GOLD and SILVER BOUGHT.

Wm. H. Stowell & Co.

CHEMISTS and ASSAYERS
421 SPRAGUE AVENUE
TELEPHONE MAIN 5924

Memorandum of Assay of Rock made for

Western Union Mine Spokane, Wash., Dec 7, 1956

SAMPLE MARK	ASSAY VALUE PER TON OF 2,000 POUNDS AVOIRDUPOIS															
	..... per lb.			Mn Oz per lb.			Silver at ..... cents per ounce				Gold at ..... per ounce				Total	
	Per Cent	DOLLARS	Cents	Per Cent	DOLLARS	Cents	OUNCES	10ths	DOLLARS	Cents	OUNCES	100ths	DOLLARS	Cents	DOLLARS	Cents
No. 1 9 cut Sec 23 T 24 R 38 E				0.132												
No. 2																
No. 3 153741 - 12/4/56				0.345												
No. 4																
No. 5																
No. 6																
No. 7																
No. 8																

No. 153744

Charges $ 7.00

Wm. H. Stowell & Co. Assayers
H. J.

10

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

MAY [illegible]

Mr. John L. Campbell, President
North Star Mining, Inc.
417 Paulsen Building
Spokane 1, Washington

Re: Docket No. [illegible]-1954 (Uranium)
Spokane Indian Reservation Land
Stevens County, Washington

Dear Mr. Campbell:

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. Mittendorf

Administrator

FMMurphy/izm 5-7-58
cc: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA Field Team, Region I (2)

April 28, 1958

Memorandum

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

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of Field Team Report, DMEA 4954 (uranium) North Star Uranium, Inc., Stevens County, Washington

North Star Uranium, Inc. has leased a property from the Spokane Indian Tribe, on which there is a radioactive fault cutting granitic country rock of the Loon Lake batholith. Green autunite crystals have been found along this fault and the applicant has compared it with the structure at the productive Midnight Uranium mine located adjacent to the south of this property. The applicant proposes to explore the prospect by making a grid survey to ascertain the principal anomalies, by cutting bulldozer trenches, and by drilling with percussion drills to depths of 50 to 100 feet below the surface. Cost of the project is estimated at roughly $12,000.

The Field Examiners report that the property is underlain by deeply weathered granite, which is cut by a persistent but not intensely mineralized fracture zone. Some sparsely disseminated occurrences of autunite were seen in the fracture zone, but samples taken by the representatives indicate that the zone is weak and that there are no known lithologic or structural features that are likely to have localized higher grade concentrations of uranium minerals at depth. Samples taken indicate that some of the area contains ore grade material. They recommend denial of the application.

The examiners have presented good evidence for denial of this application. There would appear to be very little opportunity of making a significant discovery by exploration of this property and I recommend that the application be denied.

T. H. Kiilsgaard

cc: DMEA (3)
James Paone
C.I. Gardner
Director's reading
Branch reading

Chron. file
Docket file

THKiilsgaard/mm G-MD-4-28-58

4954

EXTRA COPY
DMEA
RECEIVED APR 21 1958

DATE	INITIALS	CODE

Co. 157 Howard Street
Spokane 4, Washington

April 17, 1958

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

Re: Docket No. DMEA-4954 (Uranium)
North Star Uranium, Inc.
Spokane Indian Reservation Land
Stevens County, Washington

Dear Mr. Selfridge:

Enclosed are three copies of an examination report on this property by E. W. Parsons, Mining Engineer, and D. C. Alvord, Geologist, Geological Survey.

Deeply weathered granite is cut by a persistent fault and fracture zone that has locally been intruded by a lamprophyre dike or dikes. The fault and fracture zone, particularly where there are dikes, contains scattered, low-grade autunite-bearing zones. Five samples taken at the most promising exposures ranged from 0.022 percent U_3O_8 to 0.092 percent U_3O_8.

Parsons and Alvord conclude that further exploration with Government funds is not warranted and they recommend that the application be denied. The Field Team concurs with this recommendation.

By Field Team, Region I

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

Reviewed by
DMEA OPERATING COMMITTEE
(date)

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

Enclosures
cc: USBM(2)
USGS(SRO)
Alvord
AEC, Salt Lake

EXTRA COPY
DMEA
RECEIVED APR 21 1958

DATE	INITIALS	CODE

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

April 14, 1958

MEMORANDUM

To: DMEA Field Team, Region I

From: E. W. Parsons, Mining Engineer, U. S. Bureau of Mines, and D. C. Alvord, Geologist, U. S. Geological Survey

Subject: Examination Report, Docket No. DMEA-4954 (Uranium), North Star Uranium, Inc., Spokane Indian Reservation Land, Stevens County, Washington

INTRODUCTION

An application for Government aid to explore for uranium was received from North Star Uranium, Inc., Spokane, Washington, on March 3, 1958. The corporation proposes to explore the property with a radiometric grid survey followed by cross-trenching with bulldozer and 5,000 feet of percussion drilling, at a total estimated cost of $11,851, of which the Government's share would be 50 percent or $5,925.50.

The authors examined the property on April 2, 1958, in company with R. J. Hundhausen, consulting engineer and representative of the corporation. The most favorable trench exposures known to the applicant were examined. Frequent hail and rain showers handicapped the examiners but did not prevent a complete examination. About 4 hours were spent on the property.

SUMMARY AND CONCLUSIONS

The property is underlain by deeply weathered granite, which is cut by a persistent but not intensely developed fault and fracture zone. Locally, the fault and fracture zone is intruded by lamprophyre dikes. Dozer trenching across the fault-fracture zone has shown that the structure, particularly in the locality of the lamprophyre dikes, contains sparsely disseminated, very low-grade deposits of autunite and possibly other secondary uranium minerals. Five samples were taken from exposures pointed out by the applicant's representative as being the most promising on the

Reviewed by
DMEA OPERATING COMMITTEE

(date)

property. None of these samples contained more than 0.092 percent cU_3O_8. The structure, as exposed at the surface, is not promising and as there are no secondary lithologic or structural features known to the examiners that would be likely to have localized higher grade concentrations of uranium minerals at depth, further exploration of the structure is not warranted.

RECOMMENDATION

It is recommended that the application be denied.

LOCATION AND ACCESSIBILITY

The property is in sec. 23, T. 29 N., R. 38 E. Willamette meridian, at the southern end of Stevens County, Washington (fig. 1). It is accessible from Wellpinit, Washington, a town within the Spokane Indian Reservation, by traveling northwesterly on a graveled road to the junction with the Drum road, a distance of 3.5 miles, thence northerly a distance of 4 miles to the turnoff of the mine road at the junction of the Drum road with the Kelley road. Turn left and proceed northwesterly a distance of 1.5 miles to the property. The road as far as the Drum road junction is well-maintained. The remaining 5.5 miles comprise a poorly graded partially graveled dirt road. Snow and rainfall are generally light and the road conditions are usually good.

APPLICANT

The company has been engaged in mining in the region for about 2 years, during which time it completed one small DMEA contract in a satisfactory manner. Mr. Hundhausen, consulting engineer, would be capable to supervise the proposed work. In the application the company states that it has sufficient money on deposit to complete its share of the costs of the proposed project.

APPLICANT'S PROPERTY RIGHTS

The property consists of a mining lease of 164.14 acres on tribal lands of the Spokane Indian Reservation, Stevens County, Washington. It was formerly known as the Robert Sherwood mining permit. The North Star Uranium, Inc. controls the property by virtue of an approved mining lease from the Spokane Indian Tribe. There are no liens, mortgages, or other encumbrances on the property.

DESCRIPTION OF PROPERTY

The property is along a low ridge extending southeast from Blue Mountain. The surface is rolling, covered with soil averaging 3 feet deep, and has a sparse stand of small evergreens.

Mine workings consist of a number of bulldozed trenches up to about 200 feet long and 10 feet deep close to the north end of the property. There has been no underground work and there are no facilities on the property.

HISTORY AND PAST PRODUCTION

According to Mr. Hundhausen, the property was originally discovered by airborne radiometric reconnaissance in 1955 and 1956. A portion of the property was explored by dozer trenching in 1956. The Phelps-Dodge Company conducted a small trenching program on the ground immediately north of the property during the same year. No ore has been produced from the property. According to the applicant, Phelps-Dodge abandoned the ground to the north after completing a few trenches.

GEOLOGY

The property is underlain by a very coarse-grained leucocratic granite; biotite, the only mafic mineral noted, generally constitutes less than 5 percent of the rock. At some localities, the granite is porphyritic; at others, it has a fine-grained, almost aplitic texture. A muddy cast to the fine-grained phase and peculiar joint patterns suggestive of bedding, hint of resorbed roof pendant material. The granite has been deeply weathered, the upper few feet constituting nothing more than grus. Trenches 8-10 feet in depth have failed to encounter firm rock. A remarkably persistent but not particularly intensely developed fault and fracture zone crosses the property in a north-northeasterly direction. At the north end of the property this fault and fracture zone has been traced by trenching for a distance of about 1,000 feet. The structure can be inferred to extend about 1,500 feet southward from the area of trenching both by anomalous radioactivity and, at the south end of the property, by the presence of a natural exposure of the granite that is cut apparently by the same fracture system. Where best developed, the fault zone consists of a considerable number of variably spaced, roughly parallel fractures, sheetlike in appearance, extending over a width of 15-40 feet or slightly more. The individual fractures average an inch or so in width but in places may open up to several inches; they are generally filled with mixtures of broken country rock, clays, iron oxides and, in places, vein quartz. Megascopically discernible sericite is present at most exposures. Locally, lamprophyre dike rock has been intruded into the zone of

fractures, more or less toward the middle of the zone. Weathering or hydrothermal alteration has decomposed the dike rock to a slightly greenish to light-gray clay containing unaltered phenocrysts of biotite. This dike can be traced from the north boundary of the applicant's property southward about 500 feet, and northward, beyond the boundary, about 150 feet. It appears to pinch out both northward and southward. Figure 2, accompanying this report, is after figure 3 of the applicant's report, which was prepared by Mr. Hundhausen. Our examination indicates that Mr. Hundhausen's mapping presents the picture well enough. The northwesterly trending fault shown to offset the dike is exposed in only one trench where it appears as a zone of weak shears dipping 30° westerly. Whether or not it offsets the dike is somewhat uncertain but the assumption that it does is justified as a reasonable explanation of the apparent offset exposed in the trenches. According to Mr. Hundhausen the dike dips about 60° E. Actually, however, it probably dips closer to an average of 75°-80° eastward. In either event it dips too steeply to be drilled satisfactorily with vertical holes as suggested in the application. In the area shown on figure 2 the dike ranges in width from 2 to 4 feet; however, it pinches rapidly northward and southward of the area shown and eventually thins to the vanishing point. A compact massive waxy pistachio-green clay occurs in all of the exposures of the dike rock as irregular-shaped blotches and veinlike fillings in minute fractures. At first glance this material is easily confused with the very small autunite crystals seen in some of the exposures. The presence of this clay mineral, tentatively identified as nontronite, probably has been responsible, in part at least, for some of the enthusiasm the earlier operators had for this property. As indicated on the applicant's map, autunite crystals are present. They are, however, exceedingly small, widely disseminated, and difficult to find. Nowhere on the property were the examiners able to find an occurrence of autunite-bearing rock that, either on the basis of appearance or radioactivity, approached ore grade. Hydrothermal activity associated with the fault and fracture zone is indicated by the presence of sericite, and vein quartz filling some of the fractures. The intense deep weathering of the rocks in this locality, however, greatly confuses the picture, and it is difficult to guess just how intense the hydrothermal activity along the fault zone might have been. Most, if not all of the clay and iron fillings along the fractures could easily be accounted for by preferential downward percolation of groundwaters during the period or periods of intense weathering. There is no lithologic or structural evidence that would justify inferring that the conditions at depth are any more conducive to the localization of uranium-bearing deposits than those observed at the surface.

SAMPLING

A total of five samples were cut from the structure during the examination. Sample EWP-17B was cut from a trench located 400 feet south-southwest of Trench No. 1, as indicated on figure 2. At this locality the fault and fracture zone is weakly expressed and the lamprophyre dike is not present. Nevertheless this is where Mr. Hundhausen expected to find the best showings and where on figure 1 of the application, an assay of 0.34 percent U_3O_8 is recorded. We were able to find a few crystals of autunite but radioactivity in the pit was only about two to three times background. Sample EWP-17B was cut at the bottom of the pit where radioactivity was the most intense. It assayed only 0.022 percent U_3O_8. The locations of Samples EWP-18B, -19B, -20B, and -21B are shown on figure 2. All of these samples excepting EWP-19B were cut from the lamprophyre dike at localities indicated by their radioactivity to be the most promising. Sample EWP-19B was cut from the granite, on the footwall side of the dike, across a zone of intense fracturing containing abundant goethite. It assayed only 0.056 percent U_3O_8. The radioactivity here was four or five times background, and on this basis appeared the most strongly mineralized locality examined on the property. The results of the sampling are tabulated below:

Sample No.	Width (feet)	U_3O_8 %
EWP-17B	1.5	0.022
EWP-18B	3.8	0.042
EWP-19B	3.0	0.056
EWP-20B	2.5	0.092
EWP-21B	2.0	0.071

From the above it is obvious that the present exposures on the North Star lease do not contain ore-grade material. It is possible, as Mr. Hundhausen speculates, that the grade of the uranium-bearing rock might improve with depth, away from the intense leaching near the surface, and especially near the present water table. The probability that conditions near the water table would result in deposits of economic significance is not very great, however, and an exploration program based on this premise is not warranted.

SUPPLIES AND EQUIPMENT

Materials, supplies, and equipment are available in Spokane, Washington, 55 miles to the southeast. Manpower is available locally on the Indian Reservation or in Spokane and wages will start at $2 per hour. There is no water on the property and drill water would have to be hauled 3 or 4 miles. There are no power lines in the vicinity.

APPLICANT'S PROPOSAL

The applicant's proposal consists of making a grid survey to ascertain the principal anomalies; cutting bulldozer trenches roughly 200 feet long by 8 feet deep at right angles to the fracture zone at 200-foot intervals; and drilling with percussion drill 50 holes from 80 to 150 feet deep to cut the fault and fracture zone at a depth of 50-150 feet below the surface. The estimated total cost of the proposal is $11,851.

The estimated costs presented are as follows:

Step 1

Grid Survey:

2 men at $20/day - 12 days	$ 480.00
Supervision $\frac{12}{30} \times 750 \times \frac{1}{6}$	50.00
	$ 530.00

Step 2

Bulldozer trenching

Rental 1 D-8 Bulldozer & Operator at $18/hr.

Rental of above 100 hr. at $18	$1,800.00
Helper 100 hrs. at $2	200.00
Surveying and sampling	150.00
Supervision $\frac{12}{30} \times 750 \times \frac{2}{3}$	200.00
	$2,350.00

Step 3

The cost of percussion drilling can be closely estimated. A bid furnished herewith by Herb Sams, Contractor, shows the following prices: 0-50' - $1.25, 50-100' - $1.40, 100-150' - $1.60. All percussion drilling done under this proposed contract will be done by independent contractor. Costs are summarized below:

Step 3 (cont'd.)

3,500' at $1.306	$4,571.00
1,500' at $1.60/ft.	2,400.00
Estimate mobilizing and demobilizing drill	400.00
Sampling labor 30 days at $20/day	600.00
Assays 100 ea. at $5	500.00
Supervision	400.00
Travel - car expense - gas and oil	100.00
	$8,971.00

Summary of Costs:

Step 1 Grid Survey	$ 530.00
Step 2 Trenching	2,350.00
Step 3 Percussion drilling	8,971.00
Total	$11,851.00
Government's share at 50 percent	$ 5,925.50
North Star's share at 50 percent	5,925.50
	$11,851.00

MERIT OF THE PROPERTY

The North Star lease is underlain by granitic rock of the Loon Lake batholith, a plutonic rock known to be favorable for the occurrence of the uranium deposits both on the Spokane Indian Reservation and in the Mt. Spokane Autunite District to the east. The granitic rock is cut by a persistent weakly mineralized fault and fracture zone that has locally been intruded by lamprophyre dikes. There is some evidence of post-dike hydrothermal mineralization, but there do not seem to be any unusual lithologic or structural controls which might lead to concentrations of uranium higher in grade than those seen at the surface. So far only very low-grade concentrations of secondary uranium minerals have been found and there does not appear to be any target on the property at this time that would warrant exploration. Further prospecting, however, might disclose features of greater merit than the shear zone which, so far, has received the bulk of attention.

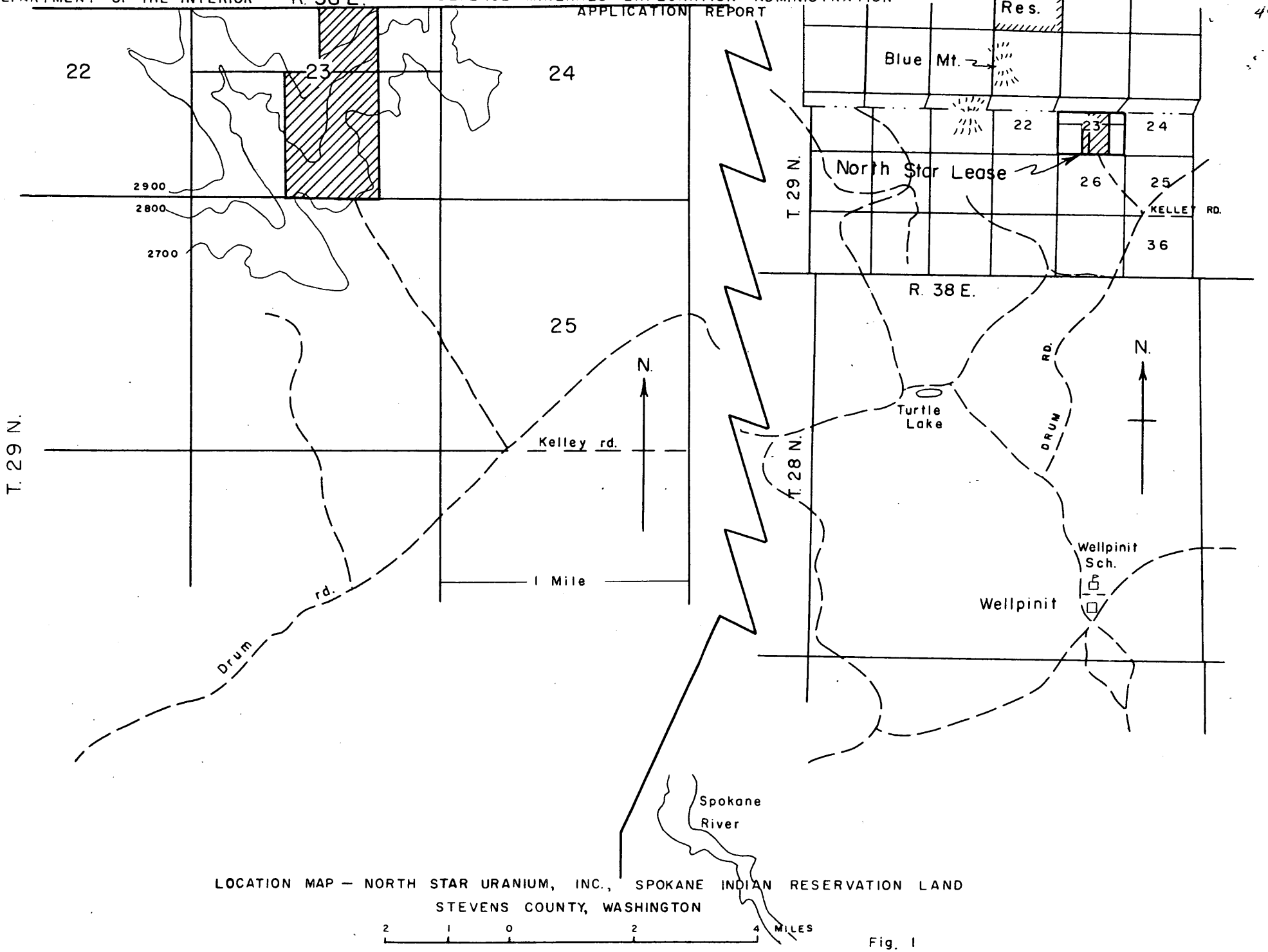
Enclosures
Distribution:

DMEA(3)	Docket
USBM(5)	Alvord
USGS(SRO)	AEC, Salt Lake

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
APPLICATION REPORT

DOCKET NO DMEA 4954
4954



LOCATION MAP — NORTH STAR URANIUM, INC., SPOKANE INDIAN RESERVATION LAND
STEVENS COUNTY, WASHINGTON

Fig. 1

EXTRA COPY
D M E A
RECEIVED APR 21 1958

DATE	INITIALS	CODE

Form MF–103
Revised Oct. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42–R1035.3
Approval expires June 30, 1958

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

NAME OF APPLICANT (Full legal name and mailing address as it should appear on contract if one is executed)

North Star Uranium, Inc.
417 Paulsen Building
Spokane 1, Washington

RECEIVED
MAR 10 1958
D.M.E.A.

RECEIVED
by hand
MAR 3 1958
U. S. G. S.
SPOKANE, WASH.

APPLICANT NOT TO USE THIS BLOCK

Docket Number	4954
Date Received	3-10-58
Government Participation %	50
Region	I
Division Code	700

BUSINESS ORGANIZATION (Check one)

- Individual ☐
- Corporation ☒
- Partnership ☐
- Other (Specify) ☐

State in which firm is organized: Washington

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
John F. Campbell	417 Paulsen Building	President
A. F. Larson	Spokane, Washington	Vice-Pres.
A. C. Townsend	" " "	Secretary
S. E. Farber	" " "	Treasurer

Mineral(s) for which you wish to explore: Uranium

Estimated Cost of Project: $ 11,851.00

LOCATION OF PROPERTY

Name	County	State
Spokane Indian Reservation Tribal Mining Lease	Stevens	Wash.

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order–I, Revised, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals,* of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

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.

MAR 3 – 1958
Dated

A. C. Townsend
BY (Signature)

Secretary
Title

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

(b) State your interest, if any, in operations stated in 2*(a)*.

(c) State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves on the property giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

(a) Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

(b) If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

(a) Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

(c) Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

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)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Revised.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC., WASH., D.C. 25960

Application for D.M.E.A. Loan
Sherwood Lease
Spokane Indian Reservation
Stevens County, Washington

1.(A) The property to be explored consists of a 164.14 acre mining lease on tribal lands on the Spokane Indian Reservation, Stevens County, Washington, described as follows:

Lot 6, W½ SE¼, E½ E½ SW¼, Sec. 23, T29N, R.38E.W.M. totalling 164.14 acres.

(B) This property was formerly known as the Robert Sherwood mining permit.

(C) The property is now held by the North Star Uranium, Inc., applicant, by virtue of an approved mining lease for 10 years from the Spokane Tribe of Indians, copy of the lease attached hereto.

(D) There are no liens,mortgages or other encumbrances on the property.

2.(A) There are no existing mine workings on the property. The map herewith (Fig.3) shows the principal bulldozer trenches that have been made to date. The trenching was done by the permittee Mr. Robert Sherwood and by a sub-permittee known as Western Uranium Mines, Inc.

(B) North Star Uranium, Inc., has had no interest in any of the physical work done on the property prior to this application.

(C) No production has been made from the property. Two samples, however, indicate ore by commercial grade.

(D) No ore reserves may be estimated.

(E) The deposit to be explored consists of a strong, persistent, wide radio active fault on shear zone in granite country rock which is part of the Leon Lake batholith. The strike of the shear zone is North 19° East, and the dip is 60 degrees easterly. The fault has been traced on the surface by preliminary trenching for a distance of 1,000 feet and can be inferred to extend at least another 1,500 feet judging by scintillator readings.

The main fault zone consists of greenish clayey gouge averaging 3 feet in width. Green autunite crystals have been noted in drying cracks in this material. A considerable number of parallel fractures or sheeting cracks occur in both walls of the main fault. The fractures are of small widths, averaging an inch or two, but they are closely spaced over widths of 10 to 20 feet on either side of the main fault. These subsidiary fractures are filled with quartz and iron oxides.

(F) The reasons for expecting to find ore are as follows:

1. A major radio active fault structure is indicated. This structure is parallel to and dips in the same direction as a known structure containing uranium ore deposits of major size.

2. Co-precipitation theories developed for the origin of uranium show close relationship between iron oxides and uranium oxides, and the two are associated in this deposit.

3. Based on the history of erosion it is reasonable to expect the grade of ore would improve on approaching the water table. Radio metric readings and chemical assays tend to verify this.

4. The Phelps-Dodge Co. trenched the ground immediately north of this deposit during their program of exploration in the area. The anomaly was located by an extensive aerial reconnaissance program. They ceased work in the area before they drilled their deposit.

5. The clay fault gouge is an excellent host for uranium mineralization, probably because of its absorbent qualities.

6. Ore has been found in near surface exposures.

7. Topographic features are favorable in that the trace of the fault zone parallels the main ridge. The fault thus acts as a barrier dam halting the flow of sub-surface meteoric waters and thereby favoring precipitation of secondary oxides both on hardpan surfaces and in the main fault zone.

(G) No geologic or engineering reports, other than this, are available. Copies of maps furnished herewith need not be returned.

3. Accessibility of project.

(A) A company official at 417 Paulsen Bldg., Spokane 1, Washington (Phone TEmple 8-8344) will direct D.M.E.A. representatives who may be required to examine the property.

The property is accessible from Wellpinit, Washington, westerly on the Hunters graveled road to the junction with the Germania Mine road, a distance of 3.5 miles, thence northerly a distance of 4.0 miles to the turnoff at the junction of the Drum road with the Kelley road. Turn left here northwesterly a distance of 1.5 miles to the property. Road signs indicate principal turns. Road conditions are generally good.

B) The nearest town to the property is Wellpinit, Wash., a distance of 9.0 miles. Housing, gas, oil and groceries are obtainable at Wellpinit. Springdale, Washington, a town of several hundred people is 20 miles from the mine by good county road and Indian Reservation road.

An adequate labor supply is available on the Reservation. Transportation of men to and from work is not necessary. Some housing

may be required at a late date if a large scale operation develops. The superintendent will probably commute to and from the project.

4. The Exploration Project:

(A) It is proposed to explore the deposit by the following steps in chronological order.

Step 1. A grid survey will be made to ascertain principal anomalies and to locate aplite dikes which may not be fully explored. The aplite dikes are more radio active than the granite and have a general association with zones of weakness. They also act as dams and barriers in the migration of uraniferous solutions.

The grid survey furnishes details on geology, topography and anomalies. About 10 acres can be surveyed each day by a two man crew.

Step 2. Additional trenching will be necessary to further delineate the fault zone in a southerly direction, following downslope. The bulldozer work will be confined to exposing principal anomalies and to provide necessary drill sites. A D-8 bulldozer will be used. Trenches will vary in length and depth, but will average 200 feet long and 8 feet deep. The trenches will be cut across the strike of the fault zone and across the strike of aplite dikes, so that intersecting structures may be delineated. The trenches are planned at intervals of 200 feet along the strike.

Step 3. The principal work required now is shallow percussion drilling, not to exceed a depth of 150 feet. The holes will be drilled vertically. The initial holes can be spaced on 200 foot centers on lines parallel to the strike of the shear zone and planned to cut the shear at depths of 50 to 150 feet vertically. Such holes will, if successful, develop dip lengths varying from 60 to 180 feet respectively. After ore is found in the 200 foot spacing grid, the best holes will be offset on 50 feet centers to further delimit lengths and depths of ore shoots in the structure. A 5000 foot drill program is planned. This footage is justified by the known length of the structure to be explored. The estimated footage of the percussion drilling program is as follows:

25 holes @ 30 feet	= 2000
15 holes @ 100 "	= 1500
10 holes @ 150 "	= 1500
Total footage	5000

The location of these holes is indicated on Fig. 1.

(B) An access road to the project is available. No costs are estimated for this purpose.

(C) Work can start within 30 days or less after an exploration contract with D.M.E.A. is executed. The first three stages of the project can be completed within 3 months time thereafter.

5. The company has completed one previous small D.M.E.A. contract for

$2,772.00 on another property, which was handled effectively even though the exploration results were negative. No difficulties were experienced in administering this contract.

The company has been searching for uranium for two years and had made a small production from one lease (The Lehmbecker) on Mt. Spokane totaling 580 tons of commercial grade uranium ore.

The project supervisor will be R. J. Hundhausen, E.M., formerly an employee of The Bureau of Mines. Mr. Hundhausen has supervised the exploration and development of a large number of mineral projects, including major nickel developments in Cuba and Oregon and more recently for 2 years as Manager of the successful Dawn Mining Co. at the Midnite Uranium Mine on the Spokane Indian Reservation. He is familiar with the structural control of uranium occurrences in this mining district.

6. Estimate of Costs

Step 1

Grid Survey:

2 men @ $20 day @ 12 days	= $480.00
Supervision $\frac{12}{30} \times 750 \times \frac{1}{6}$	50.00
	$530.00

Step 2

Bulldozer Trenching

Rental 1D-8 Bulldozer & Operator	=$1800 per hour
Rental above 100 hr @ $18.00	= $1,800.00
Helper 100 hr @ $2.00	= 200.00
Surveying and sampling	= 150.00
Supervision $\frac{12}{30} \times 750 \times \frac{2}{3}$	= 200.00
Total cost Step 2	$2,350.00

Step 3

The cost of percussion drilling can be closely estimated. A bid furnished herewith by Herb Sams, contractor, shows the following prices: 0-50' 1.25, 50-100 1.40, 100-150 1.60. All percussion drilling done under this proposed contract will be done by independent contractor.

Costs are summarized below:

3500' @ 1.306	= $4,571.00
1500' @ 1.60 per foot	= 2,400.00
Est. mobilizing & demobilizing drill	= 400.00
Sampling labor 30 days @ $20.00 per day	= 600.00
Assays 100 @ 5.00	= 500.00
Supervision	= 400.00
Travel-car expense gas & oil	= 100.00
Total cost Step 3	$8,971.00

Summary of costs

Step 1 Grid survey	$530.00
Step 2 Trenching	2,350.00
Step 3 Percussion drilling	8,971.00
Total	$11,851.00
Government's share @ 50%	5,925.50
North Star's share @ 50%	5,925.50
	$11,851.00

7.(A) The North Star Uranium, Inc., has the necessary funds in the First National Bank of Spokane to finance its share of the proposed contract.

(B) The company's share of the cost will be furnished in cash. In addition, the company will furnish the following equipment without charge except for maintenance, operating costs and repair.

1 - 111B Scintallator
1 - Babbel counter with probe and reel.
1 - International 4 wheel drive travelall 1954
1 - Mineralite
Surveying & drafting equipment

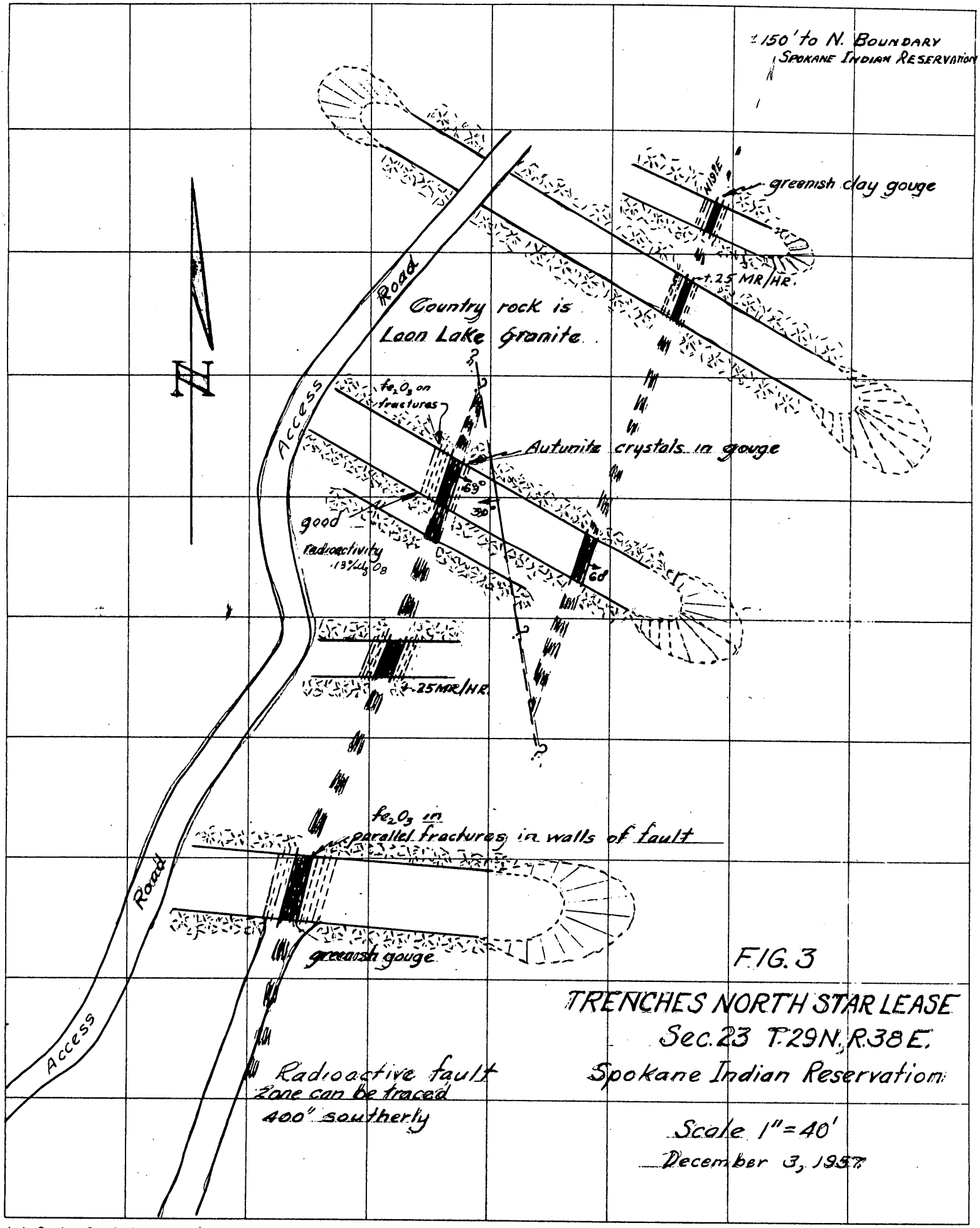


FIG. 3

TRENCHES NORTH STAR LEASE
Sec. 23 T. 29N, R. 38E.
Spokane Indian Reservation

Scale 1" = 40'
December 3, 1957

J. A. Gendron Co., Spokane

"ALBANENE" No. 198M K&E CO., N.Y.
REG. U.S. PAT. OFF

EXTRA COPY
D M E A
RECEIVED MAR 10 1958

DATE	INITIALS	CODE

EXTRA COPY
5-1047
(May 1949)
DMEA
RECEIVED MAR 10 1958

DATE	INITIALS	CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

CONTRACT NO.
14-20-503-244

DEC 1957

ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior has heretofore approved a mining lease, dated Dec 7, 1957, entered into by and between Spokane Tribe of Indians, lessor, and Robert M. Sherwood, lessee, covering the following-described lands in the Spokane Indian Reservation (Insert name of Reservation, Pueblo, Nation, etc., as needed) in the State of Washington, described as Lot 6, and the E½ of the S½ of the SE¼, and the E½ of the SE¼ of Section 28, Township 29 North, Range 38 East, Willamette meridian, in Stevens County, Washington

NOW, THEREFORE, for and in consideration of cash & 25,000 shares stock of Devil's Gap Mining, Inc. ONE THOUSAND and no/100 dollars ($1,000.00), the receipt of which is hereby acknowledged, the said Robert M. Sherwood the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys of his right, title, and interest in and to said lease, subject to the approval of the Secretary of the Interior, to North Star Mining, Inc., of Spokane, Washington

Said assignment to be effective from date of approval hereby by the Secretary of the Interior.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 7th day of Dec, 1957

16-11850-2

[OVER]

ACKNOWLEDGMENT OF CORPORATION

STATE OF
COUNTY OF ss:

Before me, a notary public, in and for said county and State on this day of , 19
personally appeared
to be known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its
and acknowledged to me that
be executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

My commission expires , 19

Notary Public.

ACKNOWLEDGMENT OF INDIVIDUAL

STATE OF
COUNTY OF ss:

Before me, a notary public, in and for said county and State, on this 1 day of , 19
personally appeared
to me known to be the identical person who executed the
and acknowledged to me that executed the same as free
and voluntary act and deed for the uses and purposes therein set forth.

My commission expires 31 , 19

Notary Public.

ACCEPTANCE BY ASSIGNEE

The assignee in the above and foregoing assignment, made subject to the approval of the Secretary of the Interior, hereby accepts said assignment and agrees to fulfill all the obligations, conditions, and stipulations in said described indenture, and to the rules and regulations of the Secretary of the Interior applicable thereto, and to furnish a bond guaranteeing a faithful compliance with said lease and this agreement.

WITNESS the said assignee has hereunto set its hand and seal this 10th day of , 1957

NORTH STAR URANIUM, INC.

President

Secretary

CONSENT OF SURETY

The Hartford Accident & Indemnity Company
Hartford, Conn. surety for Robert O. Shorrock , of
consents to the assignment and transfer of said lease as above made and agrees that said bond shall remain in force and effect covering obligations of assignee.

Dated at Spokane, Washington this 11th day of December , 19 57

Hartford Accident & Indemnity Co.
By
Attorney in Fact

UNITED STATES
DEPARTMENT OF THE INTERIOR,
Portland, Ore.
MAR 13 1958

APPROVED pursuant to authority delegated from the Commissioner of Indian Affairs in Bureau Order No. 251, Amendment 31 (22 F.R. 1905)

Area Director

16 11650-2 U.S. GOVERNMENT PRINTING OFFICE

Form 5-157b
(Sept. 1951)

CONTRACT No. I 14-20-503-244 IND.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

U.S. GEOLOGICAL SURVEY
RECEIVED
DEC 23 1957
BILLINGS MONTANA

MINING LEASE—TRIBAL INDIAN LANDS
(FOR MINERALS OTHER THAN OIL AND GAS)

Spokane Tribe, State of Washington

THIS INDENTURE OF LEASE, made and entered into in quintuplicate this 9th day of December, 1957, by and between the Superintendent of the Colville Indian Agency

of Nespelem, State of Washington

for and on behalf of the Spokane Tribe of Indians, designated herein as lessor, and Robert M. Sherwood

of McKinnis, State of Washington

herein designated as lessee:

WITNESSETH

1. That the lessor , for and in consideration of $1, receipt whereof is hereby acknowledged, and of the royalties, covenants, stipulations, and conditions hereinafter contained and hereby agreed to be paid and observed by the lessee, doth hereby demise, grant, and lease unto the said lessee, the following-described tract of land lying and being within the Spokane Indian Reservation, County of Stevens and State of Washington, to wit: the Lot 6, Block, and Block.

of section 23, township 32 North, range 38 East, Willamette meridian, and containing 164.14 acres, more or less, for the full term of 10 years from the date of approval hereof, and as much longer as the substances specified herein are produced in paying quantities, for the sole purpose of prospecting for and mining minerals, as follows:

uranium and minerals associated therewith,

the lessee to occupy so much only of the surface of said land as may be reasonably necessary to carry on the work of prospecting for, mining, [redacted], storing, and removing such minerals.

2. The term "Superintendent" as used herein shall refer to the superintendent or other official in charge of the Indian Agency having jurisdiction over the lands leased.

3. In consideration of the foregoing, the lessee hereby agrees:

(a) ROYALTY.—To pay, or cause to be paid, to the Superintendent, for the use and benefit of the lessor, or to the Treasurer of said Tribe where the tribe is organized under the act of June 18, 1934 (48 Stat. 984), as royalties, the sums of money as follows, to-wit:*

As set forth in the Exhibit "A", which is attached hereto and made a part hereof.

[redacted]

(b) ANNUAL RENTAL.—To pay, or cause to be paid, to the Superintendent for the use and benefit of the lessor, or to the Treasurer of said Tribe where the tribe is organized under the act of June 18, 1934 (48 Stat. 984), in advance beginning with the date of approval of the lease, as annual rental, the following [redacted] $1 per acre per annum in advance for each and every [redacted] year thereafter during the continuance of the lease; it being understood and agreed that said sum so paid shall be a credit on the royalties accruing during the year for which the payment of annual rental is made, and that said annual rental when paid shall not be refunded to the lessee because of any subsequent surrender or cancelation hereof.

(c) DILIGENCE, PREVENTION OF WASTE.—To exercise diligence in the conduct of prospecting and mining operations; to carry on development and operations in a workmanlike manner and to the fullest possible extent; to commit no waste on the said land and to suffer none to be committed upon the portion in his occupancy or use; to comply with all the requirements of the laws of the State in which the land is located; to take appropriate steps for the preservation of the property and the health and safety of workmen; promptly to surrender and return the premises upon the termination of this lease to whomsoever shall be lawfully entitled thereto, in as good condition as received, excepting for the ordinary wear and tear and unavoidable accidents in their proper use; not to remove therefrom any buildings or permanent improvements erected thereon during the said term by the said lessee, but said buildings and improvements shall remain a part of said land and become the property of lessor, excepting the office fixtures and records, personal property, tools, pumping and drilling outfits, boilers, engines, and mining machinery, which shall remain the property of the lessee and may be removed at any time prior to 60 days after the termination of the lease by forfeiture or otherwise, provided the payments agreed upon by this lease have been made and the lease terms and regulations applicable thereto have been fully complied with, but not otherwise; not to permit any nuisance to be maintained on the premises under lessee's control, nor allow any intoxicating liquors to be sold or given away for any purpose on such premises; and not to use such premises for any other purposes than those authorized in this lease.

(d) DEVELOPMENT.—The land described herein shall not be held by the lessee for speculative purposes, but in good faith for mining the minerals specified; and the failure by the lessee in the diligent development and continued operation of the mine or mines, except when operations may be interrupted by strikes, the elements, or casualties not attributable to the lessee, shall be held as a want of compliance with the purposes of this lease and shall render it subject to cancelation: *Provided*, That whenever the Secretary of the Interior shall consider the marketing facilities inadequate or the economic conditions unsatisfactory, he may authorize the suspension of operations for such time as he may deem advisable, but such action will not release the lessee from the payment of the advance annual rental.

(e) MONTHLY STATEMENTS.—To keep an accurate account of all mining operations, showing the sales, prices, dates, purchasers, and the whole amount of minerals mined, the amount removed, and the gross receipts derived therefrom, and to furnish the Superintendent or the Treasurer of said Tribe if payments are made to him, sworn

* Here insert the royalties agreed upon in accordance with applicable regulations.

monthly reports thereon not later than the 15th of the succeeding month; and all sums due as royalty and advance rental shall be a lien on all implements, tools, movable machinery, and all other personal chattels used in operation upon said property, and upon all of the unsold minerals obtained from the land herein leased, as security for payment of said sums. An audit of the lessee's accounts and books shall be made annually or at such times as may be directed by the Superintendent by certified public accountants approved by the Secretary of the Interior and at the expense of the lessee. The lessee shall furnish free of cost a copy of such audits to the Secretary of the Interior through the Superintendent within 30 days after the completion of each auditing.

(*f*) REGULATIONS.—To abide by and conform to any and all regulations including 30 CFR 231, of the Secretary of the Interior now or hereafter in force relative to such leases: *Provided*, That no regulations hereafter approved shall effect a change in rate of royalty, the annual rental herein specified, or the term of this lease, without the written consent of the parties to this lease.

(*g*) ASSIGNMENT OF LEASE.—Not to assign this lease or any interest therein by an operating agreement or otherwise nor to sublet any portion of the leased premises, except with the approval of the Secretary of the Interior. If this lease is divided by the assignment of an entire interest in any part of it, each part shall be considered a separate lease under all the terms and conditions of the original lease.

(*h*) BOND.—To furnish such bond as may be required by the regulations of the Secretary of the Interior conditioned upon compliance with the terms of this lease.

[illegible]

4. INSPECTION.—The leased premises and producing operations, improvements, machinery, and fixtures thereon and connected therewith and all books and accounts of the lessee shall be open at all times for inspection by agents of the lessor or any duly authorized representative of the Secretary of the Interior.

5. DISPOSITION OF SURFACE.—The lessor expressly reserves the right to lease, sell, or otherwise dispose of the surface of the lands embraced within this lease under existing law or laws hereafter enacted, such disposition to be subject at all times to the right of the lessee herein to the use of so much of said surface as is necessary in the extraction and removal of the minerals from the land herein described in accordance with this lease.

6. SURRENDER AND TERMINATION.—The lessee shall have the right at any time during the term hereof to surrender and terminate this lease or any part thereof upon the payment of all rentals, royalties, and other obligations due and payable to the lessor, and the further sum of $1, upon a showing satisfactory to the Secretary of the Interior that full provision has been made for the conservation and protection of the property, the lease to continue in full force and effect as to the lands not so surrendered. If this lease has been recorded lessee shall file a recorded release with his application to the Superintendent for termination of this lease.

7. CANCELATION AND FORFEITURE.—When, in the opinion of the Secretary of the Interior, there has been a violation of any of the terms and conditions of this lease before restrictions are removed, the Secretary of the Interior shall have the right at any time after 30 days' notice to the lessee, specifying the terms and conditions violated, and after a hearing, if the lessee shall so request within 30 days of receipt of notice, to declare this lease null and void, and the lessor shall then be entitled and authorized to take immediate possession of the land.

8. HEIRS AND SUCCESSORS IN INTEREST.—It is further covenanted and agreed that each obligation hereunder shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors of, or assigns of the respective parties hereto.

9. GOVERNMENT EMPLOYEES CANNOT ACQUIRE LEASE.—No lease, assignment thereof, or interest therein will be approved to any employee or employees of the United States Government whether connected with the Indian Service or otherwise, and no employee of the Interior Department shall be permitted to acquire any interest in such leases by ownership of stock in corporations having leases or in any other manner.

Additional covenants, stipulations and conditions are contained in Exhibit "B", which is attached hereto and made a part hereof.

IN WITNESS WHEREOF, the said parties have hereunto subscribed their names and affixed their seals on the day and year first above mentioned.

SPOKANE TRIBE OF INDIANS

Two witnesses to execution by lessor:

P. O.

P. O.

[SEAL]
Superintendent, Colville Indian Agency.

[SEAL]

Two witnesses to execution by lessee:

P. O.

P. O.

[SEAL]
Robert M. Sherwood

Attest:

ACKNOWLEDGMENT OF LESSOR

STATE OF Washington
COUNTY OF Okanogan } ss:

Before me, a notary public, on this 3rd day of January, 19 58 personally appeared Floyd H. Phillips, to me known to be the identical person, who executed the within and foregoing lease, and acknowledged to me that he executed the same in his official capacity as Superintendent of the Colville Indian Agency as his free and voluntary act and deed for the uses and purposes therein set forth.

Notary Public

My commission expires July 30, 1960

UNITED STATES DEPARTMENT OF THE INTERIOR

Portland Area Office - PORTLAND, OREGON JAN 24 1958

Washington, D.C., , 19

The within lease is hereby approved. pursuant to authority delegated by the Deputy Commissioner, Bureau of Indian Affairs, in his teletype dated Dec. 23, 1957.

Acting Area Director

Filed for record this day of , 19

at o'clock m.

By

Fee received $

GPO 83-368 52

Royalty on a monthly basis to be computed in accordance with the following schedule:

Mine Value per Dry Ton	Royalty Percentage of Mine Value per Dry Ton
$ 0.01 to $ 10.00 inclusive	10%
$ 10.01 to $ 20.00 "	11%
$ 20.01 to $ 30.00 "	12%
$ 30.01 to $ 40.00 "	13%
$ 40.01 to $ 50.00 "	14%
$ 50.01 to $ 60.00 "	15%
$ 60.01 to $ 70.00 "	16%
$ 70.01 to $ 80.00 "	17%
$ 80.01 to $ 90.00 "	18%
$ 90.01 to $100.00 "	19%
$100.01 or more	20%

"MINE VALUE PER DRY TON", wherever used herein, is hereby defined as the dollar value per dry ton of crude ores at the mine as determined by the application to the valuable metal content of such ore of the price schedule for such ores established and currently in effect by the Atomic Energy Commission or other government authorized agencies before allowance for transportation and developement. It is specifically understood that any mine production bonuses shall be included in the "mine value per dry ton." However, if the Government at any time hereafter does not establish or have in effect a price schedule for the purchase of such ores on a fixed or scheduled dollar value per dry ton of crude ores at the mine, or said ores contain salable minerals, some, or all, of which are disposed of to a custom treatment plant or smelter for the treatment and beneficiation of uranium bearing ores, the mine value per dry ton shall be the gross value per dry ton of said crude ores as paid for by the Atomic Energy Commission, or other Government authorized agency, mill or other buyer, less any allowance or reimbursements for the following specific items:

(1) Transportation of ores,

(2) Allowances paid to Lessee by the Atomic Energy Commission or other Government authorized agency for exploration for or developement of ores,

(3) Treatment or beneficiation of ores,

which specific items shall, in such event be deducted from the gross sale price received from the metal content of said ores by the seller before said percentage royalty is calculated and paid. Any cost of treatment or beneficiation shall be the actual cost without any milling profit. It is specifically understood that any mine production bonuses shall be included in the mine value per dry ton.

Lessee agrees to pay the above percentage royalty payments on or before the fifteenth (15th) day of the month next following the removal from the demised premises, weighing and sampling by lessee of said ores, and lessee shall attach to each such payment made a statement of the mine value of said ores and the amount of royalty due on each lot so removed.

EXHIBIT "A"

ADDITIONAL COVENANTS, STIPULATIONS, AND CONDITIONS

10. That, prior to the execution of this lease, the following interlineations, deletions and additions were made:

In paragraph No. 1, the words "and as much longer as the substances specified herein are produced in paying quantities" were inserted and the word "milling" was deleted; in paragraph 3(a), that portion reading "All royalties accruing for any month shall be due and payable on or before the 25th day of the month succeeding" has been deleted; in paragraph 3(b), that portion reading "25 cents per acre for the first calendar year or fraction thereof, 50 cents per acre per annum for the second and third years, and" and the word "calendar" were deleted; in paragraph 3(f), the portion reading "including 30 CFR 231" was inserted, paragraph No. 4 was deleted; paragraphs Nos. 5 to 10 inclusive were renumbered 4 to 9 respectively; and paragraphs 10 to 20 inclusive were added and are contained in this Exhibit "B", attached to and made a part of this lease.

11. During the term of this lease, the royalty provisions thereof shall be subject to reasonable adjustments at the end of the first and each successive 10-year period, such adjustments to be based upon market values at the time of the adjustments. During the period that the land is under Federal supervision, such adjustments shall be made by the Secretary of the Interior or his authorized representative. After the termination of Federal supervision such adjustments shall be made through negotiation between the lessor and the lessee, except that if they are unable to agree then, upon the written request of either party delivered to the other party, the adjustments shall be referred to and finally determined by arbitration in accordance with procedures established by applicable state law. In the absence of applicable state law the arbitration procedures shall be in accordance with the rules then obtaining of the American Arbitration Association.

12. There shall be expended annually by the lessee in actual mining operations, developments and improvements on the leased land, or for the benefit thereof, a sum which with rental shall amount to $10 per acre.

13. The term of the accompanying surety bond is limited to the first five (5) year period of the lease, commencing with the effective date thereof. It is hereby understood and agreed that the lessee shall furnish a bond satisfactory to the Secretary of the Interior, to cover the remaining five (5) year period of the lease prior to the expiration of the bond attached hereto, and that failure to do so shall be cause for automatic termination of this lease.

14. The lessee may use existing roads, if any on the land, and shall have the privilege of constructing and maintaining at its own expense any additional roads or transportation facilities across the lessor's lands that are necessary in carrying on actual mining, prospecting and exploration work, provided that the location of such roads be approved in writing by the officer in charge of the Colville Indian Agency. No part of any such roads shall inure to the benefit of the public and the public shall obtain no rights thereon, but upon termination of this lease for any cause whatsoever or if at any time it shall become unnecessary for the lessee to use any such roads for the operations under this lease, the right to use said roads shall thereupon cease and all rights shall revest in lessor in accordance with law. The lessee shall hold the lessor and the United States harmless and indemnify them

against all loss or damage that might result from the construction or maintenance by the lessee of such roads in a negligent manner. Any installations made in connection with roads or transportation facilities by the lessee shall be left intact and shall become the property of the lessor upon termination of this lease.

15. Applications for rights-of-way will be made by the lessee pursuant to the requirements of 25 CFR 256.

16. The lessee shall have the right at its own expense to drill and equip water wells on said premises and agrees that at the termination of the lease by expiration or otherwise all wells will be left intact and properly cased. Lessee shall have the right to remove all mechanical pumping equipment installed by it at any of the wells. If any of said wells shall produce water surplus to the needs of lessee, said water shall be available to the lessor.

17. The lessee agrees that on termination of operations under this lease taken thereunder it will make provisions for conservation and protection of the property and leave all of the areas on which it has worked in a condition that will not be hazardous to life or limb.

18. The lessee shall, and hereby agrees to indemnify, protect and save harmless said lessor and the United States of America from and against the following specific claims, demands and damages (and none other) arising out of the lessee's negligence or actionable faults in connection with the lessee's work and operations hereunder, to wit:

(a) To property of third persons, including lessor.

(b) To third persons, including lessor, for injury and death.

(c) To livestock, permanent buildings and structures of lessor, situated on the property covered by this lease.

(d) Liens or lien claims on account of the labor performed upon, or material furnished to the property covered by this lease at the instance of the lessee.

19. The lessee agrees to carry such insurance covering all persons working in, on, or in connection with said property for the lessee as will fully comply with the provisions of the Statutes of the State of Washington covering workman's compensation and occupational disease, as are now in force or as they may hereafter be changed or amended. Further the lessee agrees to comply with all of the terms and provisions of all applicable laws of the State of Washington and of the United States of America as now exist or as hereafter amended, pertaining to Social Security, Unemployment Compensation, wages, hours and conditions of labor, and to indemnify and hold the lessor and the United States harmless from the payment of any damages occasioned by the lessee's failure to comply with said laws. The lessee shall pay all taxes lawfully assessed against its property and operations.

20. FOREST PROTECTION STIPULATION. - The lands embraced in this lease, being located within the timbered area of the Spokane Indian Reservation, the lessee hereby agrees:

(a) Not to cut, destroy or damage timber without prior authority of the Commissioner of Indian Affairs or his local representative, such authorization to be made only where required by the pursuance of the necessary mining operations under this lease.

(b) To pay for all such timber cut, destroyed or damaged at rates prescribed by the Commissioner of Indian Affairs or his authorized representative, such rates to be determined on the basis of sales of similar timber in the vicinity.

(c) Not to interfere with the sale or removal of timber from the land covered by this lease, by contractors operating under an approved timber sales contract now in effect.

(d) To do all in his power to prevent and suppress forest, brush or grass fires on the leased land and in its vicinity, and to require his employees, contractors, subcontractors, and the employees of such contractors or subcontractors, to do likewise. To place his employees, his contractors, subcontractors, and the employees of such contractors and subcontractors employed on the leased land at the disposal of any authorized officer of the Indian Service for the purpose of suppressing forest, brush and grass fires with the understanding that payment for such services shall be made at rates to be determined by the Commissioner of Indian Affairs or his local representative, which rates shall be not less than the rates prevailing in the vicinity for services of similar character. PROVIDED that no payment shall be made for services rendered in the suppression of fires for which the lessee, his employees, contractors or subcontractors, or the employees of such contractors or subcontractors are responsible.

(e) To pay for the loss of all timber ten inches or more in diameter at a point 4½ feet from the ground occasioned by fires for which he, or any of his employees, his contractors, his subcontractors, or the employees of such contractors or subcontractors are responsible for the start or spread, the assessment of the value of such damages to be determined by the Commissioner of Indian Affairs or his local representative on the basis of the value of the timber on sales of similar of similar character in the vicinity. Also to pay liquidated damages of twenty ($20) dollars per acre for all young timber less than ten (10) inches in diameter at a point 4½ feet from the ground, destroyed by such fires unless a lesser rate of damage shall be approved by the Commissioner of Indian Affairs, and to pay all costs for the suppression of fires for which he, or any of his employees, contractors, subcontractors, or the employees of such contractors or subcontractors are responsible.

(f) Not to burn rubbish, trash, or other inflammable materials, except with the consent of the authorized representative of the Commissioner of Indian Affairs, and not to use explosives in such manner as to scatter inflammable materials on the surface of the land during fire season, except as authorized to do so by such representative.

Contract No. 14-20-503-244

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

BOND

TO ACCOMPANY MINING LEASES

Know All Men by These Presents, That ROBERT SHERWOOD of Wellpinit, Washington, as principal, and HARTFORD ACCIDENT AND INDEMNITY COMPANY of Hartford, Connecticut, as surety, are held and firmly bound unto the United States of America in the sum of TWO THOUSAND and no/100 ($2,000.00) dollars, lawful money of the United States of America, for the payment of which well and truly to be made, we bind ourselves, and each of us, our and each of our heirs, executors, administrators, successors, or assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 9th day of December, 19 57.

The condition of this obligation is such that whereas the above-bounden ROBERT SHERWOOD, as principal, entered into a certain indenture of lease, dated with the Superintendent, Colville Indian Agency, Nespelem, Washington, for and on behalf of the Spokane Tribe of Indians

for the lease of a tract of land described as follows: N½ of the SE¼ and E½ of the NE¼ of the SW¼ and Lot 6 of Sec. 23, T29N, R38E.W.M.

and located in the Stevens in the State of Washington for uranium and associated minerals mining purposes for the period of 10 years from the date of approval thereof, and as much longer thereafter as the lease shall be continued in force in the manner provided for therein. For the five (5) year period only, commencing with the effective date of said lease, any provisions of said lease to the contrary notwithstanding.

Now, if the above-bounden principal herein shall faithfully carry out and observe all the obligations assumed in said indenture of lease, and shall observe all the laws of the United States, and regulations made, or which shall be made thereunder, for the government of trade and intercourse with Indian Tribes, and all the rules and regulations that have been, or may be, lawfully prescribed by the Secretary of the Interior relative to mining leases on the said Reservation, then this obligation shall be null and void; otherwise to remain in full force and effect.

Provided, That in event supervision over all the leased tract to which this bond applies is relinquished by the Secretary of the Interior and lessee shall have made all payments then due under the lease and shall have fully performed all obligations on his part to be performed up to the time of relinquishment of supervision, this bond shall be of no further force and effect.

The rate of premium charged on this bond is $ 10 per M; the total premium paid is $ 20. per annum

[OVER]

Signed and sealed in the presence of—

WITNESSES:

N. C. McMahan

P. O. 511 - S Adams Spokane Wn

James Robertson

P. O. Rockford Wn

Lorraine R. Arnold

P. O. 601 PAULSEN BLDG., SPOKANE, WN.

Sharon Kittelson

P. O. 601 PAULSEN BLDG., SPOKANE, WN.

P. O.

as to [SEAL]

HARTFORD ACCIDENT AND INDEMNITY COMPANY

BY: L. O. Meyers

as to L. O. MEYERS, ATTORNEY IN FACT [SEAL]

P. O.

P. O.

as to [SEAL]

P. O.

P. O.

as to [SEAL]

(Two witnesses to each signature)

DEPARTMENT OF THE INTERIOR,
Bureau of Indian Affairs,
Portland Area Office
Portland, Oregon

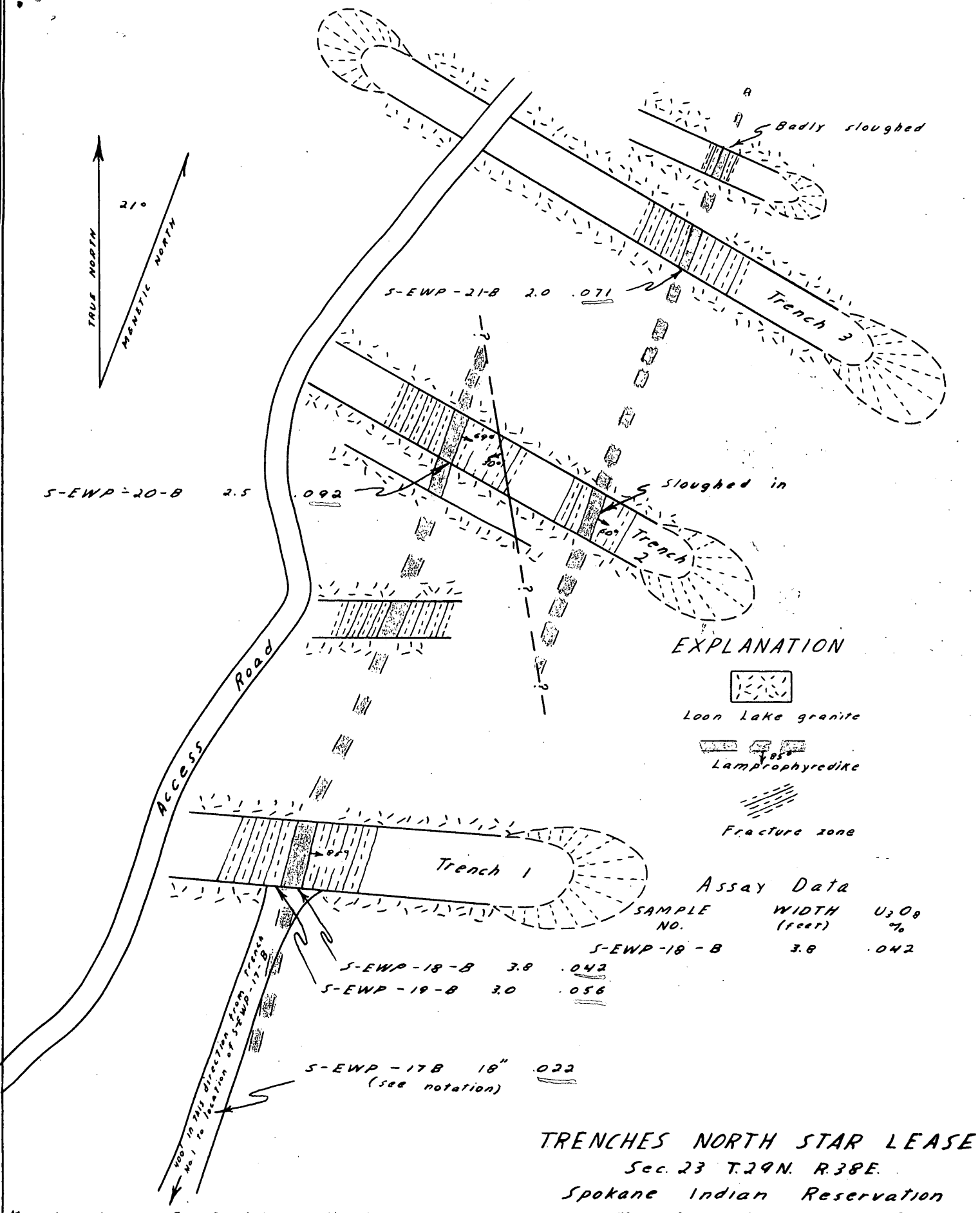
APPROVED: pursuant to authority delegated by the Deputy Commissioner, Bureau of Indian Affairs, in his teletype dated December 23, 1957

Acting Commissioner of Indian Affairs.

JAN

Acting Area Director

16- 11481 1 U. S. GOVERNMENT PRINTING OFFICE



Map based upon Fig. 3 of the application.
Minor additions by Alvord and Parsons, 1958.

APRIL 1958

FIG - 2

EXTRA COPY
D M E A
RECEIVED APR 21 1958

DATE	INITIALS	CODE