700

FILE COPY

Surname:

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

DEC - 3 1956

[redacted] Thomas
House of [redacted]
Room 212, House Office Building
Washington 25, D. C.

Re: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Company
Canyon Claim Group, et al.
Garfield County, Utah

My dear Mr. Thomas:

As requested today by Mrs. Ball of your office, there are enclosed two copies of a letter, dated November 30, 1956, to the subject company.

If I can be of further assistance to you, please call on me at any time.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

Enclosures

FLKnouse/izm 12-3-56

cc to: Docket
Code 700 - Mr. Knouse
Admr.'s Reading File
DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.L.

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

December 3, 1956

Memorandum

To: The Files

From: F. L. Knouse, Mining Engineer
Rare and Miscellaneous MetalsDivision

Subject: Returned telephone call - Mrs. Ball from Congressman Thomas' office.

Re: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Company
Canyon Claim Group, et al.
Garfield County, Utah

Mrs. Ball called regarding the status of the subject project. She said Mr. Ellis advised her that the Field Team report had been received and she was interested in learning our decision. She was advised that the Applicant was written on November 30, that the application was denied on the grounds that the probability of making a significant discovery on the property was not sufficiently promising to justify Government participation. She inquired if there had not already been some production from the property. She was advised there was a record of a few tons having been produced from the property, and from adjoining properties there was a record of a much larger aggregate production from small scattered and disconnected ore bodies along the canyon rims, but the deposits were not of a significant size. She inquired if our decision could be appealed, and she was advised the proposed project had been carefully considered before the decision was made. However, the Applicant could apply for reconsideration. She then asked if a copy of our letter to the Applicant denying the project could be furnished Congressman Thomas' office. She was advised we would send a copy of our letter to the Applicant to the Congressman.

F. L. Knouse

F. L. Knouse

cw

700

FILE COPY

Surname:
F.L. Knouse
Lamb
Kilgaard
J.E. Johnson

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

Mr. D. James Edson, Jr., Geologist-Partner
Sunburst Mining Corporation
c/o Mincon
P. O. Box 270
Grand Junction, Colorado

Re: Docket No. DMEA-4429 (Uranium)
Canyon Claim Group, et al.
Garfield County, Utah

Dear Mr. Edson:

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

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

Careful study of all our information, although noting some uranium mineralization on your property, indicates that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. 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 Exploration Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mitteldorf

Administrator

FLKnouse/izm 11-29-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
Operating Committee
DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
TsHKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Docket

700

November 29, 1956

Summary of Proposed Project

Object: Denial of application for an exploration project.

Docket No.: DMEA-4429

Commodity: Uranium

Applicant: Sunburst Mining Corporation (Incorporated in Texas) c/o Mincon, P. O. Box 270 Grand Junction, Colorado, and 402 Ouray Avenue, Grand Junction, Colorado

Property: Joe E. King, Jr., Property, consists of 99 full and fractional contiguous unpatented mining claims as follows: Rats Nest Nos. 1 & 2; Canyon Nos. 1 through 20; David Nos. 1 through 9; Warren Nos. 1 through 9; Gnat Nos. 1, 2, 3, 6, 7, 8, and 9; Bert Nos. 1 through 13; Teddy Nos. 1 through 12; Dingo Nos. 1, 2, 3, and 4; Jerry No. 1; and Creel Nos. 1 through 22, in unsurveyed secs. 2, 3, 10, 11, 14 & 15, T. 35 S., R. 11 E., S.L.M.&B., Garfield County, Utah. Property rights of Applicant are covered in an "Assignment of Mining Lease" from E. W. Creel, T. F. Conner, and Sam D. DeChevio, dated April 25, 1956.

Application dated: August 14, 1956

Work Proposed: Consists of a two stage drilling program from the surface to explore two stratigraphic horizons about 5 and 45 feet ~~but~~ above the base of the Salt Wash member of the Jurassic Morrison formation for uranium-bearing ore.

Stage I would consist of 198 wagon drill holes requiring an estimated 24,130 feet of drilling in holes spaced 200 feet apart along irregular spaced and oriented fences where drilling depths are less than 200 feet.

Stage II mineralized areas encountered in Stage I work would be further drilled by non-core and core methods, and favorable but unmineralized areas, wagon drilled on closer centers. An estimated 150 holes or 18,450 feet of all types of drilling is proposed.

Cost of Proposed Work

	Unit cost/ft.	Total Cost
*a. Independent Contractors	$0.929	$39,742.60
b. Labor, Supervision, Consultants	0.188	8,050.00
c. Operating Materials & Supplies	0.018	800.00
d. Miscellaneous	0.028	1,182.00
c. Contingencies:		
For (a) above 5%	0.046	1,987.13
For (b) above 25%	0.047	2,112.50
For (c) above 10%	0.002	80.00
For (d) above 20%	0.006	236.40
Total Cost of Project	1.264	$54,090.63
Government Participation @ 75% .		$40,567.97

*Independent Contracts (detailed)

Drilling Contracts	No. of feet	Cost/ft.	Project Cost
Stage I			
198 wagon drill holes	24,310	$0.727	$17,675.50
Stage II (150 holes)			
Wagon drilling	12,300	0.727	8,942.10
Non-Core drilling	4,500	1.15	5,175.00
Core drilling	1,650	3.00	4,950.00
Sub-Total	42,760		
Heavy Equipment rental	30 days @ $100/day		3,000.00
Total Independent Contracts			$39,742.60

$$\frac{\$39,742.60}{42,760 \text{ ft. drilling}} = \$0.929/\text{ft.}$$

Field Team Report: Nov. 1956 (Joint report by M.H. Salsbury, USBM, and W. B. Gazdiz, USGS)

The subject property is located on the northwest flank of Mt. Ellsworth, one of the structural domes that form the Henry Mountains. Sedimentary rocks exposed in the vicinity of the property consists of the Summerville and Morrison formationsof Upper Jurassic Age.

Known uranium deposits in the area occur in the Morrison formation, which is divided into two members, Salt Wash overlain by the Brushy Basin. The Brushy Basin member is absent on the subject property and the Salt Wash member is 20 to 350 feet thick. Ore deposits are found in the lower part of the Salt Wash member in two stratigraphic horizons about 5 and 45 feet above the base of the member. The ore bodies in the vicinity occur as thin high-grade discontinuous layers and pods of mineralized rock that have an erratic spatial distribution. Individual ore bodies are a few inches to several feet thick, and a few feet to as much as 25 feet long.

The origin of the ore and factors that control its location are not clear. Three possible ore trends crossing the property are suggested by the Applicant, none of which can be substantiated by the results of previous exploration on the property or on adjoining properties. Although the Salt Wash member is extensively exposed on the property in numerous canyons, mineralized rock at the outcrop is notably absent. Exploratory drilling behind the few known mineralized rim exposures failed to find significant mineralied rock.

Production reported by AEC from the Rats Nest No. 1 claim is 7.8 tons containing 0.97% U_3O_8 and 3.05% V_2O_5. Production from the adjoining Harold Eckker claims (1953 to date) total 1,524 tons containing 1.27% U_3O_8 and 2.79% V_2O_5. This production was from one or more small deposits on each of 13 claims. This production ranged from 3 to 367 tons from each claim. There are no known reserves in the property listed in the application.

Therefore it is concluded that extensive drilling on the property would probably result in finding small ore deposits, but the amount found would be insignificant and not commensurate with the cost of exploration.

Denial of the application is recommended.

The Field Team concurs in this recommendation.

Comments of Commodity Specialists:

USBM, John E. Crawford, November 27, 1956:

Concurs in the recommendations of the Field Team.

USGS, W. P. Williams, November 28, 1956:

Concurs with Field Team's recommendation of denial.

Rare & Miscellaneous MetalsDivision, F. L. Knouse, November 29, 1956:

Ore produced from this property and other nearby properties has been from small bodies (3 to 367 tons in size) occurring as thin high-grade discontinuous layers and pods of mineralized rock erratically distributed without known trends. Extensive exploration drilling would probably find some additional ore deposits but the probability of discovering significant ore reserves commensurate with the cost of an adequate drilling program is not promising. Therefore, the application for Government exploration assistance should be denied.

Conclusions:

A review of all our information relating to the proposed project indicates that the probability of making a significant discovery is not sufficiently promising for Government participation. Therefore, the application should be denied.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

11/29/56

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

IN REPLY REFER TO:

RECEIVED
NOV 29 1956
D.M.E.A.

November 28, 1956

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of field examination report, DMEA 4429, Sunburst Mining Corporation, Joe A. King, et al. claims, Henry Mountains, Garfield County, Utah, (uranium).

The field examiner's report verifies that the ore deposits along the southwest flank of the Henry Mountains are small and eratically distributed. The grade of the ore may be relatively high; but, as the examining team points out, the ore bodies are likely to be only a few feet wide and only as much as 25 feet long. Such small ore bodies constitute very poor objectives for a drilling project.

Small, scattered, high grade ore bodies may yield small tonnages of marketable ore over extended periods of time through the use of highly selective, 'pick and shovel' mining methods. Under such conditions it would be difficult to justify the extensive proposed project that would cost an estimated $54,000.

Because of the physical nature of the known ore deposits in the area and the unfavorable geologic characteristics of the property, I am in agreement with the field examiners' and Field Team's recommendations for denial of the application.

W. P. Williams

W. P. Williams

11/28/56

RECEIVED NOV 28 1956 D.M.E.A.

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

Date November 27, 1956

DMEA Docket No. 4429
DMEA Contract No.
Commodity Uranium
Name of applicant Sunburst Mining Corporation
Name of property
Location of property Garfield County, Utah
Estimated cost of project $54,090.63

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: _____. 2. Date received by reviewer: 11/27.

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location ☐
   b. Ownership ☐
   c. Evidence of mineralization ☐
   d. Geology ☐
   e. Proposed exploration method ☐
   f. Alternate exploration method ☐
   g. Costs ☐
   h. _____ ☐

9. Action advised:
   a. Obtain information from applicant ☐
   b. Refer to Field Team ☐
   c. Denial [X]
   d. Agree with Field Team [X]
      i. Consult with Mr. _____ at _____ AEC office.
   e. Disagree with Field Team ☐
   f. Suggest alternate plan ☐
   g. Request another examination ☐
   h. Approval ☐

10. Remarks: (Use back of page if necessary) Mr. J. O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

Selfridge
F. Johnson

November 26, 1956

Memorandum

To: Administrator

From: George C. Selfridge
Special Assistant

Subject: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Corporation
Canyon claim group, et al.
Garfield County, Utah

During a telephone conversation with Mr. Traver today, he mentioned that a standing Bureau of Mines instruction did not allow him to answer even simple inquiries from Members of Congress. He stated that he could refer them either to Mr. East or to us. The writer suggested that all such inquiries should be referred to Washington for reply. The matter was broached by Mr. Traver because the Operating Committee had recently written him suggesting that he answer simple Congressional inquiries directly, keeping in mind DMEA's policy and instructions issued by his superior.

The field report has been received which recommends denial.

George C. Selfridge

GCSelfridge/esf
11/27/56
cc to: Docket
Admr. R. File
Mr. Ellis
Mr. Selfridge

Mr. George Selfridge

RECEIVED
26 1956
D.M.E.A.

DN 235 BUR MIES 11-23-56 2-11

CHAIRMAN, OPRXX OPERATING COMMITTEE, DMEA

THIS IS TO CONFIRM MY AIRMAIL MEMORANDUM OF 11-21 ARRANGING FOR AND ASSUMING YOUR AVAILABILITY FOR A CONFERENCE TELEPHONE CALL THE FIELD TEAM WILL MAKE TO YOU 11-26 AT 11 A.M., YOUR TIME, WITXXX REFERENCE TO CONTRACT E929, BLACK JACK, DOCKET DMEA-4390 WATERS AND CUNDALL, AND DOCKET DMEA-4429 SUNBURST MINING CORP. REFER ESPECIALLY TO OPERATOR S REQUEST ON CONTRACT E929 WITH MY MEMORANDUM OF 21.

W M TRAVER

Denver, Colo.

Code 700

Selfridge
Johnson
Mottendorf

NOV 23 1956

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

Air Mail

Re: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Corporation
Canyon Claim Group, et al.
Garfield County, Utah

Dear Mr. Traver:

Reference is made to your November 8, 1956, memorandum concerning our letter of November 5 regarding communications with Congressman Thomas.

DMEA Circular 2 was primarily written for the guidance of the Washington staff when DMEA was organized. Its purpose was chiefly to control the evolution of policy and criteria matters. It is now obsolete in part as are many of the other circulars. We therefore suggested, which was equivalent to authorizing you, that you answer similar inquiries received by your office. In replying to such inquiries, you can be guided by our past policy and also instructions issued by your own organization.

Perhaps it would be best not to rescind the instructions to the field offices.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

P. F. Yopes (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

GCSelfridge/esf - 11/23/56
cc to: Docket
Code 700
Admr.'s Reading File
Operating Committee
Mr. Knouse
Messrs: JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JCHosted, Rm. 3210, GSA
GCSelfridge

RCK.

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

11/27/56

224 New Customhouse
Denver 2, Colorado

AIR MAIL

November 19, 1956

RECEIVED
NOV 21 1956
D.M.E.A.

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region III

Subject: Joint Report of Examination Docket DMEA No. 4429 (Uranium) Sunburst Mining Corporation (Joe A. King, Jr., et al claims) Garfield County, Utah

Enclosed are the original and three copies of a joint Engineering and Geologic Report on the subject property.

Because uranium deposits in the vicinity of the Applicant's property have all been small, although fairly high grade, erratically distributed without known trends thus making a drilling program for exploration practically impossible, at a reasonable cost, the examining team recommends denial.

The Field concurs in this recommendation.

Congressman Albert Thomas should be notified of the decision because of his previous interest in the application.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
11-23-56
(date)

MINERAL DEPOSITS
DMEA
RECEIVED
NOV 16 1956
U. S.
GEOLOGICAL SURVEY

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

RECEIVED
NOV 21 1956
D.M.E.A.

NOV 19 1956
REGION III
DENVER, COLORADO

TRANSMITTED
NOV 19 1956

November 19, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman EMH
J. F. Shaw JFS

From: F. M. Byers, Jr.,

Subject: Transmittal of joint geologic-engineering report, DMEA docket 4429 (Uranium), Sunburst Mining Corporation, (Joe A. King, Jr., et al claims), Garfield County, Utah.

The Sunburst Mining Corporation, Grand Junction, Colorado, has proposed a drilling program with DMEA assistance, at a total cost of $54,090.63, with Government participation at 75 percent, or $40,567.91. A field examination was made on October 23, 1956, by J. William Hasler of the Geological Survey and M. H. Salsbury of the Bureau of Mines. The geologist's portion of the report was largely written by W. B. Gazdik of the Survey and, therefore, his name appears on the report.

The proposed project area adjoins the Ekker property on Shootaring Creek, northwest of Mt. Ellsworth in the Henry Mountains, Garfield County, Utah. A large tonnage of high-grade uranium ore has been mined and shipped in small lots from the Ekker property over a period of 30 years.

The uranium deposits in the vicinity of the applicant's property are found in the lower 100 feet of the Salt Wash member. The proposed DMEA project is based on the possible occurrence of small, high-grade deposits of the type mined by Ekker on the adjoining property. The lack of any known trends, the erratic distribution, and the small size of the known ore deposits in this area indicate that no drilling program could be proposed to explore the area adequately at a reasonable cost. Individual ore pods reach a maximum size of 10 feet by 25 feet in plan; consequently, the drilling target is much smaller than the minimum drill hole spacing that would be practical. The examining team, therefore, recommends denial of the application under docket DMEA 4429. I concur with the recommendations of the examining team.

Reviewed by
DMEA OPERATING COMMITTEE
11-23-56
(date)

DMEA 4429 11/15/56

Enclosed is the applicant's brochure and the required number of copies of the report.

F. M. Byers, Jr.
For J. William Hasler,
Geologist

FMB/mlr
Enclosures
12 reports w/figures

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

FOR UNITED STATES GOVERNMENT USE ONLY

RECEIVED
NOV 21 1956
D.M.E.A.

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED
NOV 19 1956

DMEA 4429

Sunburst Mining Corporation

Joe A. King, Jr., et al group of claims

Garfield County, Utah

Uranium

Joint Engineering and Geologic Report

by

M. H. Salsbury
Bureau of Mines

W. B. Gazdik
Geological Survey

November 1956

Reviewed by
DMEA OPERATING COMMITTEE
11-23-56
(date)

CONTENTS

	Page
Introduction and Summary	1
Acknowledgments	4
Location, Topography, and Climate	5
History and Production	6
Ownership	8
Present status	10
Geology	12
Ore Deposits	13
Ore Reserves	15
Proposed exploration	15
Conclusions and recommendations	16

ILLUSTRATIONS

Figure		Follows page
1.	Location map, Joe A. King, Jr. group of claims, Garfield County, Utah	18
2.	Map showing Joe King, Jr. et al group of claims, Garfield County, Utah	18

DMEA 4429

RECEIVED
NOV 21 1956
D.M.E.A.

INTRODUCTION AND SUMMARY

The Sunburst Mining Corporation, care of Mincon P. O. Box 270, Grand Junction, Colorado, applied for Government assistance to explore for uranium August 16, 1956, on 99 located claims, a peak of the Henry Mountains, in Garfield County, Utah. A program of non-core and core drilling in two phases requiring a maximum of 36,610 feet of wagon drilling, 4,500 feet of rotary non-core drilling and 1,650 feet of core drilling was proposed at a maximum estimated cost of $54,090.63. Government participation at 75 percent would be $40,567.91.

A field examination was made on October 23, 1956, by a DMEA examining team, accompanied by J. William Hasler of the Geological Survey, D. James Edson, Jr., representing the applicant's consultant, Mincon; DeChearo, president of the company, and Frank Stabler, a stockholder in the company. M. H. Salsbury represented the Bureau of Mines.

The proposed project area adjoins a large block of claims on Shootaring Creek operated by Harold Ekker of Hanksville, Utah, from which a substantial total tonnage of very high grade uranium ore has been mined and shipped in small lots over a period of thirty years.

Known uranium deposits in the vicinity of the applicant's property are found in the lower 100 feet of the Salt Wash member of the Jurassic Morrison formation. The Salt Wash member is about 350 feet thick and consists principally of light gray, medium grained, lenticular sandstone units.

The beds in the area dip about 4° NW and strike about N. 15° E. The estimated depth to the base of the ore-bearing sandstone ranges from 20 to 350 feet and averages about 250 feet. Mineralized rock consists mostly of sandstone impregnated with uranium and vanadium minerals. The ore bodies occur as thin high-grade discontinuous layers and pods of mineralized rock that have an erratic spatial distribution. The origin of the ore and factors that controlled its localization are not known. Overlying altered mudstone lenses and primary sedimentary structures may be related to localization of ore bodies although such features do not appreciably increase the size of the drilling target.

The property rights of the applicant consist of leases on the groups of claims which were located and are now owned by Joe A. King, Jr., of Grand Junction, Colorado, in partnership with three different groups of individuals. Lease terms are reasonable, the claims appear to be valid, and the applicant's rights satisfactory. No evidence of conflicts was found during the field examination. The applicant's representatives stated that boundary agreements with owners of adjoining claims were in effect where some conflicts occur.

The proposed DMEA project is based on the possible occurrence of small high-grade deposits of the type mined by Ekker on the adjoining property. Three possible ore trends crossing the property are suggested by the applicant, none of which can be substantiated by the results of previous exploration either on the King group of claims, or on adjoining properties. The absence of known trends, low frequency of occurrence,

erratic distribution, and small size of known ore deposits in this area indicate that it would be very difficult to devise a drilling program to explore the area thoroughly at a reasonable cost. Individual ore bodies are as much as 10 feet by 25 feet laterally and, in one occurrence, a number of these pods are found along 200 feet of outcrop exposed by stripping. Minable ore has not been found to extend over 50 feet back from the cliff face. Alteration in the mudstones overlying the ore strata and bleaching of the sandstone does not extend beyond the ore limits. Consequently, the drilling target is much smaller than the minimum drill hole spacing which it would be practical to use.

There are many exposures of lower Salt Wash outcrops in the numerous canyons traversing the King group of claims and very little favorable sandstone or mudstone is in evidence. Most of the drilling done to date has been concentrated behind mineralized outcrops without discovering worthwhile mineralized material. The two occurrences which have been further explored underground have not been found to be minable. The tenor of the mineralized material in them is lower than that found in the Ekker deposits to the south. There is no reason to believe that exploration of several other mineralized outcrop exposures either by drilling behind them or by underground exploration will result in more significant mineralized material. This also applies to drilling exploration in areas away from the rims where such work, in the absence of any known trends of mineralization, would be of a prospecting nature, with the chances of penetrating worthwhile mineralized rock poor.

It should be pointed out that all the ore which has been mined to date on the Ekker claims has been found in outcrops. No attempt has been made to carry exploration behind the rims either underground or by drilling. The operation has been profitable to date because exploration costs have been low and the grade of ore recovered extremely high. It is doubtful that the same grade of ore in small amounts could be mined profitably at a distance from the rim without the use of ore guides to keep the required costs of exploration low.

Denial of the application under docket DMEA 4429 is recommended.

ACKNOWLEDGMENTS

The applicant submitted a well prepared application with maps, in complete records of previous drilling, and an itemized cost estimate. Bids from drilling contractors were not included.

Personnel of the Atomic Energy Commission and the Geological Survey familiar with the Henry Mountains area were consulted, as was a Geological Survey publication.[1/]

Production records from properties in the area were obtained from the Atomic Energy Commission.

1/ Charles B. Hunt, Paul Averitt and Ralph L. Miller, 1953, Geology and Geography of the Henry Mountains Region, Utah, U. S. Geol. Survey Prof. paper 228, 234 pp.

LOCATION, TOPOGRAPHY AND CLIMATE

The Joe A. King, Jr., group of claims are in unsurveyed sections 2, 3, 10, 11, 14 and 15, T. 35 S., R. 11 E., Salt Lake Meridian (fig. 1). They are 53 miles south of Hanksville, Utah, and are reached by traveling over Utah Highway 95, a graded road, and a connecting access road along the eastern flank of the Henry Mountains. The last eight miles of access road to and across the property are poor. Hanksville, Utah is 60 miles south of Green River, Utah, the nearest rail point, over Utah Highway 24, forty miles of which has been recently hard surfaced. Grand Junction, Colorado, the nearest major source of supplies is 218 miles northeast of the property.

The nearest accessible buying stations for uranium ores are at Moab, Utah, and Grand Junction, Colorado.

Power, mining supplies, water, labor, housing and ore marketing present no unusual problems. The rather remote location contributes to a high cost of operation, and low-grade ores cannot be mined profitably. Ore from the Ekker property is sold to the Grand Junction, Colorado plant of the Climax Uranium Company under a contract which calls for payment of shipping costs by the buyer as long as a high vanadium content is maintained.

The elevation varies from 4800 to 5200 feet over a highly dissected topography with numerous steep walled canyons cutting through the Salt Wash sediments which form the surface. The surface drops off from the high points in a series of benches to the canyon floors where lower Salt Wash or Summervile sediments are exposed.

On the Ekker property (fig.2) the potential ore-bearing horizons are as much as 75 feet above the floor of the canyons, often in a vertical cliff, difficult of access. On the King group of claims, the potential ore horizons are closer to the canyon floor. Drill sites back of the rim exposures can be prepared at moderate cost.

The climate at the base of the Henry Mountains is arid and characterized by moderate winters and extremely hot summers. Midday temperatures up to 110° F. are reached in the canyons. The area is subject to violent storms of short duration and maintenance of roads, many of them on the canyon floors, is difficult.

HISTORY AND PRODUCTION

Mining operations have been carried on in the vicinity of the Henry Mountains since pioneer days. Vanadium has been mined since the 1920's. The Ekker operation dates from this period and has furnished a substantial part of total production in the area. Activity has increased since 1950 but, to date, no large deposits have been found.

At the present time there are three operations in the immediate vicinity of the King group of claims: Ekker to the south, the Lamar claims to the north, and the Del Monte claims to the east. The Ekker operation is currently producing about fifty tons of high-grade ore per month. The Lamar property is not in production and the Del Monte claims are making a small production from deposits similar to those mined by Ekker.

Following are production figures on the applicant's Rats Nest No. 1 claim as submitted, and on the Ekker's and Del Monte groups as shown in Atomic Energy Commission records:

Production by Sunburst Mining Corporation to date.

Claim	Tons	Percent U_3O_8	Percent V_2O_5
Rats Nest No. 1	7.8 1/	0.97	3.05

1/ AEC record shows dry weight as 7.45 tons.

Production from Harold Ekker claims from 1953 to date

Claim	Tons	Percent U_3O_8	Percent V_2O_5
Agate No. 8	7	1.34	2.67
Agate No. 1	16	2.60	4.07
Agate No. 9	217	1.84	3.05
Lucky Strike No. 1	367	1.59	3.14
Lucky Strike No. 2	8	1.24	2.44
Lucky Strike No. 8	81	1.49	3.12
Lucky Strike No. 9	24	1.49	3.06
Lucky Strike No. 10	242	1.28	2.23
Deep Canyon No. 1	3	6.90	6.26
Lone Eagle Nos. 1,2, and 3	208	1.45	2.99
Eagle No. 1	351	0.29	2.36
Total	1,524	1.27	2.79

Production from Del Monte claims, July 1, 1955 to June 30, 1956

Del Monte	34.16	0.75	2.00
Del Monte No. 2	94.18	0.92	1.98
Del Monte No. 3	55.71	1.02	2.64
Del Monte No. 5	96.58	0.98	2.03
Del Monte No. 5 and 6	13.04	1.03	1.84
Totals	293.67	0.94	2.12

Ore from the Ekker property has come from one or more small deposits on each of 13 claims while the Del Monte shipments have come from six different claims. Thus the production from a single claim represents the total from one or perhaps two small deposits which have been mined out.

OWNERSHIP

The ownership of 77 of 99 claims in the proposed DMEA project is vested in Joe A. King, Jr., and various individuals who are in partnership with him in these claim groups. The property boundary is shown on figure 2.

(1) Rats Nest Nos. 1 and 2, Canyon Nos. 1 through 20 inclusive, owned by Joe A. King, Jr., R. R. McColm, John R. Steele, and R. P. Wilson.

(2) David Nos. 1 through 6 inclusive, owned by Joe A. King, Jr., David M. King, Joseph Ted King and Darrell C. Malvy.

(3) David Nos. 7 through 9 inclusive, Warren Nos. 1 through 9 inclusive, Gnat Nos. 1, 2, 3, 6, 7, 8 and 9, Bert Nos. 1 through 13 inclusive, Teddy Nos. 1 through 12 inclusive, Dingo Nos. 1 through 4 inclusive, Jerry No. 1.

The 49 claims in group (3) are owned by Joe A. King, Jr., David M. King, Warren D. Lowe, and Bert Allred.

The claims were all located in the period March 12, 1954 to June 18, 1954 and recorded between March 18, 1954 and June 24, 1954. Amended locations were filed on August 8, 1955 after the claims were resurveyed. Proof of labor on the entire group of claims for the year ending June 30, 1956, was posted at the Rats Nest No. 1 workings. Another amended location notice posted on the Rats Nest No. 2 claim was dated September 10, 1954.

A check was made in the field of claim corners and discovery monuments on the Rats Nest Nos. 1 and 2 claims. Location procedures appear to have been satisfactory and the claims valid. A check of the records at the county courthouse at Panguitch, Utah was not made.

The applicant has a lease from Joe A. King, Jr., and associates valid so long as lease terms are met. It lists 80 claims of which 76 claims appear to be valid and are shown on the map accompanying the brochure. Four claims, Bert No. 11 and Teddy Nos. 13, 14, and 15 were found to be in conflict with adjoining locations and were abandoned. At the time of the resurvey during the summer of 1955, the 22 Creel claims were located to cover open ground not covered by the original locations. Most of the Creel claims are fractional. By the terms of the lease with Joe A. King, Jr., and associates, they were located in King's name and became the property of King and associates, and are leased to Sunburst Mining Corporation.

The lease provides for a rental payment of $4,000.00 and a royalty of 10 percent on ore returns, less development and haulage allowances, payable to Joe A. King, Jr., as agent for the various partners. It is not clear in the lease provisions whether royalty is to be divided equally among all the partners, or only among the partners with an interest in claims from which ore might be mined.

PRESENT STATUS

Exploration to date on the claims has consisted of short adit tunnels on the Rats Nest No. 1 and Teddy No. 1 claims and 122 drill holes, a few of them cored, ranging from 30 to 190 feet in depth.

The rim workings on the Rats Nest No. 1 claim consist of adits each 25 feet in length.

A few tons of high grade ore have been mined. All minable ore in sight has been taken out. Drill holes on the Rats Nest No. 1 claim penetrated uranium bearing material up to 0.23 percent eU_3O_8 in the general area behind the rim workings, but no worthwhile target for a drift from the workings is indicated.

On the Teddy No. 1 claim, an adit was driven about 25 feet following a small stringer of ore found at the outcrop. The work did not result in finding any ore. A total of 23 holes are listed as having been drilled on the Teddy No. 1 claim but the applicant's map shows only eight holes on this claim. The highest value was 0.12 percent U_3O_8 radiometrically. No worthwhile targets for further drilling or underground exploration are indicated here.

The records of the 122 holes reported to have been drilled have been poorly kept. No geologic logs were made, radiometric probing results of only 72 holes were reported, and the locations of only part of the holes are shown on the applicant's map. A few unspecified holes were cored. Results of drilling were largely negative, judging from the incomplete data.

The applicant has put in a partial network of drill roads and at the time of the field examination, was engaged in putting a road through the east-west canyon across the center of the claim group. There are two "shows" in the canyon walls on the Warren No. 1 claim (fig. 2) consisting of stringers a few inches wide. On the north wall of the canyon a bed of mineralized material 3 to 4 inches wide had a contact of 1.35 percent U_3O_8 and 1.47 percent V_2O_5 On the opposite side of the canyon, which is about 20 feet wide, the continuation of the same mineralized bed contained 0.14 percent U_3O_8 and 0.30 percent V_2O_5. These are chemical analyses furnished by the applicant. Radiometric results obtained by the examining team verify these values.

Slight mineralization was also seen in the same canyon on the Canyon Nos. 7 and 8 claims which adjoin the Warren No. 1 claim on the east.

Mining and Milling Equipment and Other Facilities

The applicant owns a truck-mounted Failing drill for dry rotary or diamond drilling, a portable air compressor, underground drilling equipment, one mine car and rail, and an International TD 18 tractor with bulldozer. There is a fully equipped camp for 12 men and a source of good water at the Star Ranch spring at the base of Mount Hillers, 7 miles north of the King group of claims.

GEOLOGY

GEOLOGY

The Joe King, Jr., et al group of claims lies on the northwest flank of Mt. Ellsworth, one of the five structural domes that form the Henry Mountains. The sedimentary rocks exposed in the vicinity of the claims in ascending order consist of the Summerville and Morrison formations of upper Jurassic age. Quaternary alluvium is present locally.

Known uranium deposits in the area are contained in the Morrison formation of Jurassic age. In the Henry Mountains district the Morrison formation is divided into two members, the Salt Wash member and the overlying Brushy Basin member. On the applicant's property the Brushy Basin member has been eroded and the Salt Wash member crops out over most of the surface. The underlying Summerville formation is partly exposed in some of the numerous canyons that dissect the area.

The Summerville formation consists principally of dark reddish brown evenly bedded shale and fine-grained sandstone with thin gypsum veins scattered throughout the formation. The Summerville formation is unconformably overlain by the Salt Wash member of the Morrison formation. The contact with the overlying Salt Wash member is a gradational one and difficult to recognize because the basal beds in the Salt Wash member closely resemble those in the Summerville formation.

The Salt Wash member is about 350 feet thick in the general vicinity of the subject claims and consists of sandstone, siltstone and mudstone beds.

About 90 percent of the Salt Wash member is made up of sandstone beds that are lenticular and locally cross laminated. Cut and fill structures, ripple marks and current lineations suggest that the Salt Wash was deposited under fluvial conditions. Small amounts of interstitial clay and thin seams of mudstone are included in the sandstone units. Red brown mudstone beds as much as 5 feet thick are present in the upper Salt Wash member but the lower part consists mostly of thick, medium grained sandstone lenses and a few mudstone interbeds a few inches to three feet thick.

The beds in the area dip about 4° NW and strike about N. 15° E. No faults were found on the property during the course of the field examination. The estimated depth to the base of the ore-bearing sandstone on the Joe King Jr. group of claims ranges from 20 to 350 feet and averages about 200 feet.

ORE DEPOSITS

Known ore deposits in the general area of the applicant's property are found in the lower part of the Salt Wash member of the Morrison formation. Mineralized rock consists principally of sandstone impregnated with uranium and vanadium minerals. Smaller amounts of these minerals are found in mudstone seams. Iron stains including limonite are abundant in the sandstone but pyrite or copper sulphides were not observed.

The ore bodies in the vicinity of the applicant's claims occur as thin high-grade discontinuous layers and pods of mineralized rock that have an erratic spatial distribution. Ore bodies of this type are being

selectively mined on the Harold Ekker property adjoining the applicant's claims on the south. The ore is being mined from two stratigraphic horizons about 5 feet and 45 feet above the base of the Salt Wash member. The numerous adits scattered along the canyon walls range in length from a few feet to 50 feet and are indicative of the small size and scattered nature of the ore bodies in the area. Individual ore bodies are a few inches to several feet thick and a few feet to as much as 25 feet long. According to AEC production records, 1,524 tons of ore averaging 1.27 percent U_3O_8 and 2.79 percent V_2O_5 were shipped from the Ekker property from 1953 to the present time.

The origin of the ore and factors that controlled its localization are not clear. Relatively thin green mudstone layers from a few inches to three feet thick overlie mineralized areas. The altered mudstone layers, however, do not extend beyond the limits of mineralized ground for any appreciable distance and therefore do not increase the size of the drilling target. Primary sedimentary structures in the ore-bearing sandstone may be related to localization of ore. The best ore bodies on the Ekker property appear to be located where the host rock is crossbedded. Small amounts of carbonaceous material including asphalt are apparently associated with uranium minerals.

Although the Salt Wash member is extensively exposed on the subject property in numerous canyons, mineralized rock at the outcrop is notably absent. Exploratory drilling behind the few known mineralized rim exposures failed to find significant mineralized rock.

ORE RESERVES

There are no known ore reserves on the applicant's property, nor on adjoining claims. The exploration and mining methods used on the Del Monte and Ekker properties do not provide data on which reserve calculations can be based.

PROPOSED EXPLORATION

The applicant has proposed a drilling program in two phases at an estimated total cost of $54,090.63. Government participation at 75 percent would be $40,567.97.

Phase I would consist of 198 wagon drill holes requiring an estimated 24,310 feet of drilling in holes 200 feet apart along irregularly spaced and oriented fences where drilling depths are under 200 feet. This is the maximum depth at which the applicant believes it would be feasible to mine ore deposits of the type which have been found on the Ekker claim. The object of Phase I would be to locate areas which are mineralized and/or contain favorable sandstone according to the usual Geological Survey criteria;in phase II, mineralized areas would be further drilled by non-core and core methods, and favorable but unmineralized areas,wagon-drilled on closer centers in an attempt to find mineralized rock. Phase II would require an estimated 18,450 feet of all types of drilling in 150 holes.

The proposed exploration plan is actually an attempt to cover all the claim area where the potential ore-bearing horizon of the Salt Wash

member of the Morrison formation 45 feet above the Summerville formation is present, and not under more than 200 feet of cover. The grid pattern is modified to place drill sites on existing roads where possible, and this results in a rather irregular hole pattern. Two objectives set forth by the applicant are to more fully explore known favorable areas delineated by earlier drilling, and to drill behind surface exposures of mineralization, but the drill pattern proposed does not appear to stress any particular area.

Exploration costs in the applicant's estimate are reasonable. It is proposed to contract bulldozing and drilling although the applicant's equipment has been used in previous work. The required three bids from independent contractors were not submitted.

In view of the recommendations in this report, an engineering estimate is not included, and the applicant has not been requested to submit drilling bids.

CONCLUSIONS AND RECOMMENDATIONS

The proposed project is based on the assumption that small high grade ore deposits are present on the King group of claims and that they can be located successfully by drilling.

The examining team has reached conclusions which are not in accord with the applicant's assumptions. In the first place the frequency of occurrence of the Ekker deposits and the small targets presented either by the high grade pods themselves or by the green mudstone, which overlies but does not extend beyond the ore laterally, make a drilling

project such as the one proposed rather unsuitable. In the absence of known mineralized trends on which to base a drilling pattern, drill holes on the proposed grid would penetrate ore merely by chance. The applicant has already drilled behind many of the mineralized outcrops with negative results, and the proposed drilling appears to be an extension of this work, but not related to specific mineralized outcrops. There is no reason to expect that the proposed drilling will give any better results than the earlier work. A drill pattern on close enough centers to thoroughly explore the claims would have to be laid out on 100-foot centers or even less, and would be prohibitively expensive.

There are many exposures of the potential ore-bearing Salt Wash member in canyons traversing the claims, and examination shows them to be generally unfavorable except for small mineralized occurrences in the east-west canyon crossing the Warren No. 1, and Canyon Nos. 7 and 8 claims. It is concluded that there is less favorable ground, and that the frequency of occurrence of ore deposits on the King group of claims is probably less than on the Ekker property. Further drilling exploration is not believed necessary in order to evaluate the property. If it could be shown that drilling behind small ore outcrops is the best way to explore them, a limited drilling project confined to those areas immediately behind outcrops as yet unexplored could be set up. However, this procedure has not been successful in the earlier drilling. A preferable method of investigating these mineralized exposures is by underground from the rim. This is precisely the system used on the Ekker property,

where exploration at the rim follows prospecting for mineralized rock in the outcrops.

Extensive drilling on the King group of claims would probably result in finding some small ore deposits, but it is concluded that the amount found would be insignificant and not commensurate with the cost of exploration.

Denial of the application under docket DMEA 4429 is recommended.

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
NOVEMBER 1956
DOCKET 4429

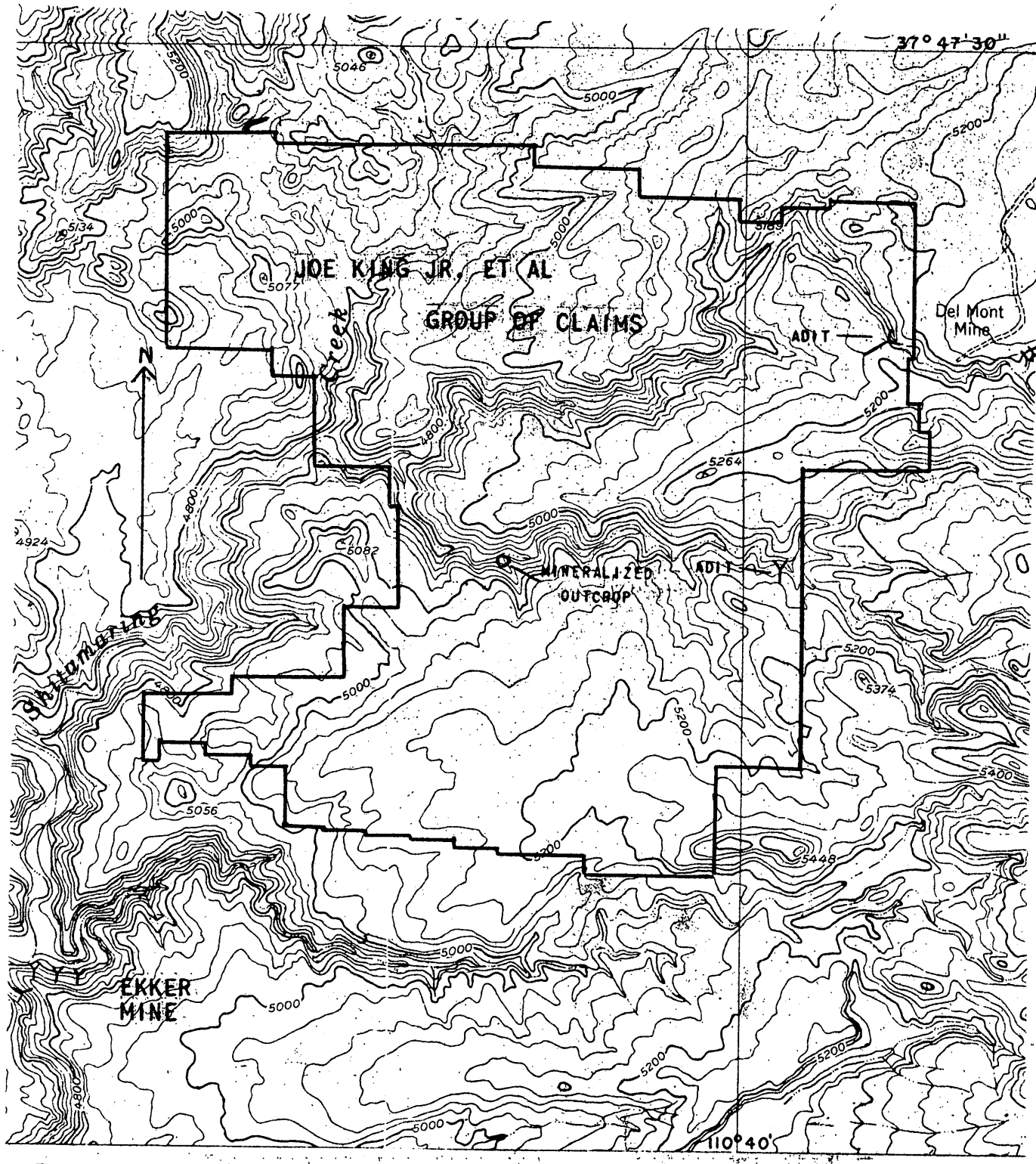


FIGURE 2.--MAP SHOWING JOE KING JR. ET AL GROUP OF CLAIMS, SUNBURST MINING CORPORATION, GARFIELD COUNTY, UTAH.

1000 0 3000 FEET

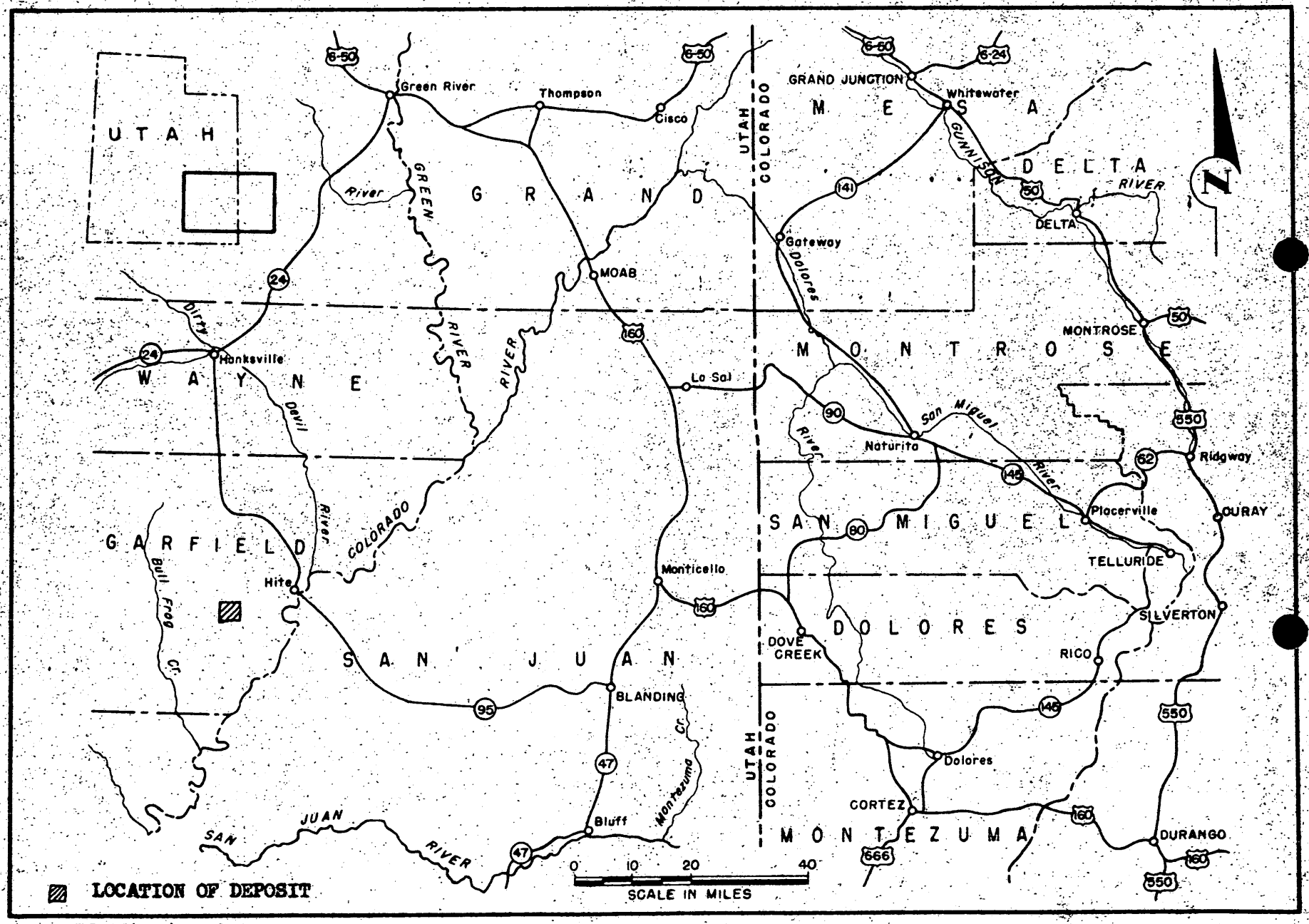


FIGURE 1 - LOCATION MAP, JOE A. KING, JR., GROUP OF CLAIMS, SUNBURST MINING CORPORATION, GARFIELD COUNTY, UTAH. DMEA 4429

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

RECEIVED NOV 23 1956 D.M.E.A.

AIRMAIL

224 New Customhouse
Denver 2, Colorado

November 21, 1956

Memorandum

To: Chairman of the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: (1) Docket DMEA-3800 (Manganese), Contract Idm-E929, Black Jack Mining Co., Juab County, Utah
(2) Denied Docket DMEA-4390, A. B. Waters and Glenn Cundall, Albany County, Wyoming
(3) Docket DMEA-4429 (Uranium), Sunburst Mining Corp., Garfield County, Utah (my memorandum November 8, 1956)

Enclosed is a copy of the Operator's request for an amendment to the contract Item (1) of the subject three dockets. Reproduction of the attached maps is poor but of small importance.

You have file copies of all correspondence relative to Items (2) and (3).

It is the Field Team's intention to call you on the telephone on Monday morning, November 26, 1956 at 11:00 A. M. your time, for a conference regarding all three items.

Original signed by
W. M. TRAVER

W. M. Traver

Enclosures

WMT/pw

cc: E929
DMEA-4390
DMEA-4429
Townsend
Traver
Harshman
Chron

700

Mr. C. O. Mittendorf

RECEIVED
NOV 14 1956
D.M.E.A.

DN 235 BUR MINES 11- 13-56 1-44

ADMINISTRATOR, C O MITTENDORF, DMEA

RE DOCKET DMEA 4429, SUNBURST MINING CORP., FOLLOWING TELEGRAM RECEIVED TODAY. QUOTE PLEASE ADVISE APPROXIMATE DATE YOU CAN HAVE REPORT READY ON SUNBURST MINING CORP., WILL GREATLY APPRECIATE EXPEDITING MATTER. REGARDS /SOGNED/ ALBERT THOMAS MC END QUOTE. HASLER STATES JOINT DENIAL REPORT WILL BE SUDMITTED SO WE CAN HAVE IT IN YOUR HANDS BY ABOUT TUESDAY, NOV. 20. PLEASE HANDLE THE SITUATION AS YOU SEE FIT AND ADVISE.

W M TRAVER

Denver, Colo.

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

November 13, 1956

Memorandum

To: The Files

From: F. L. Knouse, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Corp.
Canyon Claim Group, et al.
Garfield County, Utah

Congressman Thomas telephoned this date, November 13, inquiring as to the status of the application. He was informed by Mr. Knouse that a field examination was scheduled and made on October 23, 1956.

/s/ F. L. Knouse

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

RECEIVED NOV 13 1956 D.M.E.A.

224 New Customhouse
Denver 2, Colorado

November 8, 1956

Memorandum

To: Chairman of the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4429 (Uranium) Sunburst Mining Corporation, (Canyon Claim Group, et al), Garfield County, Utah

Reference is made to your letter of November 5, 1956 regarding communications with Congressman Thomas on the subject loan application. Also with regard to the last paragraph of the letter wherein you suggest that we make reply directly in future similar cases while the application is in the Region III office sending copies to Washington.

This is not in agreement with DMEA Circular 2, Item 5 (C) which states:

"5. The heads of divisions, the Chief Counsel, and the Administrative Officer are authorized to sign correspondence originating in the divisions and offices under their direct supervision, except that the following classes of correspondence shall be referred to the Deputy Administrator for signature or reference to the Administrator.

C. Correspondence addressed to the Secretary or members of the Secretary's staff, Members of Congress, heads of other Federal agencies, heads of other Interior agencies, and officials of State and local Governmental units."

So far as we have been informed, Circular 2 has not been rescinded nor superceded.

As Region III Executive Officer, I have in the past been scrupulously careful, possibly unduly so, in adhering to the instructions in the quoted Circular. All field offices have been instructed

in every case to refer inquiries from Congressmen through this office to the Administrator for reply as I have done myself, and therefore I would be reluctant to rescind those instructions.

You will recall this situation came up September 15, 1955 in regard to Docket DMEA-3903 (Uranium), R. M. Matson et al, Rio Arriba County, New Mexico. In that instance, I referred a telegram from Congressman Patman to the Administrator for reply and on September 17, Regional Director East wrote Congressman Patman himself with copy sent to Administrator Mittendorf and Director Forbes.

Before any further action is taken in this matter, I would like to discuss it on the phone either with you or the Administrator at your convenience.

W. M. Traver

W. M. Traver

Code 700

FILE COPY

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

NOV - 5 1956

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

Re: Docket No. DMEA-429 (Uranium)
Sunburst Mining Corporation
Canyon Claim Group, et al.
Garfield County, Utah

Dear Mr. Traver:

This is with reference to your memorandum, dated October 30, 1956, in which you inquire what action was taken by this office when Mr. Townsend's teletype, dated October 16, concerning the subject project, was received.

On October 17 we telephoned the office of Congressman Thomas and advised his secretary of the contents of the teletype. His secretary stated that if written verification of the information was necessary we would be advised. Since Mr. Townsend's teletype or Congressman Thomas' secretary did not request written verification of the action taken, there were no written communications concerning this matter.

We suggest that, when an inquiry is made to your office concerning the status of an application and said application is in your office for action, you answer directly and send a copy of the inquiry and your reply to this office. If, however, the application or the Field Team's report has been forwarded to this office, the inquiry should be forwarded to us for reply.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

N. E. Nelson

Member, Geological Survey

FLKnouse/gla/izm 11-5-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
Operating Committee
MEssrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

11-1-56

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

RECEIVED NOV 1 1956 D.M.E.A.

224 New Customhouse
Denver 2, Colorado

October 30, 1956

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4429 (Uranium), Sunburst Mining Corporation, (Canyon claim group et al), Garfield County, Utah

During my absence from the office on October 16, 1956, we received and forwarded to you a telegram from Albert Thomas, M.C. concerning our expediting the Report of Examination on the subject loan application. We reported the telegram to you by teletype on the same date received. The field examination was made as scheduled on October 23.

Please advise of your reply to Congressman Thomas and furnish copies for our file.

W. M. Traver

W. M. Traver

Chairman, D.M.E.A. 10/16/56
gla

RECEIVED
OCT 16 1956

DN 235 BUR MINES 10-16-56 10-24

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 4429, SUNBURST MINING CORP., FOLLOWING TELEGRAM RECEIVED TODAY. QUOTE-- KINDLY ADVISE WHEN REPORT CAN BE EXPECTED ON SUNBURST MINING CORP. AM VERY MUCH INTERESTED. APPRECIATE EXPEDITING MUCH AS POSSIBLE. /SIGNED/ ALBERT THOMAS, M.C. END QUOTE. DOCKET SCHEDULED FOR FIELD EXAMINATION OCTOBER 23, WEATHER AND WORK-LOAD PERMITTING. MATTER REFERRED TO YOU FOR REPLY TO ALBERT THOMAS, M.C. FOR PRIOR COMMUNICATION TO HIM, REFER TO OUR MEMORANDUM OF SEPTEMBER 28 TO ADMINISTRATOR AND HIS LETTER TO MR. THOMAS OF OCTOBER 2, 1956.

J W TOWNSEND

10-19-56

Information was telephoned to office of Albert Thomas in Washington and his secretary Miss Bumgarten advised if a written verification of the above was necessary she would advise me.
FHK

Denver, Colo.

FILE COPY
SURNAME:

F L Knouse
Ellis

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

OCT - 2 1956

Hon. Albert Thomas
House of Representatives
Room 212, House Office Building
Washington 25, D. C.

Re: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Corporation
Canyon Claim Group, et al.
Garfield County, Utah

My dear Mr. Thomas:

Reference is made to your letter of September 27, 1956, to Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region III, concerning the status of the subject application.

I have been informed by Mr. Traver under date of September 28, that an examination of the property will probably be made during the week of October 1 to 5. Otherwise, the schedule of processing the application is the same as was outlined in my letter of September 20.

Sincerely yours,

C. O. Mittendorf

Administrator

FLKnouse/bih
10/2/56
cc to: Docket
Adm. Reading File
DMEA Field Team, Reg. III (2)
Code 700, Mr. Knouse
Messrs. JECrawford, Room 3643
THKiilsgaard, Room 5224
JOHosted, Room 3210, GSA

R.C.L.

10/1/56 gla

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

RECEIVED
OCT - 1 1956

224 New Customhouse
Denver 2, Colorado

VIA AIR MAIL

September 28, 1956

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4429 (Uranium), Sunburst Mining Corporation (Unpatented mining claims on unsurveyed land in Secs. 2, 3, 10, 11, 14, and 15, T 35 S, R 11 E), Garfield County, Utah.

Attached are two copies of a letter from Honorable Albert Thomas, Member of the House of Representatives, Congress of the United States, with reference to expediting our field investigation of the subject application.

The application was received in this office September 12 and forwarded to the field with instructions for examination and reports on September 14.

My memorandum of September 14 still applies and we hope, depending on the work in the field, to have the Region III Field Team's recommendations in your office by about the middle of November. The Grand Junction office advises the examination will probably be made the week of October 1 - 5.

Please advise Congressman Thomas, with copies for our files.

W. M. Traver

W. M. Traver

ALBERT THOMAS
FIRST DISTRICT
HOUSTON, TEXAS

CHAIRMAN
INDEPENDENT OFFICES
APPROPRIATIONS SUBCOMMITTEE

CAPITOL
HOUSE OFFICE BUILDING

Congress of the United States
House of Representatives
Washington, D. C.

RECEIVED
OCT - 1 1956

September 27, 1956

DMEA
DEPARTMENT OF THE INTERIOR
SEP 28 1956
REGION III
DENVER, COLORADO

RE: Application for DMA Project on the Henry Mountains Properties Prepared for Sunburst Mining Corporation

Dear Mr. Travor:

In re the above application, I am wondering if you will be good enough to advise me when I can expect your report.

I know you are busy and you have many applications. However, I will greatly appreciate it if you will expedite this one.

Please advise me its status.

With best wishes and kind regards, I am

Sincerely yours,

Albert Thomas

Mr. W. H. Travor
Executive Officer
D.M.E.A. Field Team, Region 3
224 New Customhouse Building
Denver 2, Colorado

September 14, 1956

Memorandum

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

From: Acting Supt., Denver Experiment Station, Reg. III

Subject: Docket DMEA 4429 (Uranium), Sunburst Mining Corporation (Canyon claim group, etal), Garfield County, Utah

The application for Sunburst Mining Corporation, Docket DMEA 4429 was received in this office on September 14, 1956.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

JOHN F. SHAW

John F. Shaw

cc: W. M. Traver (2)
E. W. Earnhman
J. W. Hasler
M. M. Salsbury
J. F. Shaw
Sec. Op. Com. (2)

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

RECEIVED
SEP 17 1956

224 New Customhouse
Denver 2, Colorado

September 13, 1956

Memorandum

To: J. F. Shaw (2) w/brochure
Hasler

From: Field Team, Region III

Subject: Docket No. DMEA 4429 (Uranium), Sunburst Mining Corporation (Canyon Claim Group, et al.) Garfield County, Utah

Enclosed is the brochure on the subject docket. A field examination and suitable report are requested.

Also enclosed is a copy of a letter from the Chairman, Operating Committee, dated September 10, 1956, with memoranda of the review of the application by W. P. Williams and John E. Crawford.

If the field examiners recommend an exploration program, please request the Applicant to furnish bids from three drilling contractors covering the recommended drilling, and advise this office so that we may request the Applicant to obtain the required Consents To Lien.

Please return the brochure with the report of examination.

DMEA Field Team, Region III

W. M. TRAVER

By W. M. Traver
Executive Officer

Enc.

HMC:bh
cc-Sec. Op. Comm. (2)
Harshman
Docket DMEA-4429
Chron.

Surname copy

700

F. L. Kouse
Ellis
F. E. Johnson

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

SEP 26 1956

Hon. Albert Thomas
House of Representatives
Room 212, House Office Building
Washington 25, D. C.

Re: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Corporation
Canyon Claim Group, et al.
Garfield County, Utah

My dear Mr. Thomas:

Reference is made to your letter of September 10, 1956, to Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region III, concerning the application of the Sunburst Mining Corporation for an exploration project on properties located in the Henry Mountains.

I have been informed by Mr. Traver under date of September 14, 1956, that the subject application will be placed in line for action in its turn and that it is anticipated that we will receive the Field Team report in approximately 60 days. You can be assured that everything will be done to expedite the processing of the application.

I regret very much the time required to make a field examination; but due to the tremendous backlog of uranium applications in Region III, there just are not enough engineers and geologists available to examine all the properties and keep up with the other work of the Field Teams in administering current contracts during the few short months of the favorable season.

I appreciate your interest in this proposed project and will be pleased to have you call on me at any time you desire further information.

Sincerely yours,

G. O. Mittendorf

Administrator

FEJohnson/gla
9-18-56
cc to: Admr.'s Reading File
Docket
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700, Mr. Knouse
DMEA Field Team, Region III (2)

R.G.C.

9/17/56 gla

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

RECEIVED
SEP 17 1956

224 New Customhouse
Denver 2, Colorado

VIA AIR MAIL

September 14, 1956

Memorandum

To: Frank E. Johnson, Acting Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4429 (Uranium), Sunburst Mining Corporation (Unpatented mining claims on unsurveyed land in Secs. 2, 3, 10, 11, 14, and 15, T 35 S, R 11 E), Garfield County, Utah.

Attached are two copies of a letter from Honorable Albert Thomas, Member of the House of Representatives, Congress of the United States, with reference to expediting our field investigation of the subject application.

The application was received in this office September 12 and forwarded to the field with instructions for examination and reports, today. It will be placed in line for action in its turn and we anticipate that the Region III Field Team recommendations should be in your hands within approximately sixty days.

Please advise Congressman Thomas accordingly, with copies for our files.

W. M. Traver

W. M. Traver

Attachments

ALBERT THOMAS
EIGHTH DISTRICT
HOUSTON, TEXAS

CHAIRMAN
INDEPENDENT OFFICES
APPROPRIATIONS COMMITTEE

SUITE 212
HOUSE OFFICE BUILDING

Congress of the United States
House of Representatives
Washington, D. C.

September 10, 1956

SEP 17 1956

DMEA
DEPARTMENT OF THE INTERIOR
SEP 13 1956
REGION III
DENVER, COLORADO

RE: Application for DMEA Project on the Henry Mountains Properties Prepared for Sunburst Mining Corporation (4429)

Dear Mr. Traver:

I am advised by Mr. Ernest W. Ellis, Director, Rare and Miscellaneous Metals Division, Defense Exploration Administration, Washington, that the above case has today been referred to your office for investigation.

I am personally acquainted with officials of this Corporation. Since time is of the essence with them, I would consider it a personal favor if you would expedite this investigation as much as possible.

Thanking you for your courtesy and cooperation, and with best wishes, I am

Sincerely yours,

Albert Thomas

Mr. W. M. Traver
Executive Officer
D.M.E.A. Field Team, Region 3
224 New Customhouse Building
Denver 2, Colorado

Surname copy 700

FLKnouse
Ellis
Lamb
Kilgoppard
Selfridge

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

SEP 10 1956

Mr. D. James Edson, Jr., Geologist-Partner
Sunburst Mining Corporation
c/o Mincon
P. O. Box 270
Grand Junction, Colorado

Re: Docket No. DMEA-4429 (Uranium)
Canyon Claim Group, et al.
Garfield County, Utah

Dear Mr. Edson:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to:

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

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

Frank E. Johnson (a. copy)

Acting Administrator

FLKnouse/gla
9-10-56
cc to: Admr.'s Reading File
Docket copy
Code 700
Mr. Knouse
DMEA Field Team, Region III (2)

R.C.K.

Surname copy

700

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

SEP 10 1956

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

Re: Docket No. DMEA-4429 (Uranium)
Sunburst Mining Corporation
Canyon Claim Group, et al.
Garfield County, Utah

Dear Mr. Traver:

The captioned application is referred to your office for a field examination and report on the proposed project. Two copies of the application were retained by the Field Team.

Enclosed are copies of memoranda, dated September 6 and 7, 1956, from Mr. W. P. Williams, USGS, and Mr. John E. Crawford, USBM, respectively, relating to the subject project.

If the Field Team recommends an exploration program, we will require, in addition to the usual information, the following:

1. The Applicant should be requested to furnish bids from three drilling contractors covering the drilling recommended; and

2. Request the Applicant to furnish Consents to Lien covering all the land concerned, signed by all the landowners.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

FLKnouse/gla 9-10-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Knouse

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

9/7/56 glm

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

RECEIVED
SEP - 7 1956

Date 9/7/56

DMEA Docket No. 4429
DMEA Contract No.
Commodity Uranium
Name of applicant Sunburst Mining Corporation
Name of property
Location of property Garfield County, Utah
Estimated cost of project $54,090.63

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee
Subject: Review of Application
(Application, Field Team Report, etc.)

1. Date of subject document: 8/14. 2. Date received by reviewer: 9/5.

3. Prior reports on this property known to reviewer: Yes [ ], No [x].

4. Prior reports on nearby properties known to reviewer: Yes [ ], No [x].

5. Information available on past production: Yes [ ], No [x].

6. Other pertinent factors known to reviewer: Yes [ ], No [x].

7. Explain items marked yes above:

8. Factors needing special consideration:
a. Location [ ]
b. Ownership [ ]
c. Evidence of mineralization [ ]
d. Geology [ ]
e. Proposed exploration method [ ]
f. Alternate exploration method [ ]
g. Costs [ ]
h. [ ]

9. Action advised:
a. Obtain information from applicant [ ]
b. Refer to Field Team [ ]
c. Denial [ ]
d. Agree with Field Team [x] Memo 8/31
e. Disagree with Field Team [ ]
f. Suggest alternate plan [ ]
g. Request another examination [ ]
h. Approval [ ]
i. Consult with Mr. ____ at ____ AEC office.

10. Remarks: (Use back of page if necessary)
Mr. Joseph O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

9/6/56 gla

IN REPLY REFER TO:

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

RECEIVED
SEP - 6 1956

September 6, 1956

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4429 (uranium), Sunburst Mining Corporation, claims on southwest flank Henry Mountains, Garfield County, Utah.

The applicant proposes to explore for uranium and vanadium ore deposits on a tract of 99 unpatented mining claims located on the southwest flank of the Henry Mountains. The proposed project would consist of a total of 348 wagon drill and core drill holes at a total estimated project cost of $54,090.00.

Previous exploration on the property consists of two short prospect adits and 122 rotary drill holes. The work did not result in the discovery of new ore reserves. Total production from the property has been about 8 tons of high grade uranium and vanadium ore.

Ore deposits in the general vicinity of the property, as pointed out by Grand Junction personnel, are known to be small (one ton size, or thereabouts) and sporadically distributed. Other DMEA applications in the area have been denied.

Because the applicant has done considerable work on the property it would be advisable to examine the property in the field. I doubt, however, that approval for DMEA participation will be forthcoming from the Field Team.

W. P. Williams

W. P. Williams

9-5-56

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

RECEIVED
SEP - 4 1956

August 31, 1956

224 New Customhouse
Denver 2, Colorado

DMEA 4429

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Sunburst Mining Corporation (Unpatented mining claims on unsurveyed land in Secs. 2, 3, 10, 11, 14, and 15, T. 35 S., R. 11 E.) Garfield County, Utah

Enclosed are the original and three copies of a report of review by Howard F. Albee of Grand Junction Office, DMEA. No specific information on these claims is presently available, and he recommends that the property be examined in the Field. We concur in this recommendation.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

Hme

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
AUG 30 1956
REGION III
DENVER, COLORADO

RECEIVED
SEP - 4 1956

IN REPLY REFER TO:
MINERAL DEPOSITS
DMEA
RECEIVED
AUG 29 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

August 28, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: J. William Hasler
E. N. Harshman

From: Howard F. Albee

Subject: Application for DMEA aid, Sunburst Mining Corporation (unpatented mining claims on unsurveyed land in secs. 2, 3, 10, 11, 14, and 15, T. 35 S., R. 11 E.) Garfield County, Utah

The Sunburst Mining Corporation has made application for DMEA aid in the amount of $54,090.63.

The applicant claims lie in an area generally unfavorable for successful exploration by drilling. The Del Monte claims to the east of the subject property have been examined (DMEA docket 3700) and were found unsuitable for exploration by drilling even to shallow depths because of the small size (usually less than one ton) of the ore bodies. The Honey-Pot claims in Hansen Creek west of the subject property were examined (DMEA docket 3766) and were found unsuitable for exploration because of the unfavorable characteristics of the Salt Wash as a uranium host rock and nearly total absence of mineralized material.

The Harold Ekker claims to the south and west have produced uranium for a number of years from small, high-grade ore bodies. These claims have been profitably worked by one or two men using hand mining methods and by shipping carefully sorted ore.

No USGS or AEC geologists can be contacted that have a personal knowledge of the subject claims and thus no specific information is available. It is therefore recommended that the property be examined in the field.

J. William Hasler
For Howard F. Albee
Geologist

HFA/mlr

August 20, 1956

Sunburst Mining Corp.
c/o Miscon
P. O. Box 270
Grand Junction, Colorado

Subject: DMEA-4429
Re: Exploration Assistance
Joe A. King Jr.Property

Gentlemen

The receipt of your application dated August 14, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4429 and referred to the Rare & Misc. Metals Division.

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

Sincerely yours,

Allen S. Dakan
~~Robert E. Adams~~, Chief
Operations Control and
Statistics Division

August 20, 1956

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
-4429 Sunburst Mining Corp.
Joe A. King Jr, Property

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

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

August 16, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
AUG 20 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Sunburst Mining Corporation (Unpatented mining claims in Sections 2, 3, 10, 11, 14, and 15, T. 35 S., R. 11 E.) Garfield County, Utah

Enclosed are two copies of the subject application in the amount of $54,090.63. One copy of the application is being forwarded the Grand Junction Office for their review and comments concerning the advisability of making a field examination, and one copy is being retained in our file.

The Applicant has submitted no drill bids and the results of company drilling of 122 holes were apparently poor.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

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

August 16, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. W. Hasler

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Sunburst Mining Corporation (Unpatented mining claims in Sections 2, 3, 10, 11, 14, and 15, T. 35 S., R. 11 E.) Garfield County, Utah

Enclosed is the subject application in the amount of $54,090.63.

Please discuss this application with the Bureau of Mines representative in the Grand Junction office and the AEC and forward this office nine copies of your recommendations concerning the advisability of making a field examination.

DMEA Field Team, Region III

W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosure

HMC:ab

cc: Sec. Op. Comm. (2)
Harshman
Shaw (2)
Docket
Chron.

RECEIVED
AUG 20 1956

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

DMEA
Date Rec'd. AUG 16 1956
BUREAU OF MINES
Denver, Colorado

Not to be filled in by applicant

Docket No. 4429
Metal or Mineral Uranium
Date Received 8-20-56
Estimated Cost $54,090.63
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Sunburst Mining Corporation
c/o Minson
P. O. Box 270
Grand Junction, Colorado

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

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

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

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

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

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

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

(*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
See attached report

(*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.

16—66551-1

RECEIVED
AUG 20 1956

5. *The exploration project.*—(a) State the mineral or minerals for which you will to explore uranium and cobalt

(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 3 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 24, 1956, 195__

SUMMIT MINING CORPORATION
(Applicant)

By Mason

D. James Edson Jr.
D. James Edson, Jr., President

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

APPLICATION FOR DMEA PROJECT

ON THE

HENRY MOUNTAINS PROPERTIES

Prepared for
SUNBURST MINING CORPORATION

c/o P. O. BOX 270

GRAND JUNCTION, COLORADO

by
MINCON
P. O. Box 270
Grand Junction, Colorado

RECEIVED
AUG 20 1956

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES PREPARED FOR SUNBURST MINING CORPORATION

TABLE OF CONTENTS

Page No.

INTRODUCTION 1
NAME OF APPLICANT 1
GENERAL 2
APPLICANT'S PROPERTY RIGHTS 2
Legal Description of Property 2
Name of Property 2
Interest 2
Control of Property 3
Liens and Encumbrances 3
Record of Title 3
PHYSICAL DESCRIPTION 3
Previous Mining and Exploration 3
Production and Ore Reserves 4
General Geologic Features 4
Accessibility of Project 6
Manpower and Equipment 7
THE EXPLORATION PROJECT 7
Mineral 7
Proposed Work 8
Time of Exploration Project Contract 9
Ability of Applicant 9
ESTIMATE OF COSTS 10
Independent Contractors 10
Labor, Supervision, Consultants 10
Operating Materials and Supplies 11
Operating Equipment 11
Rehabilitation and Repairs 11
New Buildings, Improvements, Installations 11
Miscellaneous 11
Contingencies 11
Independent Contractors 11
Labor, Supervision, Consultants 11
Operating Materials and Supplies 12
Miscellaneous 12
APPLICANT'S SHARE OF COST 12

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
PREPARED FOR SUNBURST MINING CORPORATION

LIST OF SCHEDULES

Title	Schedule No.
Summary of Phase I Drilling	1
Amounts to be Paid Independent Contractors	2
Labor, Supervision, Consultants	3
Operating Materials and Supplies	4
Miscellaneous	5
Recapitulation of Costs	6

LIST OF EXHIBITS

Title	Exhibit No.
Claim Map	A
Agreement (King, et al to Creel)	B
Assignment of Mining Lease (Creel to Sunburst)	C
List of Recorded Claims with Book & Page of Location Notices	D
Detail Drill & Topographic Map of Easternmost Claims	E
Chart Showing Results of Previous Drilling	F

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
Prepared for

SUNBURST MINING CORPORATION
402 Ouray Avenue
Grand Junction, Colorado

INTRODUCTION

This report, written and prepared for SUNBURST MINING CORPORATION by Mincon, and the attached, completed Form MF-103 constitutes an application for a Defense Minerals Exploration Administration project contract of the unit-cost type. A $54,090.63 project is recommended for exploring 99 uranium claims by wagon and core drilling in the Henry Mountains area of Garfield County, Utah. The project proposes a two phase drilling program by independent contractors under the geologic and engineering supervision of Mincon.

1. NAME OF APPLICANT

(a) SUNBURST MINING CORPORATION
402 Ouray Avenue
Grand Junction, Colorado

(Note: Please address all correspondence in reference to this application to MINCON, P. O. BOX 270, GRAND JUNCTION, COLORADO.)

(b) The applicant, Sunburst Mining Corporation, is incorporated in the State of Texas.

(c) Officers of Sunburst Mining Corporation are:

Mr. Sam DeChearo, President and Director
2636 West Twohig Street
San Angelo, Texas

Mr. E. W. Creel, Vice President and General Manager
402 Ouray Avenue
Grand Junction, Colorado

Mrs. Sam DeChearo, Secretary-Treasurer and Director
2636 West Twohig Street
San Angelo, Texas

(d) Not applicable, since this company is a corporation.

2. GENERAL

This report including the attached, completed Form MF-103 is an application for a DMEA loan under a unit-cost form contract and has been prepared in accordance with DMEA Order No. 1, Amended. It is to be submitted in quadruplicate to the Executive Officer, Region IV, DMEA, New Customhouse Building, Denver 2, Colorado.

Since sufficient space is not available on the application Form MF-103 the necessary information is supplied in this report with a reference in each case by number and letter to the instruction to which the item refers on the form.

3. APPLICANT'S PROPERTY RIGHTS

(a) The property consists of 99 full and fractional, unpatented mining claims in one contiguous group located in portions of unsurveyed Sections 2, 3, 10, 11, 14, and 15, Township 35 South, Range 11 East, Salt Lake Base and Meridian, Garfield County, Utah. These unpatented claims have been surveyed under the supervision of a Registered Colorado Engineer and are tied to Atomic Energy Commission triangulation station number "S-2" which lies south 40,048 feet and west 13,744 feet from the northeast corner of Section 6, Township 34 South, Range 12 East, SLB&M. The triangulation station is located with reference to the section corner by third order triangulation. These claims include all of the land in which the owners or lessees hold any interest which might be benefited by the proposed exploratory program. The claim outlines with reference to the public land survey and triangulation station "S-2" are shown on Exhibit A. The location notices, or amended notices, are posted and copies are recorded in the Garfield County Courthouse.

(b) The property is often referred to as the Joe A. King, Jr., property.

(c) The applicant's interest is as a lessee from the original owners, Mr. Joe A. King, Jr., et al, under terms of an agreement originally signed by Mr. E. W. Creel, March 26, 1955 and assigned to Sunburst Mining Corporation April 25, 1955.

(d) A copy of the original lease is submitted as Exhibit B and the Assignment from Mr. Creel to Sunburst Mining Corporation is submitted as Exhibit C.

(e) The only liens and encumbrances are the work and royalty obligations as set forth in Exhibits B and C.

(f) All of the claims are unpatented and the book and page for each recorded location notice and amended location notice are shown on the attached Exhibit D.

4. PHYSICAL DESCRIPTION

(a) Previous Mining and Exploration.

Two small prospect drifts were driven by Sunburst Mining Corporation in from the rims exposed on the north end of the Rats Nest #1 claim and the north end of the Teddy #1 claim during 1955. Both of these are shown on Exhibit A and are readily accessible for field examination.

A total of 122 irregularily spaced rotary holes were drilled by Sunburst personnel using company equipment during December, 1954, and the early months of 1955 on 9 of the claims in the northeastern and eastern portions of the properties. Each hole penetrated the lowermost sandstone member of the Morrison formation which is locally the "ore bearing" zone and a sufficient depth to confirm a Summerville formation top. The drilling comprised 15,734 feet of plug (non-core) and core drilling. The few cores were taken at random and were not described or stored. A few samples were taken from the cores for chemical analysis to compare with the probe data. The hole depths ranged from 30 to 190 feet and averaged 129 feet. All drill holes were radiometrically probed and results were recorded for each foot when mineralized. Exhibit E which was prepared from aerial photos and ground surveys by Norman B. Platt of Grand Junction, Colorado, shows the drill hole locations, their collar elevations, access roads and topographic contours. Elevations shown are with a datum of sea level and were carried into the claim area by third order triangulation from AEC triangulation station "S-2".

Results of Previous Drilling Program: Study of the information obtained from the first 122 holes completed to date combined with several surface features

has outlined two favorable trends of uranium mineralization. These are discussed more fully below (Paragraph 4-c). It was found that the mineralization is limited to two zones within the lower part of the Salt Wash sandstone member of the Morrison formation. The "lower zone" is approximately 5 feet and the upper zone 45 feet above the top of the Summerville formation. The dip and strike of the top of the Summerville formation was determined from the drill information to more closely estimate the depth to the mineralized zones at any point on the properties. The Summerville surface was found to strike approximately N25°E and dip 3-3/4 degrees northwest. The mineralized bands or "trends" tend to follow the general strike of the Summerville. Exhibit F is a chart which shows the results of this previous drilling where mineralization was encountered. Drill holes not listed were found to be barren when probed with a geiger-type probe.

(b) Production and Ore Reserves.

Two loads of uranium-vanadium ore were shipped from the prospect drift and from surface exposures on the Rats Nest #1 claim during the summer of 1955. These totaled 7.8 tons which averaged 0.97% U_3O_8 and 3.05% V_2O_5. There are no known ore reserves.

(c) General Geologic Features.

The Joe A. King, Jr., properties are located on the southwesternmost flank of the Henry Mountains, Garfield County, Utah, adjacent to the Harold Ekker properties which have produced high grade uranium-vanadium ores from the Salt Wash member of the Morrison formation for many years. The surface elevations range from 4800 feet in Shootaring Canyon on the west boundary of the claims to 5360 feet on a small butte in the southeastern corner of the property. The surface is dissected by three deep canyons which drain westward from the nearby Henry Mountains. The principal ore zone in the district is best exposed to the east and southwest of the King claims and most of the mining performed to date has opened surface showings which lie approximately 45 feet above the Summerville-Salt Wash (Morrison) contact. Roads were quite primitive until the Atomic Energy Commission opened a well graded route into the area early in 1955. The primitive nature of the area had restricted shipments of ore to "high-grade" quality so only the more obvious and richer deposits could be exploited before the road was completed.

The formations pertinent to this application are, in ascending order:

Jurassic - Summerville Formation: The Summerville is composed of well-bedded reddish-brown siltstones, sandstones and shales. Bands or veinlets of gypsum are common in the Summerville and the bedding is often undulatory, probably as a result of the flowage of the gypsum. The contact with the overlying Salt Wash member of the Morrison is unconformable and the reddish clays beneath the contact are often "bleached" a light gray or greenish-gray where there is uranium mineralization in the overlying sands. The formation is approximately 100 feet thick in the area of the claims, but normally only a few feet are penetrated to confirm a formation top in the drill holes. In future drilling it will be necessary to take only an occasional hole down to the Summerville, to check slight irregularities in the regional dip, since the main ore zone lies approximately 45 feet above this datum.

Morrison Formation (Salt Wash member): The Salt Wash member of the Morrison formation consists predominantly of lenticular beds of light gray sandstone of extremely variable grain size which pinchout laterally into thin green or red mudstones or lie between other lenses of sands with varying grain sizes. Channeling is common with layers of varicolored chert conglomerates and carbonized plant material being found in the more prominent channels. The sands are usually very resistant to erosion and form steep ledges along the deeper canyons. Uranium mineralization occurs as disseminated carnotite grains in the finer sands or as coatings on the coarser sand grains. Many zones in which carbonaceous plant material lies along the bedding planes or in which fossil trees are common have carnotite as a replacement of the original wood.

Uranium mineralization is largely restricted to the two zones mentioned above which lie approximately 5 feet and 45 feet above the Summerville formation. The upper zone is the more important source of nearby production and where the thicker and more extensive clusters of ore are found it is usually overlain by a lens of greenish-gray mudstone. This mudstone lies as a tabular body often up to 300 feet in width and as much as 5 feet thick. The writer has not observed any concentration of large ore bodies where the overlying mudstone was absent and it may become a valuable guide for further prospecting.

The Salt Wash member of the Morrison is probably close to 400 feet thick in places on the Joe King properties, but any depth in excess of 200 feet is here considered prohibitive for profitable mining since the ore bodies in the Henry Mountains tend to be lenticular where exposed by surface stripping and would not be suitable for deep underground operations. Maximum drill depths will therefore be 200 feet with the previous average depth being 129 feet.

Structurally, the claims lie on the west flank of the Henry Mountains uplift. The beds dip 3-3/4° in a N65°W direction away from the Mount Ellsworth intrusive which is the southernmost of the Henry Mountains laccoliths. No faulting was observed on the property.

Reasons for Additional Exploration:

(1) Large tonnages of very high grade uranium-vanadium ores have been found along the canyon walls of Shootaring Creek immediately southwest of the Joe King properties. Surface prospecting and drilling during 1955 indicated that mineralization is common in the same zone on the Joe King properties in at least two trends and some commercial grade ores have been shipped from the property. Additional drilling is necessary to delineate the more favorable grounds behind the rim exposures and in the projected trends.

(2) Another possible band of mineralization may lie near the west edge of the properties since the strike of the formations from the larger ore bodies on the Ekker properties crosses this part of the claims. No drilling has been done to date on any of the westernmost claims and the potential ore zone lies at a relatively shallow depth over much of the area.

(3) Large scale mining and exploration has only recently been attempted in the southwestern part of the Henry Mountains so new prospects are in only the first stages of exploration and development. The areas of production and most active exploration nearby are summarized as follows:

(a) The Harold Ekker-Robert Shaw properties from which the majority of the uranium production in the Henry Mountains has originated are contiguous with the King properties to the south and west.

(b) The Del Monte claims which lie immediately east of the easternmost of the Joe King claims have been partially explored by drilling and numerous rim exposures have been developed by stripping or short underground drifts.

(d) Accessibility of the Project.

The properties are reached by driving southeast from Hanksville, Utah, on State Highway 95 a distance of 28.3 miles toward the town of Hite. At this point a new gravel road built by the Atomic Energy Commission turns to the south (right) and reaches the Sunburst Mining Corporation camp at Star Ranch after a distance of 19.1 miles. Two roads lead from this point onto the

claims which are approximately eight miles each in length. The road which turns southeast at the Star Ranch first touches the properties on the east margin of the Rats Nest claim. The main road which continues southwest past Star Ranch is the main access road for the Ekker mines and offers access to the westernmost of the Joe King properties by way of a branch road up Shootaring Creek. These access roads and others built on the claims by Sunburst Mining Corporation are shown on Exhibit A. All of the roads except those on the company's claims are maintained by State or Federal agencies throughout the year.

Ore could be shipped to the buying station at Thompson, Utah, a distance of 143 miles or into the mill of Climax Uranium Company at Grand Junction, Colorado, 221 miles.

(e) Manpower and Equipment.

A complete camp is maintained near the properties by Sunburst Mining Corporation for the use of company and technical personnel and is also available on a rental basis to independent contractors. The company owns a bulldozer and a Failing portable core drill which are available for use during the project. It is contemplated that the company owned equipment would be leased to independent contractors who would in turn furnish all labor and materials connected with their use. Independent drilling contractors will also be employed for the proposed wagon drilling program and they will furnish both their own manpower and equipment. Mincon, a professional geology and engineering firm, will furnish technical personnel, surveying equipment, and transportation for their employees. Sunburst and Mincon will furnish probing and field gamma-ray detection equipment.

Mining equipment, fuel, and supplies are stocked at Hanksville and Greenriver, Utah.

An excellent supply of culinary water is piped from the spring at the Star Ranch campsite. Water for mining and drilling is available from stock tanks below the springs. The camp is heated during the winter by propane and a small Kohler light plant supplies electric power to the camp.

5. THE EXPLORATION PROJECT

(a) The minerals for which the project will explore are uraninite and carnotite for their uranium and vanadium content.

(b) The proposed work will consist of drilling a series of holes to a depth sufficient to fully penetrate the principal mineralized zone in the district which lies approximately 45 feet above the top of the Summerville formation. A few of the holes will be deepened to the top of the Summerville formation to more clearly establish the structural position of this datum.

The drilling is to be divided into two phases. The first phase will include a wide spaced series of holes to be drilled by wagon drills. These proposed sites are shown on Exhibit A with depths sufficient to penetrate the principal mineralized zone. A total of 198 holes is recommended in Phase I which will total approximately 24,310 feet of drilling, as summarized in Schedule 1 (Summary of Phase I Drilling). These holes are located to more fully explore known favorable areas delineated by earlier drilling; to drill behind surface exposures of mineralization; and to explore the western portion of the properties where the principal zone lies at a depth of less than 200 feet.

Phase II drilling will consist of both wagon-type drilling and conventional core drilling, and the drill sites will be located to take advantage of information obtained in the first phase in order to further explore geologically favorable areas or mineralized zones. Criteria for favorability will be those generally used in the field to assess the value of drill information as explained in various publications of the U.S.G.S. and Atomic Energy Commission. It is understood that no holes will be drilled which could be construed as "blocking" ore, and a hole spacing of greater than fifty feet will be used in offsetting ore or mineralized holes. No specific locations for Phase II can be made until sufficient information is accumulated during Phase I drilling to indicate the more favorable locations. Wagon drilling would be used in Phase II where "favorable" areas had been located, but were not mineralized, and core drilling would be used in areas found to be mineralized in Phase I. Where the core drill is used it is planned to plug drillto the top of the mineralized zone, which is usually marked by a greenish-gray mudstone zone, and from this point to the base of the mineralized section an NX diameter core would be cut. All holes will be surveyed and elevations run to drill sites. We recommend 18,450 feet of drilling in Phase II which will comprise about 150 holes with an average depth of 123 feet.

It should not be necessary to run more than one joint of casing in the core holes since relatively little talus will be encountered and the walls of the holes stand up well. It is anticipated that it will be possible to do all of the diamond coring with air since no difficulty has been encountered in the past.

The cores will be laid in sequence into cardboard storage boxes as pulled and checked for mineralization by a field gamma ray device. A sampler, or geologic assistant, will check the cores and describe them on forms provided. The mineralized intervals will be marked for sampling and split for chemical assay for U_3O_8 and V_2O_5. Occasional $CaCO_3$ determination in ore grade zones will also be made. Such assays will be made by commercial assayors. Each hole will be probed radiometrically as soon as is practicable after completion. Cores will be kept available for inspection by DMEA representatives in the field or at 200 North Sixth Street, Grand Junction, Colorado. Upon completion of the program storage is planned at a public warehouse in Grand Junction.

(c) The work can start within 30 days from the date of the exploration project contract and can be completed within 3 months. Year around operations are possible since snowfall is light, but operations during the cold winter months would be somewhat less efficient and therefore slightly more expensive.

(d) Sunburst Mining Corporation was organized in 1955. The company has been engaged in the acquisition, exploration and development of mining properties (principally uranium). District offices are maintained in Grand Junction, Colo., by Mr. E. W. Creel, General Manager of the Corporation. Mr. Creel has had a long and varied experience in productive mining operations which is briefly summarized as follows:

1907-1911 - Superintendent, Wyoming Mine, Pittsburg Mining & Milling Company, Lake City, Colorado.
1911-1916 - Superintendent, Smuggler Union Co., Telluride, Colorado.
1917-1921 - Superintendent, Anna Beaver Mine, Smuggler Union Company, Oklahoma.
1922-1924 - Superintendent, Mountain Top Mining Company, Ouray, Colo.
1928-1947 - Owner and Operator, Beaumont Hotel, Ouray, Colorado.
1940-1945 - Owner and Operator, Mickey Breen Mine near Ouray, Colorado. This property was granted a $10,000 DMEA loan which was repaid in 18 months from mine production.
1948 - Retired.
1955 - Organized Sunburst Mining Corporation.

Mincon, a professional geology and engineering firm of Grand Junction, Colorado, will act as geologic consultants to Sunburst in the planning and supervision of this project. The background of the Staff of Mincon is as follows:

D. James Edson, Jr., geologist-partner, graduated with a B.A. from Dartmouth College and M.A. from the University of Texas. His early experience

has been with various producing oil and gas companies. Since his association with Mincon, Mr. Edson has planned and supervised exploration drilling programs for Gateway Uranium and Lisbon Uranium Corporation on Beaver Mesa, for Blue Skies Uranium Corporation on Tenderfoot Mesa, for Balboa Mining Corporation on their Muddy River property opposite the Hidden Splendor Mine, and the exploration program for Houston Pool on their Elk Ridge claims. He has critically examined many uranium properties on the Colorado Plateau and outside the Plateau for various interests.

Milton R. Scholl, Jr., geologist-partner, graduated with a B.S. and M.A. degree from the University of Texas. Mr. Scholl has prepared evaluations on many properties within the Colorado Plateau region and in New Mexico and Utah outside the Plateau, and supervised the 1956 drilling program for Lisbon Uranium Corporation on Beaver Mesa. His early experience has been as geologist with several operating oil and gas companies. Most of 1955 he was acting as consultant to the Oil and Gas Division, Reynolds Mining Corporation.

Leon E. Litz, civil engineer-partner, received his B.S. and M.S. degree from Utah State Agricultural College. Mr. Litz is a registered land surveyor in New Mexico, Utah, and Colorado with experience in the Bureau of Public Roads and as engineer with Three States Natural Gas Company prior to his association with Mincon. Mr. Litz has had considerable experience in mine surveying, location work, claim surveying and road building.

6. ESTIMATE OF COSTS

(a) Independent Contractors.

Drilling and bulldozer work necessary in the preparation of drill sites, access roads, etc., will be performed by individual contractors using equipment leased from Sunburst Mining Corporation. Schedule 1 summarizes the estimated depths of Phase I drill sites, and Exhibit A indicates the probable new road requirements. A total of 24,310 feet of drilling is suggested for Phase I. Approximately 18,450 feet of drilling is proposed for the second Phase. The costs of individual contractors are estimated in Schedule 2.

(b) Labor, Supervision, Consultants.

Mincon will supervise the proposed exploration program and will furnish geological and engineering services for $1,800 per month and expenses. This fee

will include a resident geologist as outlined in 5 (b) and all engineering and surveying services required. To prepare the required reports to DMEA, the services of a draftsman and typist will be required on a part time basis. These costs are estimated in Schedule 3.

(c) Operating Materials and Supplies.

Schedule 4 enumerates estimated costs of office supplies incidental to the project, map and drill log reproduction, and field supplies; such as, location stakes, core boxes, flagging, etc.

(d) Operating Equipment.

Operating equipment to be furnished by individual contractors.

(e) Rehabilitation and Repairs.

Not applicable.

(f) New Buildings, Improvements, Installations.

Not applicable.

(g) Miscellaneous.

Schedule 5 lists estimates of costs of chemical assays, core storage, Workmen's Compensation and liability insurance, accounting costs, payroll taxes, etc.

(h) Contingencies.

Independent Contractors: Charges for drilling and coring increase with hole depth and should greater depths be required to penetrate the mineralized zones than estimated in this report, additional costs will be incurred. Also the heavy equipment rentals are based on a time factor and the construction of drill sites and access roads may present more problems than presently foreseeable, therefore, creating the possibility of higher costs than estimated. The contingency of 5% is included to cover these possible increases.

Labor, Supervision, Consultants: Prolongation of the project for any reason will increase these charges since they are based on a time factor. Twenty-five (25) percent is added for this contingency.

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
PREPARED FOR SUNBURST MINING CORPORATION

Operating Materials and Supplies: Ten (10) percent is added to cover additional material and reproduction services which may be required.

Miscellaneous: To allow for additional chemical assay work, additional insurance costs, or unforeseeable taxes, 20% contingency is added.

7. (a) and (b)

Sunburst Mining Corporation will complete the exploration project for uranium and will make such payments as will be required to complete the program and will be reimbursed by DMEA.

Total cost of the project is estimated to be $54,090.63 as summarized in Schedule 6, Recapitulation of Costs. Reimbursement by DMEA will be at the rate of 75% of the allowable costs as stated in DMEA Order No. 1, Amended. Sunburst Mining Corporation will contribute $13,522.66 which is 25% of the cost of the project.

Respectfully submitted,

MINCON

D. James Edson Jr.
D. James Edson, Jr.

Milton R. Scholl Jr.
Milton R. Scholl, Jr.

Leon E. Litz
Leon E. Litz

August 14, 1956

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
PREPARED FOR SUNBURST MINING CORPORATION

SCHEDULE 1

SUMMARY OF PHASE I DRILLING

Estimated Total Depth	Number of Holes	Cost Per Hole	Total Dollars	Total Feet
10 Ft.	3	$ 6.50	$ 19.50	30
20	4	13.00	52.00	80
30	6	19.50	117.00	180
40	6	26.00	156.00	240
50	7	32.50	227.50	350
60	13	39.00	507.00	780
70	10	45.50	455.00	700
80	6	52.00	312.00	480
90	8	58.50	468.00	720
100	16	65.00	1,040.00	1,600
110	6	73.50	441.00	660
120	10	82.00	820.00	1,200
130	7	90.50	633.50	910
140	14	99.00	1,386.00	1,960
150	9	107.50	967.50	1,350
160	7	118.00	826.00	1,120
170	19	128.50	2,441.50	3,230
180	28	139.00	3,892.00	5,040
190	12	149.50	1,794.00	2,280
200	7	160.00	1,120.00	1,400
	198 holes		$17,675.50	24,310 feet

Note: Prices per foot and total cost calculated on the basis of the following schedule of prices for wagon drilling:

0 to 100 feet	65¢ per foot
100 to 150 feet	85¢ per foot
150 to 200 feet	$1.05 per foot

SUMMARY OF PHASE I DRILLING

SCHEDULE 1

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
PREPARED FOR SUNBURST MINING CORPORATION

SCHEDULE 2

AMOUNTS TO BE PAID INDEPENDENT CONTRACTORS

Service	Unit	No. of Units	Cost/ Unit	Cost/ Project	Total Cost
Drilling Contractor					
Phase I					
Wagon Drilling 198 holes	Ft.	24,310	$0.727	$17,675.50	$17,675.50
Phase II					
Wagon Drill Rig	Ft.	12,300	0.727	8,942.10	
Core Drill Rig					
Non-core	Ft.	4,500	1.15	5,175.00	
Core	Ft.	1,650	3.00	4,950.00	
					19,067.10
Total		42,760	$0.859		$36,742.60
Heavy Equipment Contractor					
Equipment Rental	Day	30	$100	3,000.00	3,000.00
Total					$39,742.60

AMOUNTS TO BE PAID INDEPENDENT CONTRACTORS

SCHEDULE 2

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
PREPARED FOR SUNBURST MINING CORPORATION

SCHEDULE 3

LABOR, SUPERVISION, CONSULTANTS

Services	Cost/ Hour	Cost/ Month	Cost/ Project	Cost/ Unit
Geological and Engineering Consultants	$	$1,800.00	$5,400.00	$
Consultants Field Expenses		700.00	2,100.00	
Drafting (20 hours/month)	3.00	60.00	180.00	
Typist (40 hours/month)	2.25	90.00	270.00	
Total			$8,050.00	$0.188

SCHEDULE 4

OPERATING MATERIALS AND SUPPLIES

Services	Cost/ Month	Cost/ Project	Cost/ Unit
Office Supplies, Map & Log Reproduction	$ 100.00	$ 300.00	$
Field Supplies (core boxes, stakes, probe batteries, flagging, etc.)		500.00	
Total		$ 800.00	$0.018

SCHEDULES 3 and 4

MINCON
P. O. Box 270
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE HENRY MOUNTAINS PROPERTIES
PREPARED FOR SUNBURST MINING CORPORATION

SCHEDULE 5

MISCELLANEOUS

Service	Cost/ Month	Cost/ Project
Payroll Tax, Blue Cross, Insurance	$ 20.00	$ 60.00
Accounting & Office Costs	100.00	300.00
Assays (Chemical) 150 assays @ $5		750.00
Core Storage (2 years)	3.00	72.00
Total		$1,182.00

SCHEDULE 6

RECAPITULATION OF COSTS

MF-103 Headings	Cost/ Project	Cost/ Unit
6a Independent Contractors (Sch. 2)	$39,742.60	$0.929
6b Labor, Supervision, Consultants (Sch. 3)	8,050.00	0.188
6c Operating Materials & Supplies (Sch. 4)	800.00	0.018
6d Operating Equipment		
6e Rehabilitation, Repairs		
6f New Buildings, Installations		
6g Miscellaneous (Sch. 5)	1,182.00	0.028
6h Contingencies		
For (a) above - 5%	1,987.13	0.046
For (b) above - 25%	2,012.50	0.047
For (c) above - 10%	80.00	0.002
For (g) above - 20%	236.40	0.006
Total Cost of Project	$54,090.63	$1.264 /foot

DMEA Participation (75%)	$40,567.97
Sunburst Mining Corporation Participation (25%)	$13,522.66

SCHEDULES 5 and 6

A G R E E M E N T

THIS AGREEMENT, Made and entered into on this the 26th day of March, A. D. 1955, by and between JOE A. KING, JR., JOHN R. STEELE, R. M. McCOLM, R. P. WILSON, DAVID M. KING, DARRELL C. MALUY, WARREN D. LOWE, BERT ALLRED, and JOSEPH TED KING, parties of the first part, hereinafter referred to as Lessors, and E. W. CREEL, 402 Ouray Avenue, Grand Junction, Colorado, party of the second part, hereinafter referred to as Lessee,

WITNESSETH:

WHEREAS, The following named lessors, to-wit, R. M. McColm, John R. Steele, R. P. Wilson, and Joe A. King, Jr., are the owners of the following described unpatented lode mining claims in the Little Rocky (unorganized) Mining District, Garfield County, Utah, to-wit:

Rats Nest No. 1, Rats Nest No. 2
Canyon No. 1 to Canyon No. 20, both inclusive

AND WHEREAS, The lessors David M. King, Darrell C. Maluy, Joseph Ted King, and Joe A. King, Jr. are the owners of the following described unpatented lode mining claims in the Little Rocky (unorganized) Mining District, Garfield County, Utah, to-wit:

David No. 1 to David No. 6, both inclusive

AND WHEREAS, The lessors Warren D. Lowe, Bert Allred, David M. King, and Joe A. King, Jr. are the owners of the following described unpatented lode mining claims, situate in the Little Rocky (unorganized) Mining District, Garfield County, Utah, to-wit:

David No. 7 to David No. 9 both inclusive
Warren No. 1 to Warren No. 9, both inclusive
Gnat No. 1, Gnat No. 2, Gnat No. 3, Gnat No. 6,
Gnat No. 7, Gnat No. 8, and Gnat No. 9
Bert No. 1 to Bert No. 13, both inclusive
Teddy No. 1 to Teddy No. 15, both inclusive 1 – 12 incl only
Dingo No. 1 to Dingo No. 4, both inclusive
Jerry No. 1

AND WHEREAS, It is the mutual wish and desire of the parties that the lessors lease the above-described mining claims unto the lessee on terms and conditions hereinafter set forth;

NOW, THEREFORE, For and in consideration of the premises and the mutual covenants herein contained, THE PARTIES AGREE As follows, to-wit:

1. That the lessors do hereby let, lease and demise unto the lessee the above-described mining claims for a period beginning on this date and ending on the first day of April, 1956, and for so long a time thereafter as the lessee is developing said property, or mining and selling ores therefrom, unless sooner terminated as hereinafter provided.

2. Lessee agrees to pay to the lessors as rental for said premises ten per cent (10%) of all ores, metals or minerals mined and sold from said premises, including ten per cent (10%) of any production bonus paid by the United States Atomic Energy Commission for ores mined and sold from said premises, but not including haulage or development allowances paid by any agency. The parties agree that the lessee shall instruct the buyer or buyers of ores mined and sold from said premises to pay ten per cent (10%) of the gross values thereof unto the lessors; all payments belonging to the lessors hereunder shall be paid by the buyer or buyers of ores to Joe A. King, Jr., Post Office Box 501, Grand Junction, Colorado, and all checks or drafts payable to the lessors hereunder for ores sold from said premises shall be payable to Joe A. King, Jr., agent, and the buyer or buyers of ores shall be relieved of all liability, obligation and responsibility for the payment of the proceeds to the lessors by making their draft or check payable to the said Joe A. King, Jr., as agent.

3. The lessors hereunder covenant and agree that Joe A. King, Jr. shall divide all payments received by lessors as provided herein in accordance with the interest of the respective lessors in and to said mining claims.

4. In consideration of the premises and the execution of this agreement by the lessors, the lessee agrees to pay to lessors, upon the execution of this agreement, the sum of Four Thousand Dollars ($4,000), said sum to constitute rental for said premises in addition to the rental paid to the lessors out of ore payments as hereinabove provided.

5. The lessee agrees to go upon the above-described mining claims not later than April 15, 1955, and perform the annual assessment work to be performed by June 30, 1955, in accordance with the applicable laws, said assessment work to be done and completed by the first day of June, 1955, and the lessee shall make and file necessary affidavits certifying that the assessment work has been done upon said mining claims, and shall furnish copies of said affidavits to the lessors.

6. The lessee agrees that he shall, immediately after the execution of this agreement, engage a licensed surveyor for the purpose of surveying the mining claims above-described, and shall continue, with reasonable diligence, to complete said surveying work within the shortest time possible. The lessors agree that they shall assist the lessee or his surveyor in surveying said premises by pointing out claim corners and location monuments. The lessors agree that they will pay, out of production from said claims only, a sum not to exceed Three Thousand Dollars ($3,000) for said surveying work. The lessee shall bear the entire cost of said survey, unless and until ores, metals or minerals are mined and sold from said premises, in which event the lessee shall keep and retain the first Three Thousand Dollars ($3,000) of the proceeds derived from the sale of said ores belonging to the lessors under the terms of Paragraph 2 hereof.

7. It is mutually understood and agreed that in the event the surveying of said claims discloses that there are fractions of claims or land open to mineral location within or adjacent to said claims, not previously located, that all of said open land within or adjacent to the mining claims herein described, shall be properly located by lessee, and in the names of the lessors

herein, and said mining claims or fractions thereof so located shall be and remain the property of lessors.

8. IT IS UNDERSTOOD AND AGREED By and between the parties hereto that the lessee shall proceed, with reasonable diligence, to mine and sell all ores of commercial quantity and quality discovered by him upon said mining claims, and lessee agrees to furnish to lessors all geological information and data obtained by him in prospecting and exploring and developing and mining said mining claims.

9. Lessee agrees that he shall mine and develop said mining claims in a good and minerlike fashion, performing thereon not less than 50 8-hour man shifts of labor permonth for each calendar month during the term hereof, unless prevented by unavoidable casualty, weather conditions or acts of God.

10. The parties agree that the lessee may, in the event he is not in default under the terms hereof, upon giving thirty (30) days written notice to lessors, quit and surrender possession of said premises to lessors, and this lease shall be and become terminated at the end of said thirty-day period, after the mailing of notice by lessee to lessors, and all of the obligations and responsibilities of the lessee hereunder shall thereupon terminate. Said notice shall be addressed to lessors in care of Joe A. King, Jr., Post Office Box 501, Grand Junction, Colorado, and sent by United States registered mail, and shall be deemed to have been given on the date of mailing thereof.

11. IT IS MUTUALLY UNDERSTOOD AND AGREED That, in the event of a violation of any covenant and condition herein contained to be kept and performed by the lessee, the lessors may, at their election, notify the lessee of such default, specifying the default in substantial detail, and in the event the lessee does not, within thirty (30) days after the mailing of said notice, commence to cure such default, with reasonable diligence, this agreement shall, at the end of said thirty-day period, terminate, and the lessors, or their agent, may thereupon enter upon said premises and dispossess all persons found occupying the same, with or without force, and with or without process of law; said notice shall be addressed to E. W. Creel, 402 Ouray Avenue, Grand Junction, Colorado, by United States registered mail, and shall be deemed to have been given on the date of the mailing thereof. In the event of the termination of this agreement as aforesaid, the lessors shall keep and retain all sums theretofore paid to them, as liquidated damages and rent.

12. Lessee agrees to permit the lessors, or their agents, to enter upon the premises herein described, at all reasonable times, for the purpose of inspection.

13. To pay all taxes which may be levied or assessed against the premises and on any and all structures and improvements which may now or hereafter be erected thereon, and to pay such licenses, severance taxes, production taxes, and any other taxes which may be levied or assessed against the materials, ores and products taken and extracted from said premises.

14. To take out, carry and maintain full industrial insurance with the Utah State Industrial Commission for any and all persons employed in or upon

said claims and to conduct all operations thereon so as to comply fully with the laws of the United States and of the State of Utah relating to mining, safety regulations and in every other respect, and further to save and keep the lessors harmless of and from all claims and liability of every kind and nature which may be incurred by them in the performance of this agreement, whether due to the negligence of the lessee or otherwise.

15. The lessee agrees to enter upon the leased premises and to work and mine the same in a good and minerlike fashion, with due regard to the development and preservation of the premises, and to carry on said work in accordance with the requirements of the applicable State and Federal laws, rules and regulations pertaining to mining.

Time is of the essence of this agreement, and all conveyances and conditions contained herein, express or implied, shall extend to and be binding upon the heirs, executors, administrators, successors and lawful assigns of all the parties hereto.

IN WITNESS WHEREOF, The parties hereto have hereunto set their hands and seals as of the day and year first herein written.

/s/ Joe A. King, Jr. (SEAL)

/s/ R. M. McColm (SEAL)

/s/ John Steele (SEAL)

/s/ R. P. Wilson (SEAL)

/s/ Darrell C. Maluy (SEAL)

/s/ Joseph Ted King (SEAL)

/s/ Warren D. Lowe (SEAL)

/s/ Bert Allred (SEAL)

/s/ David M. King (SEAL)
by Joe A. King, Jr., His attorney in Fact

Parties of the First Part

/s/ E. W. Creel (SEAL)

Party of the Second Part

STATE OF COLORADO)
: SS.
COUNTY OF M E S A)

On the 26th day of March, A. D. 1955, personally appeared before me Joe A. King, Jr., R. M. McColm, John Steele, R. P. Wilson, Darrell C. Maluy, Joseph Ted King, Warren D. Lowe, Bert Allred and E. W. Creel, the signers of the above instrument, who duly acknowledged to me that they executed the same.

Witness my hand and notarial seal.

My commission expires February 20, 1957.

/s/ Marcedus Murphy
Notary Public

Notarial Seal

STATE OF COLORADO)
: SS.
COUNTY OF M E S A)

On the 26th day of March, A. D. 1955, personally appeared before me Joe A. King, Jr., who, being by me duly sworn, did say that he is the attorney in fact of David M. King and that said instrument was signed on behalf of said grantor by authority, and said Joe A. King, Jr. acknowledged to me that he, as such attorney in fact, executed the same.

Witness my hand and notarial seal.

My commission expires February 20, 1957.

/s/ Marcedus Murphy
Notary Public

Notarial Seal

Recorded April 14, 1955 at 10:30 a.m. Mildred Deuel County Recorder

ASSIGNMENT OF MINING LEASE

THIS AGREEMENT Made and entered into as of April 25, 1955, between E. W. CREEL of Grand Junction, Colorado, T. F. CONNER and SAM D. DeCHERIO both of Dallas, Texas, hereinafter called Assignors, and SUNBURST MINING CORPORATION, a Texas corporation duly authorized to transact business in the State of Utah, hereinafter called Assignee;

WITHESSETH:

E. W. Creel is Lessee in that certain mining lease under date of March 26, 1955, wherein Joe A. King, Jr., and others are Lessors covering the mining claims in Garfield County, Utah, as described in said lease, a true copy thereof marked Exhibit "A" being hereto attached and made a part hereof. T. F. Conner and Sam D. DeChearo are each the owners of an undivided One-Third (1/3rd) interest in and to said mining lease.

Assignors for and in consideration of the sum of Ten ($10.00) Dollars and other valuable consideration do hereby sell, assign and transfer to the above named Assignee all of their right, title and interest in and to said mining lease hereby warranting unto Assignee that said lease is upon the date hereof, in full force and effect.

Assignee does hereby accept said assignment and agrees to observe and comply with each of the terms, covenants and conditions therein contained that are to be kept and observed and performed by Assignor E. W. Creel Lessee.

That the Assignee will save and hold harmless the Assignors of and from all actions, claims and demands whatsoever that may arise out of or in respect of said lease Exhibit "A".

WITNESS Their Names.

/s/ E. W. Creel
E. W. Creel

/s/ T. F. Conner
T. F. Conner

/s/ Sam DeChearo
Sam D. DeCherio

ASSIGNORS

SUNBURST MINING CORPORATION

/s/ Sam DeChearo
President

ASSIGNEE

STATE OF COLORADO)
) ss.
COUNTY OF M E S A)

On the 25th day of April, 1955, personally appeared before me E. W. Creel, T. F. Conner and Sam DeCherio, the signers of the above instrument, who each duly acknowledged to me that he executed the same.

My commission expires April 21, 1956.

/s/ Scott W. Heckman
Notary Public
Grand Junction,
Colorado

STATE OF COLORADO)
) ss.
COUNTY OF M E S A)

On the 25th day of April, 1955, personally appeared before me SAM DeCHERIO, who being duly sworn by me did say that he is the President of Sunburst Mining Corporation, that said instrument was signed in behalf of said corporation by authority of its by-laws and the said Sam DeCherio acknowledged to me that said corporation executed the same.

My commission expires April 21, 1956.

/s/ Scott W. Heckman
Notary Public
Grand Junction,
Colorado

Exhibit "A" as referred to in this ASSIGNMENT OF MINING LEASE is Exhibit B of the DMEA Loan Application.

LIST OF RECORDED CLAIMS
WITH BOOK & PAGE OF ORIGINAL & AMENDED LOCATION NOTICES

		Garfield County, Utah, Recorder's Office		
Name of Claim	Date Loc.	Book	Page	Date Rec.
Rats Nest #1	3-12-54	20 88	27 103	3-18-54 8- 1-55
Rats Nest #2	3-12-54	20 88	28 104	3-18-54 8- 1-55
Canyon #1	3-11-54	22 88	30 105	4- 8-54 8- 1-55
Canyon #2	3-11-54	22 88	31 106	4- 8-54 8- 1-55
Canyon #3	3-11-54	22 88	32 107	4- 8-54 8- 1-55
Canyon #4	3-11-54	22 88	33 108	4- 8-54 8- 1-55
Canyon #5	3-11-54	22 88	34 109	4- 8-54 8- 1-55
Canyon #6	3-11-54	22 88	35 110	4- 8-54 8- 1-55
Canyon #7	3-11-54	22 88	36 111	4- 8-54 8- 1-55
Canyon #8	3-11-54	22 88	37 112	4- 8-54 8- 1-55
Canyon #9	3-11-54	22 88	38 113	4- 8-54 8- 1-55
Canyon #10	3-11-54	22 88	39 114	4- 8-54 8- 1-55
Canyon #11	3-12-54	22 88	40 115	4- 8-54 8- 1-55
Canyon #12	3-12-54	22 88	41 116	4- 8-54 8- 1-55

Name of Claim	Date Loc.	Book	Page	Date Rec.
Canyon #13	3-12-54	22 88	42 117	4- 8-54 8- 1-55
Canyon #14	3-11-54	22 88	43 118	4- 8-54 8- 1-55
Canyon #15	3-12-54	22 88	44 119	4- 8-54 8- 1-55
Canyon #16	3-12-54	22 88	45 120	4- 8-54 8- 1-55
Canyon #17	3-12-54	22 88	46 121	4- 8-54 8- 1-55
Canyon #18	3-12-54	22 88	47 122	4- 8-54 8- 1-55
Canycn #19	3-12-54	22 88	48 123	4- 8-54 8- 1-55
Canyon #20	3-12-54	22 88	49 124	4- 8-54 8- 1-55
David #1	5-24-54	28 88	338 125	5-28-54 8- 1-55
David #2	5-24-54	28 88	339 126	5-28-54 8- 1-55
David #3	5-24-54	28 88	340 127	5-28-54 8- 1-55
David #4	5-24-54	28 88	341 128	5-28-54 8- 1-55
David #5	5-24-54	28 88	342 129	5-28-54 8- 1-55
David #6	5-24-54	28 88	343 130	5-28-54 8- 1-55
David #7	5-29-54	32 88	375 131	6-24-54 8- 1-55
David #8	5-30-54	32 88	376 132	6-24-54 8- 1-55

Name of Claim	Date Loc.	Book	Page	Date Rec.
David #9	5-30-54	32 88	377 133	6-24-54 8- 1-55
Warren #1	6- 1-54	32 88	366 165	6-24-54 8- 1-55
Warren #2	6- 1-54	32 88	367 166	6-24-54 8- 1-55
Warren #3	6- 1-54	32 88	368 167	6-24-54 8- 1-55
Warren #4	6- 1-54	32 88	369 168	6-24-54 8- 1-55
Warren #5	5-29-54	32 88	370 169	6-24-54 8- 1-55
Warren #6	5-29-54	32 88	371 170	6-24-54 8- 1-55
Warren #7	5-29-54	32 88	372 171	6-24-54 8- 1-55
Warren #8	5-29-54	32 88	373 172	6-24-54 8- 1-55
Warren #9	5-29-54	32 88	374 173	6-24-54 8- 1-55
Gnat #1	5-30-54	32 88	378 158	6-24-54 8- 1-55
Gnat #2	5-30-54	32 88	379 159	6-24-54 8- 1-55
Gnat #3	5-30-54	32 88	380 160	6-24-54 8- 1-55
Gnat #6	6- 1-54	32 88	381 161	6-24-54 8- 1-55
Gnat #7	6- 1-54	32 88	382 162	6-24-54 8- 1-55
Gnat #8	6- 1-54	32 88	383 163	6-24-54 8- 1-55
Gnat #9	5-30-54	32 88	384 164	6-24-54 8- 1-55

Name of Claim	Date Loc.	Book	Page	Date Rec.
Bert #1	6- 1-54	32 88	353 146	6-24-54 8- 1-55
Bert #2	6- 1-54	32 88	354 147	6-24-54 8- 1-55
Bert #3	6- 1-54	32 88	355 148	6-24-54 8- 1-55
Bert #4	6- 1-54	32 88	356 149	6-24-54 8- 1-55
Bert #5	6- 1-54	32 88	357 150	6-24-54 8- 1-55
Bert #6	6- 1-54	32 88	358 151	6-24-54 8- 1-55
Bert #7	6- 1-54	32 88	359 152	6-24-54 8- 1-55
Bert #8	6- 1-54	32 88	360 153	6-24-54 8- 1-55
Bert #9	6- 1-54	32 88	361 154	6-24-54 8- 1-55
Bert #10	6- 1-54	32 88	362 155	6-24-54 8- 1-55
Bert #11	6- 1-54	32	363	6-24-54
Bert #12	6- 1-54	32 88	364 156	6-24-54 8- 1-55
Bert #13	6- 1-54	32 88	365 157	6-24-54 8- 1-55
Teddy #1	5-30-54	32 88	333 134	6-24-54 8- 1-55
Teddy #2	5-30-54	32 88	334 135	6-24-54 8- 1-55
Teddy #3	6-17-54	32 88	335 136	6-24-54 8- 1-55
Teddy #4	6-17-54	32 88	336 137	6-24-54 8- 1-55

Name of Claim	Date Loc.	Book	Page	Date Rec.
Teddy #5	6-17-54	32 88	337 138	6-24-54 8- 1-55
Teddy #6	6-17-54	32 88	338 139	6-24-54 8- 1-55
Teddy #7	6-17-54	32 88	339 140	6-24-54 8- 1-55
Teddy #8	6-17-54	32 88	340 141	6-24-54 8- 1-55
Teddy #9	6-17-54	32 88	341 142	6-24-54 8- 1-55
Teddy #10	6-17-54	32 88	342 143	6-24-54 8- 1-55
Teddy #11	6-17-54	32 88	343 144	6-24-54 8- 1-55
Teddy #12	6-17-54	32 88	344 145	6-24-54 8- 1-55
Dingo #1	6-18-54	32 88	348 174	6-24-54 8- 1-55
Dingo #2	6-18-54	32 88	349 175	6-24-54 8- 1-55
Dingo #3	6-18-54	32 88	350 176	6-24-54 8- 1-55
Dingo #4	6-18-54	32 88	351 177	6-24-54 8- 1-55
Jerry #1	6-18-54	32 88	352 178	6-24-54 8- 1-55
Creel #1	6-22-55	88	179	8- 1-55
Creel #2	6-22-55	88	180	8- 1-55
Creel #3	6-23-55	88	181	8- 1-55
Creel #4	6-23-55	88	182	8- 1-55
Creel #5	6-21-55	88	183	8- 1-55

Name of Claim	Date Loc.	Book	Page	Date Rec.
Creel #6	6-21-55	88	184	8- 1-55
Creel #7	6-21-55	88	185	8- 1-55
Creel #8	6-24-55	88	186	8- 1-55
Creel #9	6-25-55	88	187	8- 1-55
Creel #10	6-25-55	88	188	8- 1-55
Creel #11	7- 6-55	88	189	8- 1-55
Creel #12	7- 6-55	88	190	8- 1-55
Creel #13	6-30-55	88	191	8- 1-55
Creel #14	6-30-55	88	192	8- 1-55
Creel #15	6-30-55	88	193	8- 1-55
Creel #16	7- 1-55	88	194	8- 1-55
Creel #17	7- 1-55	88	195	8- 1-55
Creel #18	7- 1-55	88	196	8- 1-55
Creel #19	7- 1-55	88	197	8- 1-55
Creel #20	10- 4-55	92	147	11- 7-55
Creel #21	10- 4-55	92	148	11- 7-55
Creel #22	10- 4-55	92	149	11- 7-55

DRILLING DATA - SUNBURST MINING CORPORATION

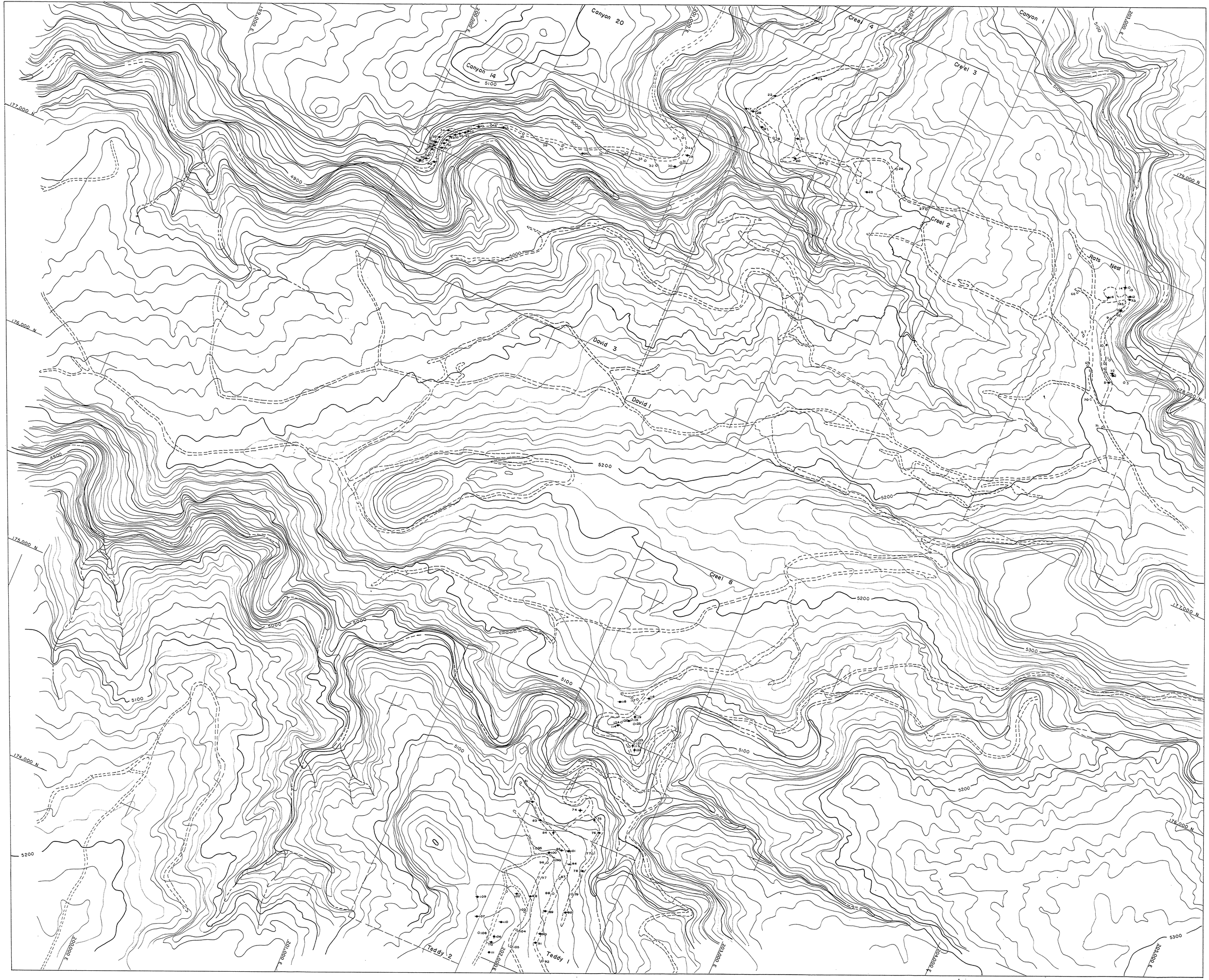
Claim	Hole No.	MINERALIZED ZONES Interval	Thick	Av. Probe	T.D.	Elev. Grd.	Elev. Js
Rats Nest #1	S-2	111 -112	1.0	0.23	113		
Rats Nest #1	S-4	118 -119	1.0	Tr	132		
Rats Nest #1	S-5	114 -124	10.0	0.04	132		
Rats Nest #1	S-10	85.0	----	Tr			
		114.0	----	Tr	125		
Rats Nest #1	S-12	113 -123	10.0	0.11	131	5172	5047
*Rats Nest #1	S-14	86 - 89	3.0	0.05			
		129 -130	1.0	0.02	152	5175	5032
Rats Nest #1	S-16	143 -144	1.0	0.06	152	5186	5039
Creel #20	S-17	137.5-138	0.5	0.04	152	5025	4880
Creel #20	S-18	118 -141	23.0	0.04	158	5036	4884
Creel #20	S-20	120 -144	24.0	0.05	158	5056	4906
Creel #20	S-21	129 -149	20.0	Tr	152	5052	4900
Creel #20	S-22	140 -149	9.0	0.04	162	5032	4878
Creel #20	S-23	135 -145	10.0	Tr	163	5046	4886
Creel #3	S-25	134 -135	1.0	Tr	152	5085	4940
Canyon #20	S-28	128.5-129	0.5	0.04	150		
Canyon #14	S-29	132 -133.5	1.5	0.03	160	5013	4866
Canyon #14	S-30	122 -126	4.0	Tr	153	5010	4864
Canyon #14	S-36	128.5-129	0.5	0.04	151	4978	4836
Canyon #14	S-40	120 -120.5	0.5	Tr	150	4969	4825
Canyon #14	S-41	126 -131	5.0	0.05	160	4963	4815
Canyon #14	S-42	142 -147	5.0	0.07	160	4962	4814
Canyon #14	S-43	137 -143	6.0	Tr	157	4961	4811
Canyon #14	S-45	121 -122	1.0	0.08	152	4961	4815
Canyon #14	S-48	147 -147.5	0.5	0.04	160	4963	4807
Canyon #14	S-49	146 -147.5	1.5	0.19	160	4962	4808
Canyon #14	S-50	144 -146	2.0	Tr	150	4961	4814
Canyon #14	S-51	129 -129.5	0.5	0.02	160	4964	4810
Canyon #14	S-52	129 -132	3.0	Tr	160	4964	4810
Canyon #14	S-53	146 -147	1.0	Tr	160	4963	4804
Canyon #14	S-54	164 -168	4.0	0.05	180	4978	4803
Canyon #14	S-55	165 -172	7.0	0.04	187	4975	4795
Canyon #14	S-56	168 -172	4.0	Tr	190	4972	4799
Canyon #14	S-57	167 -174	7.0	0.06	190	4984	4808
Canyon #14	S-59	173.5-174.5	1.0	0.11	190	4990	4820
Canyon #14	S-60	168 -169	1.0	0.09	174	4984	4808
Canyon #12	S-62	129 -136	7.0	0.04	160		
Canyon #19	S-66	110 -114	4.0	Tr	123	5148	5030
*Rats Nest #1	S-67	90 - 92	2.0	0.08	148		
*Teddy #1	S-74	23 - 24	1.0	0.07			
		36 - 37	1.0	0.08	60	5094	5039
*Teddy #1	S-75	28 - 31	3.0	Tr	60	5104	5048
Teddy #1	S-76	42.5-43.0	0.5	0.06	60	5106	5052

Claim	Hole No.	MINERALIZED ZONES Interval	Thick	Av. Probe	T.D.	Elev. Grd.	Elev. Js
Teddy #1	S-78	46 - 48	2.0	0.07	54	5118	5070
Teddy #1	S-80	50 - 51	1.0	0.06	60	5135	5080
Teddy #1	S-82	72 - 73	1.0	0.08	90	5107	5024
Teddy #1	S-83	72 - 73	1.0	Tr	90	5109	5026
*Teddy #1	S-84	45 - 46	1.0	Tr	90	5124	5040
Teddy #1	S-85	81.5- 82.5	1.0	0.11	100	5129	5037
Teddy #1	S-86	71 - 78	7.0	Tr	90	5128	5044
Teddy #1	S-89	82 - 83	1.0	0.06	100	5148	5056
Teddy #1	S-90	81.5- 82.5	1.0	0.12	90	5152	5067
Teddy #1	S-91	82 - 83	1.0	Tr	100	5157	5068
Teddy #1	S-98	100.0-102	2.0	Tr	110	5159	5052
Teddy #1	S-100	81 - 85	4.0	0.05	100	5131	5038
Teddy #1	S-101	80 - 81	1.0	0.06	90	5127	5042
Teddy #1	S-102	102 -103	1.0	0.07	130	5149	5045
*Teddy #1	S-106	78 - 79.5	1.5	0.07	130	5182	5055
Teddy #1	S-107	106 -108	2.0	Tr	130	5174	5051
Teddy #1	S-109	111 -114	3.0	Tr	140	5171	5049
Teddy #1	S-110	118.5-120	1.5	0.06			
		122 -124	2.0	0.06	139	5184	5052
*Teddy #1	S-111	93 - 93.5	0.5	Tr	130	5181	5056
Teddy #1	S-112	112 -114	2.0	0.04	135	5180	5052
*Creel #8	S-113	14.5- 19	4.5	0.12	75	5109	5041
Creel #8	S-114	85.5- 86	0.5	0.07	100	5120	5025
Creel #8	S-116	110 -111	1.0	0.08	120	5145	5031
Creel #8	S-118	108 -110.5	2.5	Tr	120	5136	5021
*Creel #8	S-119	59 - 60	1.0	0.07			
		71 - 72	1.0	0.05	110	5130	5025
Creel #8	S-120	92 - 93	1.0	0.13	100	5125	
*Creel #8	S-122	?	1.5	0.02	30	5103	
Rats Nest #1	S-72	112 -114	2.0	0.20	130		
Rats Nest #1	S-73	119 -119.5	0.5	0.05	125		
Canyon #14	S-61	164 -165.8	1.8	?	166+		

*Signifies Summerville + 45' zone

The following are results of chemical analysis of cores for comparison with radiometric probe data:

			U_3O_8	V_2O_5
Canyon #14	S-60	168 -169	0.04	0.01
Canyon #14	S-61	164 -165.8	0.02	0.00
Teddy #1	S-106	78 - 80	0.01	0.00



Control: Third order triangulation (A.E.C. triangulation station "S-2", elev. 5246.6 has assumed coordinates of 176,218.3 North & 201,016.1 East)

Topography by Kelsh Plotter from aerial photographs taken March 28, 1956 by Norman B. Platt

Mapped by Norman B. Platt

Scale 1:1800

Contour interval = 10 ft.
Datum is mean sea level

True North

0 100' 150' 200' 300' 400' 500' 600' 700' 800' 900' 1000' 1100' 1200' 1300' 1400' 1500' 1600' 1700' 1800'

Ore hole –
Mineralized hole:
Upper zone –
Lower zone –
Barren hole –
Roads –

SUNBURST MINING CORP.

JOE A. KING JR. PROPERTIES—AREA DRILLED

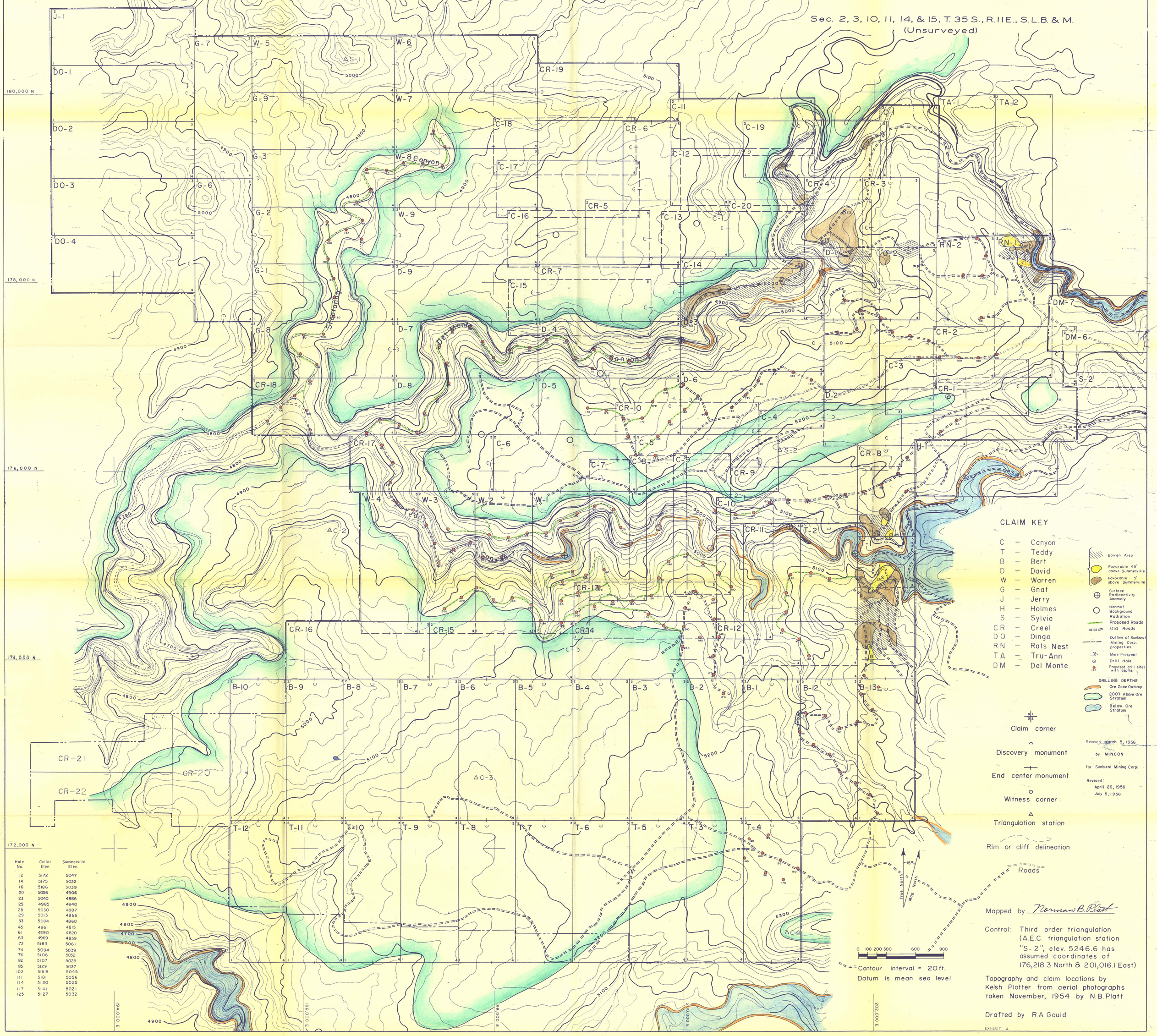
GARFIELD COUNTY, UTAH

JOE A. KING JR. ET AL CLAIM GROUP

HENRY MOUNTAINS MINING DISTRICT

GARFIELD COUNTY, UTAH

Sec. 2, 3, 10, 11, 14, & 15, T. 35 S., R. 11 E., S.L.B. & M.
(Unsurveyed)



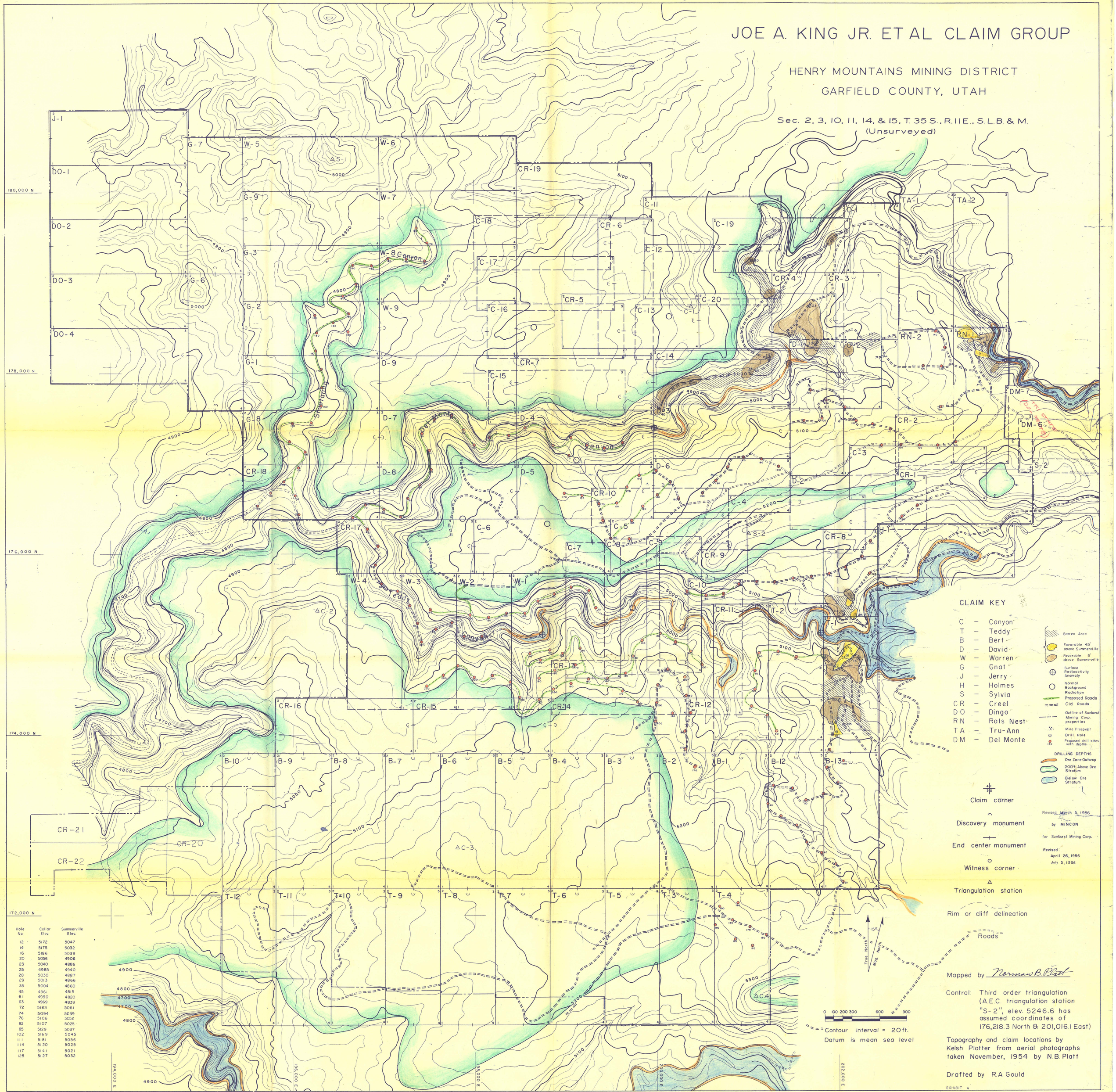
Hole No.	Collar Elev.	Summerville Elev.
12	5172	5047
14	5175	5032
16	5186	5039
20	5056	4906
23	5040	4886
25	4985	4940
28	5030	4887
29	5013	4866
33	5004	4860
45	4961	4815
61	4990	4820
63	4969	4839
72	5183	5061
74	5094	5039
76	5106	5052
82	5107	5025
85	5129	5037
102	5169	5045
111	5181	5056
114	5120	5025
117	5141	5021
125	5127	5032

JOE A. KING JR. ET AL CLAIM GROUP

HENRY MOUNTAINS MINING DISTRICT

GARFIELD COUNTY, UTAH

Sec. 2, 3, 10, 11, 14, & 15, T. 35 S., R. 11 E., S.L.B. & M.
(Unsurveyed)



Hole No.	Collar Elev.	Summerville Elev.
12	5172	5047
14	5175	5032
16	5186	5039
20	5056	4906
23	5040	4886
25	4985	4940
28	5030	4887
29	5013	4866
33	5004	4860
45	4961	4815
61	4990	4820
63	4969	4839
72	5183	5061
74	5094	5039
76	5106	5052
82	5107	5025
85	5129	5037
102	5169	5045
111	5181	5056
114	5120	5025
117	5141	5021
125	5127	5032