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DMEA
Date Rec'd.
MAR 5 1956
BUREAU OF MINES
Denver, Colorado

February 29, 1956

Executive Officer, D.M.E.A.
Field Team, Region III
Defense Minerals Exploration Administration
United States Department of the Interior
224 New Custom House
Denver, Colorado

Dear Sir:

It is requested that the application for aid in this company's project on the North Slope and the Oral mines, submitted herewith, in quadruplicate, be accorded your review and consideration.

In anticipation of an inspection of the properties by members of your Field Team, it is requested that this company be advised of the scheduled inspection date in order to insure that our senior mining engineer will be present to meet and escort the Field Team members as desired.

Yours very truly,

R.Adm. R. W. D. Woods, USN (Ret.)
President

RWDWard

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd. MAR 5 1956

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

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BUREAU OF MINES
Denver, Colorado

Not to be filled in by applicant.

Docket No. DMEA-4210
Metal or Mineral Uranium
Date Received 3-8-56
Estimated Cost $53,064.00
Participation (Government %)

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

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: Minerals Corporation of America, a Delaware Corporation, 120 South Tenth St., Grand Jct., Colorado. Adm. R.W.Moody, President, Above address: J.S.Vickers, Secty. Treas. 207 Old National Bldg. 5619 Fannin, Houston Texas: C.R.King, 7648 Dolse, Midway City, Calif. V.P.

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract North Slope No's. 1-2-11 & 12 unpatented lode claims situated in T21S, R1W, Sec.33, S.L.M; and Oral No's. 1 & 2, unpatented lode claims situated in T22S, R1W, Sec.15, S.L.M; (See claim maps)

(*b*) State any mine name by which the property is known. North Slope & Oral

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee (see attached contract, Appendix A)

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

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

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

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.

(See attached report)

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

(*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. See attached report

(*c*) The work will start within 15 days and be completed within 6 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

[x] Money [x] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated March 1, 1956

Minerals Corporation of America
(Applicant)

By R. W. Woody, Pres.
L. R. King, Vice-Pres.

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

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

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Item 5 (d): Operating Experience & Background of the Applicant

Minerals Corporation of America has been actively engaged in exploring for, and mining, uranium ores for more than a year. Equipment owned and staff organization maintained is adequate to perform any exploration and/or mining operation normal to uranium mining.

Technical control of exploration and mining rests in C. R. King, Vice President, Operations. Mr. King, of King & King Mining Engineers, has over thirty years experience in all phases of mining.

References upon MICOA are:

U. S. Bank of Grand Junction, Fourth & Main, Grand Junction, Colorado;
Western Machinery Company, 2400 West Seventh Avenue, Denver 4, Colorado;
Uranium Ore Producers Association, Uranium Center, Grand Junction, Colorado;
Uranium Institute, Uranium Center, Grand Junction, Colorado.

References upon Mr. King are:

American Institute of Mining and Metallurgical Engineers, 29 West 39th Street, New York, New York;
Mr. C. J. Mittendorf, Director, D.M.E.A;
Mr. Ben Adelstein, Chief Mining Engineer, S. S. C., Washington, D. C;
Mr. T. D. Evans, Chief Mining Engineer, Santa Fe RRY, Prewitt, New Mexico.

KING & KING

MINING ENGINEERS

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MAR - 8 1956

CLARENCE R. KING
7648 BOLSA RD.
MIDWAY CITY, CALIF.
WESTMINSTER 8272

15 February, 1956

DAN M. KING
11762 MINES BLVD.
WHITTIER, CALIF.
OXFORD 44361

INTRODUCTION.

This report and recommended exploration program has been prepared to supply the technical data necessary for an application for aid in an exploration project to be made by MINERALS CORPORATION OF AMERICA, to the Defense Minerals Exploration Administration. This report is part of, and attached to, the above mentioned application.

The ORAL and NORTH SLOPE groups of mining claims described herein are located in section 15, T22S, R14E; and section 33, T21S, R14E, Salt Lake Meridian; respectively, (See Index map herewith). The groups of claims lie about fifteen miles southeast of the town of Green River, Utah, and adjoin the Four Corners Uranium Co. property; which property is producing a substantial monthly tonnage of ore at present; and upon which it is reported that ore reserves in excess of 200,000 tons are proved to date.

The ORAL and NORTH SLOPE groups of claims are among the first located in the district. Both groups have produced small tonnages of high grade ore from rim outcrops since 1952. Neither group has been systematically explored by drilling or otherwise; mining having been confined to date to one-man "highgrading" operations upon three known ore outcrops. This report contains details of a proposed systematic exploration program upon which is based the attached Application for Aid in an Exploration Project.

LOCATION AND ACCESS.

The ORAL group of two full-sized lode claims is located in Sec. 15, T22S, R14E, S. L. M.; and the NORTH SLOPE group of four full-sized lode claims is located in Sec. 33, T21S, R14E, S. L. M. Both groups are reached by graded and improved dirt roads, from U. S. highway 6-50. The nearest town and rail shipping point is Green River, on the Denver & Rio Grande Railroad, about 15 miles northeast of the properties. (See index map herewith). The nearest uranium ore-buying station is Thompson, fifty miles by road distant from the properties; 29 miles of which is the paved U. S. 6-50. At present, plans call for the erection of a uranium ore reduction mill at Green River by the Four Corners Uranium Co., to treat ore from their property adjacent to the North Slope group of claims.

TITLES AND PROPERTY HOLDINGS.

MINERALS CORPORATION OF AMERICA, a Delaware Corporation, with principal office in Grand Junction, Colorado, holds a lease upon the ORAL and NORTH SLOPE groups of claims, from the owners of record thereof, Messrs. James Jensen, George Kouris, and Frank B. Hanson. (See Appendix A for pertinent documents).

HISTORY OF PROPERTY.

The claims herein reported upon were located by James Jensen in 1951 and 1953, to cover outcroppings of uranium ore discovered by him. At that time, Mr. Jensen began mining highgrade outcrop ore, and until December of 1955, made occasional small shipments to various ore-buying stations. On December 19th, 1955, Minerals Corporation of America concluded a lease with the owners, and have been actively operating the properties since that date.

GENERAL INFORMATION.

Topography at the property is controlled by the San Rafael river, which borders the rugged upturn of the San Rafael Swell on the east. Immediately to the east of the river, and upon the west side of the North Slope property, nearly vertical cliffs about three hundred feet high have been carved from the easterly-dipping Morrison formation. To the east of the cliffs, dip-slope topography gently falls to a valley about half a mile wide. The east side of this valley is bordered by an escarpment one or two hundred feet high, and formed by erosion of the Brushy Basin member of the Morrison, capped by the Dakota sandstone. Elevation on the property varies from 4,400 to 4,900 feet. Thick alluvium is absent; most of the property area being covered with sandstone of the Salt Wash member of the Morrison formation, upon which little or no vegetation is found.

Climate is that of the Green River Desert: hot and dry in the summer, with occasional thunder showers; rather cold in the winter, with normal snowfall for the latitude. Temperature extremes approximate 100° maximum in the summer; -10° in the winter. Precipitation averages about 20" annually, most of which is winter snowfall. Normal mining and auto travel is not impeded by winter weather except for a few days at a time during severe blizzards, which occur infrequently.

Labor supply is available from the surrounding region. Rates are: common labor, $1.50 per hour; skilled miners, $2.00 per hour; Mechanics and cat-skinners, $2.25 per hour.

Water supply for drilling or other industrial uses is found in the San Rafael river on the western edge of the property. Drinking water is hauled from Green River, or might be obtained from wells sunk close to the river.

Power for exploration and other mining purposes is generated by use of gasoline or diesel engines. Fuel is obtained from Moab, Utah, at present, and stored in large-capacity tanks on the property. The nearest source of electrical power is Green River, where high-line power is available.

Supplies and timber are purchased in Green River, Price, Utah, Grand Junction, Colorado, or other outside points, and hauled to the property by rail and truck, or by truck.

ECONOMIC GEOLOGY.

The properties lie on the east flank of the San Rafael swell, a short distance to the east of the nearly vertically dipping "reef". At and near the properties, average dip of the sediments is 5° to 15° slightly south of east; the lesser dips being upon the east side of the property. The channel of the San Rafael river has exposed a cross section of the sedimentary column upon the property, (in the cliffs upon the western side of the North Slope group), from the Entrada at the bottom of the river bed, to remnants of the Brushy Basin member of the Morrison formation upon the tops of the highest points of the ridge dominating the center of the property. Except for these remnants of the Brushy Basin, the entire surface of the properties is covered with the upper part of the Salt Wash member of the Morrison, within which all of the orebodies known to date in the immediate district have been found.

Immediately to the north of the North Slope group, extensive exploration and mining upon the properties of the Four Corners Uranium Co. has established the trend of the mineralized zone, and has given much information upon the habits and characteristics of orebodies within this

zone. These data may be summarized as follows:

(1) The mineralized zone strikes roughly N30°E, for a known distance of about four to five miles. Orebodies within this zone are elliptical in outline, with the long axis parallel to the strike of the zone, (N10° to N40°E).

(2) Orebodies are found only in the upper 100 feet of the Salt Wash formation, but may occur at any horizon within this approximate thickness. Orebodies may be one above the other; en echelon; or scattered at random within the favorable zone; but are almost always associated with high carbon concentrations in the sandstone, and with interbedded thin bleached mudstone seams. Orebodies vary in size from about 1500 tons to 10,000 tons each, but average about 6000 tons; and frequency of occurrence within the mineralized zone is high: upon the Four Corners property, over 200,000 tons of commercial ore is so far known within an area about 1/2 mile wide by one mile long, with exploratory drilling extending the known reserves to date.

Upon the North Slope and Oral properties, outcropping ore in the extreme upper part of the Salt Wash has been mined and shipped from four places. Both properties are within the known trend of the mineralized zone. Upon the North Slope group, mining is progressing upon two outcropping orebodies as of Feb. 15th, 1956. These outcrops represent orebodies occurring approximately 1,200 feet along the strike of the mineralized zone, one from the other. Between these outcrops, and to the north and south of both of them, the remnants of the Brushy Basin member cover the ore-bearing zone to a depth varying from 20 to 150 feet. Exploration of this area should disclose four to six orebodies of average tonnage, (about 6000 tons each), if the size and frequency of occurrence conforms to that found in the favorable zone adjacent to the North Slope group and to the north therefrom.

At the present time, a detailed study of the immediate district is being made by the exploration division of the A. E. C., Grand Junction Operations Office. None of the data have been published, however. This division has drilled several exploratory holes near the properties, and stratigraphic information is available from these drill holes which corelates with that exposed in the San Rafael river cliffs.

ORE SHIPMENTS AND RESERVES.

To date, under the owners operations, which involved small-scale hand mining of outcrop ore; approximately 40 dry short tons of ore averaging 0.463% U_3O_8 and 1.36% V_2O_5 were shipped from the North Slope group; and about 3 tons averaging 0.28% U_3O_8 and 0.60% V_2O_5 were shipped from the Oral group. Since Dec. 20, 1955, when Minerals Corporation of America leased the properties, mining of rim outcrops has been under way as a prelude to systematic exploration, and approximately 50 tons has been mined from each of the properties up to Feb. 15, 1956.

No blocked ore reserves exist on either of the two groups of claims. Upon the North Slope, a few hundred tons of ore of a grade about 0.3% U_3O_8 may be classed as reasonably assured. Systematic exploratory drilling will be required to outline extensions of orebodies now outcropping, and to find others inferred from favorable geologic evidence.

RECOMMENDATIONS AND CONCLUSIONS.

The following facts and inferences lead to the conclusion that a detailed and systematic drilling program will disclose and outline commercial orebodies upon the North Slope and Oral properties; and will give information necessary to plan an efficient mining program:

(1) Ore of good grade has been mined and shipped from four separate outcrops upon the properties, in places where erosion has exposed

the known ore-bearing horizon upon the properties.

(2) The North Slope and Oral lie near the center and south end, respectively, of the favorable mineral belt from which Four Corners Uranium Co. and others are now producing appreciable tonnages of ore, and within which large known reserves exist.

(3) Exploration and development has progressed, upon the Four Corners properties adjoining the North Slope, to the point that prediction of type and size of orebodies, and frequency of occurrence within the favorable zone, may be made with a reasonable degree of accuracy.

(4) These data, applied to the North Slope and Oral properties, indicate that exploratory drilling may be expected to disclose an average of about 500 to 1000 tons of ore of commercial thickness per acre of first phase exploration drilling. Ore so disclosed may be expected to occur in bodies varying from 1000 to 10,000 tons, and should average about 6000 tons per orebody. These orebodies will be found at depths not exceeding 150 feet, upon the properties herein reported upon. Drill hole spacing, to insure a pattern that will disclose any orebodies within the pattern, should be about 50 feet, in a direction at right angles to the trend of mineralization, (S30^{o}E); but may well be spaced at 100 foot intervals parallel to the trend, (N30^{o}E), since known orebodies are elongate in the direction of the trend. Allowing for those areas within the claim groups which would not be explored by drilling because of geological or other considerations, it is estimated that 20,000 feet of first phase exploratory drilling is necessary to establish the presence of any orebodies other than those outcropping, which may exist upon the properties. Detailed cost estimates upon this program follow.

TABULATED ESTIMATE OF COSTS.

Application Item No.	Description of Item	Est. total Cost	Unit cost, per foot hole
5-(c)	Start in 15 days, complete in 6 months		
6-(a)	Independent contracts: Drilling,		
	10,000 ft. plug drilling @ $1.00	$10,000	
	10,000 ft. core drilling @ $3.00	$30,000	
	Total drilling, by contract - - - - - - -	$40,000	$2.0000
6-(b)	Labor, supervision & consultants:		
	(furnished by Micoa):		
	Field supt., 6 months @ $525	$ 3,150	
	Engineer-geologist, 6 mo. @ $400	$ 2,400	
	Total labor, super. & consultants:	$ 5,550	$0.2775
6-(c)	None: included under 6-(d)		
6-(d)	Operating equipment:		
	(furnished by Micoa):		
	150 hours cat. work building drill roads, etc., @$10 per hour, inc. operating supplies & operator	$ 1,500	$0.0750
6-(e)	Rehabilitation & repairs:		
	None: included under 6-(d)		
6-(f)	New buildings: none.		
6-(g)	Miscellaneous:		
	Accounting: 6 months @ $85	$ 510	
	Comp. ins., payroll taxes, etc., 6 months @ $84	$ 504	
	Total miscellaneous	$ 1,014	$0.0507
6-(h)	Contingencies:		
	10% of estimated costs	$ 5,000	$0.2500
Item 6: Total estimated cost of project:		$53,064	$2.6532

Notes:

Item 5-(c) : Drilling contractor is willing to start within a week of signing contract; and guarantees completion within six months of date of contract.

Item 6-(a): Contract drilling price given is bid from Airborne Exploration Co.. Included with application are bids from two other drilling companies.

Item 6-(d): Dozer necessary to build drill roads, etc. is property of the company, and is figured at customary charge.

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Rotary
Percussion

Calyx
Coring

CANNON DIAMOND DRILLING CO.
Compton, Calif. Grand Junction, Colo.

Compton Calif.
P.O.Box 549
Tel. No.1-9341

Grand Junction, Colo.
P.O.Box 712
Tel. 2605

Minerals Corporation of America
159 Colorado Avenue
Grand Junction, Colorado

Gentlemen:

In answer to your request for bids on drilling your property near Green River, Utah, we submit the following prices:

0-300 feet	Non Core	$1.37 per foot
0-300 "	Core	$5.00 per foot
Standby time		$12.00 per hour

Thanking you for your request we are,

Very truly yours,

S/F. G. Cannon, Jr.

(rd: copied from original: 2/29/56)

Minerals Corp. of America

Airborne Exploration Corporation
270 Park Avenue
New York 17, N. Y.

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(copied from original letter
2/29/56)

Murray Hill 8 - 8490

February 13, 1956

Minerals Corporation of America
120 South Tenth Street
P. O. Box 1297
Grand Junction, Colorado

Gentlemen:

Confirming our conversation regarding our bidding on drilling upon your North Slope and Oral properties near Green River, Utah, we herewith submit the following bid:

Plug bit drilling, depth 0 - 300 feet	$1.00 per foot;
Coring, 0 - 300 ft. depth, per foot cored	$3.00 per foot;
Standby time	$10.00 per hour;
Moves in charge	$100.00.

If core recovery does not exceed 70%, it is understood that such footage will be charged for at the same rate as plug drilling.

Standby time is defined as that time our drill rig is idle due to your request, or your failure to have drill sites prepared ahead of moves.

Usual contract provisions regarding sampling procedure, drill roads and sites prepared on your account, etc. will apply.

Thanking you for the opportunity to bid this job, we are

Very truly yours,

AIRBORNE EXPLORATION CORPORATION

JDM:rd

John D. Heffernan, Manager

LEASE AND AGREEMENT

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THIS LEASE AND AGREEMENT, made and entered into in quadruplicate this 19th day of December, A. D., 1955, by and between James W. Jensen, sometimes otherwise known as James Jensen, by his attorney in fact, Frank B. Hanson, George Kouris and Frank B. Hanson, all of Price, County of Carbon, State of Utah, hereinafter called the LESSORS, which expression shall include each and all of their heirs, executors, administrators, and assigns, and MINERALS CORPORATION OF AMERICA, organized and existing under and by virtue of the corporate laws of the State of Delaware, with its principal place of business at Grand Junction, Colorado, hereinafter called the LESSEE, which expression shall include each and all of its successors and assigns, WITNESSETH:

That the Lessors, for and in consideration of the covenants hereinafter set forth, do, by these presents, demise and let unto the LESSEE, Six (6) Mining Claims, together with the areas embraced therein, subject to the paramount title of the United States of America, and subject to the regulations and requirements of the mining laws of the United States of America, and of the State of Utah; said Six (6) mining claims being evidenced by Notices of Location being duly made, posted, and recorded in accordance with the mining laws aforesaid; said mining claims, their names, and their dates of recordation in the office of the County Recorder for the County of Emery, State of Utah, being as follows, to-wit:

Six (6) Mining Claims, as evidenced by Notices of Location, posted and recorded as aforesaid, located in the San Rafael Mining District, in Emery County, State of Utah, the claims located being as follows, to-wit:

NAME OF CLAIM	RECORDING DATA	BOOK & PAGE
North Slope No. 1	Sept. 26, 1951	J-9 579
North Slope No. 2	Sept. 26, 1951	J-9 579
North Slope No. 11	[illegible], 1953	J-12 259
North Slope No. 12	[illegible], 1953	J-12 260
Oral No. 1	Sept. 8, 1952	J-10 330
Oral No. 2	Nov. 30, 1953	J-13 446

TO HAVE AND TO HOLD the same for a term of five years from the date and execution of this lease, unless sooner relinquished or abandoned or forfeited or surrendered by LESSEE, under the terms, covenants and provisions of this lease.

IT IS FURTHER UNDERSTOOD AND AGREED that, if the LESSEE is in possession of said claims under this lease, and has fully complied with the terms, covenants and provisions thereof, at the termination or end of said lease period of five years, then and in that event the LESSEE shall have the option to remain in possession of said claims and mine and operate the same, and the said lease shall be extended and renewed upon the same terms, covenants and provisions of this lease for two (2) consecutive five year terms; provided, however, that the LESSEE shall, at least ninety (90) days prior to the expiration of the first five year term hereof, give written notice by registered mail to the LESSORS of its, the lessee's, election to extend the lease for the first five-year additional period, and like notice at least ninety (90) days prior to the expiration of the second five-year term, in the event LESSEE exercises the option to extend the lease for the second additional five-year term.

The Lessee, in consideration of the lease of the said mining claims hereinabove set forth and described, covenants and agrees with the LESSORS as follows:

1. The lessee shall pay to to the LESSORS the sum of Five Hundred Dollars ($500.00) upon the execution of this lease, receipt of which is hereby acknowledged, which said sum of $500.00 is not paid as royalty, nor can the same be charged against or claimed as credit against the further royalty payments provided hereunder, but is simply made as an evidence of their intention to carry out the terms of this lease, and to reimburse the LESSORS for any expense incident to the preparation and negotiation of said lease.

2. The Lessee shall further to pay to the LESSORS forty (40) percent of the net profits resulting from the operation of and mining of said mining claims, and the extraction and sale of ores mined and produced and sold therefrom; the said forty (40) percent of net profits computed on the basis hereinafter set forth being taken by the LESSORS as their royalty payments for ore produced, mined and sold from their claims above described, and the said forty (40) percent of net profits being computed determined and established at the end of each 4 week period from the first time ore is mined, extracted and sold from said claims above described, and

to continue each 4 weekly period thereafter as long as this lease, or any extension, continuation or renewal thereof, is in force and being; the determination, establishment and computation of the net profits so divided as aforesaid is to be made on the following basis, and computed solely on that basis, and none other, as long as this lease, or any renewal or continuation thereof remains in force, as follows, to-wit:

(a) The total returns as evidenced by settlement sheets or vouchers or checks received by the Lessee for each 4 weekly period from the sale of all ores mined and extracted during that said 4 weekly period shall be computed and totaled, and that shall be amount of the earnings from the mining and sale of ore for said 4 weekly period.

(b) From the amount of earnings so arrived at as above set forth for the said 4 weekly period, there shall be deducted all haulage allowances and development allowances included therein by the purchaser of said ores as now provided under present purchasing invoices.

(c) From the net amount of earnings so arrived and determined as set forth in (a) and (b) aforesaid, then there shall be deducted 5% of the total returns or proceeds, which said 5% amount as computed on the basis of the total returns shall be credited against the amount thus far expended by the LESSEE, as exploration costs; exploration costs being those costs incident to drilling and drifting to the point of mining ore; drifting essential in the mining of ore and not location of ore would be not classified as an exploration cost but a mining cost; and in this connection all expense incident to drilling or drifting not essential to mining, including the moving to the claims of drilling equipment, will be classified as exploration costs and not mining costs. This right to deduct 5% of total returns from the net amount of earnings as herein provided shall exist so long, and not any longer, as it takes the amounts and sums computed as aforesaid as they are applied to reimburse the LESSEE for such exploration costs paid and expended by the lessee, and when the lessee has received deductions and credits to the amount of the exporation costs, then, as aforesaid, this right to deduct shall cease and determine, and all further computations after happening of that event shall be made without taking into consideration such 5% deduction.

(d) From the net amount of earnings so arrived and determined as set forth in (a) and (b) aforesaid, and after the deduction has been made as set forth in (c), there shall be deducted another 5% of the total returns or proceeds, for each 4 weekly period, and the sums and amounts so realized therefrom shall be credited against the advance of $1500.00

made by the Lessee to the Lessors, for the purpose of removing outstanding claims or leases, as hereinafter set forth; and this right to deduct another 5% of the total returns or proceeds shall continue only so long as the sums realized each 4 weekly period do not equal the said $1500.00, and when they do, then, at that time, this right to deduct another 5% of total returns as aforesaid shall cease and determine, and all further computations after the happening of that event shall be made without taking into consideration the said5% deduction as above set forth.

(e) From the net amount of earnings so arrived at and determined as above set forth in (a) and (b) hereof, and the net amount of earnings left after the deductions or credits are taken as set forth in (c) and (d) hereof, (for as long as they shall be permissible and not longer), the Lessee shall then deduct its actual mining costs (mining costs being those costs incident to mining and excluding exploration costs as hereinabove defined and set out); and it is agreed that in addition to actual mining costs the pro rata cost for eachweekly period for industrial insurance, compensation insurance (unemployment) and that portion of the social security taxes paid by the lessee shall be included as a mining cost; and also, if any occupational tax is due the State of Utah for ore delivered from the claims, then that percentage of such tax applicable to the total returns for each 4 weekly period shall be a mining cost. In the event the lessee determines the said tax is not constitutional, or not payable, it shall nevertheless have a right to deduct the same as a mining cost, holding that amount in a trust fund until the question is determined, and then if determined in favor of the lessee, the lessee will refund 40% thereof back to the Lessor. It is understood that this occupational tax deduction shall not be operative until the total returns exceed 50,000.00, the State of Utah, by statute having exempted the returns to that amount before the application of the tax.

(f) It is agreed, however, in this connection that the Lessee in no event can charge from the net earnings as determined as provided in (a), (b), (C) and (d), more than 60% as mining costs; and that in event the actual mining costs as set forth in (e) exceed 60% then in that event, the Lessee shall for each 4 weekly period bear the same, and shall have no right of offset for such excess mining cost against the net amount of earnings so computed for each 4 weekly period, for that 4 weekly period, or any 4 weekly period in the future; each 4 weekly period standing on its own, without right of redress against any other 4 weekly period.

(g) The remainder, computed as set forth in (a), (b), (e), (d), and (e), or rather resulting therefrom after the application of those paragraphs have been taken into consideration, shall divided as follows: 60% of said remainder shall be retained by the lessee, and 40% thereof shall be paid to the LESSORS as royalty as set forth in paragraph 2 hereof and above.

(h) Whilst the determination and computation of the royalty due the LESSORS is to made at the end of each weekly 4 week period, the LESSEE shall have ten days after the end of such 4 weekly period in which to transmit and pay said royalty as so computed to Frank B.Hanson, at 28 North Carbon Ave., Price, Utah, one of the lessors, and the agent for the other lessors; lessee sending to the said Frank B. Hanson statement of computation for each said 4 weekly period so

computed as aforesaid.

(i) In this connection, it is further agreed that in the event the total returns for ores extracted, mined and sold shall not be sufficient to reimburse the LESSEE for its exploration costs, or its advance of $1500.00, deducated on a 5% basis above set forth, then the LESSEE shall have no recourse against the LESSORS for any of the moneys so expended for exploration costs or so advanced as aforesaid.

(j) It is mutually understood between the LESSEE and the LESSORS that the claims known as the NORTH SLOPE, and the claims known as the ORAL, have not as yet been certified as yet for payment of the bonuses due as provided under the Atomic Energy Act; and it is further mutually understood between the LESSEE AND THE LESSORS that the LESSORS have shipped ores from said claims; and that upon certification of these claims, the LESSORS shall have a right to receive the bonuses applicable thereto for ore shipped prior to this lease, as their own, without any claim being made for same by the LESSEE, and without deductions or claims of any kind by the LESSEE.

(k) It is mutually understood between the LESSEE AND THE LESSORS, however, that after the certification of the claims for payment of the bonuses has been made, and after the LESSORS have been paid the bonuses due on ore shipped prior to this lease, then the amount of the bonuses remaining on on the claims shall accrue to and belong to the LESSEE, the LESSEE MAKING claim therefor under the certification of the LESSORS, or under their certificate, as may be determined by the A.E.C., subject however to the agreement by the LESSEE to pay to the LESSORS 40% of the bonuses received by them from the mining of ore, the LESSEE having the right to first deduct from said bonuses as received, as long as the exploration and advancement heretofore referred to herein is unpaid, 5% of the total bonus received as it is received, for exploration cost, and 5% of the total bonus as it is received for advancement as aforesaid, and then to divide such bonuses as received, 40% to the LESSORS and retain 60% to them; said bonuses, or rather the 40% thereof as above set forth, being payable to the LESSORS thru their agent, Frank B.Hanson, at 28 North Carbon Ave., Price, Utah, within ten days after receipt thereof, together with a statement showing the amount of bonus received at each time, less the deductions as aforesaid.

3. It is mutally agreed by and between the LEASEE, and the LESSORS that certain surveys have to be made, and certain locations cleared, and outstanding claims, leases, and liens have to be removed, and for that purpose, as set forth in paragraph 2, the LESSEE will advance, and does hereby advance, to the LESSORS, for those purposes, the sum of $1500.00, which sum shall be repayable only in the manner and way set forth in paragraph 2, subdivisions (d) and (i) thereof, and not otherwise.

4. The Lessee covenants and agrees to enter upon said mining property and commence exploration and or mining within thirty (30) days from the date

hereof. The lessee agrees to work and mine said premises in a manner consistent with good and economical mining practices with due regard to the development and preservation of the same as mining property. Suspension of exploration and /or mining operations for a period of more than fifteen (15) days shall, at the option of the lessor, constitute abandonment, and result in the automatic forfeiture of the lease, at the option of the lessors. It is mutally understood, however, that mining and /or exploration conducted upon any of said claims, or any one of them, leased herewith shall satisfy the foregoing agreement by LESSEE to work and mine said premises; and that suspension of mining and/ or exploration for periods longer than fifteen (15) days due to Acts of God, flood, excessive snow or other causes resulting in involuntary suspension of such work on the part of the LESSEE shall not constitute abandonment, or forfeiture, nor violation of the terms of this lease.

5. LESSEE shall not be under obligation to survey any claims but may at its own discretion, make such surveys when ores in commercial quantities are located on any claims. If such surveys, in the opinion of both the LESSEE AND LESSORS, indicate the necessity of filing new or amended locations, or location certificates, LESSEE AND LESSOR will mutually prepare the same, sharing the cost thereof, and when satisfactory to both the LESSORS AND LESSEE agree to execute and file of record the said amended location or location certificates.

6. Lessee shall enter upon said leased premises and work the same in good miner-like fashion, in manner necessary to good and economical mining, and it is hereby given the right to take over the sole and exclusive possession of said property and to investigate, test, sample and develop, work, operate, manage, and control the same, and the water and water rights appurtenant thereto, and to mine, extract, and remove from said property the ores and minerals therefrom, therein and belonging thereto, and to treat or mill on or off the premises, ship, sell, or otherwise dispose of the same, and receive the proceeds therefrom, subject, however, to the express limitation that the ores so sold or disposed of cannot be so sold or disposed of for less than the market price prevailing at the time of such disposal or sale, and subject further to the payment of the

royalty hereinaoove provided, and in the manner and way set forth hereinabove; to erect, construct, maintain, use and operate thereon structures, machinery, and equpment, to build, erect, construct, use and operate ponds, tanks, or reservoirs for the storage and use of water; to stack or store on the surface thereof waste products and residues resulting from the operations of said property; to construct and maintain roads, power lines, telephone lines, etch., over and across the surfance thereof; and to do all things, including but not limited on the foregoing, necessary or convenient to carrying on the operations contemplated herein.

7. Lessee shall perform the annual labor upon said mining claims as required by law; and shall record such data required and otherwise comply with the laws of the United States and the State of Utah to the end that the claims leased from the LESSORS shall remain valid and in good standing.

8. Lessee shall furnish Lessors with copies of any drill logs and maps made by it and all drill holes put down by LESSEE shall be plainly marked thereon for location and identification purposes. Also, LESSEE shal, in proper and reasonable manner, mark location on site of all drill holes and plug the same.

9. Lessee shall comply with all laws and regulations pertaining to the mining operations to be carried on hereunder by LESSEE, including the payment of industrial, unemployment and social security insurance or taxes, and occupational taxes, if legally valid, when levied by the State of Utah, over and above the exemption of $50,000.00 for ores mined and delivered, and on the basis and under the terms as rovided in Saragra h 2 hereof. Lessors shall pay any property tax levied by the county on the property herein leased, if any there is, it being understood these are unpatented mining claims, located on the Public Domain of the U. S. of A., and as yet no such levies have been made thereon.

10. Lessee shall take out Workmen's compensation insurance and maintain the same, on any basis satisfactory to the State and its employees, and shall also pay all unemployment insurance and social security taxes levied on said property, or rather, against the payrolls as provided by law, and shall have the right to pro rate such as mining costs as provided in paragraph 2 hereof.

11. Lessee agrees to indemnify and hold harmless from harm, the Lessors, from any and all loss, or damage, and from all claims for injury, death, loss or damage of any kind or character, and by whomsoever suffered, occasioned by or in connection with any work performed by LESSEE, its agents or employees. Lessee agrees fruther to promptly pay all bills for labor and material incurred in LESSEE'S operations hereunder, and to indemnify and save harmless LESSOR from all claims and liability of every kind and nature which may or might be incurred by reason of LESSEE'S operations hereunder.

12. Lessors, or their duly signated agent or agents, may at reasonable times, enter on said premises and descend into the mine workings for the purposes of inspecting the same at reasonable times without interference with mining operations. LESSORs shall also have the right to enter upon the premises at all reasonable times for the purpose of pewbing any existing drill holes on said mining claims.

13. Lessors represent to LESSEE that they acquired the claims herein described by Locating and filing upon said claims itself, and to the best of their knowledge and belief said mining claims are and were located, discovered, staked and filed upon in full compliance with the laws of the United States and the State of Utah, upon public domain, which they believed was open for location under said laws, and that the same to the best of their belief and knowledge good and in full legal standing. LESSORS further agree that in the event any adverse claims are asserted thereto, at any time, it or they will defend against said claims promptly and to the best of their ability, and in this connection, LESSEE, who have possession hereunder, will promptly advise them of any claims made, but that the LESSEE will not surrender possession of any of the property, until ordered to so do by a Court of competent jurisdiction.

14. LESSORS shall have the right to declare this lease at an end, upon the violation of any of the covenants and provisions hereof, but that such right shall not be effective, except in case of cessation of work or exploration as herein above provided, or failure to pay royalties as herein above provided (which without notice will cause forfeiture of lease, at option of lessors) without the LESSORS giving the LESSEEs thirty days written notice,

by registered mail, addressed to the LESSEE at Minerals Corporation of America, at P. O. Box 1297, Grand Junction, Colorado, of such violation and during such 30 days period LESSEE shall have the right to correct and remedy the alleged violation. In the case of cessation of work or explora- for a period longer than 15 days, unless excused by the terms of this lease, or in case of failure to pay royalties, the LESSORS may treat the same as a surrender of the lease without notice, but the LESSORS may, by written notice as herein provided, call these violations to the attention of the LESSEE, and the LESSEE will have only 10 days from receipt of notice to remedy and correct such violations, it being the purpose of this provision to give the LESSOR the choice of remedies, and to maintain the essence of good relations between the LESSOR and LESSEE, but since this is mining property, the LESSORS expressly except themselves from being bound to give notice, except at their option where the property has been abandoned longer than 15 days, or royalties have not been paid within the time stated in said lease.

15. Lessee shall have the right upon the termination or cancellation thereof however, at the time the same is effected, to remove from the leased premises within 90 days from the termination date, all property placed ther on by it and irrespective of whether the same may constitute real or personal property; provided, however, that LESSEE may not remove any timbering from any shaft, tunnels or drifts, and providing further that the LESSEE shall not remove any underground structure that would endanger any shaft, tunnel, or drift. Nor shall the Lessee remove any drill hole markers.

16. That the LEASE may not be assinged, either in part or in whole, without the written consent of the LESSORS first had and obtained.

17. In the event LESSEE desires to make application to the United States of America, or any of its agenices to cause said properties to be drilled at the total or partial expense of the United States, or to any Government agency for an exploration or development loan or grant, LESSOR agrees to execute consents or agreements for mineral exploration as may be required by the United States, or any of its agencies, provided, however that any such lien shall not constitute or provide to have any lien thereafter on the title of the property and mining claims covered by this lease.

18. If the Lessee shall locate any mining claim within six hundred (600) feet (airline) of the boundary lines of any of the claims described herein, LESSORS shall be entitled to a royalty from the production thereon at the same rate and determined in the same manner as royalty fixed hereto, and herein, for and during the term of this lease or any extensions as herein provided for.

19. LESSORS shall locate any additional claims within six hundred (600) feet (airline) of the demised claims, LESSEE shall have the right to lease the same on the same terms and conditions as herein contained.

20. All notices provided for herein to be served upon LESSORS shall be in writing, by registered mail, and deposited in the United States mail, addressed to Frank B. Hanson, 28 North Carbon Avenue, Price, Utah, or such other address as the LESSORS, in writing, hereafter direct. All notices herein provided to be served upon LESSEE shall be in writing, by registered mail, and deposited in the United States mail, directed to Minerals Corporation of America, P. O. Box 1297, Grand Junction, Colorado, or at such other address at ia may, in writing, hereinafter designate.

This lease and each and all of the terms, conditions, covenants and agreements herein contained shall extend to and be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the LESSORS have hereunto set their hands and seals the day and year first above written, and the LESSEE has caused its corporate name to affixed thereto, together with its seal, on the day and year first above written.

JAMES W. JENSEN

By _____
His Attorney.

_____
LESSORS.

MINERALS CORPORATION OF AMERICA, a corporation,
BY _____
ITS PRESIDENT.

ATTEST _____
~~ITS SECRETARY.~~
Vice President and Director

(CORPORATE SEAL)

STATE OF UTAH,)
: SS
COUNTY OF CARBON)

On this 11 day of December, A. D., 1955, before me personally appeared Frank B.Hanson, known to me to be the person who is described in, and whose name is subscribed to the within instrument as the attorney in fact of JAMES W. JENSEN, and he acknowledged to me that he subscribed the name of James W. Jensen thereto as principal, and his own name as attorney in fact.

IN WITNESS WHEREOF, I, A Notary Public in and for the County of Carbon, State of Utah, have hereunto set my hand and affixed my official seal the day and year last above written.

Notary Public for Utah
Residing at Price, Utah.

My commission expires: _____

STATE OF UTAH,)
: SS
COUNTY OF CARBON)

On this 11 day of December, A. D., 1955, beforeme, A Notary Public, in and for the County of Carbon, State of Utah, personally appeared Frank B. Hanson, and George Kouris, two of the signers of the foregoing instrument, who duly acknowledged to me that they executed the same.

Notary Public for Utah
Residing at Price, Utah.

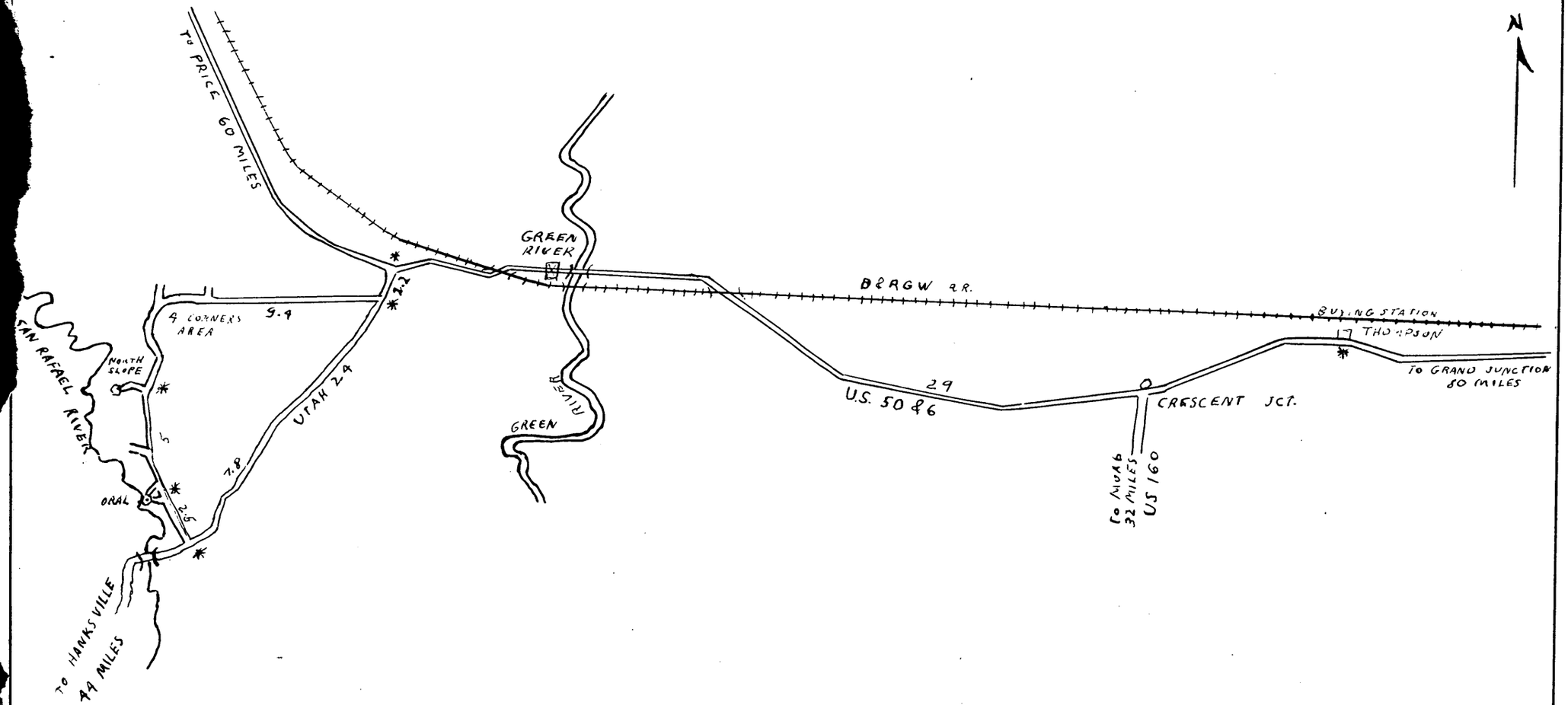
My commission expires _____

STATE OF UTAH,)
: SS
COUNTY OF CARBON)

On this 19 day of December, A. D., 1955, before me, A Notary Public, in and for the County and State aforesaid, personally appeared R. W. D. Woods, did say that he is the PRESIDENT of MINERALS CORPORATION of AMERICA, a Delaware Corporation, and that the said instrument was signed in behalf of said corporation by authority of its by-laws, and the said R.W. D. Woods acknowledged to me that the said corporation executed the same.

My commission expires Dec 13, 1959

NOTARY PUBLIC FOR UTAH.
RESIDING AT PRICE, UTAH.



INDEX MAP

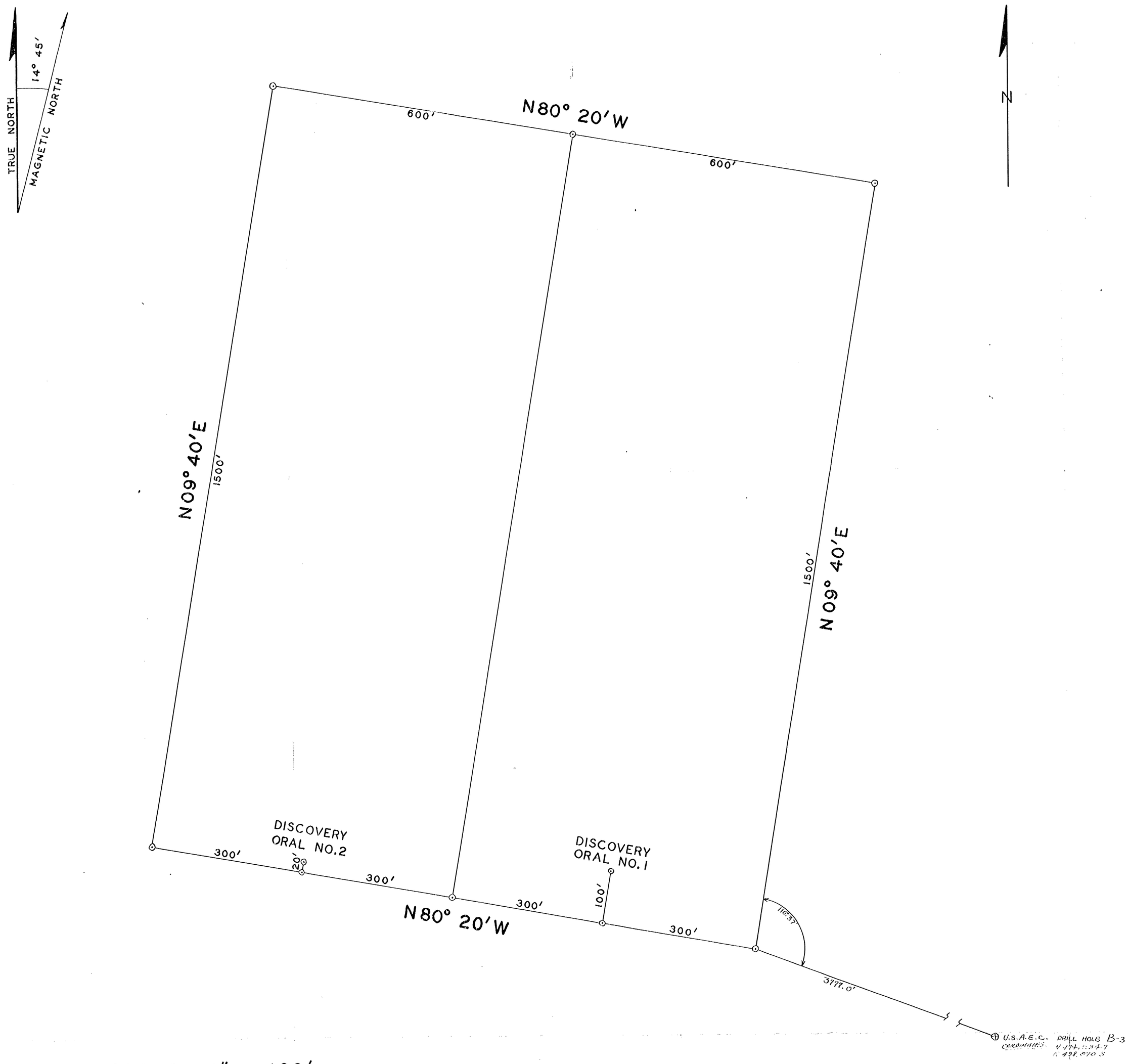
MINERALS CORPORATION OF AMERICA
2nd & Colorado
GRAND JUNCTION, COLORADO
NORTH SLOPE SEC 33, T21S, R14E
ORAL SEC 15, T22S. R14E
EMERY COUNTY, UTAH

Scale: 1" = 4 MILES
FEB. 3 1956 J. S. Hayden

MINERALS CORPORATION OF AMERICA
CLAIM MAP
NORTH SLOPE NO.S, 1-2-11-12
S. 33, T. 21 S., R. 14 E., S.L.M.
EMERY COUNTY, UTAH
SCALE: 1" = 100'

⊗ : EXCAVATIONS SHOWING ORE
X : HOT SPOTS

FEBRUARY 18, 1956 Thomas S. Harper



SCALE 1" = 100'

CLAIM MAP
ORAL NO.1 & NO.2
T22S, R14E, SEC. 15
EMERY CO. UTAH

MINERALS CORPORATION OF AMERICA

JANUARY 28, 1956

SURVEYED BY: J. F. SMITH

MINERALS CORPORATION OF AMERICA
CLAIM MAP
NORTH SLOPE NO.S, 1-2-11-12
S. 33, T. 21 S., R. 14 E., S.L.M.
EMERY COUNTY, UTAH
SCALE: 1" = 100'