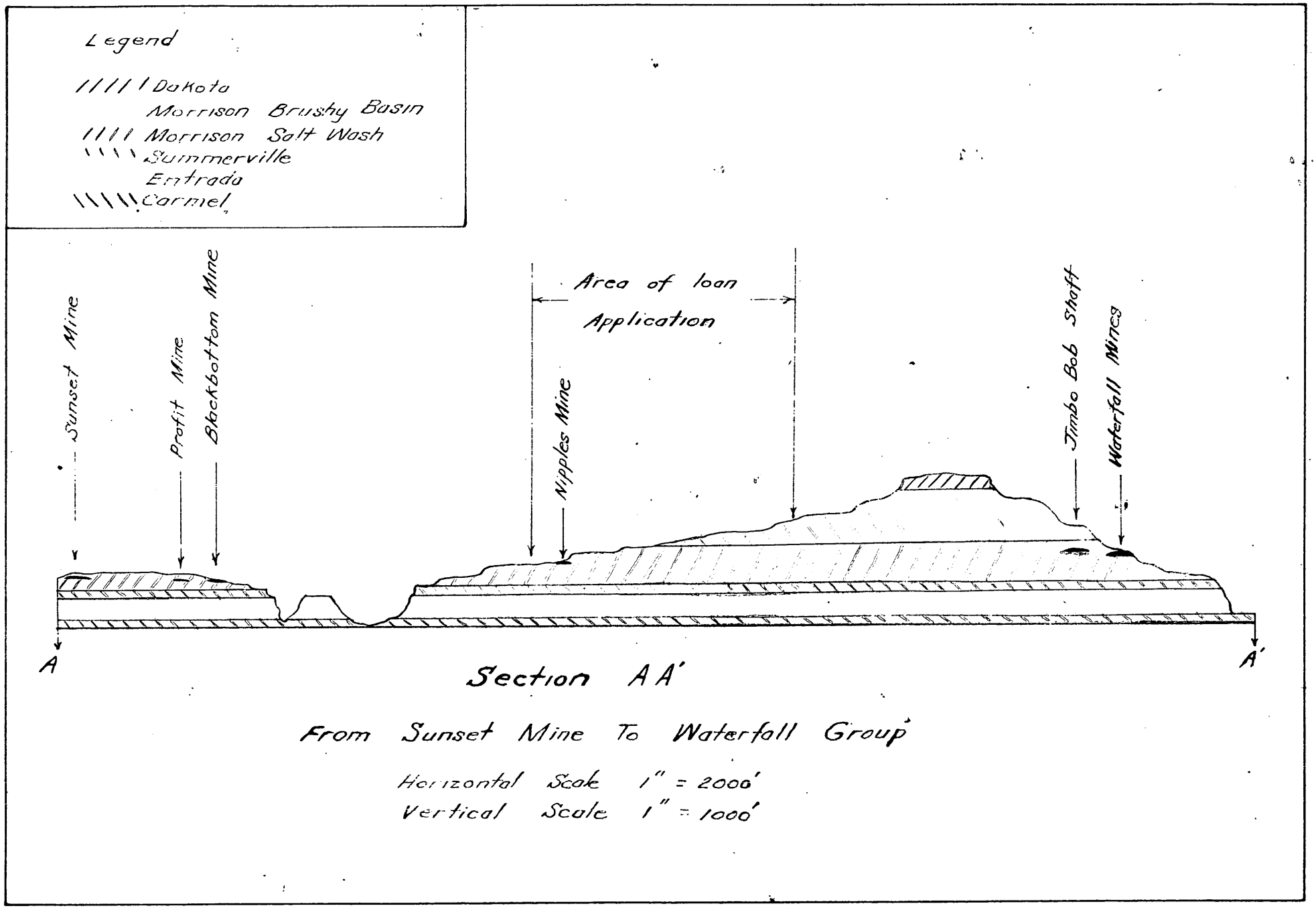
Formations exposed in the vicinity of these claims range from Entrada of Jurassic Age to Burro Canyon and Dakota sandstone of Cretaceous Age. The Entrada is exposed in the floor and lower rim of West Canyon and the Dakota sandstone forms the top rims on both sides of the valley. The ore bearing Morrison formation consists of the upper Brushy Basin member and the lower Salt Wash Member. Most of the commercial ore deposits are found in the upper light colored sandstone rims of the Salt Wash member.

This area which has long been worked as a uranium and vanadium producing district has an apparent trend or favorable ore zone that extends from the Waterfall Area on the north (See attached map), through the groups of claims included herein and continuing south to the Sunset and Prince Groups. This trend has been most favorable for recent ore finds as well as past production. The thickness of the seam in this area and other criteria appear to be more favorable for the deposition of the ore. It also appears that the ore bodies in this trend lie nearly east and west or normal to the north-south position of the main ore trend.

The area is approximately 6 miles from the Lisbon Fault and the local dip of the beds is approximately 1 to 3 degrees to the southwest. On the south side of West Canyon, the beds appear to be almost horizontal and going further southwest the beds begin to dip in the opposite direction or to the northwest.

History and Production

The Yellowstone Group and the original Mary Louise Group (No. 1 thru 4) were located in March 1953 by Strategic Minerals Exploration Company.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Vertical Scale 1" = 1000'

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Strategic Minerals Exploration Co.
P.O. Box 1648
Grand Junction, Colorado

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(continued - History and Production)

The remaining Mary Louise claims were located in June 1954 by the same locators. It should be noted, however, that only the Mary Louise No. 1 through 3 are included in this report and application as they are thought to be most favorable for immediate production. If these claims prove to be favorable it would be well to include the remaining Mary Louise Claims No. 4 through 21 at a later date.

Two exposed ore rolls were found on the Mary Louise No. 3. These outcrops are approximately 100 feet apart and separated by a shallow draw. The exposures are in the same horizon and are probably the same ore deposit. Sample No. 1 was taken on the outcrop on the west side of the draw and Samples Nos. 2 and 3 were cut from the ore outcrop on the east side of the draw.

A mineralized outcrop can be traced for approximately 100 feet on the Yellowstone No. 1 and No. 2 claims. The exact thickness of this deposit has not been determined as the surface is talus covered and large boulders are common. Samples No. 4, No. 5 and No. 6 were taken from this outcrop.

The Nipples Claim has produced a relatively small tonnage of uranium and vanadium ore and has been certified for bonus by the Atomic Energy Commission. It is reported by the former owner that the bonus received from ore shipped amounted to approximately $2100.00. One sample as shown on the sketch of the mine workings shows considerable vanadium content. All ore left in the mine is on the thinning edge of rolls and does not infer any reserves. A sketch of the underground workings of the Nipples Mine is enclosed with this report.

There are some minor underground and surface workings on the South Slope Claim but little or no production is believed to have come from this claim.

Strategic Minerals Exploration Co.
P.O. Box 1548
Grand Junction, Colorado

Production from Waterfall-East Canyon Area

The Waterfall and East Canyon Areas have long been known as producing areas. Initial production from mine workings were particularly high in vanadium and a privately owned vanadium mill was operated until 1944 in the Waterfall Area. More recent production behind the mine has shown good values in uranium.

Early large producers were the Mine Mine in the Waterfall Group which produced in excess of 2000 tons. The Woodrow Wilson Mine to the south and east of the Waterfall Group is estimated to have produced in excess of 2000 tons. Sunset Mine operated by V.C.A. and the Prince Group are estimated to have produced at least 5000 tons each. Since no accurate records are available the above mentioned figures are estimates based on verbal reports and mine examinations.

More recent production has come from the Jimbo Bob No. 1 Mine which lies to the south of the Waterfall workings. It is reported by the operators that 3000 tons have been shipped to date. This operation started about one year ago. The mine is owned by Homestake Mining Company and is under lease to Roger Conroy.

The Profit No. 1 located behind the Black Bottom has recently started production and has produced over 200 tons. The Windfall behind the Prince which was also started recently has also produced 200 tons. Both are owned by Simpson Mining Company and both are now in production.

Guides to Exploration

Favorable geologic criteria to intelligently guide an exploration program is evident from present exposures and mine workings. A drilling program in three phases is recommended. The first phase drilling on wide spacing will show favorable and unfavorable areas. Thickness of the

(continued - Guides to Exploration)

sandstone, alteration of the clay above and below the sandstone and the carbon found in the sand will determine the favorability of the area. Favorable drill holes are off-set on closer spacing in the second stage drilling and ore holes found in this phase of the project are offset to outline the ore bodies.

Exploration Plans

Exploration would consist of core drilling in the areas behind the mine workings and mineralized outcrops. Proposed roads and drill sites are shown on Fig. 6. Five holes are proposed to test the area immediately behind the outcrop on the Yellowstone Group. These holes will average 150 feet in depth. Other holes proposed will vary from 150 feet to 175 feet in depth and will test the ore horizon of the mines and outcrops exposed. Thirteen holes will average 150 feet in depth and the remaining five holes will average 175 feet in depth. Drilling depths were determined by a transit and stadia survey of the area.

First Phase Drilling

Drilling will be done on 800 feet centers to explore the favorable ore horizon.

15 holes averaging 150 feet or		2250 feet
5 holes averaging 175 feet or		875 feet
	Total	3125 feet

Second Phase Drilling

After the first phase drilling is completed, the favorable holes would be offset on 250 feet centers. Assuming five of the first phase holes to be favorable, an additional 20 holes would be needed for this phase.

15 holes averaging 150 feet or		2250 feet
5 holes averaging 175 feet or		875 feet
	Total	3125 feet

Strategic Minerals Exploration Co.
P.O. Box 1548
Grand Junction, Colorado

(continued - Exploration Plans)

Third Phase Drilling

This drilling would be used to block out the ore bodies found with the second phase drilling program. An additional 20 holes would be necessary to prove sufficient ore reserves to warrant a mining operation.

Using the average depth of holes

18 holes averaging 180 feet or	3250 feet	
5 holes averaging 175 feet or	875 feet	
Total	3125 feet	

A total of 180 holes with a total footage of 3375 feet. Core-drilling the bottom 40 feet of each hole and non-core drilling the upper part of each hole would then give the following totals:

Core drilling	3000 feet
Non-core	6375 feet

Drilling Bids

Below are listed the prices of three representative companies of drilling for core and non-core at various depths:

Depth	Johnson & Youven		Minerals Engineering		Sprague & Henwood	
	Core	Non-Core	Core	Non-Core	Core	Non-core
0-150	2.50	2.00	3.00	2.75	3.75	1.75
150-300	3.00	2.00	4.00	3.00	3.75	1.75
300-450	3.50	2.50	5.00	-	4.50	2.00

Since it is difficult to determine which contractor would be available at the time of drilling an average cost figure is used for appropriate depths. It is estimated that the bottom 30 feet of each hole would be cored.

Plug bit drilling 0-150 ft. (6375 ft.) Average price $2.17/ft.	$ 13,833.75
Core drilling	
45 holes cored 100-150 (2250 ft.) Average price $3.08/ft.	6,930.00
18 holes (Cored 150-160 (375 ft.) (Average price $3.08	1,155.00
(Cored 150-175 (375 ft.) (Average price $3.58	1,342.50
Total drilling cost	$ 23,231.25

Strategic Minerals Exploration Company
P.O. Box 1548
Grand Junction, Colorado

Labor and Living Conditions

Contract bulldozing and core drilling will be done on a bid basis and the accepted contractors will furnish the labor and probably house the men in a temporary camp.

General Supplies

Fuel, oil, powder, groceries and general supplies can be purchased in Monticello, Utah, 27 miles from the East Canyon Area claim groups. Heavy mining supplies and equipment can be purchased in either Monticello or Moab, Utah, 52 miles distant. Water for domestic use is available at a well, 4 miles distant. Drilling water is available at the well or can be developed in the drainage of East Canyon during most seasons of the year.

Conclusions

The claims are situated favorably both geologically and geographically in an area that has produced a large tonnage of uranium and vanadium ores. The Waterfall Group to the north and the Prince Group to the south have been large producers of ore. Other mines in the general area include the Wilson and Sunset. The Black Bottom Mine in Section 19 to the south has had considerable production and recent drilling has proved more reserves. A new inclined shaft is being driven on this property.

John I. Schumacher
JOHN I. SCHUMACHER
REG ENGR COLORADO.

Harold C. Anderson
HAROLD C. ANDERSON

Strategic Minerals Exploration Company
P.O. Box 1048
Grand Junction, Colorado

ASSAY RESULTS

Following is a list of samples taken from the outcrops on the Mary Louise and Yellowstone Claims with the assay results and a description of the samples:

Sample No.	U_3O_8	V_2O_5	Description
1	0.29	1.06	10 inch sample across carnotite roll on Mary Louise No. 3-west side of draw
2	0.51	1.13	12 inch sample across carnotite roll on Mary Louise No. 3 - east side of draw.
3	0.38	1.29	12 inch sample across same carnotite roll as Sample No. 2
4	0.19	1.33	10 inch cut sample from mineralized zone on Yellowstone No. 2
5	0.09	0.33	5 inch cut sample from outcrop on Yellowstone No. 2.
6	0.19	0.32	Surface float from Yellowstone No. 1
7	Trace	1.45	2 feet cut sample Nipples Mine. Location shown on sketch.

Samples were chemically assayed by Brown Laboratories, Grand Junction, Colorado.

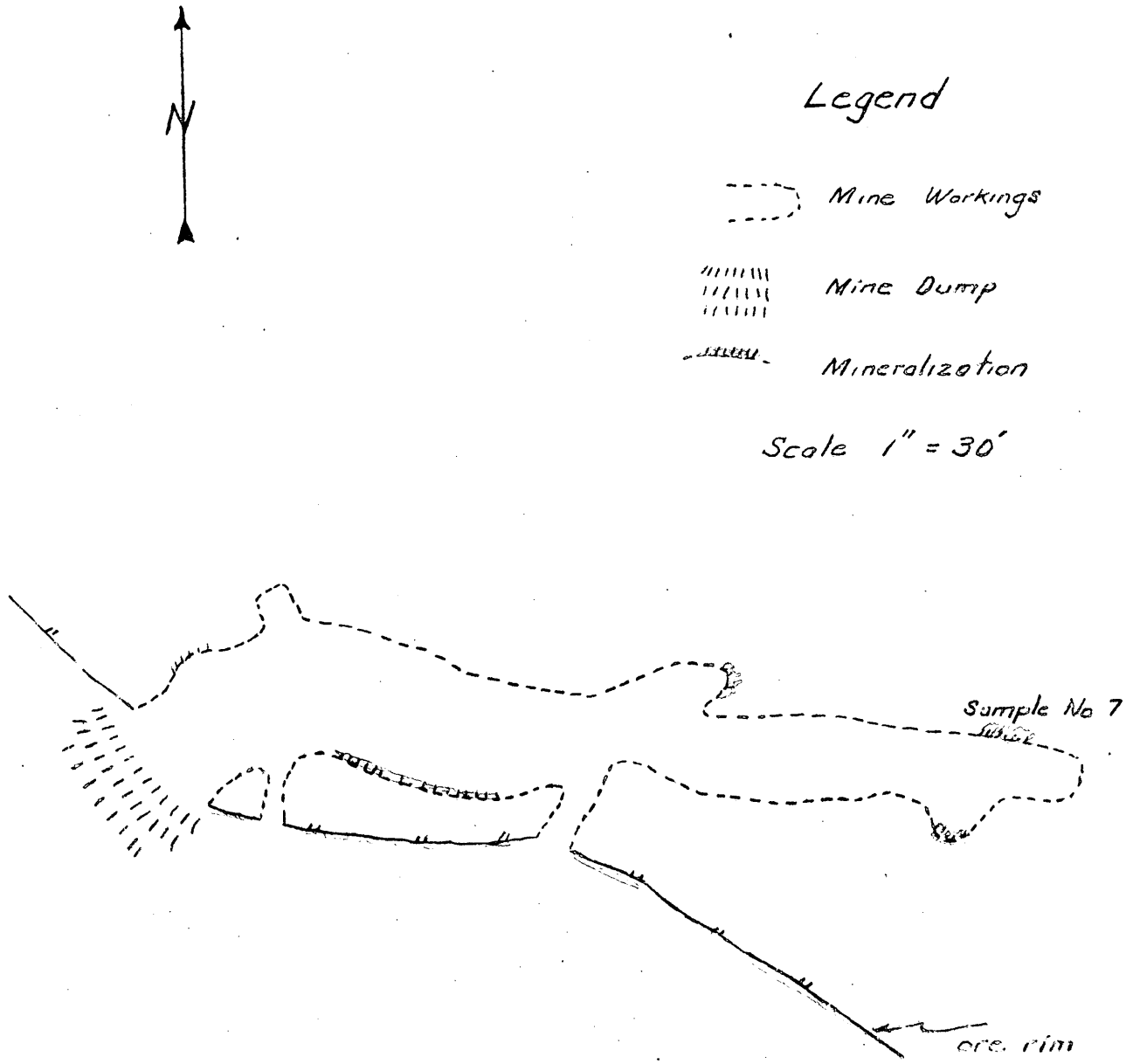

Fig. 5
Nipples Mine

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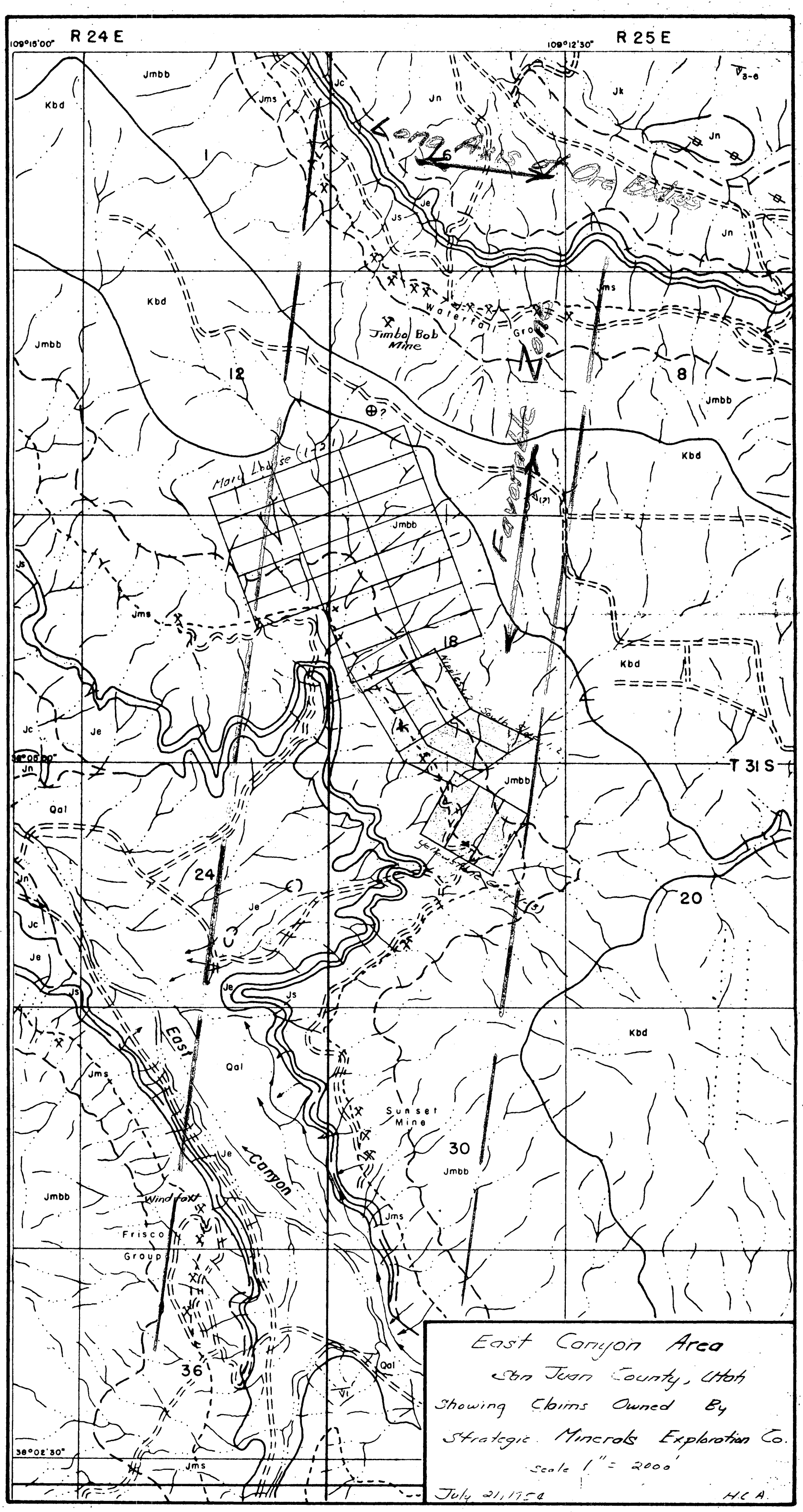

East Canyon Area
San Juan County, Utah
Showing Claims Owned By
Strategic Minerals Exploration Co.
Scale 1" = 2000'
July 21, 1954 HCA

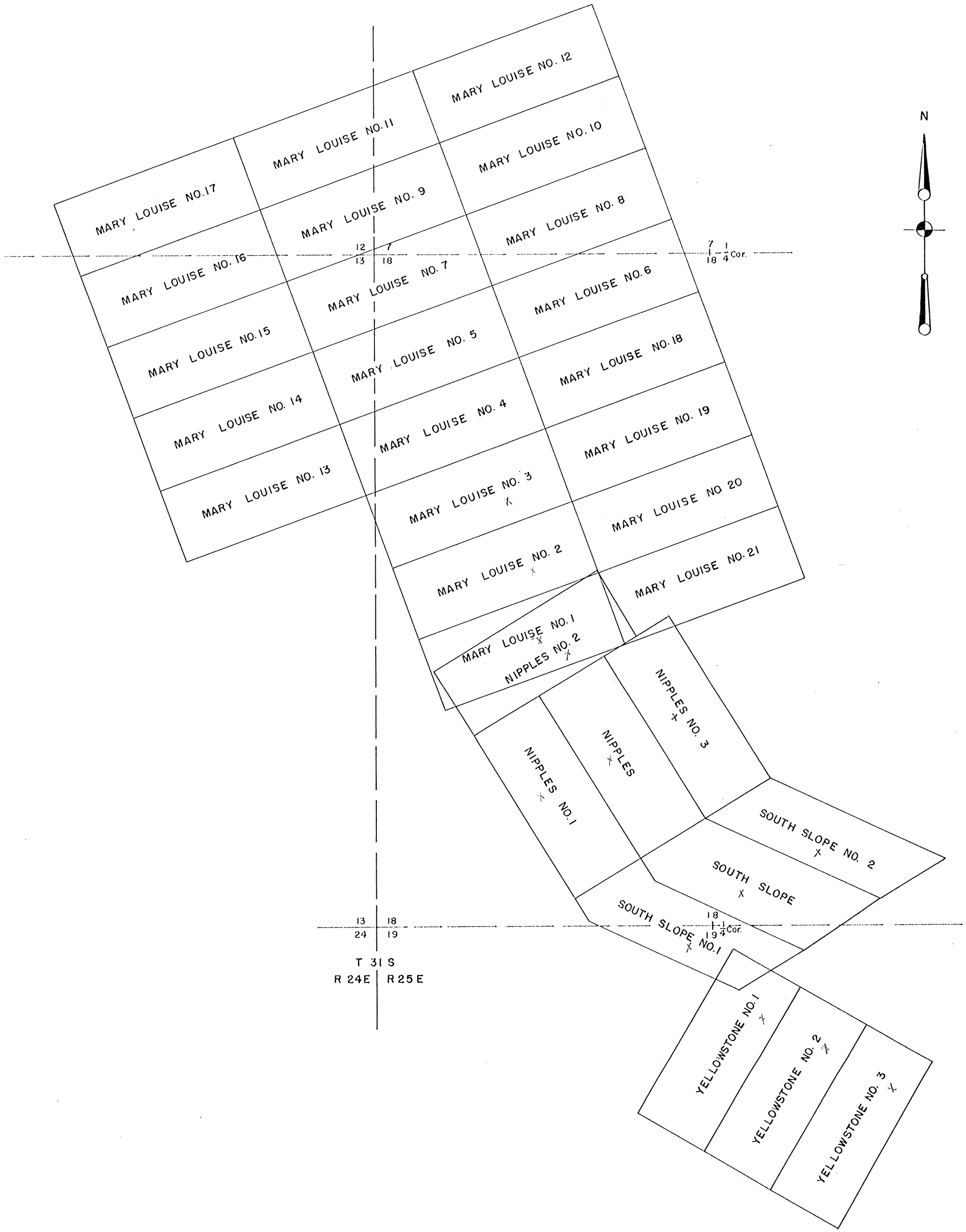

FIGURE 3

EAST CANYON AREA

SHOWING YELLOWSTONE, SOUTH SLOPE, NIPPLES AND MARY LOUISE GROUPS

SAN JUAN COUNTY, UTAH

STRATEGIC MINERALS EXPLORATION COMPANY

SCALE: 1" = 500'

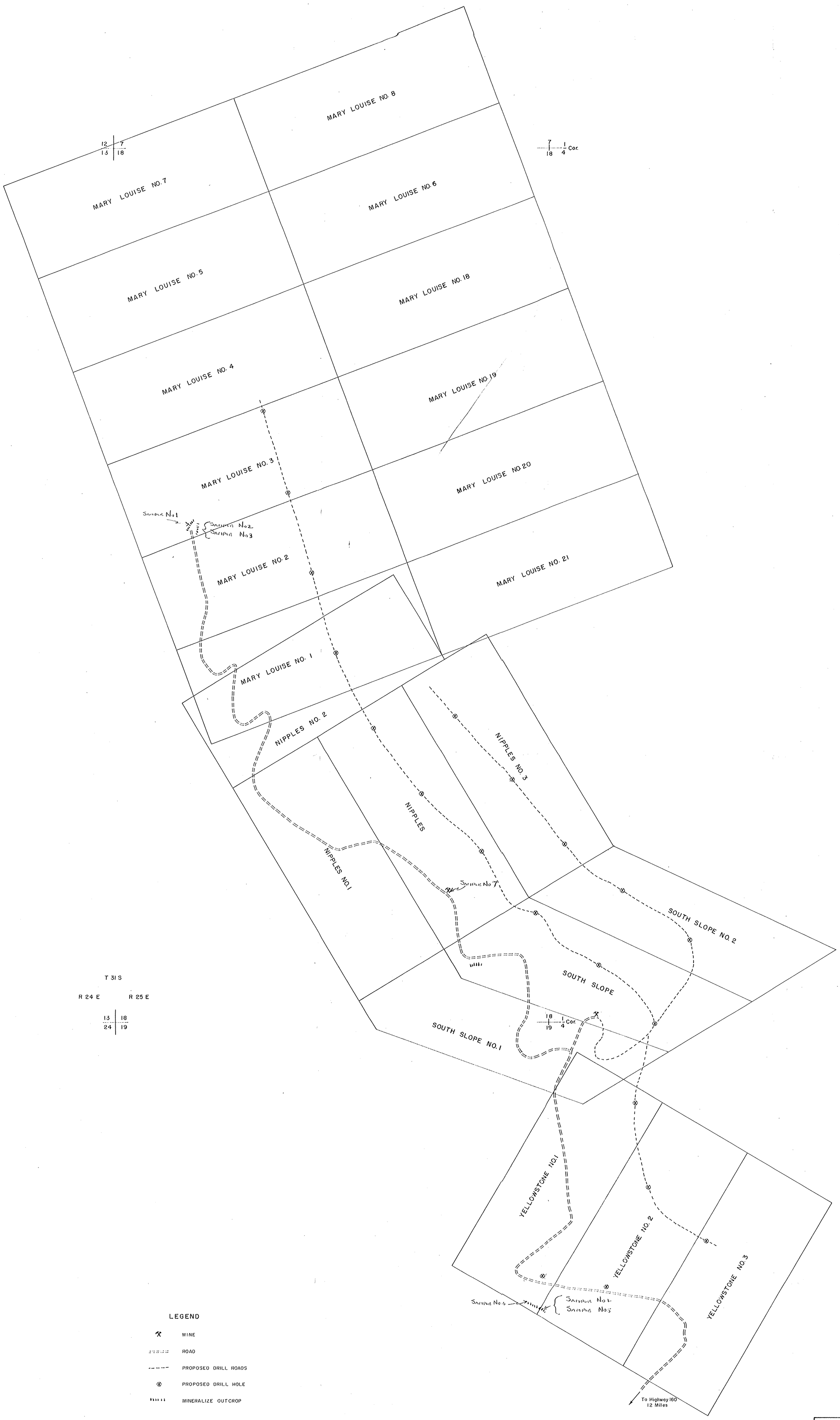

FIGURE 4

CLAIM MAP

SHOWING PROPOSED DRILL HOLES

STRATEGIC MINERALS EXPLORATION COMPANY

SCALE: 1" = 200'

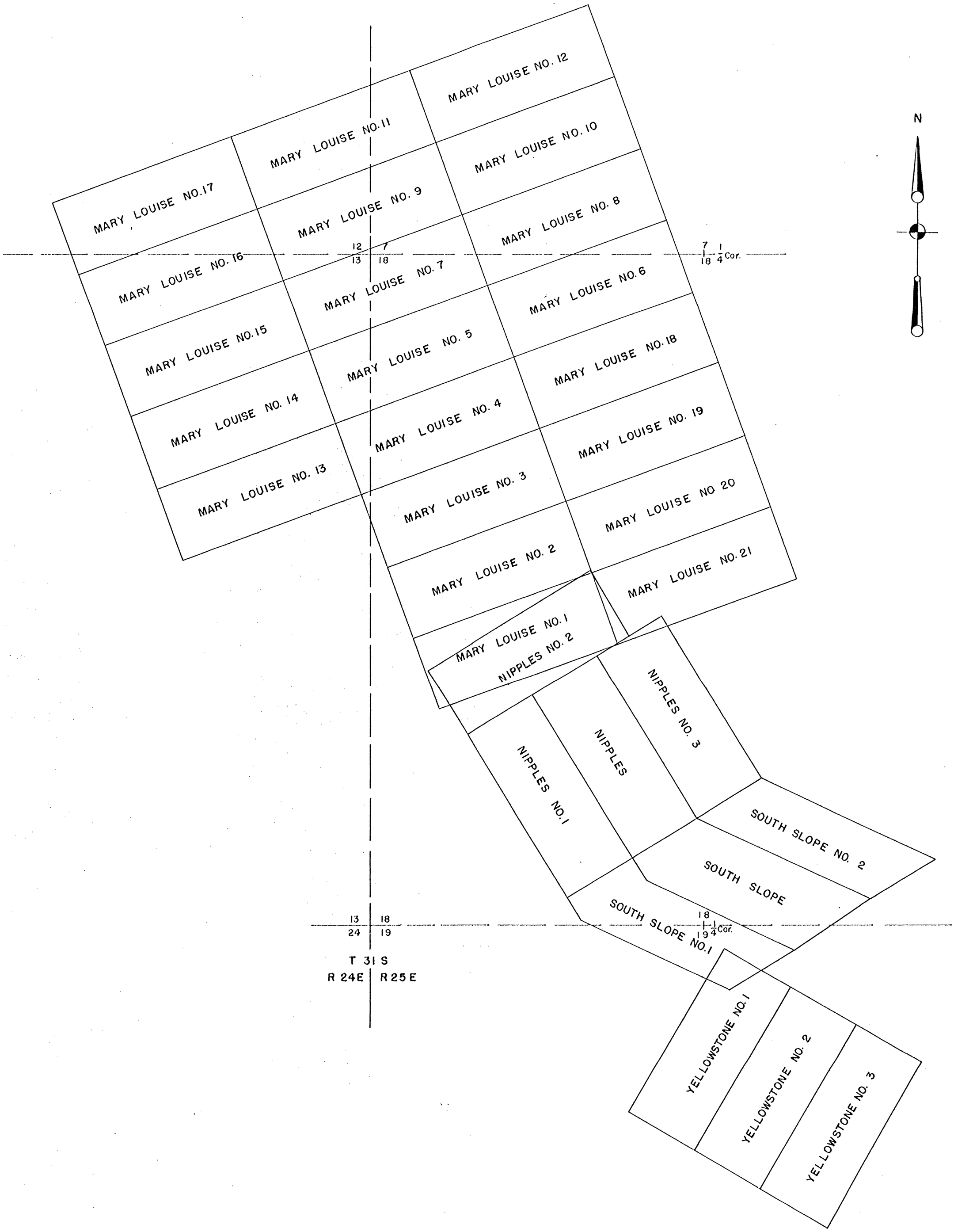

FIGURE 3

EAST CANYON AREA

SHOWING YELLOWSTONE, SOUTH SLOPE, NIPPLES AND MARY LOUISE GROUPS

SAN JUAN COUNTY, UTAH

STRATEGIC MINERALS EXPLORATION COMPANY

SCALE: 1" = 500'