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PRELIMINARY REPORT ON THE JO REYNOLDS AREA LAWSON-DUMONT DISTRICT CLEAR CREEK COUNTY COLORADO

By J. E. Harrison and B. F. Leonard

UNITED STATES DEPARTMENT OF THE INTERIOR
Oscar L. Chapman, Secretary

GEOLOGICAL SURVEY
W. E. Wrather, Director

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By J. E. Harrison and B. F. Leonard

This report concerns work done on behalf of the U. S. Atomic Energy Commission and is published with the permission of the Commission

Washington, D. C., 1952

Free on application to the Geological Survey, Washington 25, D. C.

PRELIMINARY REPORT ON THE JO REYNOLDS AREA
LAWSON-DUMONT DISTRICT, CLEAR CREEK COUNTY, COLORADO

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ABSTRACT

Pitchblende occurs in the deposit of the Jo Reynolds area, which was primarily a lead-zinc-silver ore body. The reported production in 1919 of 8 tons of high-grade uranium ore, presumably from the lowest workings of the mine, is still unconfirmed but has a fair degree of credibility. The deposit consists of 3 (possibly 4) veins, but the ore was concentrated principally along the no. 2 vein. The no. 2 vein is localized along a fault, which is independent of the pre-Cambrian structures in the bedrock. The age of the mineralization is inferred to be Tertiary.

The deposits of the Jo Reynolds area appear to contain an ore shoot, which has a trend of N. 17° E., a plunge of 60° NE., and a rake of 70° NE. Localization of the ore body in a shoot, or possibly shoots, is attributed either to intersection of the main shear with a transverse set of joints or the movement along a curved fault surface.

INTRODUCTION

Location of the area

The Jo Reynolds area, as designated here, includes the Jo Reynolds and American Sisters groups of claims. The area is in Clear Creek County, Colo., about three-fourths of a mile south of the town of Lawson (fig. 1). The coordinates given on the map (pl. 1) were established by triangulation from a Bureau of Reclamation triangulation net. The coordinate system of the Bureau of Reclamation has its origin at Douglas Mountain, about 0.75 mile southeast of Empire, Colo. For convenience, the Bureau of Reclamation coordinates (0,0) for Douglas Mountain were transformed to (100,000 N, 100,000 E). The general surface geology of the area has been described by Spurr, Garrey, and Ball (1908), Bastin and Hill (1917), and Lovering and Goddard (1950, pl. 2).

Purpose and scope of study

The Jo Reynolds group of claims was mined extensively for lead, zinc, and silver from 1877 through 1907. Since 1907 the claims have been worked only intermittently, the last operation having been about 1946. Pitchblende in the Jo Reynolds mine has been reported in newspapers, in publications of the U. S. Geological Survey, in unpublished reports of the Union Mines Development Corp., and orally. The most significant of these accounts states that 8 tons of high-grade uranium ore (pitchblende) was shipped from the mine in 1919.

Because of the potential importance of the area it was selected for detailed study, together with other areas in the Lawson-Dumont district. This report

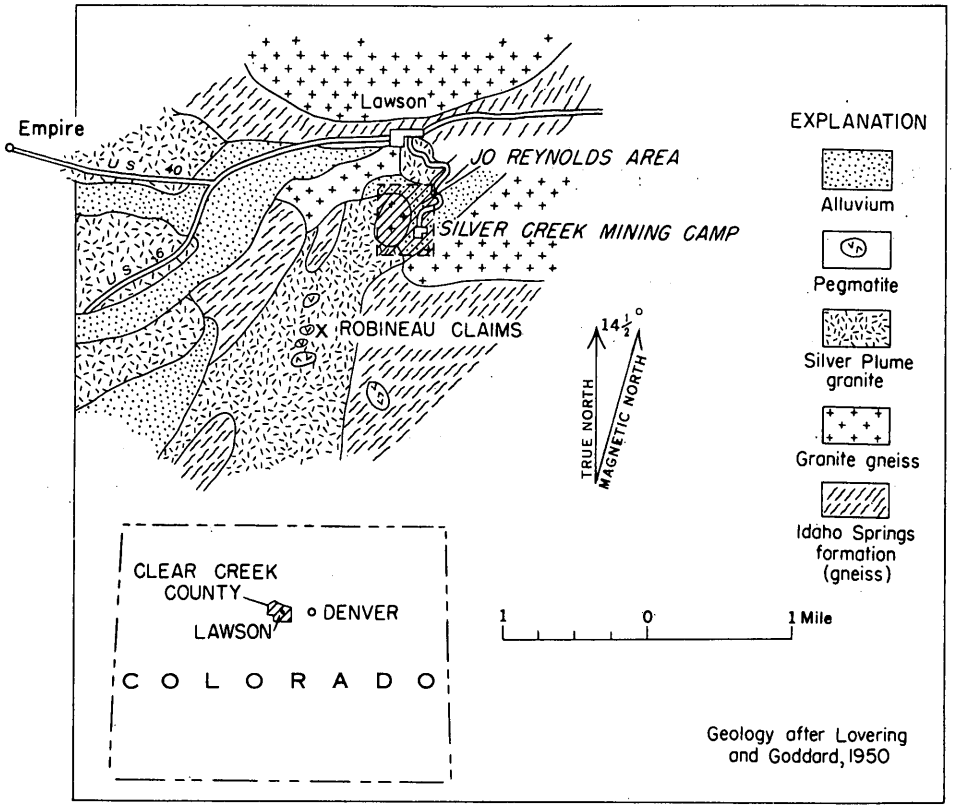

Figure 1. --Index map of the Jo Reynolds area, Lawson-Dumont District, Clear Creek County, Colo.

is based upon surface mapping done during September and October 1951. The work was on behalf of the U. S. Atomic Energy Commission. Harrison is responsible for the geologic mapping and for the preparation of most of the report; Leonard is largely responsible for the section on economic geology.

Mine workings

The Jo Reynolds mine consists of a surface stope above the Daily tunnel, drifts and extensive stopes along 10 levels, the Elida tunnel which forms the 11th level, and a sublevel below the Elida tunnel (pl. 2). These workings extend through a vertical distance of about 900 ft. At the time of the examination, November 1951, the Daily tunnel was caved at the portal, the Moore shaft to the surface stope was caved, no. 6 shaft to the 4th level was not safe, and the Elida tunnel had recently caved at a point 745 ft from the portal.

ROCK UNITS

The mapped area consists predominantly of igneous rocks, some of which have been metamorphosed, and metasedimentary rocks. The bedrock is mostly pre-Cambrian in age (pl. 1). The metasedimentary rocks have been invaded and migmatized by quartz diorite, gneissic granite, Silver Plume granite, and finally pegmatite. One large bostonite dike of Tertiary age cuts the pre-Cambrian rocks. The eastern part of the area mapped is covered mostly by Quaternary glacial debris and alluvium.

Field relations of the pre-Cambrian rock units suggest the following age sequence: Idaho Springs formation (consisting of biotite-quartz-plagioclase gneiss, granodiorite gneiss, and migmatite), quartz diorite, gneissic granite, Silver Plume granite, pegmatite.

Idaho Springs formation

Biotite-quartz-plagioclase gneiss.--Three distinct units of the Idaho Springs formation (as defined by Lovering and Goddard, 1950, pp. 19-20) are recognizable in the Jo Reynolds area. One unit is a fine- to medium-grained biotite-quartz-plagioclase gneiss that ranges in composition from a highly quartzose rock to a biotite schist locally containing sillimanite. The gneiss is migmatitic due to introduction of white granitic material along the foliation. Where the white granitic material forms over 40 percent of the rock, the rock has been mapped as migmatite on plate 1.

The biotite-quartz-plagioclase gneiss has well-developed foliation due to a mineral layering. Alinement of biotite flakes forms a strong lineation in the gneiss. In places fracture cleavage is common and is revealed by thin layers of recrystallized(?) quartz along fractures.

The biotite-quartz-plagioclase gneiss grades into granodiorite gneiss, and both of these rock types occur as inclusions in quartz diorite.

Granodiorite gneiss. --The granodiorite gneiss is a brownish-gray porphyroblastic gneiss whose main constituents are plagioclase, biotite, and quartz. Small feldspar porphyroblasts give a distinctive "knotty" appearance to the rock in outcrop.

The gneiss has a weak foliation produced by small subrounded feldspar porphyroblasts in

planar arrangement. Lineation due to mineral alinement is commonly lacking.

The granodiorite gneiss is cut by small white granitic layers similar to those forming migmatite in the biotite-quartz-plagioclase gneiss.

Migmatite. --Several stages of migmatization are indicated by the field relations of the rock units in the Jo Reynolds area. The bulk of the migmatite appears to belong to an early stage that was formed by the introduction of white granitic material into biotite-quartz-plagioclase gneiss and granodiorite gneiss. Small veins of granitic material were introduced principally along foliation of these older gneisses, though locally the veins transect the foliation. Further migmatization occurred with the emplacement of the later granitic rocks (quartz diorite, gneissic granite, Silver Plume granite, and pegmatite). The migmatite has been assigned to the Idaho Springs formation with the realization that this migmatite actually is a combination of older metasedimentary rocks of the Idaho Springs formation with later introduced material of younger pre-Cambrian age.

Quartz diorite

Two small irregular bodies of quartz diorite are present in the southwestern part of the mapped area (pl. 1). The quartz diorite is principally a coarse-grained, massive rock consisting of biotite, hornblende, and plagioclase, with noticeable amounts of quartz. Locally a metamorphosed quartz diorite facies has been developed by shearing and recrystallization of the quartz diorite.

Foliation, apparently due to local shearing of the quartz diorite, is present in the metamorphosed quartz diorite facies. The foliation direction is immediately related to the direction of the shearing.

Locally, the quartz diorite is cut by stringers of gneissic granite and occurs as inclusions in Silver Plume granite.

Gneissic granite

The gneissic granite is a white medium-grained foliated rock that consists essentially of potash feldspar, plagioclase, and quartz. It contains as much as 30 percent of schist inclusions. Locally a coarse-grained pegmatitic facies occurs as irregular masses in the granite.

The gneissic structure of the granite is given by subparallel alinement of thin wisps of biotite schist and 1- to 2-in. layers of biotite-quartz-plagioclase gneiss, which range from a few inches to 4 ft in length. In places a weak mineral layering is present in the parts of the granite containing inclusions of schist, gneiss, or both of these rocks. The degree of gneissic structure present in this granite depends principally upon the abundance of inclusions--the more inclusions present, the better the gneissic structure. More inclusions are present in the granite near its contact with migmatite or biotite-quartz-plagioclase gneiss than in the central part of the granite. Gneissic granite grades into migmatite and biotite-quartz-plagioclase gneiss. The gneissic granite apparently has inherited its foliation from the older rocks. Gneissic granite is cut by veins of Silver Plume granite and pink pegmatite.

Silver Plume granite

A gray to pink, fine- to coarse-grained biotite granite is exposed in approximately 40 percent of the outcrop area shown on plate 1. The granite consists of potash feldspar, plagioclase, quartz, and biotite and is similar in mineralogy, texture, and color to Silver Plume granite at the type locality of Silver Plume, Colo. For this reason the writers refer to it as the Silver Plume granite. Most of this granite in the Jo Reynolds area belongs to the medium-grained facies; a few outcrops of the fine- and coarse-grained facies occur around and within the larger medium-grained masses.

All facies of Silver Plume granite have a weak foliation. Subparallel tabular potash feldspar crystals in planar arrangement give foliation to the medium- and coarse-grained facies; alinement of biotite flakes forms the foliation in the fine-grained facies.

The Silver Plume granite contains inclusions of quartz diorite and rocks of the Idaho Springs formation. Veins of Silver Plume granite cut through gneissic granite. Silver Plume granite is cut by veins and dikes of pink pegmatite.

Pegmatite

Dikes or veins of pink granite pegmatite occur in most of the outcrops of this area. Most of the dikes, however, are too small to be shown on plate 1. Small pegmatite masses are found along most contacts between Silver Plume granite and older rocks. The pegmatite consists of perthitic microcline, plagioclase, and quartz with small amounts of biotite and muscovite. Locally the dikes contain magnetite, which may form as much as 35 percent of a 2-ft square section of an outcrop.

Pink pegmatite veins and dikes cut all other pre-Cambrian rocks. A close field association between the pink pegmatite and Silver Plume granite suggests that the pegmatite may be a late phase of Silver Plume granite.

Bostonite dike

A bostonite dike crops out in the extreme northern part of the mapped area and extends several hundred feet northward beyond the limit of the map (pl. 1). The southward extension of the dike is covered by a thick deposit of glacial debris. Excellent exposures of the dike occur in the road cut and in several of the prospect pits.

The dike is essentially a fine-grained light-lavender rock, which is locally porphyritic. The porphyritic parts of the dike may have a dozen small phenocrysts per square foot. Trachytic texture is well developed in the dike and is made visible to the naked eye by weathering. Chilled margins are present. Alteration along fractures has bleached parts of the dike to light buff.

The bostonite dike cuts pre-Cambrian rocks. Similar bostonite dikes in other parts of the Front Range

are considered by Lovering and Goddard (1950, p. 47) to be early Tertiary in age.

Glacial debris and alluvium

Much of the area mapped north of coordinate 102,000 N (pl. 1) is covered by Quaternary glacial debris deposited by alpine-type glaciers, which moved easterly down Clear Creek valley.

The eastern part of the area mapped along Silver Creek is covered by alluvium.

STRUCTURE

Principal structural features

Two fold systems have been formed in the pre-Cambrian bedrock of the mapped area (fig. 2). The principal fold system is indicated by the major structural feature in this area--a syncline plunging 20° to 80° in a general direction of N. 60° E. A second fold system intersects the major fold system at an angle of about 30°. Traces of the axial planes of the secondary fold system trend about N.30° E. on the northwest flank of the major syncline. Bending of fold axes in a horizontal plane is reflected by bends in the trace of the axial planes (fig. 2); bending in a vertical plane is suggested by a wide range in plunge of lineations that are parallel to axes of folds (pl. 1).

Traces of two normal faults are shown on plate 1 and figure 2. The faults are not directly related to planar and linear structures of the pre-Cambrian bedrock. The faults, though in places subparallel to major fold axes in the bedrock, elsewhere transect these axes. Lovering and Goddard (1950) consider the faulting in the Lawson-Dumont district to be early Tertiary in age.

Folds

The folds in the area are outlined by gneissic structures, which have been previously described with each rock unit. The mapped area contains a series of upright and very slightly overturned synclinal and anticlinal folds a few hundred feet across. The folds generally plunge 20° to 80° NE. The flanks of the larger folds of both fold systems have been crumpled into small rolls and warps, in places several feet across. The small warps plunge down the flanks of the larger folds and have their axes approximately normal to the axes of the larger folds. Crinkles and drag folds are present on both of these fold systems, and other linear features are developed in the rocks through streaking and mineral alinement.

Faults

The faults in this area are normal faults trending N. 65° E. The faults are indicated on the map (pl. 1) by the veins that occupy them. Surface exposures of the faults are easily recognized because of the presence of siderite, sphalerite, and hematite along them.

Two faults are exposed on the surface: the main Jo Reynolds fault (occupied by the Jo Reynolds no. 2 vein), which strikes N. 60°-80° E. and dips 58°-82° NW., and a minor subparallel fault 150 ft southeast of it. Each fault has a 20- to 30-ft sheared zone adjacent to it.

The Jo Reynolds fault and the minor fault southeast of it are curved surfaces and in general take the form of flat cymoid curves.[1] Associated fractures and shingle structures in outcrops indicate that the southeast blocks have moved up and to the southwest relative to the northwest blocks. Underground mapping of the accessible part of the Elida tunnel (fig. 3) confirms this apparent movement along the Jo Reynolds fault and suggests that the apparent horizontal offset is 20 to 30 ft.

At least two other faults are reported in this area but are not shown on the map--one contains the Jo Reynolds no. 1 vein, the other is presumed to follow the general line of the American Sisters group of dumps. Bastin and Hill (1917, p. 339) give the general trend of the American Sisters vein (fault) as parallel to the Jo Reynolds main vein (fault).

Joints

Joints are well developed in all the pre-Cambrian and Tertiary rocks exposed in the area mapped. The most prominent joints strike N. 65° E. and dip 80° NW. and are approximately parallel to the Jo Reynolds fault. Less prominent are joints that strike approximately N. 35° W. and dip steeply to the northeast or northwest.

ECONOMIC GEOLOGY

The Jo Reynolds no. 2 vein, or main vein, is exposed at the surface in 12 places over a strike length of several hundred feet. The same(?) vein crops out in the saddle on the prominent rock knob N. 46° E., 1,250 ft, from the portal of the Daily tunnel. The no. 2 vein, where exposed, strikes N. 60°-80 E. and dips 58°-82° NW., generally flattening from southwest to northeast along the strike. Although only the most prominent vein is shown on the maps (pl. 1 and fig. 2), several exposures show minor parallel fractures in a 20- to 30-ft zone around the main vein. The main vein and parallel fractures contain sphalerite, siderite, and local hematite. From the plan of the drifts, it is inferred that the no. 2 vein has an average strike of N. 63° E. and dip of 67° NW.

The no. 3 vein crops out in four places. It strikes N. 55°-68° E.; it dips 55°-70° NW. opposite the places where the no. 2 vein dips 75°-82° NW. Underground, the no. 3 vein appears to strike N. 80° E.; its dip is not known.

The no. 1 vein is not exposed, and the no. 4 "lode," as mentioned by Morton,[2] cannot now be identified.

[1] A cymoid curve is a reverse curve in which a line swerves from its course and then swings back again, resuming a direction parallel to its former course but not in line with it (McKinstry, 1948, p. 315).

[2] Morton, R. B., Vertical longitudinal section of Jo Reynolds mine (loaned by C. L. Harrington) and notebook page (photostat loaned by J. W. Shireman), 1905.

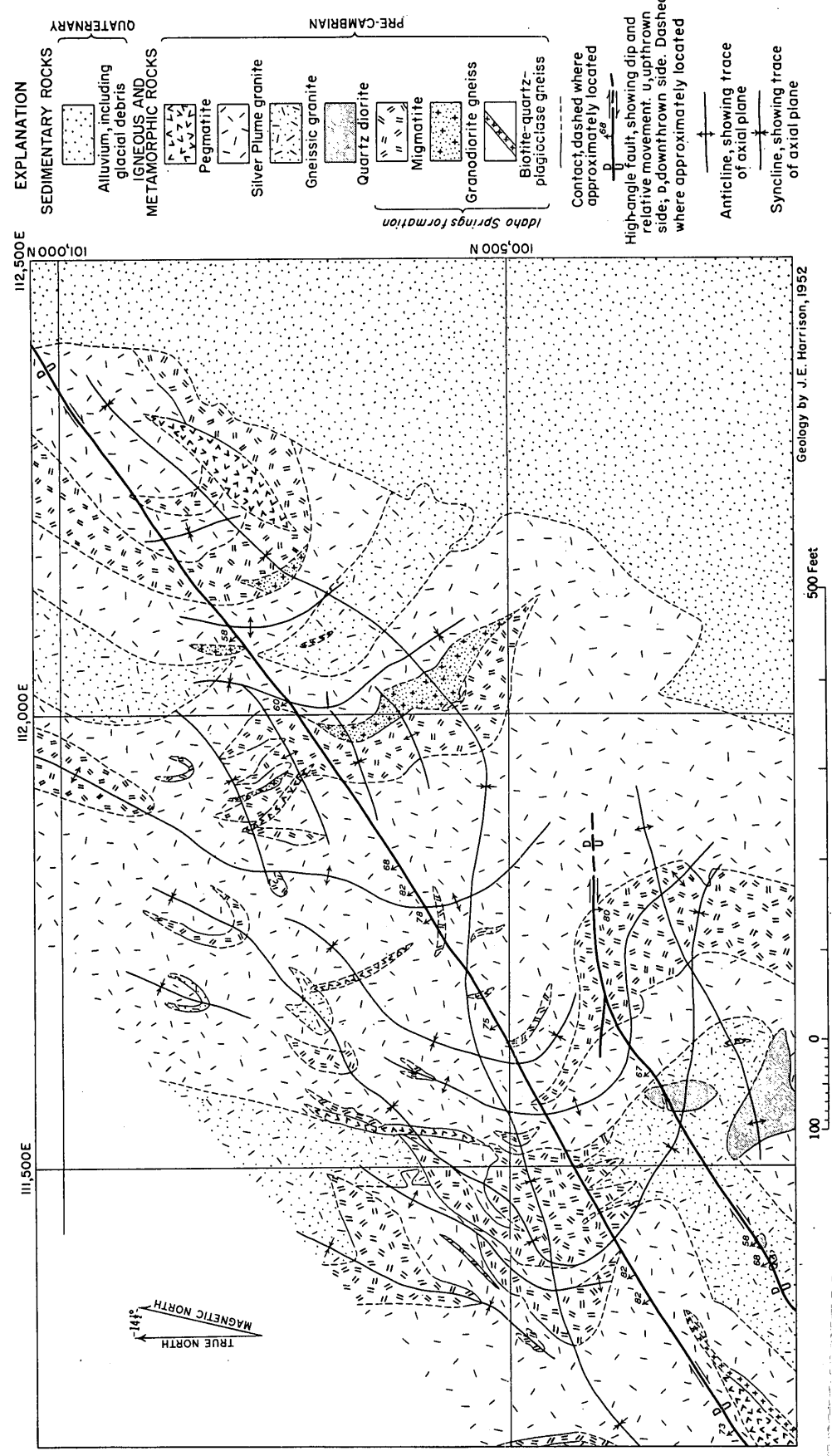

Figure 2. --Inferred geologic and structure map of part of the Jo Reynolds area, Lawson-Dumont district, Clear Creek County, Colo.

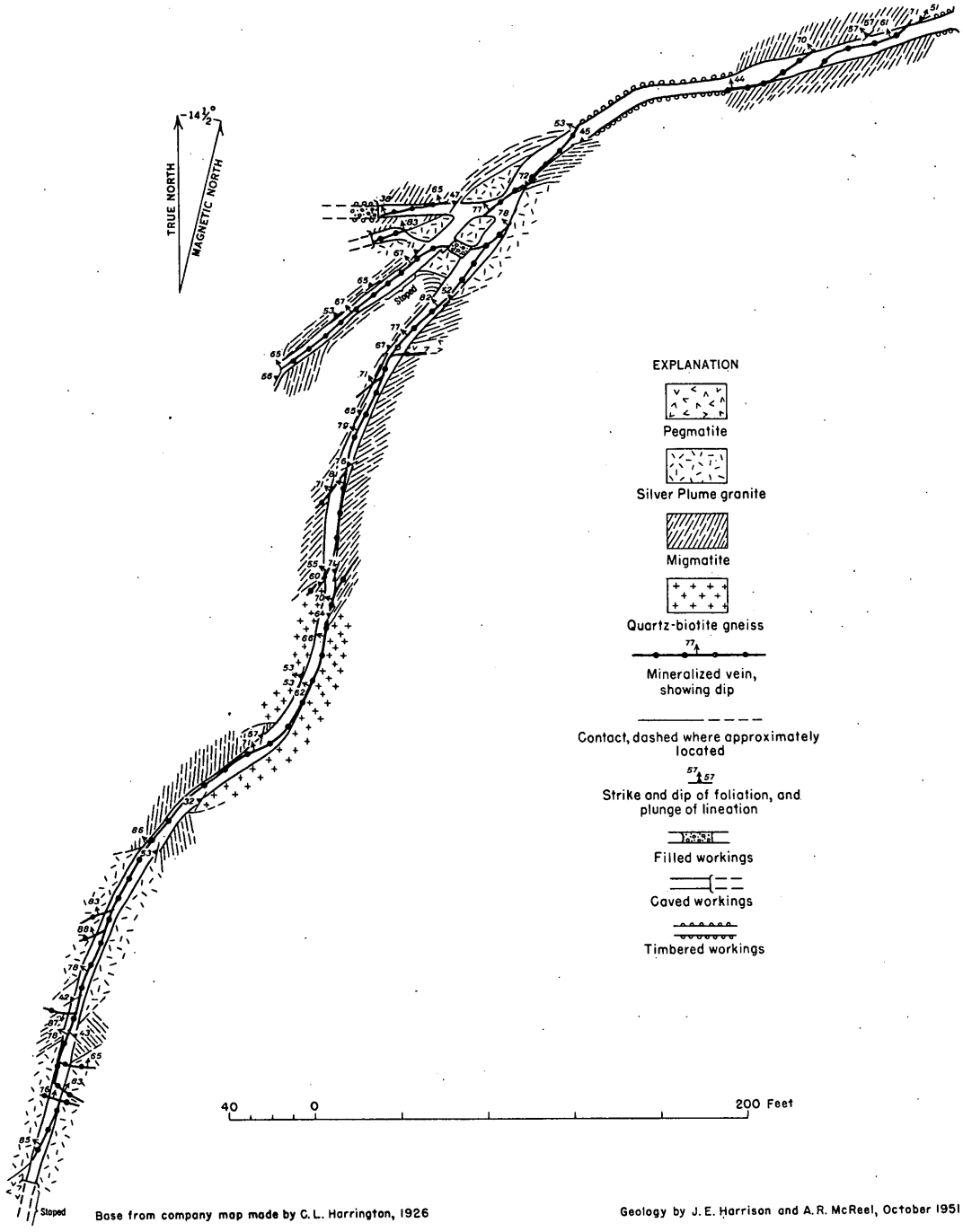

Figure 3. --Geologic map of the northeast part of Elida tunnel, Jo Reynolds mine.

Bastin and Hill (1917, p. 340) give the mineralogy of the vein as follows:

> "The vein is similar in mineral characters to the neighboring American Sisters vein. The primary metallic minerals are galena, sphalerite, pyrite, chalcopyrite, and gray copper; and the secondary minerals polybasite, pearceite, proustite, argentite (original?), native silver, chalcopyrite, and galena."

Bastin and Hill (1917, p. 124) examined polished surfaces of pitchblende ore from the Jo Reynolds mine. They concluded that deposition of the pitchblende was early and was followed by deposition of the sulfides.

Though a radiometric survey of the dumps in the area failed to show significant anomalies (King, 1951, p. 6), outcrops of the veins show anomalous radioactivity on the order of two times background on the 0.2 mr/hr scale of a Geiger counter.

The only mine workings accessible at the time of the mapping were 745 ft of the Elida tunnel. This part of the tunnel (fig. 3), together with the short drifts near its portal, shows several minor shear zones with oxidized sulfides but no detectable concentrations of radioactive material. A cave 745 ft from the portal blocks access to the main Jo Reynolds vein and the area from which pitchblende has been reported.

Occurrences of pitchblende and anomalous radioactivity in the Jo Reynolds area

Eight occurrences of pitchblende have been reported at this deposit. In addition, Guillotte (1944, p. 13) reports the presence of torbernite in the Jo Reynolds mine.

The eight occurrences are tabulated below, beginning with the upper workings.

1. A pocket of pitchblende at a point on the 100-ft level.[3] The 100-ft level might be either level 3 or level 4 (pl. 2, B).
2. Abeel crosscut to no. 4 lode, and 100-ft and 200-ft levels from Herrick shaft--places not further identifiable.[4]
3. "Quite a large pocket" of uranium ore encountered in 1886 on the second or third level (Georgetown Courier, February 28, 1914).
4. Pitchblende high in radium from an 18-in. vein--location in the mine unspecified (Denver Post, November 10, 1914; Rocky Mountain News, November 11, 1914; --? Herald, with Idaho Springs, November 10 dateline).
5. Tunnel level (Elida?), near the bottom of the old shaft, about 1,000 ft below the surface (Bastin and Hill, 1917, p. 124).
6. Sooty pitchblende(?), Elida tunnel, 100-150 ft southwest of the main shaft (King, 1951, p. 6). This might be virtually the same occurrence as that noted by Bastin and Hill (1917, p. 124).
7. A 76-ft raise in 1 to 3 percent ore more than 3 ft wide; raise made from the tunnel (Elida?) level (Georgetown Courier, January 12, 1916).
8. Eight tons of pitchblende--location unknown but inferred to have been in the lowest workings of the Jo Reynolds mine (King, 1951, p. 2)[5]. Most of the current significance of the Jo Reynolds property is based on this reported production of high-grade ore. Because of the importance of such a deposit and the divergence of opinion on its credibility, the matter is discussed below.

Guillotte (1944, p. 6) states that in 1919 the Jo Reynolds mine produced 8 tons of pitchblende that assayed 72 percent U_3O_8. The ore was sold in France by R. B. Morton, owner in 1919, for $80,000. Both statements were contributed to Guillotte in 1944 by the owner, E. H. Geary (now deceased) of Denver, and reportedly confirmed by Mrs. Morton. Guillotte, apparently finding it impossible to authenticate the information, felt that the production data for the Jo Reynolds mine might be erroneous.

King (1951) found no significant quantities of uranium ore in the Elida tunnel but concluded, after re-evaluating all the available information, that the ore body reported to have yielded 8 tons of high-grade ore was probably cut in the lowest workings of the mine.

Anomalous radioactivity in the vein exposed in the Elida tunnel has been reported by King (1951, p. 6) in the ground 100 to 200 ft southwest of the main shaft. Local areas in the first 745 ft of the Elida tunnel show very slight anomalous radioactivity.

Other anomalous radioactivity near the area

King and Granger (1950) report the occurrence of torbernite at the Robineau claims about three-fourths of a mile southwest of the portal of the Daily tunnel. This group of claims was located by triangulation and their position plotted with reference to the Daily tunnel portal. The Jo Reynolds no. 2 vein, when projected, passes about 1,200 ft north of the Robineau claims. The Nabob vein, which is reported to be essentially parallel to the Jo Reynolds and American Sisters veins, had the correct geographic position and attitude to project through the Robineau claims. The question of whether or not it does can be settled only by detailed study, however.

Shoot structure

The writers believe that the lead-zinc-silver ore body in the Jo Reynolds mine had a pronounced shoot structure. This raking ore shoot with a possible maximum height[6] of about 500 ft is shown on the vertical longitudinal projection (pl. 2, B). The original stope section bore tonnage and grade estimates for all the unstoped ground. These estimates were an extrapolation of data from adjacent stoped areas, so that Morton clearly reckoned--on that stope section, at least--that the ore body was a uniform tabular deposit. However, the writers doubt that an ore body then mined for more than 30 yr would have been stoped obliquely down the vein unless that was truly the most favorable ground.

[3]Morton, R. B., photostat of notebook, 1885.
[4]Op. cit.

[5]There is some uncertainty about the date of driving the sublevel below the Elida level. Part of the sublevel is more than 30 yr old; part of it may be 15–20 yr old. The term "lowest workings" as used by King is deliberately noncommittal (King, oral communication). It refers to the Elida level and workings immediately above and below that level.

[6]The height of an ore shoot is its dimension perpendicular to the long axis of the shoot, measured in the plane of the shoot. "Height" is sometimes called "breadth."

The "apparent rake" of the ore shoot in the vertical longitudinal section is 45°-65° NE. (probably close to 60° NE). This inclination is approximately equivalent to the true plunge of the shoot. The trend, or direction of elongation of the shoot, is close to N. 17° E. The true rake, measured in the plane of the vein, is about 70° NE.

The structural control for the now unobservable ore shoot is, of course, a matter of conjecture. However, the meager structural information that is available suggests two explanations for localization of an ore body along the direction N. 17° E., 60° NE.

1. A plan map of the Elida tunnel loaned by C. L. Harrington[7] shows the strike and dip of the main mineralized fractures in the tunnel and adjoining workings. A schematic plot of these fractures and their relation to the trend of the ore shoot is shown in figure 4. The main vein (*A*) appears to have the attitude N. 65° E., 65° NW. Two essentially symmetrically arranged mineralized fracture surfaces (*B* and *C*) have attitudes of N. 88° E., 65° NW., and N. 46° E., 71° NW., respectively. A transverse joint (*D*) strikes N. 35° W., and dips 65° NE. The traces (lines of intersection) *AD*, *BD*, and *CD* lie within a few degrees of N. 17° E., 60° NE. The trace *AC* has a similar plunge but trends roughly north, instead of north-northeast. A statistical study of joints in outcrops in the Jo Reynolds area shows maxima for surfaces having attitudes of N. 65° E., 80° NW., and N. 35° W., steep NE. and SW. These data agree well with Harrington's plot of mineralized fractures on the Elida level. Perhaps we may cautiously infer, then, that the structure of the ore body was controlled by the intersection of a main fracture zone with a transverse set of joints(?); surfaces symmetrical about the main zone may also have exerted considerable control.

[7]Harrington, C. L., Maps of Jo Reynolds property, including plan of Elida tunnel and vertical longitudinal (stope) section prepared by R. B. Morton.

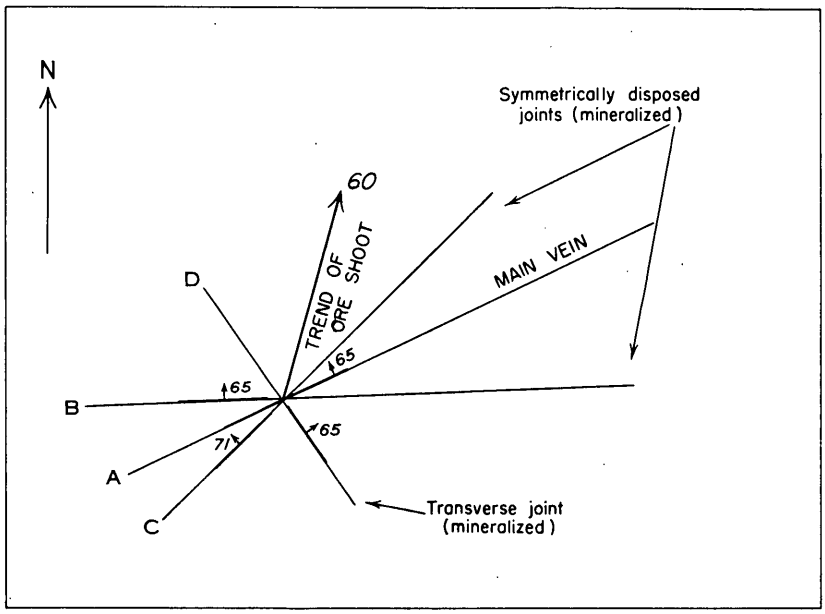

Figure 4. --Schematic plot of fracture surfaces and trend of ore shoot, Elida tunnel level, Jo Reynolds mine.

In the fracture pattern of the area the transverse set of joints bears the relation of a tension fracture to the main faults. Everhart and Wright (1951) and Buffam (1951) have recently suggested that pitchblende occurs in tension fractures that are commonly minor fractures associated with large-scale structures. The writers do not wish to imply that they believe that pitchblende necessarily should, or should not, be found on the transverse joints of the Jo Reynolds mine. However, the hypothesis should be borne in mind when further study of the deposit is undertaken.

2. Data from surface geologic mapping show that the Jo Reynolds no. 2 vein is on a somewhat curving surface. The apparent movement along this curved surface has been discussed under the topic of faults. The data are too few to define the directions or amounts of relative movement with precision, but they suggest movement roughly along the NNE. direction at a high angle, with consequent horizontal displacement of 20 to 30 ft. This movement would serve to develop openings along the curved shear surface favorable for the deposition of ore in a shoot.

A multiple shoot structure may be present in the Jo Reynolds mine. Slight variations in strike and dip along the high-angle fault, such as appear on the surface map, could serve to develop a series of openings favorable for the formation of ore shoots. At least three veins have been mined on the Jo Reynolds property, and the intersection of each of the veins with a transverse set of joints could also serve to localize ore in shoots.

LITERATURE CITED

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Lovering, T. S., and Goddard, E. N. 1950, Geology and ore deposits of the Front Range, Colo.: U. S. Geol. Survey Prof. Paper 223.

McKinstry, H. E., 1948, Mining geology, New York, Prentice-Hall.

Spurr, J. E., Garrey, G. H., and Ball, S. H., 1908, Economic geology of the Georgetown quadrangle (together with the Empire district), Colorado: U. S. Geol. Survey Prof. Paper 63.

INT.-DUP. SEC., WASH., D.C.-29133

name
Docket copy

700

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

Ching
F. L. Kuoum

Mr. G. C. Ridland, Vice President
Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

Re: Docket No. DMEA-3309 (Uranium)
Jo Reynolds Mine
Clear Creek County, Colorado

Dear Mr. Ridland:

Reference is made to Mr. W. H. King's letters to you of May 19 and July 7, 1954, advising you of the necessity of supplying an Owner's Consent to Lien or a Performance Bond before the subject application could be processed.

We have been informed that you have not supplied either of the documents requested; therefore, you are hereby advised that the captioned docket has been closed as of August 6, 1954, in accordance with Mr. King's letter of July 7, 1954.

Sincerely yours,

C. O. Mittendorf

Administrator

MChing/gla
8-16-54
cc to: Admr. Reading File
Docket
Messrs. A. P. Butler, Jr. Rm. 3212, GSA
J. O. Hosted, Rm. 3210, GSA
H. D. Keiser, Rm. 3641
Code 700
Mr. Ching
Mr. Adams
DMEA Field Team, Region IV (2)

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

Mr. [illegible] Midland, Vice President
Reynolds Uranium Corporation
[illegible] Interstate Trust Building
Denver 2, Colorado

Re: Docket No. [illegible]-339 (Uranium)
Jo Reynolds Mine
Clear Creek County, Colorado

Dear Mr. Midland:

Reference is made to Mr. L. H. King's letters to you of May 19 and July 7, 1954, advising you of the necessity of supplying an Owner's Consent to Lease or a Performance Bond before the subject application could be processed.

We have been informed that you have not supplied either of the documents requested; therefore, you are hereby advised that the captioned docket has been closed as of August 1, 1954, in accordance with Mr. King's letter of July 7, 1954.

Sincerely yours,

C. O. Mittenderf

Administrator

HKing/gla
8-16-54
cc to: Admr. Reading File
Docket
Messrs. A. F. Butler, Jr. Rm. 3212, DEA
J. D. Hosted, Rm. 3210, DEA
H. D. Keiser, Rm. 3041
Code 700
Mr. Ching
Mr. Adams
DEA Field Team, Region IV (2)

8-12-54
a. th.

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

224 New Customhouse
Denver 2, Colorado

August 9, 1954.

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3309 (Uranium), Reynolds Uranium Corporation.

The applicant has not replied to our letter dated July 7, 1954 in which we gave him thirty days to deliver an Owner's Consent to Lien or Performance Bond. Accordingly, we have closed this docket.

W. H. King

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

224 New Customhouse
Denver 2, Colorado

August 9, 1954.

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3309 (Uranium), Reynolds Uranium Corporation.

The applicant has not replied to our letter dated July 7, 1954 in which we gave him thirty days to deliver an Owner's Consent to Lien or Performance Bond. Accordingly, we have closed this docket.

W. H. King

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

224 New Customhouse
Denver 2, Colorado

August 9, 1954.

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3309 (Uranium), Reynolds Uranium Corporation.

The applicant has not replied to our letter dated July 7, 1954 in which we gave him thirty days to deliver an Owner's Consent to Lien or Performance Bond. Accordingly, we have closed this docket.

W. H. King

JFS:cwm

cc: Docket
Administrator, DMEA
WMTraver
AHKoschmann
Chron.

7/12/54 gla

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

224 New Customhouse
Denver 2, Colorado

July 7, 1954.

REGISTERED MAIL

Dr. G. C. Ridland, Vice President
Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

Re: Docket DMEA-3309 (Uranium)
Reynolds Uranium Corp.

Dear Doctor Ridland:

In our letter dated May 19, 1954 we notified you that it will be necessary for you to obtain Owner's Consent to Lien before we could process your application. Shortly thereafter in a telephone conversation you stated that you planned to obtain a Performance Bond in lieu of Owner's Consent to Lien.

If we do not receive signed copies of Owner's Consent to Lien or a Performance Bond within 30 days your docket will be closed.

Very truly yours,

W H King

W. H. King
Executive Officer
DMEA Field Team, Region IV

JFS:cwm

cc: Docket
WMTraver
AJKoschmann
Chairman of the Oper. Committee
Administrator, DMEA
Chron.

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

224 New Customhouse
Denver 2, Colorado

July 7, 1954.

REGISTERED MAIL

Dr. G. C. Ridland, Vice President
Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

Re: Docket DMEA-3309 (Uranium)
Reynolds Uranium Corp.

Dear Doctor Ridland:

In our letter dated May 19, 1954 we notified you that it will be necessary for you to obtain Owner's Consent to Lien before we could process your application. Shortly thereafter in a telephone conversation you stated that you planned to obtain a Performance Bond in lieu of Owner's Consent to Lien.

If we do not receive signed copies of Owner's Consent to Lien or a Performance Bond within 30 days your docket will be closed.

Very truly yours,

W H King

W. H. King
Executive Officer
DMEA Field Team, Region IV

JFS:cwm

cc: Docket
WMTraver
AHBoschmann
Chairman of the Oper. Committee
Administrator, DMEA
Chron.

5/7/54 gla

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

224 New Customhouse
Denver 2, Colorado

May 4, 1954

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3309 (Uranium), Reynolds Uranium Corporation, Jo Reynolds Mine, Clear Creek County, Colorado

This is in reply to your letter dated April 26, 1954 regarding the subject docket.

The application has been referred for a field examination after investigation by this office.

We are advised that the applicant will not be able to furnish the necessary Owner's Consent to Lien, so we presume that the applicant will be required to furnish a bond in lieu thereof.

W. H. King

W. H. King

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

224 New Customhouse
Denver 2, Colorado

May 4, 1954

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-3309 (Uranium), Reynolds Uranium Corporation, Jo Reynolds Mine, Clear Creek County, Colorado

This is in reply to your letter dated April 26, 1954 regarding the subject docket.

The application has been referred for a field examination after investigation by this office.

We are advised that the applicant will not be able to furnish the necessary Owner's Consent to Lien, so we presume that the applicant will be required to furnish a bond in lieu thereof.

W. H. King

W. H. King

HMC:es

cc: Docket
Chron.
Traver
Koschmann

Surname
Docket copy

700

Ching
Ellis
Martin
Hedges
Farrell
Johnson

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

APR 26 1954

Mr. G. C. Ridland
Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

Re: Docket No. DMEA-3309 (Uranium)
Jo Reynolds Mine
Clear Creek County, Colorado

Dear Mr. Ridland:

The application for assistance in exploring your property, under the above captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for investigation to the Executive Officer of Region IV at the following address:

Mr. W. H. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

The Regional Office will contact you in the event they desire to obtain further information.

Sincerely yours,

G. O. Mitteadest (for)

Administrator

MChing/gla
4/26/54
cc to: Admr. Reading File
Docket
Code 700
MChing
DMEA Field Team, Region IV (2)

R.C.J.

Surname
Docket copy

700

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

Ching
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Mr. W. H. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

APR 26 1954

Re: Docket No. DMEA-3309 (Uranium)
Reynolds Uranium Corporation
Jo Reynolds Mine
Clear Creek County, Colorado

Dear Mr. King:

The subject application is being referred to you for investigation and recommendation. A copy of the application is already in your files.

Enclosed are two copies each of comments and recommendations relative to the application by H. D. Keiser and Arthur P. Butler, Jr. of the Uranium Commodity Committee, both dated April 15, 1954.

As you know, the subject property is the same as that covered by Docket No. DMEA-1446, Jorey Mining Corporation. The latter docket was closed when the Applicant failed to provide the necessary Owner's Consent to Lien. While a Field Team report on Docket No. DMEA-1446 recommended approval of an exploration project estimated to cost $35,000, new information developed by the Geological Survey, or the Field Team's recent experience with a somewhat similar project at the German-Belcher mine may give you a different viewpoint on the present application.

We note that the Applicant has not submitted an Owner's Consent to Lien which would be required from both Reynolds Uranium, Inc. and The Jo Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, Fanny P. Morton, individually, and Fanny P. Morton, Mary R. Morton and Lulu M. Quantrell, as co-owners. It is suggested that you contact the Applicant and ascertain whether or not it will be able to furnish these agreements.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (245)

Enclosures 4

MChing/gla 4/26/54
cc to: Admr. Reading File
Operating Committee
Docket
Messrs. APButler, Jr. Rm. 3212, GSA
JOHosted, Rm. 3210, GSA
HDKeiser, Rm. 3641
Code 700
~~ELKnouse~~ M. CHING

APPROVED:

J. H. Hedges (245)
Member, Bureau of Mines

D. M. Larrabee (245)
Member, Geological Survey

P.C.

4/23/54 gla

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

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

DATE: April 15, 1954

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

DMEA-3309

SUBJECT: (Uranium), Application of Reynolds Uranium Corporation, Jo Reynolds Mine, Clear Creek County, Colorado

Comment

I have reviewed the application identified in the subject above. The applicant, Reynolds Uranium Corporation, proposed 2500 feet of underground diamond drilling in five holes, 545 feet of underground exploration, and rehabilitation of parts of the workings in the Jo Reynolds mine at an estimated cost of $33,325 to explore extensions of four separate vein systems which have been previously worked for silver, lead, zine and minor amounts of pitchblende.

The Geological Survey is currently preparing areal geologic maps in the vicinity of the Jo Reynolds mine and has examined accessible parts of the mine for anomalous radioactivity. The results of this work should be considered in fully evaluating the merits of the application. In addition, a review of past production records of the mine may help in evaluating the possible size and distribution of uraniferous ore bodies that might be discovered as a result of the proposed exploration.

Recommendation

1. I recommend that the application be forwarded to the Field Team for review and evaluation especially with respect to the general scope of the exploration in relation to the results of examinations by Geological Survey personnel.

2. I suggest that the Field Team consult with Mr. R. U. King, Mr. J. E. Harrison, and with other members of Mr. A. H. Koschmann's staff of the Geological Survey, and also with members of the Denver Exploration Branch, U. S. Atomic Energy Commission.

Copies to: E. Wm. Ellis (2)

Arthur P. Butler, Jr.

4/16/54 gla

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

Defense Materials Administration
APR 16 1954

April 15, 1954

Memorandum

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

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

Subject: DMEA Docket 3309, Reynolds Uranium Corporation, 403 Interstate Trust Building, Denver 2, Colorado

I have reviewed the application included in the subject docket and discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

It is recommended that the application be forwarded to the Field Team for investigation and report, and that the Field Team be requested to discuss the application with Charles C. Towle, representative of the Atomic Energy Commission at Denver, Colorado.

H. D. Keiser

H. D. Keiser

Attachment

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

April 13, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 3309 Reynolds Uranium Corp.

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

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

April 13, 1954
Subject: DMEA-3309
Re: Exploration Assistance
Jo Reynolds Mine

Reynolds Uranium Corp.
403 Interstate Trust Bldg.
Denver 2, Colorado

Gentlemen:

The receipt of your application dated March 22, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3309 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-3309 in any future correspondence relating to your application.

Sincerely yours,

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

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

224 New Customhouse
Denver 2, Colorado

April 7, 1954

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: (Uranium), Application of Reynolds Uranium Corporation, Jo Reynolds Mine, Clear Creek County, Colorado

Enclosed are two copies of the subject application containing Form MF-103 and accompanying answer sheets and Exhibit D, a map showing the proposed exploration work. Also enclosed are photostatic copies of the purchase agreement, agreement and mining lease, and the assignment of the latter to the applicant.

One copy of the application is being forwarded to Mr. A. P. Butler, Bldg. 21-TEPCO, at Denver Federal Center, and one copy is being retained in our file.

Although the amount involved might be within the delegated authority of this office, our attorney, Mr. Shireman, has for many years represented the property owners, and would be unable to assist this office if the application should go to a contract.

W. H. King

W. H. King

A. H. Koschmann

A. H. Koschmann

Enclosures

G. CARMAN RIDLAND
Geological Engineer

TELEPHONE: ALPINE 1891

403 INTERSTATE TRUST BUILDING
DENVER 2, COLORADO

March 23, 1954

Mr. W. M. King
Executive Officer
Defense Minerals Exploration Admin.,
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Enclosed please find an application for aid by Reynolds Uranium Corporation to explore portions of the Jo Reynolds mining property.

The application consists of:

1. Form MP-103 and accompanying answer sheets.
2. Exhibit A. - Certified copy of "Purchase Agreement".
3. Exhibit B. - Certified copy of "Agreement and Mining Lease".
4. Exhibit C. - Assignment of the latter to the applicant.
5. Exhibit D. - Maps from U.S.G.S. Circular 213 showing proposed exploration work.

Yours very truly,

G. C. Ridland

G. C. Ridland

F.
Enc.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 3309
Metal or Mineral Uranium
Date Received
Estimated Cost $33,325
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

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

(*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

See Exhibit "A" attached.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee. The property is leased from Reynolds Uranium, Inc. which holds a purchase agreement.

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

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

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

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

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

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

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

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

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

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

(*c*) The work will start within 30 days and be completed within 24 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 [ ] 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 22, 1954

Reynolds Uranium Corporation
(Applicant)

By G. C. Ridland

G. C. Ridland, Vice President

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

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

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

1. (a) Reynolds Uranium Corporation
403 Interstate Trust Bldg.,
Denver 2, Colorado

(b) State of New York

(c)

Name	Address	Office
Douglas J. Luckhurst	27 Williams St., N.Y.C., N.Y.	Pres. & Director
G. Carman Ridland	Interstate Trust Bldg. Denver, Colorado	V. Pres. & Director
Robert J. Stiro	272 Howland Ave. River Edge, New Jersey	Treasurer
Joseph Masopust	52 Chambers St., Rm. 312, N.Y.C., N.Y.	Secretary & Director
Jack Nix	Roslyn Heights, Long Island, N.Y.	Director

3. (a) Legal description - given in detail in "Purchase Agreement" attached as Exhibit A.

(b) Jo Reynolds mine.

(c) Lessee. The property is leased by applicant from Reynolds Uranium, Inc., which company holds a "Purchase Agreement" from the owners.

(d) Copy of the "Purchase Agreement" between the owners and Reynolds Uranium, Inc., and "Agreement and Mining Lease" between Reynolds Uranium, Inc., and Douglas J. Luckhurst with an Assignment of the latter by Luckhurst to the applicant are the means under which the applicant controls the property. Certified copies of said documents are attached as Exhibit A,B. and C.

(e) Not applicable.

(f) All claims are patented.

4. Physical Description

(a) The maps attached as Exhibit D, show the extent of the mine workings. The mine was operated steadily from 1877 through 1907, and intermittently since 1907. The last mining operation ceased in 1946. The applicant has had no interest in any of the former operations. The mine is now idle.

The workings are not accessible at this time. On Dec. 30, 1948, the 4,500-foot lower adit level, known as the Elida Tunnel, was accessible and was examined by Robert U. King of the U. S. Geological Survey (U.S.G.S., Trace Elements Memorandum Report 5). In 1951, this tunnel was found caved at 745 feet from the portal. The surface geology was mapped in detail in 1951 by the U.S. Geological Survey (U.S.G.S. Circular 213).

(b) Past Production - This mine is credited with a production, mainly silver, some lead, zinc and uranium - of $1,500.000.

Current Production - None

Ore Reserves - Not known.

(c) Geologic Features - The geology is described in detail in two reports cited in 4 (a).

Fissure veins (at least 4) mineralized with sphalerite, galena, silver, pyrite, chalcopyrite, gray copper, argentite, ruby silver and pitchblende in places cut pre-Cambrian metamorphosed sedimentary and igneous rocks of the Idaho Springs Complex and Silver Plume granite. The veins strike north of east and dip steeply North west. Width of the veins has not been reported due to inaccessibility of the workings. One vein has been traced on the surface for several hundred feet.

According to U.S.G.S. Circular 213, Page 7, pitchblende has been reported to occur in eight places in the Jo Reynolds mine. The places are tabulated.

It is reported that in 1919 the Jo Reynolds produced eight tons of pitchblende that assayed 72% U_3O_8 and Robert King deduces that this ore may have come from the lowest workings of the mine.

Because of the reports of the occurrence of pitchblende, and because the geological environment is believed favorable for deposition of pitchblende, the applicant wishes to explore the veins at and beyond the lower workings of the Jo Reynolds mine. Also, it is proposed to explore by diamond drilling the downward extension of the adjacent veins, No. 1, 3 and 4, which were explored only to a minor degree in the uppermost levels of the mine by former operators.

(d) The portal of the Elida Tunnel of the Jo Reynolds Mine is connected to paved U.S. Highway 40-6 by one mile of good gravel road The nearest railroad shipping point is Golden, Colorado, 32 miles east by paved highways except for the first mile of gravel. The roads are accessible at all times of the year.

Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colo.

Living quarters are available at Lawson, one mile from the mine, and at Idaho Springs, seven miles east of Lawson.

Denver, major source of supplies is 40 miles east by paved highway.

(e) Manpower, materials, supplies, equipment, water and electric power are all available in any required quantity for the contemplated exploration program.

5. (a) Pitchblende (Uranium ore).

(b) Proposed work:

Project	Estimated Cost
Install underground hoist, electric cable, electric pump at winze station Elida Tunnel Level -	$500.
Rehabilitate winze below Elida Tunnel (80 feet) -	1,600.
Rehabilitate 11th level (level at bottom of winze - 975 feet) -	4,875.
Diamond drilling 5 500-ft. flat holes as shown on accompanying map - 2500' @ $4.00 ft. -	10,000.
Raise 125' from Elida Tunnel level at pitchblende location described by King 125' @ $30.00 ft.	3,750.
Drift NE on No. 2 vein on 12th level (winze bottom) 320 feet @ $30.00 ft.	9,600.
Raise 100 feet from sublevel or 12th level under radioactive zone described by King. 100' @ $30.00 ft.	3,000.
	$ 33,325.

Government's participation;
75% of $33,325. - $ 24,933.75

(c) The work will start within thirty days and be completed within twenty-four months.

(d) The Reynolds Uranium Corporation was organized with the purpose of opening the Jo Reynolds Mine and exploring it for uranium. The operation will be supervised by Dr. C. C. Ridland, consulting geological engineer. Dr. Ridland is known to the D.M.E.A., as he is managing the Cold Spring mining operation at Nederland, Colorado (D.M.E.A. Docket No. 1447X; Contract Idm E-54). Alexander H. Baldo, 1950 graduate of mining engineering from The Missouri School of Mines, will be mines superintendent. Since graduating he has had one year with

Cerro De Pasco Corporation and three years with New Jersey Zinc Company in all phases of underground production and mining experience.

6. Estimate of Costs

It is proposed to conduct the operation on the unit cost basis, and estimates of the cost of each project is given under 5 (b) above.

(a) Independent contracts - It is proposed to sub-contract the diamond drilling program. This may be done at approximately $4.00 per foot, not including engineering and geological services. All other work will be done by the applicant.

(b) Labor, supervision, consultants -

Labor:				
Miners & drillers	2400 hrs.	@$1.75/max	$ 4200.00	
Muckers/trammers	2400 "	1.75 "	4200.00	
Surface men	1920 "	1.65 "	3168.00	
Timbermen	2400 "	1.75 "	4200.00	
Hoistmen	1920 "	1.65 "	3168.00	
Sup't & foreman	12 mo.	550.00 "	6600.00	
Engineer, geologist, consultants	6 "	500.00 "	3000.00	
Drifting, raising and cross-cutting labor may be contracted at $10.00/ft.max.			28536.00	28,536.00

(c) Operating materials and supplies -

Small tools, shovels, picks, etc.	Lot		100.00	
Mine Timber	20000 FBM	@$ 75.00M	1500.00	
Mine T-Rail	4 Ton	95.00	380.00	
Pipe, 1" water	1300 ft.	.50	650.00	
Pipe, 2" air	1300 "	.65	845.00	
Vent pipe 12"	1100 "	1.00	1100.00	
Fittings & misc.	Lot		100.00	
Electric Power (average)	45000-KWH	.033	1485.00	
Water - plenty available free				
Fuel - not required			6160.00	6,160.00

(d) Operating equipment -

Air compressor	5000.00	
Electric Hoist	1800.00	
Mucking machine	3100.00	
Pump	2500.00	
Copco Drifter Drills (2)	1400.00	
Ingersoll-Rand Stoper Drills (2)	1000.00	
Connections for drills	75.00	
	14875.00	
All of the above to be supplied by the operator, so only 10% (depreciation) charged to project		1,487.50

(e) Rehabilitation -

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Denver 2, Colorado.

Rehabilitation of the 11th, or Elida Tunnel Level, will be done at applicant's expense. Installation of compressor, hoist, and pump and electrical connections is estimated at $500.00

Rehabilitation of the winze is estimated to cost $ 1600.00 and the 12th level $ 4875.00

(f) New buildings, improvements, installations - None required

(g) Miscellaneous -

Maintenance costs:				
Air Compressor	12 mo.	$ 25.00	$ 300.00	
Hoist	12 "	10.00	120.00	
Pump	12 "	15.00	180.00	
Drills	10 "	5.00	50.00	
			650.00	$ 650.00
Assaying				250.00
Accounting	12 mo.	100.00		1200.00
Payroll taxes, including workman's compensation, liability insurance, unemployment, etc., 10% of payroll				2850.00

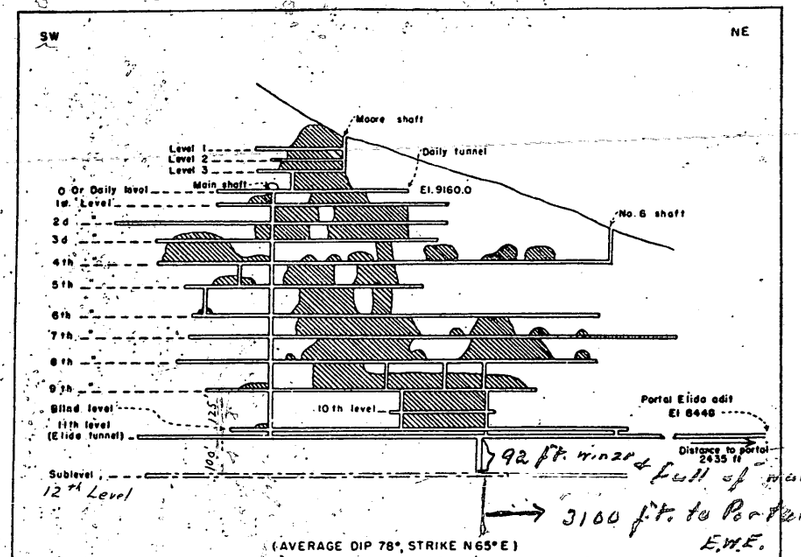
(h) Contingencies -

Allowance for contingencies	400.00
Grand Total	$ 41,533.50 *

7. (a) Applicant is prepared to pay it's share of the cost.

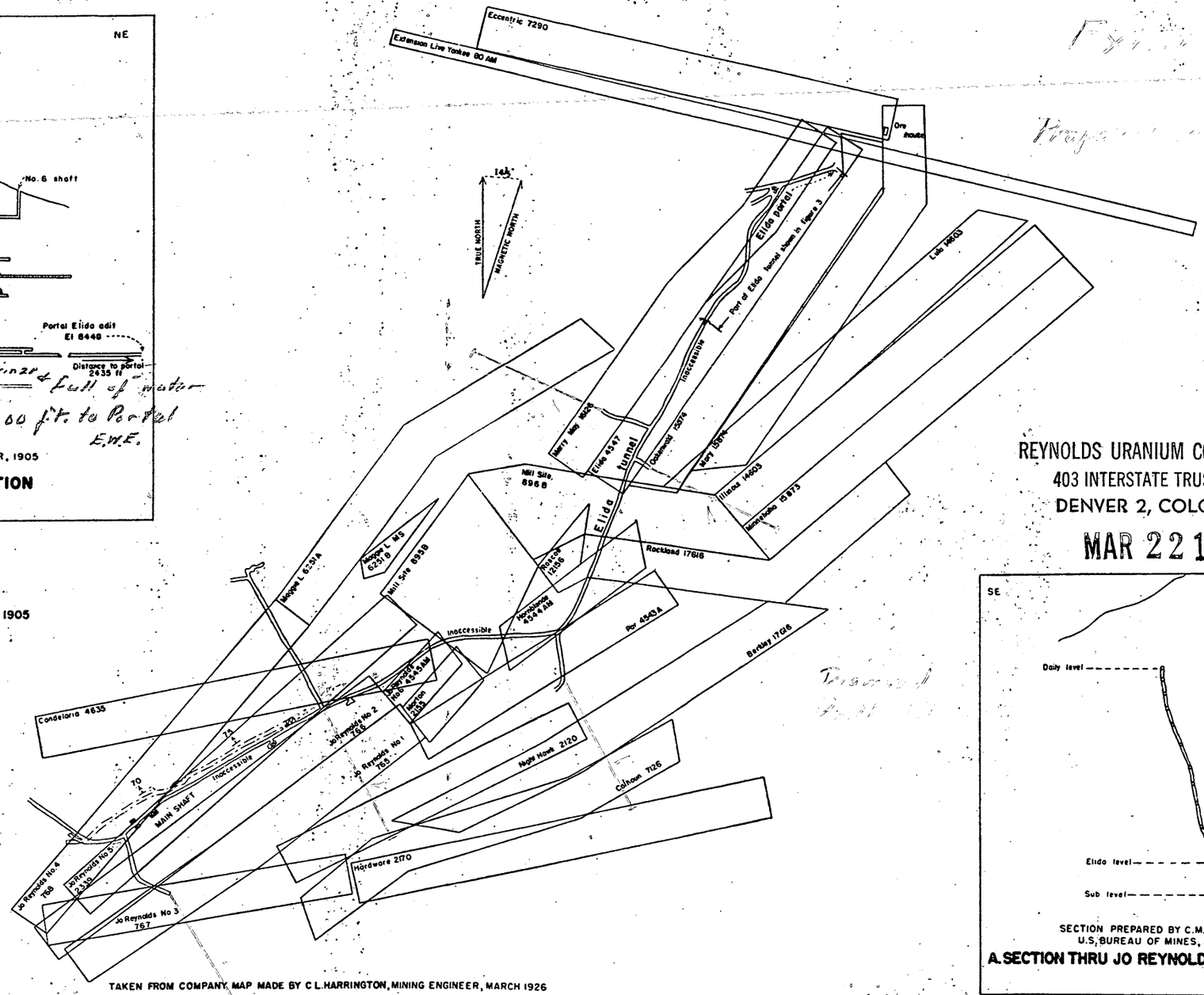
(b) With money.

* The applicant believes that this estimated total of $ 41,533.50 can be reduced by (a) final liquidation of the government's equity in pipe, rail, tools, etc., and by (b) substitution of piecework rates for some of the hourly pay rates shown. We believe that these two operating economies will bring the total cost of the project down to the $ 33,325.00 figure shown on Page 3, and we are willing to accept a contract based on the unit costs used to derive this lower total.



(AVERAGE DIP 78°, STRIKE N65°E)
STOPE SECTION PREPARED BY R B MORTON, MINING ENGINEER, 1905

B. VERTICAL LONGITUDINAL PROJECTION THROUGH JO REYNOLDS VEIN

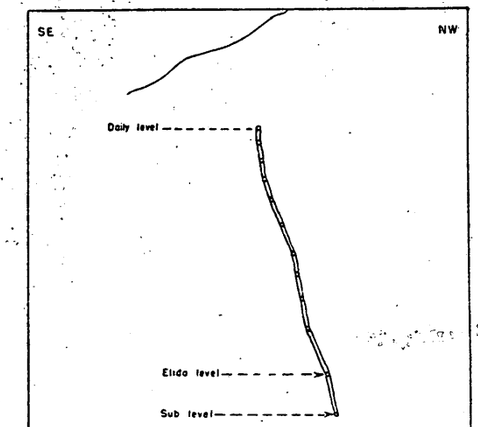


TAKEN FROM COMPANY MAP MADE BY C L. HARRINGTON, MINING ENGINEER, MARCH 1926

C. PLAN OF ELIDA TUNNEL, SHOWING HORIZONTAL PROJECTION OF CLAIMS

REYNOLDS URANIUM CORPORATION
403 INTERSTATE TRUST BLDG.
DENVER 2, COLORADO

MAR 22 1954



SECTION PREPARED BY C.M. HARRER
U.S. BUREAU OF MINES, 1951

A. SECTION THRU JO REYNOLDS MAIN SHAFT

LEGEND

- PRESENT MINE WORKINGS, ELIDA LEVEL
- PRESENT 92-FOOT LEVEL, DRIVEN AFTER 1905
- SHAFT - BOTTOM
- RAISE OR WINZE - FOOT
- DIP AND STRIKE OF VEIN
- RAISE OR WINZE - HEAD
- CAVED, OCT. 1951

200 0 200 400 600 800
SCALE OF FEET

PLAN AND SECTION OF JO REYNOLDS MINE, LAWSON—DUMONT DISTRICT, CLEAR CREEK COUNTY, COLORADO

payment of a salary to Mr. Luckhurst and of fees and/or a salary to Dr. G. C. Ridland under the conditions named below (page 9).

The Company and its Board of Directors reserve the right to change such application of proceeds in the best interests of the Company and its stockholders as circumstances may require.

DESCRIPTION OF COMMON STOCK

The shares offered hereunder are Common Stock of a par value of $1. per share. The shares participate equally, share for share, in all dividends declared by the Board. Each share is entitled to one vote. The stock has no preemptive right.

CAPITALIZATION

The present capital structure of the Company is as follows:

Title	Authorized	Issued and Outstanding	To Be Outstanding after all Securities Offered Hereunder are Sold
Common Stock.....	75,000 Shs.	45,000 Shs.	75,000 Shs.

PAR VALUE $1 PER SHARE

The Company may borrow money or obtain aid from the Government of the United States or from others for the rehabilitation, exploration and/or development of its properties upon terms and conditions which may give the lender or lenders a claim upon the proceeds of the Company's operations or upon the property of this Company superior to that of the stockholders. The Company does not represent that any application for any loan will be made or that, if made, any loan will be concluded; nor does the Company represent the terms and conditions it would accept upon any loan, and the Company may accept terms and conditions upon any loan different from those suggested above.

MANAGEMENT AND CONTROL

The officers and directors of the Corporation are as follows:

Name	Address	Office
DOUGLAS J. LUCKHURST	27 William Street, New York City, N. Y.	President and Director
G. CARMAN RIDLAND	Interstate Trust Building, Denver, Colorado	Vice President and Director
ROBERT J. STIRO	272 Howland Avenue, River Edge, New Jersey	Treasurer
JOSEPH MASOPUST	52 Chambers Street, Room 312, New York City, N. Y.	Secretary and Director
JACK NIX	Roslyn Heights, Long Island, N. Y.	Director

Copies of the Agreement and Mining Lease and of the Assignment thereof to the Company are on file at the office of the Company in New York City, and may be inspected by interested parties during the usual business hours. Reference is made thereto for their material provisions.

RICH URANIUM FIND — MANY YEARS AGO

Today, on the Colorado Plateau, ores assaying 1/10 of 1% uranium oxide sell for approximately $4.00 per ton; ores of 2/10 of 1% uranium oxide sell for approximately $16.00 per ton. Ores of a full 1% uranium oxide, worth approximately $94.50 per ton, are relatively rare. Yet figures prepared by the United States Atomic Energy Commission indicated that in 1919 the Jo Reynolds Mine produced 16,000 pounds of uranium ore assaying 72% uranium oxide. This ore probably occurred in erratic lenses and probably was hand sorted to this grade. Such ore would be worth, today, approximately $100,000. The Company is encouraged by the prospect that history may repeat itself at the Jo Reynolds Mine.

MARKET FOR URANIUM

It is common knowledge that because of the strategic importance of the atomic program, the United States Government has guaranteed the market for domestically produced uranium ores. In addition, the Government is making every effort to stimulate production by cooperation with companies which offer adequate promise of production. In view of world conditions today, it seems reasonable to assume that this cooperative policy will continue.

APPLICATION OF PROCEEDS

The offering being made on behalf of the Company covers 30,000 shares of Common Stock offered to the public at $10. per share. Underwriting discounts and commissions are $2. per share, and the Company will receive proceeds of $8. per share. If all the shares being offered hereby are sold, the gross proceeds of the offering will be $300,000., and the proceeds to the Company will be $240,000. after deducting underwriting discounts and commissions of $60,000., but before expenses of the issue. The Company has also agreed to reimburse the Underwriter for its expenses of the issue in an amount not exceeding $15,000. (of which $5,000. has been advanced to the Underwriter). Such expenses, together with the Company's own expenses estimated at approximately $5,000. (for legal fees, printing costs, etc.) will aggregate approximately $20,000. so that the net proceeds to the Company, if the entire issue is sold, will aggregate approximately $220,000.

The foregoing expense items will be paid out of the first proceeds of the issue. Thereafter, the Company will use the proceeds, as received, for the following purposes and in the following order:

$10,000. will be paid to Clear Creek Mines, Inc. under the Agreement and Mining Lease, as indicated herein.

$10,000. will be devoted to the repayment of a loan in that amount from an independent person, introduced by Mr. Luckhurst.

The balance of the proceeds, which will amount to approximately $200,000. if the entire issue is sold, will be used for rehabilitation, exploration, and/or development of the Company's claims, and may include

EXHIBIT D

EXAMINED

AGREEMENT AND MINING LEASE

THIS AGREEMENT AND MINING LEASE, made and entered into this 16th day of November, 1953, by and between REYNOLDS URANIUM, INC., a Delaware corporation, hereinafter called the Lessor, and DOUGLAS J. LUCKHURST, 40 Exchange Place, New York 5, New York, hereinafter called the Lessee;

WITNESSETH, that the said Lessor for and in consideration of TEN THOUSAND ($10,000) DOLLARS to be paid by the Lessee to the Lessor within two (2) months after the issuance of authority to Lessee or his assign to sell at public offering securities of such assign, and Lessee covenants to secure such authority on or before March 6, 1954, and the further consideration of the rents, royalties, covenants and agreements hereinafter expressed to be paid, kept and performed by the said Lessee, has leased, let and demised and by these presents does covenant, contract and agree and does lease, let and demise unto said Lessee the following described mining property and premises, situate in the County of Clear Creek, State of Colorado, to-wit:

GSG
DJL

Mining Claims:
Montana District:

NAME	U. S. SURVEY LOT NO.
Jo Reynolds No. 1 lode	765
Jo Reynolds No. 2 "	766
Jo Reynolds No. 3 "	767
Jo Reynolds No. 5 "	2339
Jo Reynolds No. 6 "	4545 A
Hornblende "	4544 A
Par "	4543 A
Hardware "	2170
Calhoun "	7126
Extension Live Yankee lode	130
Eccentric "	7290
Horton "	12155
Roscoe "	12156
E.M.D. Nos. 1, 2, 3, 4 and 5 lodes	12157
Illinois and Lulu lodes	14603
Oakenwald and Mary lodes	15674
Minnehaha lode	15873
E.M.D. No. 6 lode	15402
NAME	U. S. SURVEY LOT NO.
Rockland, Greenwood and Berkley Lodes	17616
Undivided 1/2 Elida lode	4547
Jo.Reynolds No. 4 lode, except part deeded recorded in Book 82 page 505 County Records	763
Natchitoches lode, being the part deeded and recorded in Book 153 page 243 County records	14331
Goshen millsite	895 B
Dominion millsite	896 B
Stephens millsite, part	2177 B
Blue Ridge Mill Site	14678

GSG
DJL

Capital Ditch and the water and water rights to be conveyed therethrough, said ditch being the same as is described in a certain deed bearing date the 21st day of December, A. D. 1900, wherein John H. Kemp is named as grantor, which said deed is found of record in Book 134 at Page 532 of the County Records of said Clear Creek County, to which reference is hereby made.

Land at Dumont, Colorado
Tract described in Book 138, Page 10 of County records

Mining Claims
Montana District

NAME	U. S. SURVEY LOT NO.
5/8 interest in Nighthawk	2120
5/8ths interest in Candelaria	4635
2/11th interest in Goshen	895 A
1/4 th interest in Maggie L.	6251 A
1/4 th interest in Maggie L. millsite	6251 B

Downieville District

East 387 feet of Argyle	1188

Upper Union District

Hilltineer	511
West 400 feet of Silver Glance	477

Idaho District

1/2 interest in Dorina	14222
1/2 interest in No Name	14222
West 200 feet of Seaton	89
Tropic	827
1/2 interest in Millsite	14222 B
1/2 interest in Conflict with Grandview	2059

----Insert Rider to Page 2

STATE OF COLORADO,)
)ss.
County of Clear Creek,)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 383.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

Rider to Page 2 of agreement and mining lease
dated November 16, 1953, between Reynolds
Uranium, Inc., a Delaware corporation, as
Lessor, and Douglas J. Luckhurst, as Lessee

TOGETHER with all right, title and interest of the Lessor in and to that certain agreement dated October 31, 1912, between Walter F. Laesch, Fred W. Laesch, and Martha W. Laesch, sole and only heirs at law of Margaret Laesch, deceased, parties of the first part, and the Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, party of the second part, recorded on January 25, 1913, in Book 153 at page 315 of the records in the office of the Recorder of Clear Creek County, Colorado, and all right, title and interest of the Lessor in and to the agreement dated February 1, 1913, between Walter F. Laesch and Fred W. Laesch, parties of the first part, Charles Acker, party of the second part, and the Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, party of the third part, and subject to said agreements;

It is intended by the foregoing description that the Lessor shall lease, let and demise unto the Lessee all of the property which the Lessor agrees to purchase pursuant to a certain agreement made the 16th day of November, 1953, between the Lessor herein and Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, a Delaware corporation, Mary F. Morton, individually, and Mary F. Morton, Mary F. Morton, and Willis W. Mitchell, as co-owners.

Reynolds Uranium, Inc. Lessor herein
By Geo. S. Groves

Douglas J. Luckhurst

(1) TO HAVE AND TO HOLD the above described premises for the purpose of mining, to the extent of ownership, W. M. 2040, unless sooner forfeited or terminated through the failure of the Lessee to perform any of the covenants herein contained, then no longer than said period of time as said premises shall be worked or said Lessee shall be entitled to exclusive possession of the said premises under the terms of this lease, except that the said Lessee first had and obtained, except as herein-after provided.

(2) The said Lessee for himself or his premises does covenant, contract and agree to and with the said Lessor, his successors and assigns:

(3) To enter upon said leased premises not later than six (6) months from date hereof, and to work the same in mine fashion in manner necessary to find an economical mining, so as to take out the greatest amount of ore possible, with due regard to the working and preservation of said mine or mining premises, as a workable mining property, subject to the special covenants herein contained.

(4) To work the said premises as aforesaid, steadily and continuously during the term of this lease and in doing said work to perform at least ninety (90) days' mining labor each month for at least ten (10) months each and every year during the life of this lease.

(5) To repair all old timbering wherever it may become necessary, and to well and sufficiently timber said mine and mining premises at all points where proper and necessary in accordance with good and safe mining; continuing the timbering in the mining chambers now upon said premises with timber of the same dimensions as heretofore used, unless it becomes necessary for safety to use larger timber, in which event timber of sufficient size for safety and permanent mining shall be used.

(6) To allow the Lessor or its agent from time to time to enter upon and remain into all parts of said leased premises, for the purpose of inspection, surveys or mining examinations therefrom, and to render to it proper assistance in making such inspection, surveys or examination.

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(7) To recover and hold as the property of the Lessor all cross and parallel lodes, veins and mineral deposits of every kind which may be uncovered, disclosed or discovered within said leased ground by said Lessee or any person or persons under or in privity with him, with privilege to said Lessee to work and mine the same as part and parcel of said premises.

(8) To keep at all times the drifts, shafts, tunnels and other workings thereunto properly ventilated and clean of loose rock and rubbish, unless prevented by extraordinary mining difficulty.

(9) To stow no waste underground except with the consent and under the direction of the Lessor.

(10) To do no underground stoping below the bottom of any main working level or winze and to do no stoping or breaking of ore or rock within six feet of any working shaft.

(11) Not to adulterate or mix any ores broken or mined without the consent of the Lessor; it being understood that all ores mined which are too low grade for present shipment shall remain the property of and be subject to the control and disposition of the Lessor.

(12) To make all working shafts at least four feet by eight feet in the clear; all drifts and tunnels at least three and one-half feet by six and one-half feet in the clear, and all winzes and raises at least three and one-half feet by seven feet in the clear.

(11) It is expressly understood and agreed that the Lessor reserves the property and right of property in and to all ores extracted from said premises during the period of this lease, but that the same may be shipped to smelter or other ore buyer in the name of the Lessee, and that said Lessee covenants and agrees to pay and allow the Lessor as royalty upon all ores so mined, shipped or sold from said leased premises in any manner

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STATE OF COLORADO,)
)ss.
County of Clear Creek)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at page 384.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

during the life of this lease twelve percent (12%) of the net smelter returns, and that said Lessee will instruct the smelter or other ore buyer to deduct twelve percent (12%) from its settlement on each such shipment. The mining property and premises leased, let and demised to the Lessee are the subject of a purchase agreement made the 10th day of November 1953 between the Lessor and The Jo Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, a Colorado corporation, Fanny F. Morton, individually, and Fanny F. Morton, Mary R. Morton and Lulu E. Quantrell, as co-owners, (hereinafter called the "Purchase Agreement"). Pursuant to paragraphs 11 and 12 of Article IV of the Purchase Agreement the lessor is required to pay to John W. Shireman and Norma L. Comstock ten percent (10%) and two percent (2%) of the "net proceeds" from the sales of ore. So long as the aforesaid mining property and premises or any of them are subject to the Purchase Agreement or any succeeding agreement requiring the Lessor to make payment from the proceeds of ore, the Lessee shall be entitled to make the payments required by this Agreement and Mining Lease by paying the same to the party or parties to whom the Lessor is required to make its payment under the Purchase Agreement or any succeeding agreement, and any payment so made by the Lessee shall pro tanto be compliance by the Lessee with its obligation to the Lessor under this Agreement and Mining Lease.

The Lessor agrees forthwith to deliver to the Lessee a copy of the Purchase Agreement certified by the Lessor to be true and correct, which Purchase Agreement shall be and become a part of this Agreement and Mining Lease; and the Lessor further agrees to deliver promptly to the Lessee any succeeding agreement pursuant to which the Lessor may be or become obligated to make payments from ore, which further succeeding agreement

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shall likewise be certified by the Lessor to be true and correct and shall be and become a part of this Agreement and Mining Lease.

All royalty settlements to be made upon the smelter, mill or sampler net assay value, deducting therefrom only the actual cost of above ground transportation and treatment charges paid by the Lessee.

(12) The Lessee shall and hereby does assume all responsibility in case of accident to his employees or any persons employed in or about said property by the Lessee or by others with his express or implied consent.

(13) All taxes assessed against said demised premises for ores mined and entered under this lease shall be paid by the Lessee, and all real estate taxes, beginning with those assessed for the year 1953, on the property leased shall be paid by Lessee.

(14) All proper bills and expenses including taxes, incurred by the Lessee or those in privity with him shall be promptly paid by the Lessee, and by said prompt payment said Lessee shall prevent the filing of any and all liens of miners, mechanics or otherwise upon or for taxes against the said demised premises; and if by reason of the failure of said Lessee to pay such bills or expense, any lien or liens shall be filed against said premises and if the Lessee shall fail within sixty (60) days after the filing of any such lien or liens to remove said lien or liens, to bond said lien or liens, or to commence a bona fide action for the removal of said lien or liens, then the said Lessor may at its option forthwith pay off and discharge the same, and the said Lessee hold bound to pay to said Lessor all sums so advanced or paid to clear said premises from liens which may be filed as aforesaid, and the said Lessor may also at its election declare a forfeiture of this lease because of the filing of any such lien. The Lessee will at all times keep conspicuously

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posted on the demised premises notices as provided for in Chapter 161, Sec. 17 of Colorado Statutes Annotated 1935.

(15) Said Lessee further covenants that no person not in privity with the parties hereto shall be allowed to hold possession of said premises or any part thereof under any pretext whatsoever.

(16) Further, that he will deliver to said Lessor quiet and peaceable possession of said demised premises in good order and condition with all drifts, tunnels and other passages thoroughly drained and cleared of loose rock and rubbish and said premises ready for immediate continued working, without demand or further notice, on the 16th day of November, A. D. 2052, at noon, or at any time previous thereto, upon proper demand for forfeiture in accordance with the terms of this Agreement and Mining Lease, and it is mutually understood that all machinery and tools which may be placed upon said premises by the said Lessee may be removed therefrom within ten (10) days after the termination of this lease; provided, however, that no such tools or machinery shall be so removed while the said Lessee may be in any manner indebted to the said Lessor under any obligation incurred under this Lease.

(17) Upon the violation of any covenant or condition herein contained, this lease shall, at the option of said Lessor, expire and terminate, and the said premises with the appurtenances and all buildings and other improvements shall become forfeited to the Lessor, provided the said Lessor shall give thirty (30) days' written notice to Lessee of the default or defaults complained of and unless within said thirty (30) days Lessee shall correct said default, and the said Lessor or its agent may thereupon, after demand in writing for possession, enter upon said premises and dispossess all persons occupying the same, with or without force,

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and with or without process of law, or at the option of the Lessor the said Lessee and all persons found occupying said premises or any part thereof may be proceeded against as guilty of unlawful detainer. No thirty (30) days' written notice will be required of default in the payment of the above mentioned Ten Thousand ($10,000) Dollars mentioned as a consideration for entering into this Agreement and Mining Lease.

(18) Consent is hereby given to the Lessee to make one assignment of this entire Agreement and Mining Lease to a corporation to be organized. Upon making such assignment, the Lessee shall be relieved of all liability under this Agreement and Mining Lease. No further assignment shall be made except with the written consent of the Lessor, but such consent shall not be unreasonably withheld.

(19) The giving of a purchase money mortgage for equipment placed on the demised premises shall not constitute a violation of Section 14 hereof.

STATE OF COLORADO,)
)ss.
County of Clear Creek,)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 385.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

(20) Lessee covenants to comply with all of the Federal and State laws and regulations which may, at any time during the continuance hereof, be in effect relating to or appertaining to the operations hereunder, including the construction of suitable tailings ponds and adequate and efficient protection from stream pollution from such operations.

(21) Lessee covenants, agrees and contracts to keep all necessary books and records to show all work done on the demised premises, and to promptly advise Lessor when each shipment of ore is made, giving the date and car numbers of each such shipment and the name of the consignee thereof; all of such books and records of Lessee shall be open for the inspection of Lessor during all business hours at the principal mine office on the demised premises.

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(22) The Lessee does hereby agree to carry ample fire insurance on all buildings and equipment when such are constructed and equipment installed, the said insurance to be payable to the Lessee and the Lessor as their interests may appear.

(23) The Purchase Agreement referred to above provides "The balance of the purchase price, being Sixty-eight Thousand Dollars ($68,000.00), shall be paid as follows:

On May 10, 1954 - $5,000.00
On Nov. 10,1954 - $7,500.00
Thereafter $5,000.00 on May 10 and November 10 of each year 1955, 1956 and 1957;
On May 10,1958 - $5,000.00
On Nov. 10,1958 - $20,500.00"

The Lessor shall at least three (3) days prior to each respective aforesaid date, provide the Lessee with evidence satisfactory to the Lessee of payment by the Lessor of each respective aforesaid payment, or with evidence satisfactory to the Lessee that the date for the making of any such payment has been duly extended, in which latter event the Lessor shall at least three (3) days prior to such extended date provide the Lessee with evidence of payment satisfactory to the Lessee. In the event the Lessor shall fail to provide the Lessee with such evidence of payment, then the Lessee may, but shall not be required to, make such payment as in such Purchase Agreement provided, and upon making such payment, the Lessee shall thereupon succeed to all right, title and interest of the Lessor in and to the Purchase Agreement, and in and to the mining property and premises referred to in this Agreement and Mining Lease and in the Purchase Agreement, and the Lessor shall have no further rights under this Agreement and Mining Lease nor any claim against the Lessee under this Agreement and Mining Lease or otherwise.

(24) The Lessor agrees to use its best efforts to enable the Lessee to use the name Reynolds Uranium Corporation as the name of a corporation which the Lessee intends, but shall

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not be obligated, to form under the laws of the State of Delaware or the State of New York, and qualify as a foreign corporation under the laws of the State of Colorado, and without limitation of the foregoing, the Lessor agrees upon request by the Lessee to change its name from Reynolds Uranium, Inc. to some other name not similar to or likely to be confused with Reynolds Uranium Corporation, and to provide the Lessee or such other person as the Lessee may designate with consent to the use of the name Reynolds Uranium Corporation.

(25) The Lessor agrees to subordinate any right, title or interest which it may presently or hereafter have in the Purchase Agreement or in any of the mining property and premises referred to in the Purchase Agreement or in this Agreement and Mining Lease, as the Lessor may be requested by the Lessee in order to enable the Lessee to secure financial assistance, directly or indirectly, from the Government of the United States or any agency or department thereof, in connection with the exploration, development or operation of any of the mining property and premises referred to in said Purchase Agreement and this Agreement and Mining Lease.

(26) The Lessor agrees to execute such other, further and different documents as it may be requested to execute by the Lessee, to further the terms, spirit and intention of this Agreement and Mining Lease.

(27) Any notice required to be given under this Agreement and Mining Lease intended for the Lessor shall be sufficient if delivered in person or mailed by registered mail, postage prepaid, addressed to the Lessor in care of George S. Groves, Room 639, 36 East 42nd Street, New York 17, New York, or such other address as may have previously been given by the Lessor to the Lessee in writing. Any notice required to be given under this Agreement and Mining Lease intended for the Lessee shall be

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sufficient if delivered in person or mailed by registered mail, postage prepaid, addressed to the Lessor at 40 Exchange Place, New York 5, New York, or such other address as may have previously been given by the Lessee to the Lessor in writing. Any notice given by registered mail shall be effective when received.

(28) Time is of the essence of this Agreement, and each and every clause of this Indenture and all the covenants and conditions contained herein, expressed or implied, shall extend to the successors, heirs, executors, administrators and lawful assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names the day and year first above written.

LESSOR:

REYNOLDS URANIUM, INC.

(Corporate Seal)

By Geo. S. Groves
President

LESSEE:

Douglas J. Luckhurst
Douglas J. Luckhurst

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STATE OF COLORADO,)
)ss.
County of Clear Creek)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at page 386.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

[illegible]) ss.

[illegible] instrument was acknowledged before me this [illegible] by [illegible] as the President of [illegible] Inc., [illegible] official seal.

[illegible] Jones
Notary Public in and for the State of [illegible]

[illegible]

[illegible]) ss.

[illegible]

[illegible]

- -

[illegible]

[illegible] reference is hereby made.

STATE OF COLORADO,)
)ss.
County of Clear Creek)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 387.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

LAND at Dumont, Colorado
Tract described in Book 158, page 10 of County Records

Mining Claims
Montana District

NAME	U. S. SURVEY LOT NO.
3/4 interest in Nighthawk	2120
3/8ths interest in Candelaria	4635
2/11th interest in Goshen	895 A
1/4th interest in Maggie L.	6251 A
1/4th interest in Maggie L millsite	6251 B
Downieville District	
East 387 feet of Argyle	1130
Honor Union District	
Silverineer	511
West 400 feet of Silver Glance	477
Idaho District	
1/2 interest in Dorina	4222
1/2 interest in Ad Hoc	4222
East 200 feet of Seaton	39
Tropic	327
1/2 interest in Millsite	4222 B
1/2 interest in Conflict with Grandview	2059

TOGETHER with all right, title and interest of the Assignor in and to the agreement dated October 29, 1912, between Walter F. Laesch, Fred W. Laesch, and Martha M. Laesch, sole and only heirs at law of Margaret Laesch, deceased, parties of the first part, and the Jo Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, party of the second part, recorded on January 29, 1913, in Book 183 at Page 375 of the Records in the office of the Recorder of Clear Creek County, Colorado, and all right, title and interest of the Assignor in and to the agreement dated February 25, 1918, between Mary M. Jones and Fred W. Laesch, parties of the first part, Charles Ecker, party of the second part, and the Jo Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, party of the third part, and subject to said agreements;

It being intended by the foregoing description that DOUGLAS J. LUCKHURST shall assign to REYNOLDS URANIUM CORPORATION, his entire interest in any property under the aforesaid Agreement and Mining Lease.

TO HAVE AND TO HOLD the same unto the Assignee, REYNOLDS URANIUM CORPORATION, its successors and assigns from the 1st day of January, 1954 for all the rest of the 99 years mentioned in the said Agreement and Mining Lease, subject to the rents, covenants, conditions and provisions therein also mentioned.

IN WITNESS WHEREOF, The Assignee DOUGLAS J. LUCKHURST, has hereunto set his hand and seal this 31st day of December, 1953.

Douglas J. Luckhurst

STATE OF NEW YORK,)
: ss.
County of New York)

The foregoing instrument was acknowledged before me this 31st day of December, 1953 by DOUGLAS J. LUCKHURST. Witness my hand and official seal.

Jacques J. Benjamin
Notary Public

(Notarial Seal)

My Commission Expires:

Jacques J. Benjamin
Notary Public, State of New York
No. 30-0241300
Qualified in Nassau County
Certificate Filed with Queens
New York, Kings, Bronx County
Clerks and Registers
Term Expires March 30, 1955

Filed for record this 8th day of January, A. D. 1954, at 1 o'clock P. M.

No. 2613

K. E. Moscript
Recorder.

- -

STATE OF COLORADO,)
)ss.
County of Clear Creek,)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 388.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

PURCHASE AGREEMENT

THIS AGREEMENT, Made this 10th day of November, 1953, by and between THE JO REYNOLDS MINING, MILLING, DRAINAGE, TUNNEL AND TRANSPORTATION COMPANY, a Colorado corporation, FANNY P. MORTON, individually, and FANNY P. MORTON, MARY R. MORTON and LILLY M. CANTRELL as co-owners, hereinafter collectively called the "Sellers," and REYNOLDS MINING, INC., a Delaware corporation, hereinafter called the "Purchaser,"

W I T N E S S E T H:

I

The respective sellers, each contracting with respect to its, her or their respective rights and properties, agree to sell, transfer and convey and the purchaser agrees to purchase, all right, title and interest which sellers have in and to the mining rights and mining claims owned by them, situate in the County of Clear Creek, State of Colorado, which properties are listed and the respective ownerships thereof specified in Annex A, hereto attached and made a part hereof, with the buildings and improvements thereon, and all rights, privileges and easements thereunto incident, appendant and appurtenant; subject, however, to any and all existing easements and rights of way for the benefit of others, and contracts of any nature for the benefit of others affecting the use of the Alida Tunnel, the Climax Tunnel and the Tropic Tunnel, and for the use of the surface of any of said property.

II

The purchase price of said property is Eighty Thousand Dollars ($80,000.00) of which Two Thousand Five Hundred Dollars ($2,500.00) now deposited with John W. Shireman and Norman L. Comstock under the terms of that certain Option Agreement, as amended, between the sellers and George S. Groves, dated October 10, 1950, and relating to the same property, is a part; and the sellers further acknowledge receipt of the following sums which are hereby applied to said purchase price in accordance with the terms of the aforesaid Option Agreement, viz.;

Five Hundred Dollars ($500.00) paid as consideration for the making of said Option Agreement;

Nine Thousand dollars ($9,000.00) paid as consideration for extensions of said Option Agreement;

The balance of the purchase price, being Sixty-eight Thousand Dollars ($68,000.00), shall be paid as follows:

On May 10, 1954 - $5,000.00;
On Nov. 10, 1954 - $7,500.00;
Thereafter $5,000.00 on May 10 and November 10 of each year 1955, 1956 and 1957;
On May 10, 1958 - $5,000.00 and
On Nov. 10, 1958 - $20,500.00.

The purchaser will, before the same becomes delinquent under the laws of the State of Colorado, cause to be paid all taxes heretofore levied on said premises, but which are not yet due, and all taxes that may be hereafter levied thereon while this contract is in force. To insure such payment, the purchaser agrees to seasonally deposit with John W. Shireman and Norman L. Comstock, or the survivor of them, sufficient funds to discharge such taxes promptly as the same fall due. If the purchaser shall fail, refuse or neglect to so deposit sufficient funds, then the sellers may at their option advance money for the payment of taxes and the amount so advanced, with interest thereon at ten per cent (10%) per annum, shall be added to and become a part of the installment of purchase price next due and shall be payable at the due date thereof.

III

Conveyance of said real estate shall be by mining deed without warranty, and said contract rights shall be transferred without warranty, it being agreed that the purchaser has made its own independent investigation of titles prior to the making of this agreement. The sellers agree promptly to execute such conveyances and assignments, and promptly thereafter the same shall be placed in escrow in The Denver National Bank of Denver, Colorado, with a copy of this agreement; and concurrently the parties shall instruct said bank, by writing in form satisfactory to said bank, to receive the payments due the sellers and remit the same as received to John W. Shireman and Norman L. Comstock, or the survivor of them, and to deliver said deeds and assignments to the purchaser when said purchaser shall have made all the payments of purchase price as herein provided; and further instructing that in the event the purchaser shall fail, refuse or neglect to make any of such payments at the time and in the manner herein provided, then said conveyances and assignments shall be by said bank returned to the sellers by delivering the same to John W. Shireman and Norman L. Comstock, or the survivor of them. The sellers and each of them shall appoint said John W. Shireman and Norman L. Comstock as their respective agent to receive and give receipts to said bank for payments and papers escrowed as aforesaid. Should any error or omission in the description of the mining rights and mining properties set forth in said mining deeds and assignments be discovered before the actual delivery of the same, but not afterward, appropriate correction shall be made prior to the delivery to the purchaser.

IV

Pending completion of payments and delivery of conveyances and assignments and so long as payments are made punctually when due, the purchaser shall have the right to occupy said premises and conduct mining operations thereon and market ores therefrom, upon the following conditions:

1. Before commencing work the purchaser shall obtain and pay the premiums for and on Workmen's Compensation insurance policies sufficient to save and protect harmless the sellers and the purchaser from all liability under the Workmen's Compensation Act of Colorado for and on account of injuries, disablement or death of any of the purchaser's

STATE OF COLORADO,)
)ss.
County of Clear Creek)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 389.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

employees, contractors or sub-contractors, lessees or sub-lessees, and shall furnish to sellers certificates of insurance or other satisfactory evidence that such insurance policies are in full force and effect. Any failure to keep such policies in force and pay premiums thereon after initially procuring the same, shall ipso facto terminate the right of the purchaser to occupy and conduct mining operations on said premises.

2. The purchaser shall have each and every man employed and working upon said premises and properties, including the purchaser's contractors or sub-contractors, lessees, sug-lessees or licensees, and their respective employees, and each and every person, company or corporation from which the purchaser buys material on credit, or from which its contractors, sub-contractors, lessees, or licensees buy material on credit, sign a contract as follows:

"(Date)_____

"In consideration of my being employed by_____

_____or of_____
purchasing material from me, I hereby covenant and agree to look solely to said _____ for my pay, and I hereby waive all rights or claims that I may have in law or in equity against the properties, or any of them, upon which said labor is bestowed, or to which said material is furnished."
(All blanks to be properly filled.)

and the aforesaid releases shall be by the purchaser promptly delivered to John W. Shireman or Norman L. Comstock, or the survivor of them, as agent for the sellers.

3. The Purchaser shall keep said premises and every part thereof at all times free and clear of liens; and shall post and keep posted in conspicuous places at each point where work is being done upon the premises, a notice that said premises are operated under a contract to purchase and that the interest of the sellers therein shall not be subject to any lien for services, labor or material furnished upon or used in connection with said property or said premises, which said notices shall be on behalf of and in the name of the sellers with the signature of the purchaser also attached.

4. The Purchaser shall not allow any person not in privity with the parties hereto to take or hold possession of said premises or any part thereof under any claim or pretense whatsoever.

5. The purchaser shall save and keep harmless from any and all liability for or by reason of accidents to any of the purchaser's employees, lessees, sub-lessees, licensees, agents, associates and visitors.

6. All mining operations shall be conducted in manner appropriate to good and economical mining, with due regard to the preservation of the mines as working mining properties and to the special covenants herein contained.

7. All of the workings through which the purchaser may work shall be well and sufficiently timbered in accordance with good mining practice, and all timbering in said workings which may be rentered insufficient by any cause whatsoever shall be repaired or replaced promptly; and the timbering of said workings shall at all times be kept in good and safe condition.

8. All workings through which the purchaser shall work shall be kept drained and clear of loose rock and rubbish and in a safe and secure condition, unless the purhcaser be prevented from so doing by extraordinary mining casualty; and no stoping or mining shall be done which shall endanger the maintenance of main haulage ways.

9. All operations at or in connection with the Jo Reynolds Mine shall be so conducted that the waters of Silver Creek shall not be contaminated or polluted to the damage of others.

10. The sellers have the right, either personally or through their duly authorized agents or representatives, to enter and visit all parts of the premises and workings thereon for the purpose of inspection, taking assays or having surveys made of the workings.

11. The purchasers shall direct each purchaser to whom mine products are sold to deduct upon the settlement for each lot of ore, and to pay to John W. Shireman and Norman L. Comstock, or the survivor of them, then per cent (10%) of the net proceeds of each sale. By net proceeds is meant the market value of ore based on assays, less costs of concentration, processing, transportaion and smelting, including any incidental expenses, including charges for handling frozen ores, switching, umpires and similar charges. The sums so paid to Shireman and Comstock shall be by them held until the due date of the next installment of purchase price, at which time the same shall be turned over to the sellers and applied as partial payment of said installment, if the balance thereof be paid by the purchaser, but if the purchaser shall fail, neglect, or refuse to pay such balance, then the same shall be turned over to the sellers and the purchaser hereby releases all claim thereto.

STATE OF COLORADO)
)ss.
County of Clear Creek)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 390.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

12. The purchaser shall create a fund in the hands of Shireman and Comstock, or the survivor of them, for the purpose of discharging taxes to be paid by the purchaser, and for said purpose shall direct each ore purchaser to deduct, in addition to the deduction hereinabove specified, upon settlement for each lot of ore, two per cent (2%) of the net proceeds as hereinabove defined, and pay the same to John W. Shireman and Norma L. Comstock. Said Shireman and Comstock aredirected to deposit the same in a savings account in The International Trust Company of Denver, Colorado, in their names, and to hold the same for the purpose of paying taxes assessed for the year next following that in which the ore was marketed, and payable in the year next following the assessment. If the amount on deposit in said fund be insufficient for the payment of taxes when the same become due and payable, the purchaser shall promptly deposit with Shireman and Comstock the amount of such deficiency. If, after paying taxes at any due date, there remains a balance from funds deposited during the year prior to that in which the assessment was made, 90% of such excess shall be returned to the purchaser and 10% shall be held by Shireman and Comstock and by them handled as though paid under the terms of the next preceding paragraph.

13. Upon violation of the provisions of either of paragraphs 1, 2, 11 or 12 of this section, the right of the purchaser to occupy and conduct mining operations on the premises prior to full payment of the purchase price shall immediately cease and determine. Upon violation of any of the covenants in other paragraphs of this section set forth and upon the part of the purchaser to be paid, kept, done and performed, the sellers may at their option rescind the right of the purchaser to occupy and conduct mining operations on the premises prior to payment of the full purchase price, by giving written notice to the purchaser, specifying the violation or violations complained of and giving notice of their intention to so rescind and annul said rights unless the purchaser shall within thirty (30) days after receiving such notice cease such violation or violations and otherwise remedy the matter or matters concerning which the purchaser is in default. Should the purchaser fail to cease such violation or violations or fail to remedy the matter or matters in default within such thirty-day period, the sellers shall have the right to terminate the rights of the purchaser to so occupy and conduct mining on the premises by mailing to the purchaser, by registered mail, notice of termination. Such termination shall not, however, affect the right of the purchaser to complete the purchase by making payment of the purchase price in accordance with the provisions of Section II.

V

Time is of the essence of this agreement.

VI

The sellers hereby designate, constitute and appoint in the alternative, John W. Shireman and Norman L. Comstock, each residing in Denver, Colorado, its, her and their true and lawful attorney upon whom processes issued by authority or under any law of the State of Colorado, or issued out of the United States District Court for the District of Colorado, in any action or proceeding against them, may be served, and as their agent to receive and receipt for any payment to be made to the sellers, and to give or receive any notice to or from the purchaser. The service of such process or notice on either of said representatives shall constitute a valid and binding service on the sellers or any of them.

VII

The purchaser hereby designates, constitutes and appoints, in the alternative, Hazel N. Scott and G. C. Ridland, residing in Denver, Colorado, its true and lawful attorney and agent upon whom any notices hereunder may be served, and any processes issued by authority or under any law of the State of Colorado, or issued out of the United States District Court for the District of Colorado, in any action or proceeding against it, may be served. The service of such process or notice on either of said representatives shall constitute a valid and binding service on the said purchaser.

VIII

In case the purchaser shall fail to make the payments of the purchase price as provided in Sections II and III hereof punctually and upon the strict terms and at the times limited, the sellers shall have the right to declare the entire unpaid balance immediately due and payable and treat this contract as a mortgage and foreclose the same; and shall be entitled to all appropriate equitable remedies applicable in cases of foreclosure; and if the same be so foreclosed and upon sale pursuant to decree, the proceeds of sale be insufficient to pay in full the costs of suit, costs of sale, and the amount due the sellers, then the sellers shall be at liberty to enforce collection of any deficiency by execution against other property of the purchaser; provided, however, that the purchaser may, at its option, at any time prior to the commencement of foreclosure, by assigning this contract to the sellers free from all encumbrances created by the purchaser and by delivering possession of the premises free and clear of any encumbrance created by the purchaser, be relieved from all further obligations hereunder.

IN WITNESS WHEREOF, the corporate seller has caused its name to be subscribed by its President, and its seal to be affixed and attested by its Secretary, and the individual sellers and the purchaser have subscribed their names.

(Corporate Seal)

THE JO REYNOLDS MINING, MILLING, DRAINAGE, TUNNEL AND TRANSPORTATION COMPANY

STATE OF COLORADO,)
)ss.
County of Clear Creek)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 391.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

By Mary R. Morton
President

Attest:

Fanny P. Morton
Secretary

Fanny P. Morton

Mary R. Morton

Lulu M. Quantrell
Sellers

REYNOLDS URANIUM, INC.

By Geo S. Groves
President

Attest:

Mabel M. Scott
Secretary

Purchaser

(Corporate Seal)

STATE OF NEW YORK)
)ss.
COUNTY OF WESTCHESTER)

The foregoing instrument was acknowledged before me this 9 day of November, 1953, by Mary R. Morton as President of The Jo Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, a corporation.

My notarial commission expires_____ Renee D. Spears
Notary Public in the State of New York
No. 60-9119100
Appointed for Westchester County
Commission expires March 30, 1954

Witness my hand and official seal.

(Notarial Seal)

Renee D. Spears
Notary Public

STATE OF NEW YORK)
) ss.
COUNTY OF WESTCHESTER)

The foregoing instrument was acknowledged before me this 9 day of November, 1953, by Fanny P. Morton as Secretary of The Jo Reynolds Mining, Milling, Drainage, Tunnel and Transportation Company, a corporation.

My notarial commission expires_____ Renee D. Spears
Notary Public in the State of New York
No. 60-9119100
Appointed for Westchester County
Commission expires March 30, 1954

Witness my hand and official seal.

(Notarial Seal)

Renee D. Spears
Notary Public

STATE OF NEW YORK)
)ss
COUNTY OF WESTCHESTER)

The foregoing instrument was acknowledged before me this 9 day of November, 1953, by Fanny P. Morton

My commission expires_____ Renee D. Spears
Notary Public in the State of New York
No. 60-9119100
Appointed for Westchester County
Commission expires March 30, 1954

Witness my hand and official seal.

(Notarial Seal)

Renee D. Spears
Notary Public

STATE OF NEW YORK)
) ss.
COUNTY OF WESTCHESTER)

The foregoing instrument was acknowledged before me this 9 day of November, 1953, by Mary R. Morton.

My commission expires_____ Renee D. Spears
Notary Public in the State of New York
No. 60-9119100
Appointed for Westchester County
Commission expires March 30, 1954

Witness my hand and official seal.

(Notarial Seal)

Renee D. Spears
Notary Public

STATE OF NEW YORK)
)ss.
COUNTY OF WESTCHESTER)

The foregoing instrument was acknowledged before me this 9 day of November, 1953, by Lulu M. Quantrell.

My commission expires_____ Renee D. Spears
Notary Public in the State of New York
No. 60-9119100

Witness my hand and official seal.

STATE OF COLORADO)
)ss.
County of Clear Creek,)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 392.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

(Notarial Seal) appointed for Westchester County
Commission expires March 30, 1954

Renee D. Spears
Notary Public

STATE OF COLORADO)
)ss.
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 7th day of November, 1953, by Geo. S. Groves as President of Reynolds Uranium, Inc., a Delaware corporation.

My notarial commission expires September 16, 1957.

Witness my hand and official seal.

(Notarial Seal) Josephine Burger
Notary Public

STATE OF COLORADO)
)ss.
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 7th day of November, 1953, by Mabel N. Scott as Secretary of Reynolds Uranium, Inc., a Delaware Corporation.

My notarial commission expires September 16, 1957.

Witness my hand and official seal.

Josephine Burger
(Notarial Seal) Notary Public

ANNEX A

OWNER: THE JO REYNOLDS MINING, MILLING DRAINAGE, TUNNEL AND TRANSPORTATION COMPANY

Mining Claims:

Montana District:

NAME	U. S. SUR. LOT NO.
Jo Reynolds No. 1 Lode	765
Jo Reynolds No. 2 Lode	766
Jo Reynolds No. 3 Lode	767
Jo Reynolds No. 5 Lode	2339
Jo Reynolds No. 6 Lode	4545 A
Hornblende Lode	4544 A
Par Lode	4543 A
Hardware Lode	2170
Calhoun Lode	7126
Extension Live Yankee Lode	180
Eccentric Lode	290
Horton Lode	12155
Roscoe Lode Mining Claim	12156
E.M.D. Nos. 1, 2, 3, 4 and 5 Lodes	12157
Illinois and Lulu Lodes	14603
Oakenwald and Mary Lodes	15674
E.M.D. No. 6 Lode	15402
Minnehaha Lode	15673
Rockland, Greenwood and Berkley Lodes	17616
An undivided one-half interest in and to the Elida Lode	4547
Jo Reynolds No. 4 Lode	768

All save and except all that part of said Lode hereunto conveyed by a certain deed bearing date the 14th day of June, 1893, wherein Mary Esther Reynolds is named as grantor, and The American Sisters Mining Company, a corporation, is named as grantee, which said deed is found of record in Book 62 at page 535 of the County Records of said Clear Creek County.

Natchitoches Lode 14331
As to a fractional part described as follows, to-wit:
"Beginning at Corner No. 3 of U. S. Sur. No. 14331 of the Natchitoches Lode; thence N. 64°50' E. 192.1 feet to Corner No. 4 of said Sur. No. 14331 of the Natchitoches Lode; thence S. 13° 30' W. 217.35 feet to a point on Line 3-4 of Sur. No. 14678 of the Blue Ridge Mill Site; thence S. 83° 44' W. 159.4 feet to a point on line 2-3 of the Natchitoches Lode; thence N. 13° 30' E. 151.24 feet to said Corner No. 3, the place of beginning, containing 0.[illegible] acres, and being the same property conveyed to The Capital Mining and Milling Company on the 1st day of July, 1902, by Deed duly recorded in Book 153 at page 248 of the County Records of said Clear Creek County;"

Goshen Mill Site 895 B
Dominion Mill Site 896 B
Stephens Mill Site 2177 B
As to that portion of the Stephens Mill Site described by metes and bounds as follows, to-wit: "Beginning at Corner No. 4, Sur. Lot No. 2177 B, and running thence N. 80° 37' E. 208.04 feet to Corner No. 5; thence S. 9° 23' E. 282.9 feet to Corner No. 6; thence N. 80° 27' E. 686.21 feet to Corner No. 7; thence N. 36° 8' W. 335.95 feet to Corner No. 8; thence S 80° 37' W. 745.7 feet to

STATE OF COLORADO,)
)ss.
County of Clear Creek,)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 393.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

Corner No. 9; thence S. 18- 14' W. 17.3 feet to the place of beginning."

The Alice Mill Site 14678

Capital Ditch and the water and water rights to be conveyed to grantee, said ditch being the same as is described in a certain deed bearing date the 21st day of December, A. D. 1900, wherein John H. Kemp is named as grantor, which said deed is found of record in Book 134 at Page 532 of the County records of said Clear Creek County, to which reference is made by name.

Page 42- [illegible]

GRANTOR: FANNY P. NORTON

Land:

Land at Dumont, Colorado

Tract described in Book [illegible], page 10, of Clear Creek County records.

Mining Claims:

Montana District:

Name	U. S. Sur. Lot No.
1/2 the interest in Matthew	2120
1/2 " " " Candelaria	4635
1/2 " " " Gordon	695 A
1/2 " " " Maggie B.	6251 A
1/2 " " " Maggie B. Mill Site	6251 B

Downieville District:

East 387 feet of Argyle	1188

Lower Union District:

Stilinger	511
West 400 feet of Silver Glance	477

GRANTEES: FANNY P. NORTON, MARY R. NORTON, EMILY M. CAMPBELL

Idaho District:

1/2 Interest in Carolina	14222
1/2 " " " To Have	14222
East 200 feet of Boston	69
Apple	427
1/2 Interest in Mill Site	14222 B
1/2 Interest in conflict with Grandview	2059

Filed for record this 5th day of Feb. A. D. 1934 at 10 o'clock A. M.

K. E. Loscript, Recorder

No. [illegible] By B. Reichwein, Deputy

STATE OF COLORADO,)
)ss.
County of Clear Creek.)

I, K. E. Moscript, Clerk and Recorder in and for said County of Clear Creek, in the State aforesaid, do hereby certify that the above and foregoing is a true, correct and complete transcript and copy from the records of my office as the same appears in Book 245 at Page 394.

Witness my hand and official seal this 25th day of March A. D. 1954.

Clerk & Recorder

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

224 New Customhouse
Denver 2, Colorado

April 7, 1954

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: (Uranium), Application of Reynolds Uranium Corporation, Jo Reynolds Mine, Clear Creek County, Colorado

Enclosed are two copies of the subject application containing Form MF-103 and accompanying answer sheets and Exhibit D, a map showing the proposed exploration work. Also enclosed are photostatic copies of the purchase agreement, agreement and mining lease, and the assignment of the latter to the applicant.

One copy of the application is being forwarded to Mr. A. P. Butler, Bldg. 21-TEPCO, at Denver Federal Center, and one copy is being retained in our file.

Although the amount involved might be within the delegated authority of this office, our attorney, Mr. Shireman, has for many years represented the property owners, and would be unable to assist this office if the application should go to a contract.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

G. CARMAN RIDLAND
Geological Engineer

TELEPHONE: ALPINE 1891
403 INTERSTATE TRUST BUILDING
DENVER 2, COLORADO

Defense Minerals Administration
MAR 16 1954

March 23, 1954

Mr. W. H. King
Executive Officer
Defense Minerals Exploration Admin.,
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Enclosed please find an application for aid by Reynolds Uranium Corporation to explore portions of the Jo Reynolds mining property.

The application consists of:

1. Form MF-103 and accompanying answer sheets.
2. Exhibit A. - Certified copy of "Purchase Agreement".
3. Exhibit B. - Certified copy of "Agreement and Mining Lease".
4. Exhibit C. - Assignment of the latter to the applicant.
5. Exhibit D. - Maps from U.S.G.S. Circular 213 showing proposed exploration work.

Yours very truly,

G. C. Ridland

G. C. Ridland

F.
Enc.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 3309
Metal or Mineral Uranium
Date Received
Estimated Cost $33,325
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

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

(*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

See Exhibit "A" attached.

(*b*) State any mine name by which the property is known: Jo Reynolds Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee. The property is leased from Reynolds Uranium, Inc. which holds a purchase agreement.

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

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

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

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

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

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

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

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

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

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

(*c*) The work will start within 30 days and be completed within 24 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 [ ] 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 22, 1954

Reynolds Uranium Corporation
(Applicant)

By G. C. Ridland

G. C. Ridland, Vice President

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

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

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

1. (a) Reynolds Uranium Corporation
403 Interstate Trust Bldg.,
Denver 2, Colorado

(b) State of New York

(c)

Name	Address	Office
Douglas J. Luckhurst	27 Williams St., N.Y.C., N.Y.	Pres. & Director
G. Carman Ridland	Interstate Trust Bldg. Denver, Colorado	V. Pres. & Director
Robert J. Stiro	272 Howland Ave. River Edge, New Jersey	Treasurer
Joseph Masopust	52 Chambers St., Rm. 312, N.Y.C., N.Y.	Secretary & Director
Jack Nix	Roslyn Heights, Long Island, N.Y.	Director

3. (a) Legal description - given in detail in "Purchase Agreement" attached as Exhibit A.

(b) Jo Reynolds mine.

(c) Lessee. The property is leased by applicant from Reynolds Uranium, Inc., which company holds a "Purchase Agreement" from the owners.

(d) Copy of the "Purchase Agreement" between the owners and Reynolds Uranium, Inc., and "Agreement and Mining Lease" between Reynolds Uranium, Inc., and Douglas J. Luckhurst with an Assignment of the latter by Luckhurst to the applicant are the means under which the applicant controls the property. Certified copies of said documents are attached as Exhibit A,B. and C.

(e) Not applicable.

(f) All claims are patented.

4. Physical Description

(a) The maps attached as Exhibit D, show the extent of the mine workings. The mine was operated steadily from 1877 through 1907, and intermittently since 1907. The last mining operation ceased in 1946. The applicant has had no interest in any of the former operations. The mine is now idle.

The workings are not accessible at this time. On Dec. 30, 1948, the 4,500-foot lower adit level, known as the Elida Tunnel, was accessible and was examined by Robert U. King of the U. S. Geological Survey (U.S.G.S., Trace Elements Memorandum Report 5). In 1951, this tunnel was found caved at 745 feet from the portal. The surface geology was mapped in detail in 1951 by the U.S. Geological Survey (U.S.G.S. Circular 213).

(b) Past Production - This mine is credited with a production, mainly silver, some lead, zinc and uranium - of $1,500.000.

Current Production - None

Ore Reserves - Not known.

(c) Geologic Features - The geology is described in detail in two reports cited in 4 (a).

Fissure veins (at least 4) mineralized with sphalerite, galena, silver, pyrite, chalcopyrite, gray copper, argentite, ruby silver and pitchblende in places cut pre-Cambrian metamorphosed sedimentary and igneous rocks of the Idaho Springs Complex and Silver Plume granite. The veins strike north of east and dip steeply North west. Width of the veins has not been reported due to inaccessibility of the workings. One vein has been traced on the surface for several hundred feet.

According to U.S.G.S. Circular 213, Page 7, pitchblende has been reported to occur in eight places in the Jo Reynolds mine. The places are tabulated.

It is reported that in 1919 the Jo Reynolds produced eight tons of pitchblende that asseyed 72% U_3O_8 and Robert King deduces that this ore may have come from the lowest workings of the mine.

Because of the reports of the occurrence of pitchblende, and because the geological environment is believed favorable for deposition of pitchblende, the applicant wishes to explore the veins at and beyond the lower workings of the Jo Reynolds mine. Also, it is proposed to explore by diamond drilling the downward extension of the adjacent veins, No. 1, 3 and 4, which were explored only to a minor degree in the uppermost levels of the mine by former operators.

(d) The portal of the Elida Tunnel of the Jo Reynolds Mine is connected to paved U.S. Highway 40-6 by one mile of good gravel road The nearest railroad shipping point is Golden, Colorado, 32 miles east by paved highways except for the first mile of gravel. The roads are accessible at all times of the year.

Living quarters are available at Lawson, one mile from the mine, and at Idaho Springs, seven miles east of Lawson.

Denver, major source of supplies is 40 miles east by paved highway.

(e) Manpower, materials, supplies, equipment, water and electric power are all available in any required quantity for the contemplated exploration program.

5. (a) Pitchblende (Uranium ore).

(b) Proposed work:

Project	Estimated Cost
Install underground hoist, electric cable, electric pump at winze station Elida Tunnel Level -	$500.
Rehabilitate winze below Elida Tunnel (80 feet) -	1,600.
Rehabilitate 11th level (level at bottom of winze - 975 feet) -	4,875.
Diamond drilling 5 500-ft. flat holes as shown on acompanying map - 2500' @ $4.00 ft. -	10,000.
Raise 125' from Elida Tunnel level at pitchblende location described by King 125' @ $30.00 ft.	3,750.
Drift NE on No. 2 vein on 12th level (winze bottom) 320 feet @ $30.00 ft.	9,600.
Raise 100 feet from sublevel or 12th level under radioactive zone described by King. 100' @ $30.00 ft.	3,000.
	$ 33,325.

Government's participation;
75% of $33,325. - $ 24,933.75

(c) The work will start within thirty days and be completed within twenty-four months.

(d) The Reynolds Uranium Corporation was organized with the purpose of opening the Jo Reynolds Mine and exploring it for uranium. The operation will be supervised by Dr. G. C. Ridland, consulting geological engineer. Dr. Ridland is known to the D.M.E.A., as he is managing the Cold Spring mining operation at Nederland, Colorado (D.M.E.A. Docket No. 1447X; Contract Idm E-54). Alexander H. Baldo, 1950 graduate of mining engineering from The Missouri School of Mines, will be mines superintendent. Since graduating he has had one year with

Cerro De Pasco Corporation and three years with New Jersey Zinc Company in all phases of underground production and mining experience.

6. Estimate of Costs

It is proposed to conduct the operation on the unit cost basis, and estimates of the cost of each project is given under 5 (b) above.

(a) Independent contracts - It is proposed to sub-contract the diamond drilling program. This may be done at approximately $4.00 per foot, not including engineering and geological services. All other work will be done by the applicant.

(b) Labor, supervision, consultants -

Labor:				
Miners & drillers	2400 hrs.	@$1.75/max	$ 4200.00	
Muckers/trammers	2400 "	1.75 "	4200.00	
Surface men	1920 "	1.65 "	3168.00	
Timbermen	2400 "	1.75 "	4200.00	
Hoistmen	1920 "	1.65 "	3168.00	
Sup't & foreman	12 mo.	550.00 "	6600.00	
Engineer, geologist, consultants	6 "	500.00 "	3000.00	
Drifting, raising and cross-cutting labor may be contracted at $10.00/ft.max.			28536.00	28,536.00

(c) Operating materials and supplies -

Small tools, shovels, picks, etc.	Lot		100.00	
Mine Timber	20000 FBM	@$ 75.00M	1500.00	
Mine T-Rail	4 Ton	95.00	380.00	
Pipe, 1" water	1300 ft.	.50	650.00	
Pipe, 2" air	1300 "	.65	845.00	
Vent pipe 12"	1100 "	1.00	1100.00	
Fittings & misc.	Lot		100.00	
Electric Power (average)	45000-KWH	.033	1485.00	
Water - plenty available free				
Fuel - not required			6160.00	6,160.00

(d) Operating equipment -

Air compressor	5000.00	
Electric Hoist	1800.00	
Mucking machine	3100.00	
Pump	2500.00	
Copco Drifter Drills (2)	1400.00	
Ingersoll-Rand Stoper Drills (2)	1000.00	
Connections for drills	75.00	
	14875.00	
All of the above to be supplied by the operator, so only 10% (depreciation) charged to project		1,487.50

(e) Rehabilitation -

Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado.

Rehabilitation of the 11th, or Elida Tunnel Level, will be done at applicant's expense. Installation of compressor, hoist, and pump and electrical connections is estimated at $500.00

Rehabilitation of the winze is estimated to cost $ 1600.00 and the 12th level $ 4875.00

(f) New buildings, improvements, installations - None required

(g) Miscellaneous -

Maintenance costs:				
Air Compressor	12 mo. @$ 25.00	$ 300.00		
Hoist	12 " 10.00	120.00		
Pump	12 " 15.00	180.00		
Drills	10 " 5.00	50.00		
		650.00	$	650.00
Assaying				250.00
Accounting	12 mo. 100.00			1200.00
Payroll taxes, including workman's compensation, liability insurance, unemployment, etc., 10% of payroll				2850.00

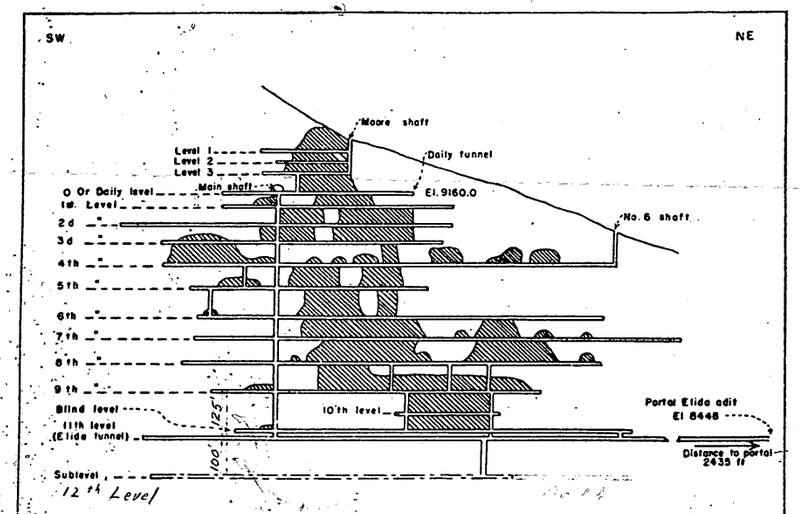
(h) Contingencies -

Allowance for contingencies	400.00
Grand Total	$ 41,533.50 *

7. (a) Applicant is prepared to pay it's share of the cost.

(b) With money.

* The applicant believes that this estimated total of $ 41,533.50 can be reduced by (a) final liquidation of the government's equity in pipe, rail, tools, etc., and by (b) substitution of piecework rates for some of the hourly pay rates shown. We believe that these two operating economies will bring the total cost of the project down to the $ 33,325.00 figure shown on Page 3, and we are willing to accept a contract based on the unit costs used to derive this lower total.

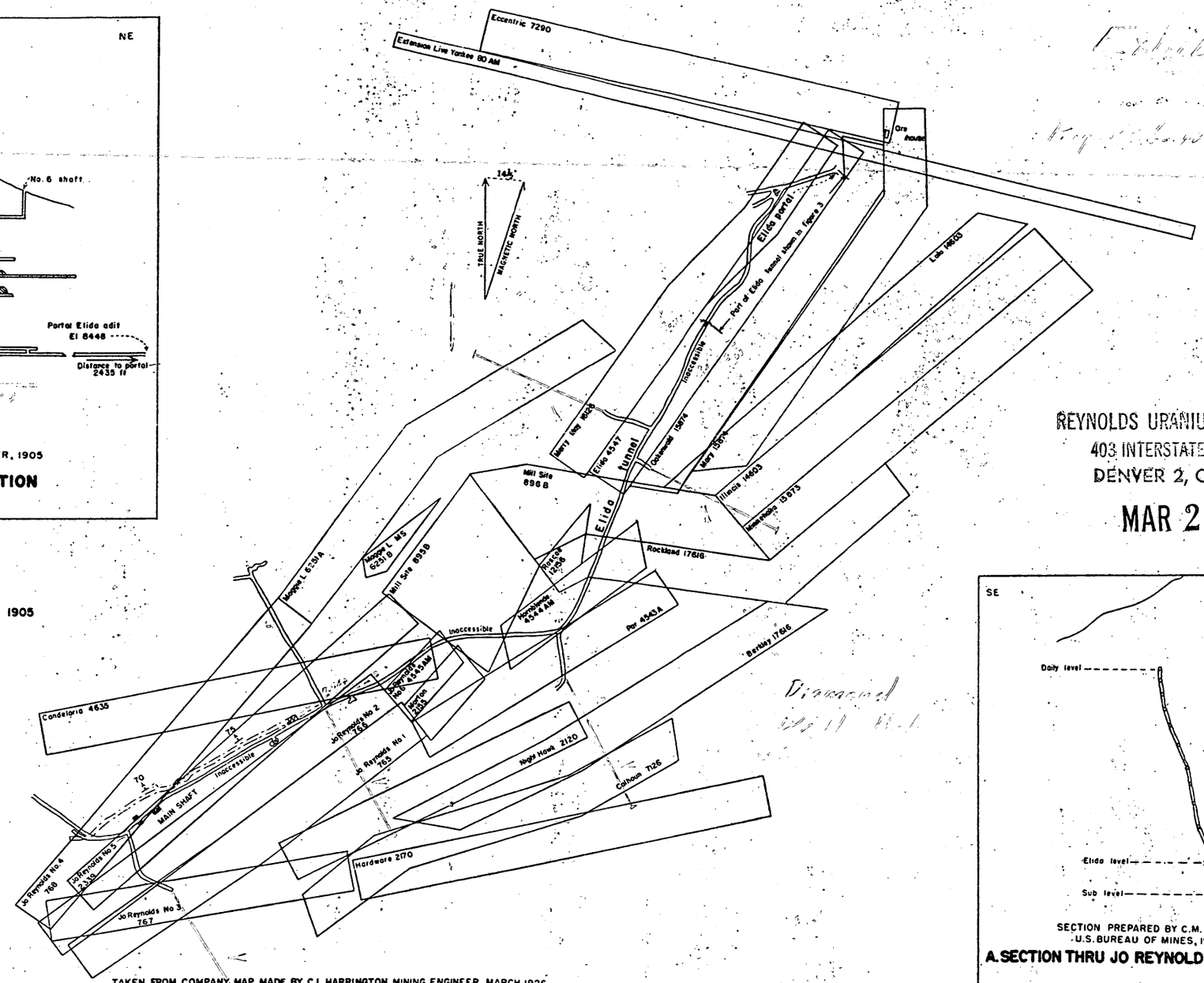


(AVERAGE DIP 78°, STRIKE N65°E)
STOPE SECTION PREPARED BY R B MORTON, MINING ENGINEER, 1905

B. VERTICAL LONGITUDINAL PROJECTION THROUGH JO REYNOLDS VEIN

LEGEND

- PRESENT MINE WORKINGS, ELIDA LEVEL
- PRESENT 92-FOOT LEVEL, DRIVEN AFTER 1905
- SHAFT - BOTTOM
- RAISE OR WINZE - FOOT
- DIP AND STRIKE OF VEIN
- RAISE OR WINZE - HEAD
- CAVED, OCT. 1951



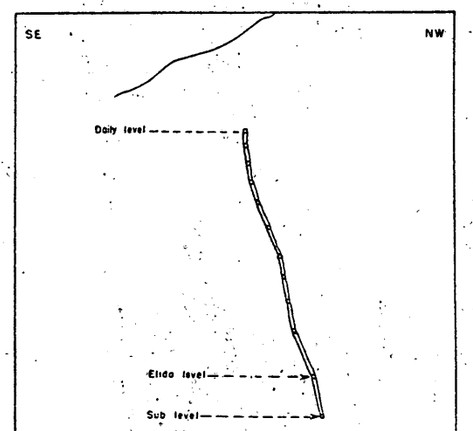
TAKEN FROM COMPANY MAP MADE BY C.L. HARRINGTON, MINING ENGINEER, MARCH 1926

C. PLAN OF ELIDA TUNNEL, SHOWING HORIZONTAL PROJECTION OF CLAIMS

Exhibit D

REYNOLDS URANIUM CORPORATION
403 INTERSTATE TRUST BLDG.
DENVER 2, COLORADO

MAR 22 1954



SECTION PREPARED BY C.M. HARRER
U.S. BUREAU OF MINES, 1951

A. SECTION THRU JO REYNOLDS MAIN SHAFT

PLAN AND SECTION OF JO REYNOLDS MINE, LAWSON—DUMONT DISTRICT, CLEAR CREEK COUNTY, COLORADO

200 0 200 400 600 800
SCALE OF FEET

payment of a salary to Mr. Luckhurst and of fees and/or a salary to Dr. G. C. Ridland under the conditions named below (page 9).

The Company and its Board of Directors reserve the right to change such application of proceeds in the best interests of the Company and its stockholders as circumstances may require.

DESCRIPTION OF COMMON STOCK

The shares offered hereunder are Common Stock of a par value of $1. per share. The shares participate equally, share for share, in all dividends declared by the Board. Each share is entitled to one vote. The stock has no preemptive right.

CAPITALIZATION

The present capital structure of the Company is as follows:

Title	Authorized	Issued and Outstanding	To Be Outstanding after all Securities Offered Hereunder are Sold
Common Stock	75,000 Shs.	45,000 Shs.	75,000 Shs.

PAR VALUE $1 PER SHARE

The Company may borrow money or obtain aid from the Government of the United States or from others for the rehabilitation, exploration and/or development of its properties upon terms and conditions which may give the lender or lenders a claim upon the proceeds of the Company's operations or upon the property of this Company superior to that of the stockholders. The Company does not represent that any application for any loan will be made or that, if made, any loan will be concluded; nor does the Company represent the terms and conditions it would accept upon any loan, and the Company may accept terms and conditions upon any loan different from those suggested above.

MANAGEMENT AND CONTROL

The officers and directors of the Corporation are as follows:

Name	Address	Office
DOUGLAS J. LUCKHURST	27 William Street, New York City, N. Y.	President and Director
G. CARMAN RIDLAND	Interstate Trust Building, Denver, Colorado	Vice President and Director
ROBERT J. STIRO	272 Howland Avenue, River Edge, New Jersey	Treasurer
JOSEPH MASOPUST	52 Chambers Street, Room 312, New York City, N. Y.	Secretary and Director
JACK NIX	Roslyn Heights, Long Island, N. Y.	Director

Copies of the Agreement and Mining Lease and of the Assignment thereof to the Company are on file at the office of the Company in New York City, and may be inspected by interested parties during the usual business hours. Reference is made thereto for their material provisions.

RICH URANIUM FIND — MANY YEARS AGO

Today, on the Colorado Plateau, ores assaying 1/10 of 1% uranium oxide sell for approximately $4.00 per ton; ores of 2/10 of 1% uranium oxide sell for approximately $16.00 per ton. Ores of a full 1% uranium oxide, worth approximately $94.50 per ton, are relatively rare. Yet figures prepared by the United States Atomic Energy Commission indicated that in 1919 the Jo Reynolds Mine produced 16,000 pounds of uranium ore assaying 72% uranium oxide. This ore probably occurred in erratic lenses and probably was hand sorted to this grade. Such ore would be worth, today, approximately $100,000. The Company is encouraged by the prospect that history may repeat itself at the Jo Reynolds Mine.

MARKET FOR URANIUM

It is common knowledge that because of the strategic importance of the atomic program, the United States Government has guaranteed the market for domestically produced uranium ores. In addition, the Government is making every effort to stimulate production by cooperation with companies which offer adequate promise of production. In view of world conditions today, it seems reasonable to assume that this cooperative policy will continue.

APPLICATION OF PROCEEDS

The offering being made on behalf of the Company covers 30,000 shares of Common Stock offered to the public at $10. per share. Underwriting discounts and commissions are $2. per share, and the Company will receive proceeds of $8. per share. If all the shares being offered hereby are sold, the gross proceeds of the offering will be $300,000., and the proceeds to the Company will be $240,000. after deducting underwriting discounts and commissions of $60,000., but before expenses of the issue. The Company has also agreed to reimburse the Underwriter for its expenses of the issue in an amount not exceeding $15,000. (of which $5,000. has been advanced to the Underwriter). Such expenses, together with the Company's own expenses estimated at approximately $5,000. (for legal fees, printing costs, etc.) will aggregate approximately $20,000. so that the net proceeds to the Company, if the entire issue is sold, will aggregate approximately $220,000.

The foregoing expense items will be paid out of the first proceeds of the issue. Thereafter, the Company will use the proceeds, as received, for the following purposes and in the following order:

$10,000. will be paid to Clear Creek Mines, Inc. under the Agreement and Mining Lease, as indicated herein.

$10,000. will be devoted to the repayment of a loan in that amount from an independent person, introduced by Mr. Luckhurst.

The balance of the proceeds, which will amount to approximately $200,000. if the entire issue is sold, will be used for rehabilitation, exploration, and/or development of the Company's claims, and may include

EXHIBIT D

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

NOTED
APR 12 1954
TEPCO
Butler

224 New Customhouse
Denver 2, Colorado

April 7, 1954

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: (Uranium), Application of Reynolds Uranium Corporation, Jo Reynolds Mine, Clear Creek County, Colorado

Enclosed are two copies of the subject application containing Form MF-103 and accompanying answer sheets and Exhibit D, a map showing the proposed exploration work. Also enclosed are photostatic copies of the purchase agreement, agreement and mining lease, and the assignment of the latter to the applicant.

One copy of the application is being forwarded to Mr. A. P. Butler, Bldg. 21-TEPCO, at Denver Federal Center, and one copy is being retained in our file.

Although the amount involved might be within the delegated authority of this office, our attorney, Mr. Shireman, has for many years represented the property owners, and would be unable to assist this office if the application should go to a contract.

W H King
A. H. King

A. H. Koschmann
A. H. Koschmann

GEOLOGICAL SURVEY
TEPCO
RECEIVED
APR 12 1954
Denver

Enclosures

HMC:es

cc: Docket
Chron.
AP Butler
Koschmann

G. CARMAN RIDLAND
Geological Engineer

TELEPHONE: ALPINE 1891
403 INTERSTATE TRUST BUILDING
DENVER 2, COLORADO

Defense Minerals Exploration Adm.
MAR 30
23 1954

March 23, 1954

Mr. W. H. King
Executive Officer
Defense Minerals Exploration Admin.,
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Enclosed please find an application for aid by Reynolds Uranium Corporation to explore portions of the Jo Reynolds mining property.

The application consists of:

1. Form MF-103 and accompanying answer sheets.
2. Exhibit A. - Certified copy of "Purchase Agreement".
3. Exhibit B. - Certified copy of "Agreement and Mining Lease".
4. Exhibit C. - Assignment of the latter to the applicant.
5. Exhibit D. - Maps from U.S.G.S. Circular 213 showing proposed exploration work.

Yours very truly,

G. C. Ridland

G. C. Ridland

F.
Enc.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-3309
Metal or Mineral
Date Received
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colorado

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

(*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

See Exhibit "A" attached.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee. The property is leased from Reynolds Uranium, Inc. which holds a purchase agreement.

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

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

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

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

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

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

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

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

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

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

(*c*) The work will start within 30 days and be completed within 24 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 [ ] 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 22, 1954

Reynolds Uranium Corporation
(Applicant)

By G. C. Ridland

G. C. Ridland, Vice President

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

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

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

1. (a) Reynolds Uranium Corporation
403 Interstate Trust Bldg.,
Denver 2, Colorado

(b) State of New York

(c)

Name	Address	Office
Douglas J. Luckhurst	27 Williams St., N.Y.C., N.Y.	Pres. & Director
G. Carman Ridland	Interstate Trust Bldg. Denver, Colorado	V. Pres. & Director
Robert J. Stiro	272 Howland Ave. River Edge, New Jersey	Treasurer
Joseph Masopust	52 Chambers St., Rm. 312, N.Y.C., N.Y.	Secretary & Director
Jack Nix	Roslyn Heights, Long Island, N.Y.	Director

3. (a) Legal description - given in detail in "Purchase Agreement" attached as Exhibit A.

(b) Jo Reynolds mine.

(c) Lessee. The property is leased by applicant from Reynolds Uranium, Inc., which company holds a "Purchase Agreement" from the owners.

(d) Copy of the "Purchase Agreement" between the owners and Reynolds Uranium, Inc., and "Agreement and Mining Lease" between Reynolds Uranium, Inc., and Douglas J. Luckhurst with an Assignment of the latter by Luckhurst to the applicant are the means under which the applicant controls the property. Certified copies of said documents are attached as Exhibit A,B. and C.

(e) Not applicable.

(f) All claims are patented.

4. Physical Description

(a) The maps attached as Exhibit D, show the extent of the mine workings. The mine was operated steadily from 1877 through 1907, and intermittently since 1907. The last mining operation ceased in 1946. The applicant has had no interest in any of the former operations. The mine is now idle.

The workings are not accessible at this time. On Dec. 30, 1948, the 4,500-foot lower adit level, known as the Elida Tunnel, was accessible and was examined by Robert U. King of the U. S. Geological Survey (U.S.G.S., Trace Elements Memorandum Report 5). In 1951, this tunnel was found caved at 745 feet from the portal. The surface geology was mapped in detail in 1951 by the U.S. Geological Survey (U.S.G.S. Circular 213).

(b) Past Production - This mine is credited with a production, mainly silver, some lead, zinc and uranium - of $1,500.000.

Current Production - None

Ore Reserves - Not known.

(c) Geologic Features - The geology is described in detail in two reports cited in 4 (a).

Fissure veins (at least 4) mineralized with sphalerite, galena, silver, pyrite, chalcopyrite, gray copper, argentite, ruby silver and pitchblende in places cut pre-Cambrian metamorphosed sedimentary and igneous rocks of the Idaho Springs Complex and Silver Plume granite. The veins strike north of east and dip steeply North west. Width of the veins has not been reported due to inaccessibility of the workings. One vein has been traced on the surface for several hundred feet.

According to U.S.G.S. Circular 213, Page 7, pitchblende has been reported to occur in eight places in the Jo Reynolds mine. The places are tabulated.

It is reported that in 1919 the Jo Reynolds produced eight tons of pitchblende that asseyed 72% U_3O_8 and Robert King deduces that this ore may have come from the lowest workings of the mine.

Because of the reports of the occurrence of pitchblende, and because the geological environment is believed favorable for deposition of pitchblende, the applicant wishes to explore the veins at and beyond the lower workings of the Jo Reynolds mine. Also, it is proposed to explore by diamond drilling the downward extension of the adjacent veins, No. 1, 3 and 4, which were explored only to a minor degree in the uppermost levels of the mine by former operators.

(d) The portal of the Elida Tunnel of the Jo Reynolds Mine is connected to paved U.S. Highway 40-6 by one mile of good gravel road The nearest railroad shipping point is Golden, Colorado, 32 miles east by paved highways except for the first mile of gravel. The roads are accessible at all times of the year.

Reynolds Uranium Corporation
403 Interstate Trust Building
Denver 2, Colo.

Living quarters are available at Lawson, one mile from the mine, and at Idaho Springs, seven miles east of Lawson.

Denver, major source of supplies is 40 miles east by paved highway.

(e) Manpower, materials, supplies, equipment, water and electric power are all available in any required quantity for the contemplated exploration program.

5. (a) Pitchblende (Uranium ore).

(b) Proposed work:

Project	Estimated Cost
Install underground hoist, electric cable, electric pump at winze station Elida Tunnel Level -	$500.
Rehabilitate winze below Elida Tunnel (80 feet) -	1,600.
Rehabilitate 11th level (level at bottom of winze - 975 feet) -	4,875.
Diamond drilling 5 500-ft. flat holes as shown on acompanying map - 2500' @ $4.00 ft. -	10,000.
Raise 125' from Elida Tunnel level at pitchblende location described by King 125' @ $30.00 ft.	3,750.
Drift NE on No. 2 vein on 12th level (winze bottom) 320 feet @ $30.00 ft.	9,600.
Raise 100 feet from sublevel or 12th level under radioactive zone described by King. 100' @ $30.00 ft.	3,000.
	$ 33,325.

Government's participation;
75% of $33,325. - $ 24,993.75

(c) The work will start within thirty days and be completed within twenty-four months.

(d) The Reynolds Uranium Corporation was organized with the purpose of opening the Jo Reynolds Mine and exploring it for uranium. The operation will be supervised by Dr. G. C. Ridland, consulting geological engineer. Dr. Ridland is known to the D.M.E.A., as he is managing the Cold Spring mining operation at Nederland, Colorado (D.M.E.A. Docket No. 1447X; Contract Idm E-54). Alexander H. Baldo, 1950 graduate of mining engineering from The Missouri School of Mines, will be mines superintendent. Since graduating he has had one year with

Cerro De Pasco Corporation and three years with New Jersey Zinc Company in all phases of underground production and mining experience.

6. Estimate of Costs

It is proposed to conduct the operation on the unit cost basis, and estimates of the cost of each project is given under 5 (b) above.

(a) Independent contracts - It is proposed to sub-contract the diamond drilling program. This may be done at approximately $4.00 per foot, not including engineering and geological services. All other work will be done by the applicant.

(b) Labor, supervision, consultants -

Labor:				
Miners & drillers	2400 hrs.	@$1.75/max	$ 4200.00	
Muckers/trammers	2400 "	1.75 "	4200.00	
Surface men	1920 "	1.65 "	3168.00	
Timbermen	2400 "	1.75 "	4200.00	
Hoistmen	1920 "	1.65 "	3168.00	
Sup't & foreman	12 mo.	550.00 "	6600.00	
Engineer, geologist, consultants	6 "	500.00 "	3000.00	
Drifting, raising and cross-cutting labor may be contracted at $10.00/ft.max.			28536.00	28,536.00

(c) Operating materials and supplies -

Small tools, shovels, picks, etc.	Lot		100.00	
Mine Timber	20000 FBM	@$ 75.00M	1500.00	
Mine T-Rail	4 Ton	95.00	380.00	
Pipe, 1" water	1300 ft.	.50	650.00	
Pipe, 2" air	1300 "	.65	845.00	
Vent pipe 12"	1100 "	1.00	1100.00	
Fittings & misc.	Lot		100.00	
Electric Power (average)	45000-KWH	.033	1485.00	
Water - plenty available	free			
Fuel - not required			6160.00	6,160.00

(d) Operating equipment -

Air compressor	5000.00	
Electric Hoist	1800.00	
Mucking machine	3100.00	
Pump	2500.00	
Copco Drifter Drills (2)	1400.00	
Ingersoll-Rand Stoper Drills (2)	1000.00	
Connections for drills	75.00	
	14875.00	
All of the above to be supplied by the operator, so only 10% (depreciation) charged to project		1,487.50

(e) Rehabilitation -

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403 Interstate Trust Building
Denver 2, Colorado.

Rehabilitation of the 11th, or Elida Tunnel Level, will be done at applicant's expense. Installation of compressor, hoist, and pump and electrical connections is estimated at $500.00

Rehabilitation of the winze is estimated to cost $ 1600.00 and the 12th level $ 4875.00

(f) New buildings, improvements, installations - None required

(g) Miscellaneous -

Maintenance costs:				
Air Compressor	12 mo.	$ 25.00	$ 300.00	
Hoist	12 "	10.00	120.00	
Pump	12 "	15.00	180.00	
Drills	10 "	5.00	50.00	
			650.00	$ 650.00
Assaying				250.00
Accounting	12 mo.	100.00		1200.00
Payroll taxes, including workman's compensation, liability insurance, unemployment, etc., 10% of payroll				2850.00

(h) Contingencies -

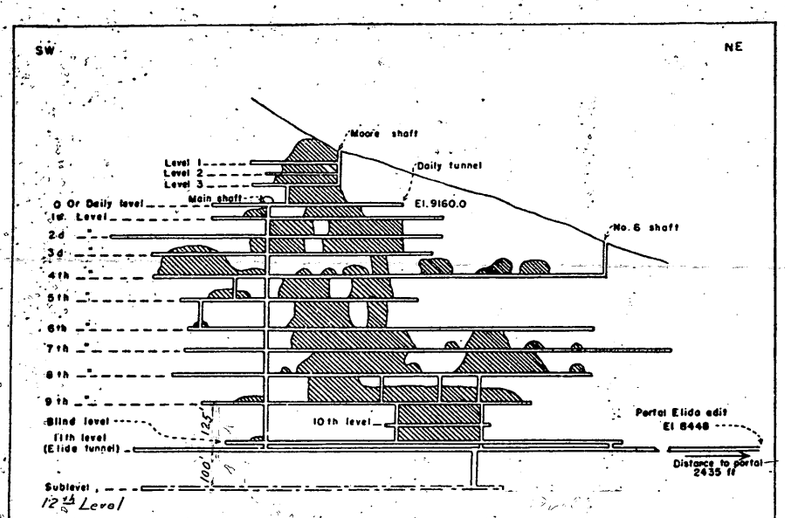
Allowance for contingencies	400.00
Grand Total	$ 41,533.50 *

7. (a) Applicant is prepared to pay it's share of the cost.

(b) With money.

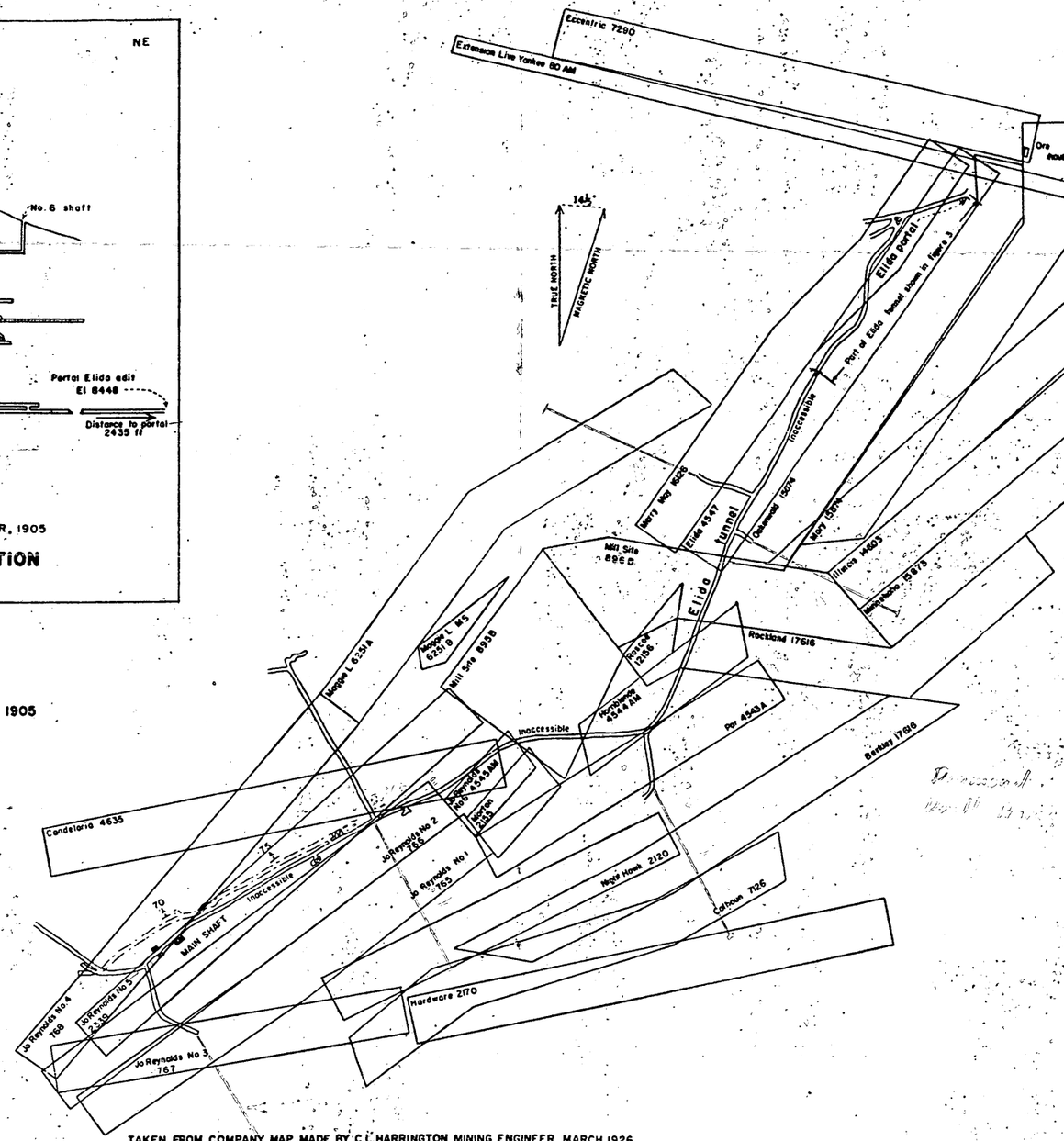
* The applicant believes that this estimated total of $ 41,533.50 can be reduced by (a) final liquidation of the government's equity in pipe, rail, tools, etc., and by (b) substitution of piecework rates for some of the hourly pay rates shown. We believe that these two operating economies will bring the total cost of the project down to the $ 33,325.00 figure shown on Page 3, and we are willing to accept a contract based on the unit costs used to derive this lower total.

Exhibit D



(AVERAGE DIP 78°, STRIKE N65°E)
STOPE SECTION PREPARED BY R B MORTON, MINING ENGINEER, 1905

B. VERTICAL LONGITUDINAL PROJECTION THROUGH JO REYNOLDS VEIN

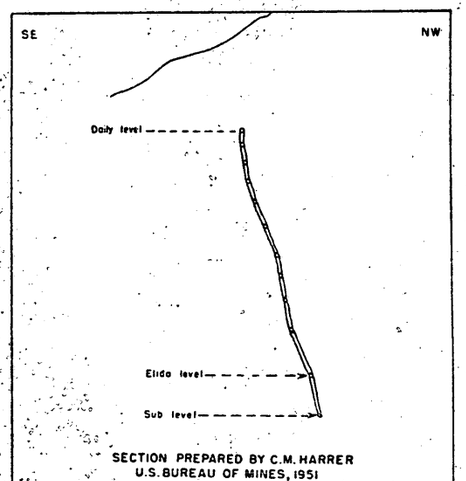


TAKEN FROM COMPANY MAP MADE BY C.L.HARRINGTON, MINING ENGINEER, MARCH 1926

C. PLAN OF ELIDA TUNNEL, SHOWING HORIZONTAL PROJECTION OF CLAIMS

REYNOLDS URANIUM CORPORATION
403 INTERSTATE TRUST BLDG.
DENVER 2, COLORADO

MAR 22 1954



SECTION PREPARED BY C.M. HARRER
U.S. BUREAU OF MINES, 1951

A. SECTION THRU JO REYNOLDS MAIN SHAFT

LEGEND

- PRESENT MINE WORKINGS, ELIDA LEVEL
- PRESENT 92-FOOT LEVEL, DRIVEN AFTER 1905
- SHAFT - BOTTOM
- RAISE OR WINZE - FOOT
- DIP AND STRIKE OF VEIN
- RAISE OR WINZE - HEAD
- CAVED, OCT. 1951

PLAN AND SECTION OF JO REYNOLDS MINE, LAWSON—DUMONT DISTRICT, CLEAR CREEK COUNTY, COLORADO

200 0 200 400 600 800
SCALE OF FEET

payment of a salary to Mr. Luckhurst and of fees and/or a salary to Dr. G. C. Ridland under the conditions named below (page 9).

The Company and its Board of Directors reserve the right to change such application of proceeds in the best interests of the Company and its stockholders as circumstances may require.

DESCRIPTION OF COMMON STOCK

The shares offered hereunder are Common Stock of a par value of $1. per share. The shares participate equally, share for share, in all dividends declared by the Board. Each share is entitled to one vote. The stock has no preemptive right.

CAPITALIZATION

The present capital structure of the Company is as follows:

Title	Authorized	Issued and Outstanding	To Be Outstanding after all Securities Offered Hereunder are Sold
Common Stock.....	75,000 Shs.	45,000 Shs.	75,000 Shs.
PAR VALUE $1 PER SHARE			

The Company may borrow money or obtain aid from the Government of the United States or from others for the rehabilitation, exploration and/or development of its properties upon terms and conditions which may give the lender or lenders a claim upon the proceeds of the Company's operations or upon the property of this Company superior to that of the stockholders. The Company does not represent that any application for any loan will be made or that, if made, any loan will be concluded; nor does the Company represent the terms and conditions it would accept upon any loan, and the Company may accept terms and conditions upon any loan different from those suggested above.

MANAGEMENT AND CONTROL

The officers and directors of the Corporation are as follows:

Name	Address	Office
DOUGLAS J. LUCKHURST	27 William Street, New York City, N. Y.	President and Director
G. CARMAN RIDLAND	Interstate Trust Building, Denver, Colorado	Vice President and Director
ROBERT J. STIRO	272 Howland Avenue, River Edge, New Jersey	Treasurer
JOSEPH MASOPUST	52 Chambers Street, Room 312, New York City, N. Y.	Secretary and Director
JACK NIX	Roslyn Heights, Long Island, N. Y.	Director

Copies of the Agreement and Mining Lease and of the Assignment thereof to the Company are on file at the office of the Company in New York City, and may be inspected by interested parties during the usual business hours. Reference is made thereto for their material provisions.

RICH URANIUM FIND — MANY YEARS AGO

Today, on the Colorado Plateau, ores assaying 1/10 of 1% uranium oxide sell for approximately $4.00 per ton; ores of 2/10 of 1% uranium oxide sell for approximately $16.00 per ton. Ores of a full 1% uranium oxide, worth approximately $94.50 per ton, are relatively rare. Yet figures prepared by the United States Atomic Energy Commission indicated that in 1919 the Jo Reynolds Mine produced 16,000 pounds of uranium ore assaying 72% uranium oxide. This ore probably occurred in erratic lenses and probably was hand sorted to this grade. Such ore would be worth, today, approximately $100,000. The Company is encouraged by the prospect that history may repeat itself at the Jo Reynolds Mine.

MARKET FOR URANIUM

It is common knowledge that because of the strategic importance of the atomic program, the United States Government has guaranteed the market for domestically produced uranium ores. In addition, the Government is making every effort to stimulate production by cooperation with companies which offer adequate promise of production. In view of world conditions today, it seems reasonable to assume that this cooperative policy will continue.

APPLICATION OF PROCEEDS

The offering being made on behalf of the Company covers 30,000 shares of Common Stock offered to the public at $10. per share. Underwriting discounts and commissions are $2. per share, and the Company will receive proceeds of $8. per share. If all the shares being offered hereby are sold, the gross proceeds of the offering will be $300,000., and the proceeds to the Company will be $240,000. after deducting underwriting discounts and commissions of $60,000., but before expenses of the issue. The Company has also agreed to reimburse the Underwriter for its expenses of the issue in an amount not exceeding $15,000. (of which $5,000. has been advanced to the Underwriter). Such expenses, together with the Company's own expenses estimated at approximately $5,000. (for legal fees, printing costs, etc.) will aggregate approximately $20,000. so that the net proceeds to the Company, if the entire issue is sold, will aggregate approximately $220,000.

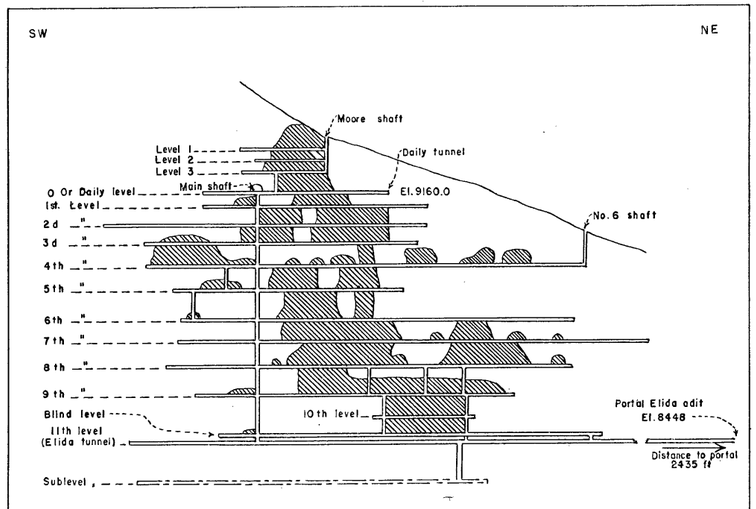
The foregoing expense items will be paid out of the first proceeds of the issue. Thereafter, the Company will use the proceeds, as received, for the following purposes and in the following order:

$10,000. will be paid to Clear Creek Mines, Inc. under the Agreement and Mining Lease, as indicated herein.

$10,000. will be devoted to the repayment of a loan in that amount from an independent person, introduced by Mr. Luckhurst.

The balance of the proceeds, which will amount to approximately $200,000. if the entire issue is sold, will be used for rehabilitation, exploration, and/or development of the Company's claims, and may include

EXHIBIT D



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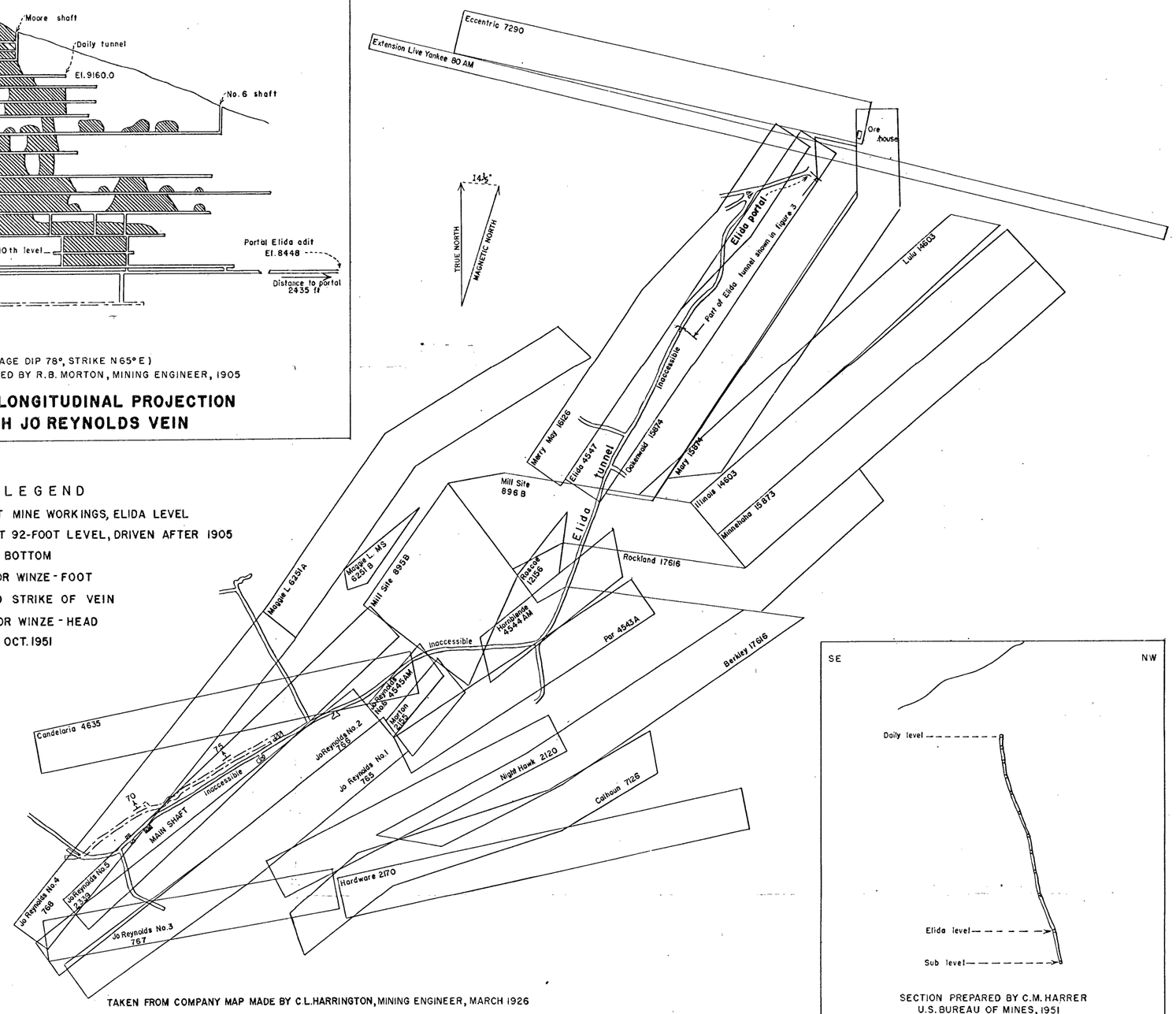

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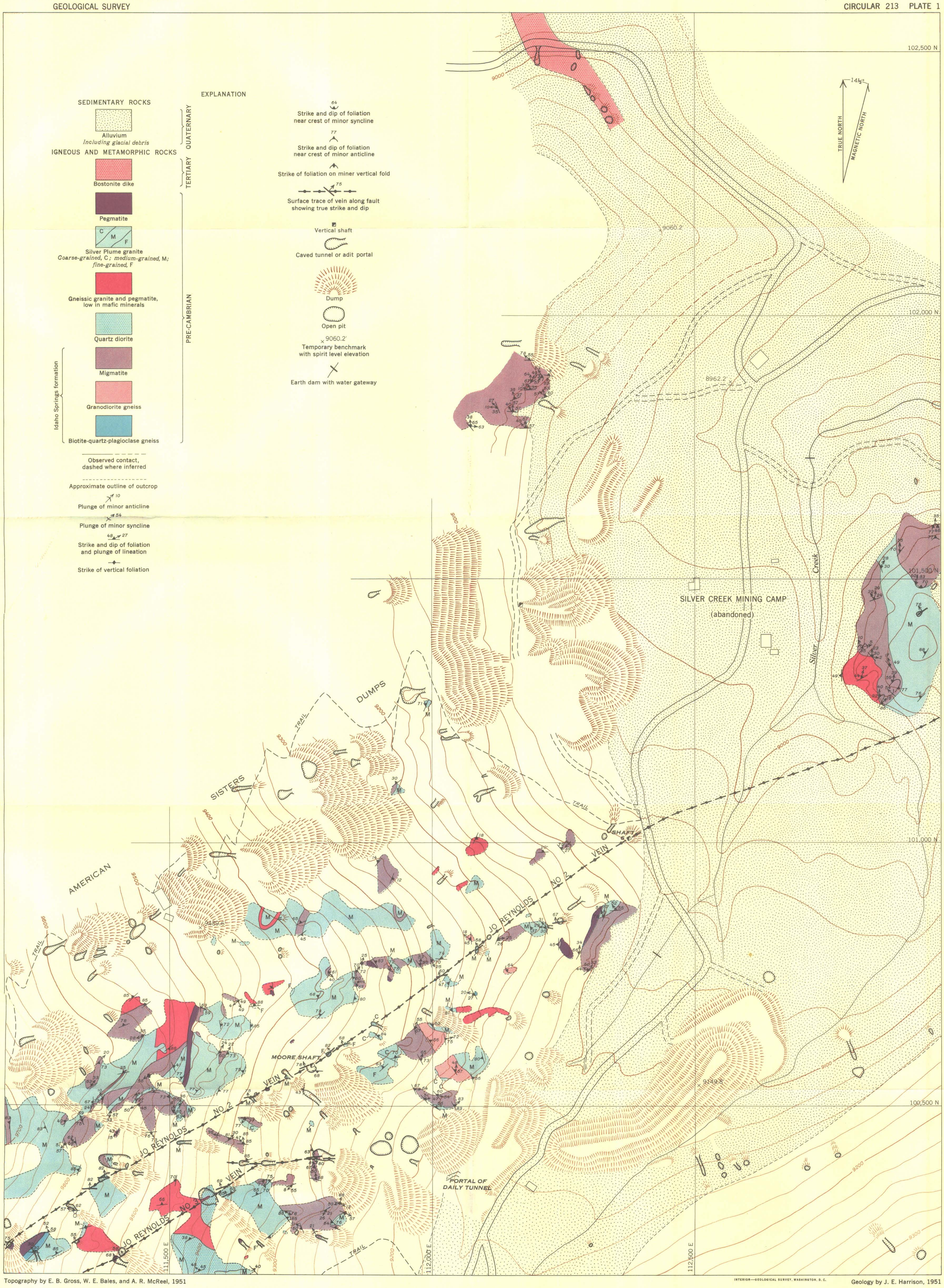
SECTION PREPARED BY C.M. HARRER
U.S. BUREAU OF MINES, 1951

A. SECTION THRU JO REYNOLDS MAIN SHAFT

PLAN AND SECTION OF JO REYNOLDS MINE, LAWSON—DUMONT DISTRICT, CLEAR CREEK COUNTY, COLORADO

200 0 200 400 600 800
SCALE OF FEET



Topography by E. B. Gross, W. E. Bales, and A. R. McReel, 1951

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.

Geology by J. E. Harrison, 1951

GEOLOGIC OUTCROP MAP OF THE JO REYNOLDS AREA, LAWSON-DUMONT DISTRICT, CLEAR CREEK COUNTY, COLORADO

100 0 300 Feet

Contour interval 20 feet

Datum is mean sea level