File Copy
Surname
Griswold
Nelson
Gahan
Selridge
Johnson

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

APR 2 1956

Mr. L. D. Barry, General Manager
The King Lease, Inc.
Ouray, Colorado

Re: Docket No. DMEA-4042 (Lead-Zinc-Copper)
The King Lease, Inc.
Fortuna Lode Claim
Ouray County, Colorado

Dear Mr. Barry:

The application of The King Lease, Inc. for aid in an exploration project and reports available to us in Washington concerning the cited property have been reviewed.

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

A careful study of all our information indicates that the probability of disclosing significant ore reserves by the proposed work is not sufficiently promising to justify Government participation. This review also reveals that the Millionaire, U. S. Depository, and Yellow Rose claims may be involved in the apex rights to the particular vein which you wish to explore. Likewise, the short time limitation of the present lease on the haulage level of the Camp Bird mine cannot be considered as being satisfactory for the purposes of an exploration project contract. Consequently, we regret to advise that, in these circumstances, the application of The King Lease, Inc. for exploration assistance is denied.

However, our denial is made without prejudice to the property. In the event that your company obtains control of the controversial claims, with the necessary Owner's Consent to Lien, as well as an adequate lease or easement covering the haulage level, we shall be glad to consider a revised application. It appears that exploration work on the vein below the 14th haulage level might more logically be done. This, of course, would depend upon whether your company believed that such work was feasible and presented worthwhile possibilities.

Sincerely yours,

Administrator

WRGriswold/bjl(3/20,26,29&30/56)
Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kiilsgaard
Region III (2)
Chron.

R.E.H.

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

500

March 26, 1956

Memorandum

To: The Administrator

From: Chief, Base Metals Division

Subject: Denial of Application, Docket No. DMEA-4042, The King Lease, Inc., Fortuna Lode Claim, Ouray County, Colorado, Lead-Zinc-Copper.

The attached letter of denial is a departure from our established format since the reasons are preculiar to this case. Actually it looks like a favorable project, except for a question of apex rights and easement privileges.

A vein was cut by the Camp Bird lower tunnel driven many years ago. The Applicants (who are lessees of the Camp Bird property) have located the ground vertically above the intersection but the Field does not believe they have the outcrop. Nor do they have more than a short term lease permitting them to use the tunnel in question.

W. R. Griswold

W. R. Griswold

File Copy
Surname
Griswold

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

500

March 26, 1956

Memorandum

To: The Administrator

From: Chief, Base Metals Division

Subject: Denial of application, Docket No. DMEA-402, The King Lease, Inc., Fortuna Lode Claim, Ouray County, Colorado, Lead-Zinc-Copper.

The attached letter of denial is a departure from our established format since the reasons are preculiar to this case. Actually it looks like a favorable project, except for a question of apex rights and easement privileges.

A vein was cut by the Camp Bird lower tunnel driven many years ago. The Applicants (who are lessees of the Camp Bird property) have located the ground vertically above the intersection but the Field does not believe they have the outcrop. Nor do they have more than a short term lease permitting them to use the tunnel in question.

W. R. Griswold

W. R. Griswold

WRG/er

Copy to: Docket
Base Metals
Chron.

Griswold
Baily

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

March 23, 1956

Re: DMEA-4042 (Pb-Zn-Cu; $150,170)
King Lease, Inc.
Fortuna Claims
Ouray County, Colorado

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of field team report dated March 5, 1956, received March 12, 1956

The field examiners and field team conclude that the Fortuna vein is probably the Yellow Rose vein (explored under DMEA-1144X), which apexes on the patented Millionaire and U. S. Depository claims owned by the Walsh-McLean Estate. The field examiners also note that underground access to the Fortuna claims is via ground leased by King Lease, Inc. from Camp Bird, Ltd.; that the lease expires December 31, 1956; and that the lease stipulates that recording of the lease in a public office is immediate cause for cancellation.

The map presented supports the view of the field examiners that proposed drifting and raising, while all within the confines of the Fortuna claims Nos. 1 and 2, is actually on the Yellow Rose vein which apexes on claims not owned or leased by the applicant.

I concur with the field recommendation that the application should be denied on the grounds that King Lease, Inc. does not control the vein to be explored and that the lease giving underground access is subject to cancellation. The field team presents further evidence suggesting that even though the applicant controlled both access and apex his potential for discovery is not good because the vein flattens and presumably pinches so that a commercial ore discovery above the Camp Bird tunnel level is not likely. It therefore appears that there is small reason for any exploration of the vein on the Fortuna claims and that the applicant should not be encouraged.

O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Branch of Base Metals (2)
Mr. Kiilsgaard, 5222
Mr. Geehan, Room 3608
Files

IN REPLY REFER TO:

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

RECEIVED
MAR 20 1956

March 19, 1956

Re: DMEA 4042
The King Lease
Fortuna Lode
Ouray County, Colorado
$150,170 - Lead-zinc copper

Memorandum

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

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

Subject: Review of Field Team Report

The applicant requested assistance in exploring a 'blind' vein cut in the long Camp Bird lower tunnel. The vein is presumed to be the Yellow Rose vein which outcrops about 1,300 feet vertically above the intersection in the long crosscut adit.

The work proposed consists of:

Drifting northwest from the intersection	1,000 feet
" southeast " " "	1,500 "
Raising 3 raises at 300' each	900 "

The estimated cost of the work is $150,170.

Where crosscut in the adit, 3 samples of the vein show

		Ounces per ton			Percent	
	Width	Gold	Silver	Lead	Zinc	Copper
Sample by applicant at crosscut	3.8	.01	6.2	4.4	2.9	.30
at 59'	3.0	.02	8.3	7.8	3.6	.30
D.M.E.A " 65'	7.0	.02	15.6	4.4	5.8	.60

Raises on the vein 26 and 39 feet from the crosscut have been driven to heights of 44 and 49 feet respectively. At 24 feet up the vein flattens to 50° from the 72° at the adit level and at the top of the raises the vein appears as a sheeted zone and shows no sulfides. The flattening is taken as a bad omen, and it is assumed good ore would not 'come in' again for 800 to 1,000 feet where the vein might be expected to again have the

steeper dip. The average dip of the vein as shown on the section, Fig. 2, is 62°, as from the adit to the outcrop. The long upward projection of an unfavorable condition is not realistic.

The applicant probably does not own or control the claims on which the Yellow Rose vein outcrops ("apexes") so may not have rights on it at the adit level. Also the applicant has only a year to year lease on the Camp Bird mine. Rights as to use of the adit are not set out in detail.

Production figures for the Camp Bird mine which the applicant leases, are not given and it is not known what constitutes ore, but it must be assumed the applicant sees possibilities in a vein which samples as given above, and with one third the hauling distance.

A denial of the application, based on the questionable apex rights and lease term needs no further justification. However, exploration of the vein to the southeast and above and below the adit level appears to be warranted. Therefore, as recommended by the examiners and the Field Team, the denial should be qualified.

I recommend such a denial of the application.

N. E. Nelson

N. E. Nelson

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

RECEIVED
MAR 12 1956

March 8, 1956

Hunewald

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4042 (Lead-Zinc-Copper), King Lease, Inc., Fortuna claims, Ouray County, Colorado

Enclosed are the original and three copies of the joint engineering and geologic report on the subject docket.

The field examiners conclude that the Fortuna vein is actually the Yellow Rose vein which was the subject of DMEA Docket 1144X and that the applicant does not have apex rights to the Fortuna (Yellow Rose) vein. The vein flattens immediately above the level at which the applicant wishes to explore and may well remain flat, and barren, to a point some 800 feet above that level. The field examiners recommend that the application be denied, and we concur in this recommendation.

If, at a later date, the applicant would be interested in exploration work below the 14th level of the Camp Bird Mine, proper consideration would be given his application; provided that he has satisfactory control of the claims on which the Yellow Rose (Fortuna) vein apexes, and should their lease on the haulage (14th) level of the Camp Bird Mine be extended beyond December 31, 1956.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
3-16-56
(date)

IN REPLY REFER TO:
DMEA
Date Rec'd
MAR 7 1956
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
MAR 12 1956

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

March 6, 1956

TRANSMITTED
MAR 6 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA Docket 4042 (Lead-zinc-copper), King Lease, Inc., Fortuna claims, Ouray County, Colorado

Enclosed are the original and eight copies of a joint engineering and geologic report by D. R. MacLaren, Geological Survey, and C. M. Harrer, Bureau of Mines, covering their examination of the subject property.

The applicant proposes to explore the Fortuna vein by 2,500 feet of drifting and three 300-foot raises from the drift level. The applicant's estimated cost of the proposed project is $150,170, Government participation 50 percent or $75,085.

The examining team concludes that the Fortuna vein of the applicant is actually the Yellow Rose vein which was the subject of a prior application (DMEA Docket 1144X) and that the applicant does not have apex rights to the Fortuna (Yellow Rose) vein. Furthermore, the vein changes dip (flattens) immediately above the level at which the applicant wishes to explore and may well remain flat, and barren, to a point some 800 feet above that level.

Denial of the application is recommended.

Should the applicant acquire satisfactory control of the claims on which the Yellow Rose (Fortuna) vein crops out, and should their lease on the haulage (14th) level of the Camp Bird mine be extended beyond December 31, 1956, exploration of the Yellow Rose vein below the 14th level would be recommended.

Reviewed by
DMEA OPERATING COMMITTEE
3-16-56
(date)

John F. Shaw
Superintendent of the Denver
Experiment Station

E. N. Harshman
Member, Field Team

Enclosures (9)
ENHarshman:mp

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
MAR 12 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED
MAR 8 1956

DMEA 4042

The King Lease, Inc.

Fortuna Claims

Ouray County, Colorado

Lead-Zinc-Copper

Joint Engineering and Geological Report

by

D. R. MacLaren, Geologist
Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

March 5, 1956

Reviewed by
DMEA OPERATING COMMITTEE
3-16-56
(date)

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ILLUSTRATIONS

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DMEA 4042

THE KING LEASE, INC.
FORTUNA CLAIMS
OURAY COUNTY, COLORADO

RECEIVED
MAR 12 1956

SUMMARY

The King Lease, Incorporated, a Colorado corporation, has applied for Defense Minerals Exploration Administration assistance to explore their Fortuna lode claims for lead-zinc-copper ore at an over-all cost of $150,170.

They own the Fortuna No. 1 and No. 2 standard lode claims by right of location. The claims are in approximate sec. 27 of the unsurveyed T. 43 N., R. 8 W., in the Sneffels mining district of Ouray County, Colorado, at an altitude of about 9,800 feet. They also operate the Camp Bird mine as lessee.

The property is 6 miles southwest of Ouray and 16 miles southwest of Ridgway, Colorado.

The property was examined on January 10, 1956, in the company of Franklin A. Bell, Superintendent of King Lease, Inc.

The applicant proposes to explore the Fortuna claims by 2,500 feet of drifting, 1,500 feet of which would be to the southeast along the vein which is exposed in the 14th level crosscut, and 1,000 feet would be along this vein and northwest of the crosscut. In addition, two 300-foot raises would be driven from the southeast drift and one from the northwest drift. The vein which the applicant proposes to

explore is in the 14th level crosscut and is directly beneath the center line of his Fortuna claims. The vein appears to be the Yellow Rose vein which apexes on the Millionaire and U. S. Depository claims. These claims are not owned or controlled by the applicant. The applicant's lease on Camp Bird, Ltd., property expires on December 31, 1956.

The only rock exposed on the applicant's claims is the San Juan tuff that has been cut by two prominent sets of fissures, one set striking nearly east-west and dipping south, the other set striking northwesterly and dipping north. Both sets of fissures contain gold, silver, lead, zinc, and copper minerals in a gangue of quartz and brecciated wall rock. Gold values are high in the upper portion of the veins forming bonanza ore bodies, while the silver, lead, zinc, and copper minerals are present in fairly constant amounts from the surface to the deepest mine workings. Wherever they flatten to dips of less than 60 degrees, the veins are unmineralized sheeted zones. The vein the applicant proposes to explore flattens to 55 degrees about 24 feet above the 14th level.

It is concluded that:

1. The bottom of the best ore in the Yellow Rose vein is about 800 to 1,000 feet above and 1,200 to 1,500 feet southeast of the intersection of the Yellow Rose vein and the 14th level crosscut, and that the average grade below the best ore horizon will not exceed 0.04 ounce gold and 5.6 ounces silver per ton, 5 percent lead, 4 percent zinc, and 0.4 percent copper.

2. For a distance of about 800 to 1,000 feet above the 14th level, the dip of the Yellow Rose vein is too flat to be a favorable host for ore deposition in significant amounts.

3. The applicant does not own or control the apex rights to the vein he proposes to explore.

4. There is no assurance that the existing lease between Camp Bird, Ltd., and the King Lease, Inc., will be renewed after it expires on December 31, 1956, and the present lease stipulates that any recording in a public office is immediate cause for cancellation.

Because of the limited height of mineralization directly above the 14th level, it is recommended that this application for DMEA exploration assistance be denied.

However, should the applicant acquire satisfactory control of the Millionaire and U. S. Depository claims and the intervening ground, as well as access to the Camp Bird, Ltd., 14th level crosscut, a program of diamond drilling to explore the vein below the 14th level can be recommended for approval.

INTRODUCTION AND ACKNOWLEDGMENTS

King Lease, Inc., a Colorado corporation whose address is Ouray, Colorado, owns the two standard lode locations known as the Fortuna claims 1 and 2, which straddle the Camp Bird 14th level crosscut adit to the Camp Bird mine (fig. 2).

King Lease, Inc., has applied for DMEA assistance to explore their claims with 2,500 feet of drifting along what they call the

Fortuna vein and with three 300-foot raises from the drift levels. Over-all cost of the project was estimated at $150,170 and Government participation would be 50 percent or $75,085.

An examination was made of the property by a Bureau of Mines and Geological Survey team on January 10, 1956, in the company of F. A. Bell, superintendent for King Lease, Inc. Messrs. K. Moore and L. D. Barry, Vice-president and General Manager, respectively, for King Lease, Inc., were contacted in Gunnison on January 11, 1956. They contributed additional information not available to Mr. Bell.

Pertinent information included in a prior application for DMEA assistance (Docket DMA-1144X) to explore the Yellow Rose vein during 1951 has been incorporated in this report.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The applicant's property, consisting of the Fortuna claims Nos. 1 and 2, is estimated to be in unsurveyed sec. 27, T. 43 N., R. 8 W., New Mexico Principal Meridian, in the Sneffels Mining district near Ouray, Colorado (fig. 1), at altitudes of 9,600 to 11,000 feet above sea level. The claims (fig. 2) straddle the route of the crosscut adit or tunnel to the 14th level of the Camp Bird mine. The property is near the center of the extensive San Juan mining region. Colorado state secondary highway 316 connects Ouray to the Camp Bird mine and the site of exploration. The six miles of gravelled road is maintained by Ouray County throughout the year with the exception of occasional two- or three-day periods during severe storms. The altitude of the portal of the adit leading to the Camp Bird mine and passing beneath the Fortuna claims is about 9,800 feet.

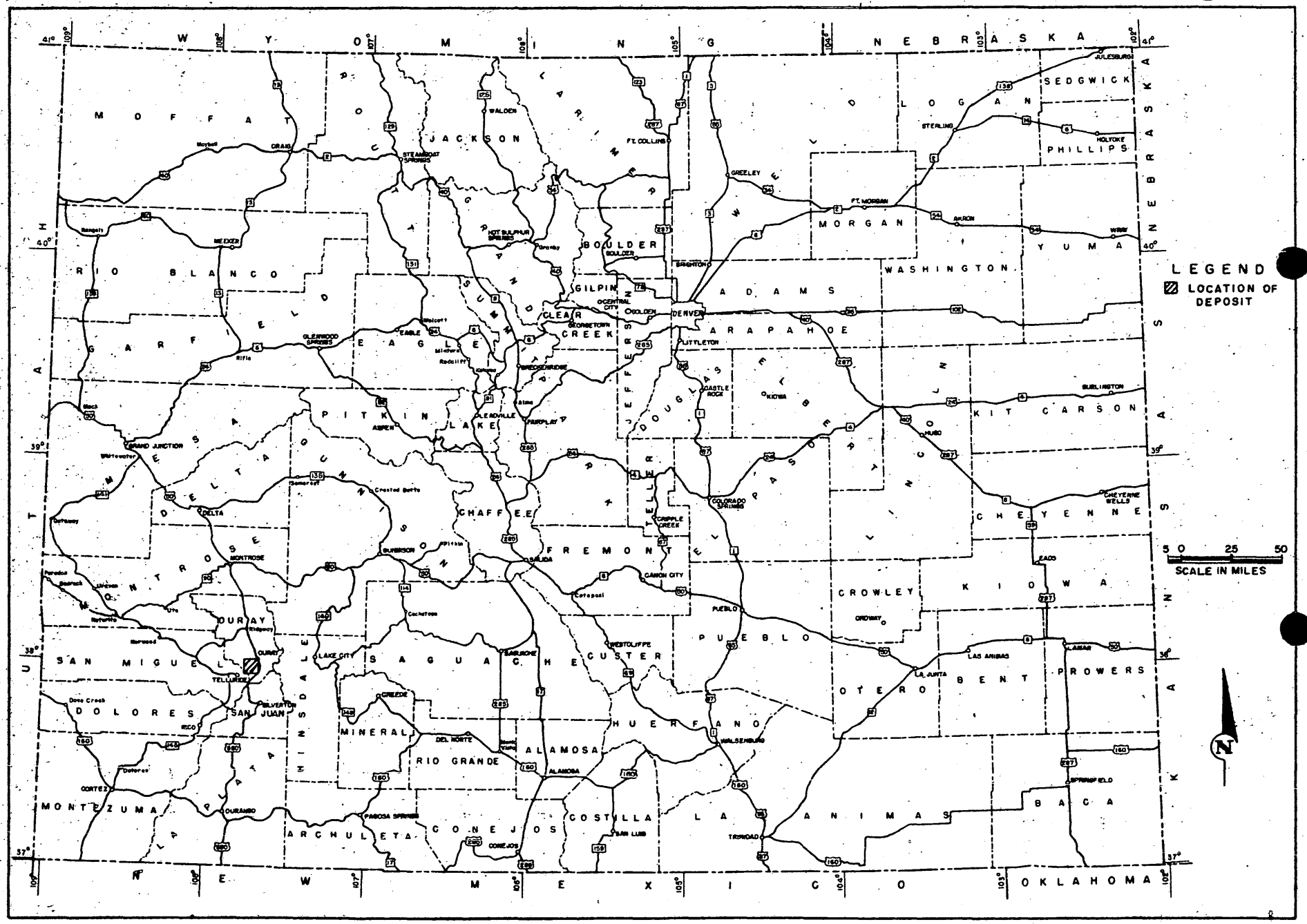

FIGURE 1 - LOCATION MAP, KING LEASE INC., FORTUNA CLAIMS, OURAY COUNTY, COLO. DMEA 4042

The region is one of rugged and precipitous slopes and heavy snowfall. Water is plentiful from Canyon Creek and its tributaries. The area is served by the Denver and Rio Grande Western Railroad at Ridgway, Colorado.

HISTORY AND PRODUCTION

The original mineral discovery in the area was made during 1877 on what is known as the Camp Bird, Ltd., property. In 1896, Thomas F. Walsh consolidated a large group of claims under the name of Camp Bird mine. In 1902 Walsh sold part of his holdings to a Colorado Corporation known as the Camp Bird Mining Co. In 1913 all claims were disposed of to the Camp Bird, Ltd., of London, England, present owners of the Camp Bird mine. By 1916 mining operations in the Camp Bird mine had progressed to a point where water in the lowest levels made further sinking impossible. A subsidiary, known as the Camp Bird Tunnel, Mining and Transportation Co., was then incorporated by Camp Bird, Ltd., to drive a lower level crosscut adit, known as the 14th level, for 11,078 feet on a bearing of S. 11° 52' W., to intersect the Camp Bird vein 2,000 feet below its apex. In 1925 the property was leased to the Camp Bird Leasing Co., later incorporated under the name of King Lease, Inc. King Lease, Inc., is presently operating the Camp Bird mine from the 14th level crosscut adit.

King Lease, Inc., located the Fortuna No. 1 and No. 2 lode claims (fig. 2) on August 8, 1955. The discovery is described as a vein

exposure in the crosscut adit 3,455 feet in from its portal and 900 feet below the surface.

There has been no production from the Fortuna claims to date. The Yellow Rose claim to the southeast of the Fortuna No. 1 claim is credited with some production at a considerably higher level (± 1,000) and there are several large dumps and the remains of two old mills. This claim and the underground workings were completely inaccessible to the examining team.

OWNERSHIP

King Lease, Inc., a Colorado corporation, owns the Fortuna No. 1 and Fortuna No. 2 claims (fig. 2) by right of location. The claims are standard (600 by 1,500 feet) lode locations which straddle the Camp Bird 14th level crosscut adit to the Camp Bird vein and mine. The claims were located on the basis of a vein exposure in the Camp Bird, Ltd. (Camp Bird Tunnel, Mining and Transportation Co.) crosscut adit, about 3,455 feet in from its portal. The claims were located by L. D. Barry, general manager of King Lease, Inc., on August 8, 1955, and recorded at the Ouray County courthouse at Ouray, Colorado on September 13, 1955.

The Fortuna No. 1 claim location certificate is recorded on page 73 of book 152. The "Portal notice of location" is recorded on page 74 of book 152.

The Fortuna No. 2 claim location certificate is recorded on page 74 of book 152. Its "Portal notice of location" is recorded on page 75 of book 152.

While the applicant's vein exposure in the 14th level crosscut is directly beneath the Fortuna claims (fig. 2), the vein appears to be the Yellow Rose vein which crops out on the Millionaire and U. S. Depository claims about 1,400 feet above. King Lease, Inc., does not own or control these claims. The southeast extension of the Yellow Rose vein crosses the Yellow Rose claim which is part of the Camp Bird Ltd., property under lease to King Lease, Inc.

Camp Bird, Ltd., has agreed to only one year extensions on their lease to the applicant, and there is some question as to whether it will be renewed after this year or whether it will be for longer than the customary one year. The current lease expires December 31, 1956.

Any exploration of the Yellow Rose vein at the crosscut adit level would require the subordination of the patented U. S. Depository (474) and Millionaire (472) patented claims owned by the Walsh-McLean estate. The Chief Deposit (167) to the northwest and the Yellow Rose (576) patented claims to the southeast should also be included.

The lease between Camp Bird, Ltd., and the applicant stipulates that if the lease is recorded in any public office it will be subject to immediate cancellation.

GEOLOGY

The geology of the Sneffels-Telluride area is described in U. S. Geological Survey Folio 57 by Whitman Cross and C. W. Purington (1899), and Folio 120 by Whitman Cross, Ernest Howe, and F. L. Ransome (1905); in Economic Geology, Vol. XX, number 2 by J. E. Spurr (1925), and in U. S. Geological Survey Bulletin 906-E by W. S. Burbank (1940). Each of these papers has been used as a source of general background information in the preparation of this report.

In the Richmond Basin-Imogene Basin area, where the applicant proposes to explore, the only rock of known economic importance is the San Juan tuff formation of early Eocene age. This formation comprises about 2,600 feet of andesitic breccia containing all sizes of angular fragments of andesite imbedded in fine-grained andesitic material. This is overlain by a sheet of andesite about 50 feet thick called the first andesite flow. Above the flow is 200 to 300 feet of breccia similar to that below it. Above this breccia is another andesite sheet about 150 feet thick. Next there is about 500 feet of andesite breccias with andesite flows and flow-breccias. Finally, there is about 600 feet of rhyolite flows.

In 1945 and 1946 the U. S. Bureau of Mines drilled seven diamond drill holes in the walls of the Camp Bird vein. This drilling indicated that the bottom of the San Juan tuff is about 380 feet below the 14th level.

There are two principal sets of fissures, one set striking northwesterly and dipping northerly, the other set striking nearly east and west and dipping southerly. Fissures of the northwesterly-striking set are much more numerous than those of the east-west set. Most of the production, however, has come from the latter set of fissures in the Camp Bird, Tomboy, Smuggler Union, and Virginius mines.

In the Camp Bird mine a zone of high grade gold ore extends about 500 feet from the bottom of the first andesite flow to the 3rd level. The average grade of ore mined from this zone, as given by the applicant in Docket DMA 1144-X, is 1.4 ounces gold and 2 ounces silver per ton. No grade is available for lead, zinc, and copper in this zone. Below the 3rd level to the 6th level the average gold content decreased to 0.13 ounce per ton, and the average silver content increased to 4.5 ounces per ton. This zone is reported by the applicant (Docket DMA 1144-X) to have an average content of 2.2 percent lead and 2.4 percent zinc. In a section along the vein, accompanying application DMA 1144-X, three blocks of calculated ore totalling 36,160 tons, are shown as having the following average grade:

1. Below the 12th level: 0.03 ounce gold and 2.9 ounces silver per ton, 1.8 percent lead, 3.8 percent zinc, and 0.47 percent copper.

2. Below the 5th level: 0.08 ounce gold and 2.3 ounces silver per ton, 3.1 percent lead, 2.5 percent zinc, and 0.32 percent copper.

3. Above the 5th level: 0.02 ounce gold and 1.8 ounces silver per ton, 3.2 percent lead, 4.0 percent zinc, and 0.32 percent copper.

There appears to be little change in the grade of ore between the 5th and the 14th levels, the average values being: 0.04 ounce gold and 2.3 ounces silver per ton, 2.7 percent lead, 3.4 percent zinc, and 0.37 percent copper.

The vein which the applicant proposes to explore is one of the northwesterly-striking set of veins. It has an average strike of N. 45° W. and dips about 70° NE at the surface, according to a report by C. W. Vaupell, made for the applicant in 1930. In a report written by A. Von Schultz in 1883-84 it is stated that the Yellow Rose vein is traceable on the surface for more than 3 miles and that it ranges in width from 4 to 8 feet. It is stated in the same report that the Yellow Rose vein has been developed on the Yellow Rose claims by a drift 480 feet long, and on the Declaration and Agnes claims southeast of the Yellow Rose claim by two tunnels 100 feet and 610 feet long, respectively. This work was all done southeast of the proposed project area and at a horizon that has been eroded from the applicant's claims.

In the Camp Bird 14th level crosscut, about 3,455 feet from the portal, is a vein which is believed to be the Yellow Rose. It is about 5 feet wide, strikes N. 38° W. and dips 70° NE. This vein has been followed for 65 feet to the southeast by a drift. At distances of 26 feet and 39 feet from the crosscut, raises have been driven to heights of 44 feet and 49 feet, respectively. At a height of 24 feet

above the drift floor the dip of the vein begins to flatten from 72° NE until at the breast, it is 50° NE. On the level the vein is 4.5 to 7 feet wide consisting of quartz and brecciated wall rock with lead and zinc sulfides as stringers and nodules replacing many of the breccia fragments. Along the hangingwall side of the vein, at the breast of the drift, is a 2- to 3-foot zone of massive sulfides. Two samples of the vein taken by the applicant, one at the crosscut and one at a distance of 59 feet from the crosscut, assayed:

	Width (feet)	Ounces per ton		Percent		
		Gold	Silver	Lead	Zinc	Copper
At the crosscut	3.8	.01	6.2	4.4	2.9	.30
At 59 feet	3.0	.02	8.3	7.8	3.6	.30

A sample taken by the examiners over a width of 7 feet at the breast of the drift assayed 0.02 ounce gold and 15.6 ounces silver per ton, 4.4 percent lead, 5.8 percent zinc, and 0.60 percent copper. The average width and grade of these three samples is 4.6 feet, and 0.02 ounce gold and 10.7 ounces silver per ton, 5.1 percent lead, and 0.45 percent copper.

In the raises, as the vein flattened, the quartz pinched out and the sulfides disappeared. At the top of the raises the vein was a sheeted zone, unmineralized except for one small lens of quartz about 2 feet long and 1 foot thick.

Whether or not the vein on the 14th level and in the raises continues as shown in the section, figure 2, or whether it steepens and outcrops on the surface north of the Yellow Rose cannot be positively

stated. However, no such vein on the surface is known to the applicant between the Yellow Rose vein and the Fortuna vein, and to be the Fortuna, the vein on the level would have to reverse dip. Moreover, there is no other vein in the crosscut that is as close to the projected dip of the Yellow Rose as determined by a line through its outcrop and the lower level workings. Therefore, it is reasonable to believe, as the applicant states in Docket 1144-X, that the proposed exploration will be on the Yellow Rose vein. Moreover, it is probable that the dip of the Yellow Rose vein will not steepen appreciably until it is about 200 feet below the Yellow Rose lower adit, a distance of 800 to 1,000 feet above the 14th level along the dip of the vein.

The only data on the tenor of the ore in the higher portions of the Yellow Rose vein are the assays of samples taken by C. W. Vaupell from the Yellow Rose dump some 1,000 feet above, and about 1,500 to 2,000 feet southeast of the 14th level crosscut. In the application DMA 1144-X the applicant quotes Vaupell "Samples have been taken off the Yellow Rose dumps at the site of the upper mill as follows:

	Ounces per ton		Percent	
	Gold	Silver	Lead	Zinc
No. 1	Trace	20.9	Not assayed	
No. 2	0.04	47.9	"	"
No. 3	0.04	200.5	"	"
No. 4	0.16	29.0	20.0	9.0

"The best looking part of the Yellow Rose outcrop is southeast of the Camp Bird Ltd. ownership at elevations of 11,000 to 12,000 feet in the Sunflower claim. An outcrop sample over a width of 6 feet gave assays as follows: No. 5, 0.02 ounce gold and 5.3 ounces silver per ton, 5.3 percent lead."

ORE RESERVES

There is no basis on which to make an estimate of ore reserves on the Yellow Rose vein. The vein has been reported by A. Von Schultz (1883-84) as cropping out 4 to 8 feet wide and as traceable for over 3 miles. In 1908 J. E. Spurr recommended development of the Yellow Rose vein below the first andesite flow. This horizon has been eroded immediately above the applicant's claims, but is present 1,200 to 1,500 feet southeast of the crosscut.

PRESENT STATUS

Exploration and development

The Fortuna claims (fig. 2) straddle the Camp Bird 14th level crosscut adit which was driven 11,078 feet on a S. 11° - 52' W., bearing to the Camp Bird vein and mine. At a location 3,455 feet in from the portal of the above-mentioned access adit to the Camp Bird mine, the Yellow Rose vein crosses the adit with a strike of about N. 38° W. This vein has been drifted on for 65 feet to the southeast. In addition, two untimbered raises have been advanced to 44 feet and 49 feet, respectively, above the drift sill. The raise centers are 26 and 39 feet in, respectively, from the side of the crosscut. A

horizontal EX-size hole was core drilled from a location 32 feet south of the vein crossing and in the crosscut adit. The hole was drilled on a S. 80° W. bearing from the west wall of the adit to a depth of 37 feet. About 3 feet of vein was cut between hole depths of 23' 7" and 26' 7". This segment of the vein was quartz with small scattered crystals of galena and sphalerite.

Mining, milling, and other facilities

The applicant, King Lease, Inc., owns and operates a mine plant which is presently producing about 175 tons of lead-zinc-copper ore per day from the Camp Bird mine which they have under lease. This ore is hauled from stopes above the 14th level of the Camp Bird mine and through the 11,078-foot Camp Bird crosscut adit. King Lease, Inc., also owns and operates a 175-ton per day differential flotation mill which produces both lead-copper and zinc concentrates. The plant is completely electrified and electric trolley locomotives are used for haulage of 40-cubic-foot mine cars.

King Lease, Inc., is completely equipped for mining and exploration. Shops and personnel are adequate for any repairs, maintenance, and mining operations. Electrical energy is supplied by the Western Colorado Power Company. Water is available for all mining and milling operations. Timber is available locally. All supplies are readily transported to the portal and buildings of the Camp Bird 14th level

crosscut adit from many sources including Denver. Transportation is by truck and railroad facilities.

Labor is readily obtainable locally and living accomodations are available at the mine and in Ouray. Zinc ores and concentrates are trucked to Ridgway and shipped by rail to Amarillo, Texas. Lead-copper ores are trucked to the American Smelting and Refining Company smelter at Leadville, Colorado.

PROJECT PROPOSALS

King Lease, Inc., proposes to drift 1,500 feet southeast and 1,000 feet northwest along a vein exposed in the Camp Bird 14th level crosscut adit 3,455 feet in from the portal (fig. 2). The proposed exploration is within the confines of the Fortuna claims No. 1 and No. 2. In addition, the applicant proposes to drive three 300-foot exploration raises on the vein at locations shown on figure 2. The total cost of exploration was originally estimated at $150,170.

King Lease, Inc., proposes to operate two drift headings simultaneously with an advance of 5 feet per day in each heading. At an estimated advance of 250 feet per month, at least 10 months would be required to complete the drifting. An estimated 3 feet of advance per day in each raise, working more or less simultaneously with drifting would complete the total exploration in about 1 year.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that:

1. The bottom of the best ore in the Yellow Rose vein is about 800 to 1,000 feet above and 1,200 to 1,500 feet southeast of the intersection of the Yellow Rose vein and the 14th level crosscut, and that the average grade below the best ore horizon will not exceed 0.04 ounce gold and 5.6 ounces silver per ton, 5.0 percent lead, 4.0 percent zinc, and 0.40 percent copper.

2. For a distance of about 800 to 1,000 feet above the 14th level, the dip of the Yellow Rose vein is too flat to be a favorable host for ore deposition in significant amounts.

3. The applicant does not own the apex rights to the vein he proposes to explore (Yellow Rose vein);

4. There is no assurance that the existing lease between the King Lease and Camp Bird, Ltd., will be renewed after it expires December 31, 1956.

Therefore, it is recommended that this application be denied. However, should the applicant acquire satisfactory control of the Millionaire and U. S. Depository claims and the intervening ground, as well as access to the Camp Bird, Ltd., 14th level crosscut, a program of diamond drilling to explore the vein below the 14th level can be recommended for approval. This possibility was not discussed with the applicant because the data available at the time of the examination were incomplete.

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

March 8, 1956

224 New Customhouse
Denver 2, Colorado

Gruswold
Betty

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MAR 12 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4042 (Lead-Zinc-Copper), King Lease, Inc., Fortuna claims, Ouray County, Colorado

Enclosed are the original and three copies of the joint engineering and geologic report on the subject docket.

The field examiners conclude that the Fortuna vein is actually the Yellow Rose vein which was the subject of DMEA Docket 1144X and that the applicant does not have apex rights to the Fortuna (Yellow Rose) vein. The vein flattens immediately above the level at which the applicant wishes to explore and may well remain flat, and barren, to a point some 800 feet above that level. The field examiners recommend that the application be denied, and we concur in this recommendation.

If, at a later date, the applicant would be interested in exploration work below the 14th level of the Camp Bird Mine, proper consideration would be given his application; provided that he has satisfactory control of the claims on which the Yellow Rose (Fortuna) vein apexes, and should their lease on the haulage (14th) level of the Camp Bird Mine be extended beyond December 31, 1956.

DMEA Field Team, Region III

By W. M. Traver
W. M. Traver
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE

(date)

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED MAR 12 1956

IN REPLY REFER TO:
DMEA
Date Rec'd
MAR 7 1956
BUREAU OF MINES
Denver, Colorado

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

March 6, 1956

TRANSMITTED
MAR 8 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA Docket 4042 (Lead-zinc-copper), King Lease, Inc., Fortuna claims, Ouray County, Colorado

Enclosed are the original and eight copies of a joint engineering and geologic report by D. R. MacLaren, Geological Survey, and C. M. Harrer, Bureau of Mines, covering their examination of the subject property.

The applicant proposes to explore the Fortuna vein by 2,500 feet of drifting and three 300-foot raises from the drift level. The applicant's estimated cost of the proposed project is $150,170, Government participation 50 percent or $75,085.

The examining team concludes that the Fortuna vein of the applicant is actually the Yellow Rose vein which was the subject of a prior application (DMEA Docket 1144X) and that the applicant does not have apex rights to the Fortuna (Yellow Rose) vein. Furthermore, the vein changes dip (flattens) immediately above the level at which the applicant wishes to explore and may well remain flat, and barren, to a point some 800 feet above that level.

Denial of the application is recommended.

Should the applicant acquire satisfactory control of the claims on which the Yellow Rose (Fortuna) vein crops out, and should their lease on the haulage (14th) level of the Camp Bird mine be extended beyond December 31, 1956, exploration of the Yellow Rose vein below the 14th level would be recommended.

John F. Shaw
Superintendent of the Denver Experiment Station

E. N. Harshman
Member, Field Team

Reviewed by
DMEA OPERATING COMMITTEE

(date)

Enclosures (9)
ENHarshman:mp

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MAR 12 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED
MAR 8 1956

DMEA 4042

The King Lease, Inc.

Fortuna Claims

Ouray County, Colorado

Lead-Zinc-Copper

Joint Engineering and Geological Report

by

D. R. MacLaren, Geologist
Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

March 5, 1956

Reviewed by
DMEA CLEARING COMMITTEE

(date)

RECEIVED
MAR 12 1956

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DMEA 4042

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THE KING LEASE, INC.
FORTUNA CLAIMS
OURAY COUNTY, COLORADO

SUMMARY

The King Lease, Incorporated, a Colorado corporation, has applied for Defense Minerals Exploration Administration assistance to explore their Fortuna lode claims for lead-zinc-copper ore at an over-all cost of $150,170.

They own the Fortuna No. 1 and No. 2 standard lode claims by right of location. The claims are in approximate sec. 27 of the unsurveyed T. 43 N., R. 8 W., in the Sneffels mining district of Ouray County, Colorado, at an altitude of about 9,800 feet. They also operate the Camp Bird mine as lessee.

The property is 6 miles southwest of Ouray and 16 miles southwest of Ridgway, Colorado.

The property was examined on January 10, 1956, in the company of Franklin A. Bell, Superintendent of King Lease, Inc.

The applicant proposes to explore the Fortuna claims by 2,500 feet of drifting, 1,500 feet of which would be to the southeast along the vein which is exposed in the 14th level crosscut, and 1,000 feet would be along this vein and northwest of the crosscut. In addition, two 300-foot raises would be driven from the southeast drift and one from the northwest drift. The vein which the applicant proposes to

explore is in the 14th level crosscut and is directly beneath the center line of his Fortuna claims. The vein appears to be the Yellow Rose vein which apexes on the Millionaire and U. S. Depository claims. These claims are not owned or controlled by the applicant. The applicant's lease on Camp Bird, Ltd., property expires on December 31, 1956.

The only rock exposed on the applicant's claims is the San Juan tuff that has been cut by two prominent sets of fissures, one set striking nearly east-west and dipping south, the other set striking northwesterly and dipping north. Both sets of fissures contain gold, silver, lead, zinc, and copper minerals in a gangue of quartz and brecciated wall rock. Gold values are high in the upper portion of the veins forming bonanza ore bodies, while the silver, lead, zinc, and copper minerals are present in fairly constant amounts from the surface to the deepest mine workings. Wherever they flatten to dips of less than 60 degrees, the veins are unmineralized sheeted zones. The vein the applicant proposes to explore flattens to 55 degrees about 24 feet above the 14th level.

It is concluded that:

1. The bottom of the best ore in the Yellow Rose vein is about 800 to 1,000 feet above and 1,200 to 1,500 feet southeast of the intersection of the Yellow Rose vein and the 14th level crosscut, and that the average grade below the best ore horizon will not exceed 0.04 ounce gold and 5.6 ounces silver per ton, 5 percent lead, 4 percent zinc, and 0.4 percent copper.

2. For a distance of about 800 to 1,000 feet above the 14th level, the dip of the Yellow Rose vein is too flat to be a favorable host for ore deposition in significant amounts.

3. The applicant does not own or control the apex rights to the vein he proposes to explore.

4. There is no assurance that the existing lease between Camp Bird, Ltd., and the King Lease, Inc., will be renewed after it expires on December 31, 1956, and the present lease stipulates that any recording in a public office is immediate cause for cancellation.

Because of the limited height of mineralization directly above the 14th level, it is recommended that this application for DMEA exploration assistance be denied.

However, should the applicant acquire satisfactory control of the Millionaire and U. S. Depository claims and the intervening ground, as well as access to the Camp Bird, Ltd., 14th level crosscut, a program of diamond drilling to explore the vein below the 14th level can be recommended for approval.

INTRODUCTION AND ACKNOWLEDGMENTS

King Lease, Inc., a Colorado corporation whose address is Ouray, Colorado, owns the two standard lode locations known as the Fortuna claims 1 and 2, which straddle the Camp Bird 14th level crosscut adit to the Camp Bird mine (fig. 2).

King Lease, Inc., has applied for DMEA assistance to explore their claims with 2,500 feet of drifting along what they call the

Fortuna vein and with three 300-foot raises from the drift levels. Over-all cost of the project was estimated at $150,170 and Government participation would be 50 percent or $75,085.

An examination was made of the property by a Bureau of Mines and Geological Survey team on January 10, 1956, in the company of F. A. Bell, superintendent for King Lease, Inc. Messrs. K. Moore and L. D. Barry, Vice-president and General Manager, respectively, for King Lease, Inc., were contacted in Gunnison on January 11, 1956. They contributed additional information not available to Mr. Bell.

Pertinent information included in a prior application for DMEA assistance (Docket DMA-1144X) to explore the Yellow Rose vein during 1951 has been incorporated in this report.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The applicant's property, consisting of the Fortuna claims Nos. 1 and 2, is estimated to be in unsurveyed sec. 27, T. 43 N., R. 8 W., New Mexico Principal Meridian, in the Sneffels Mining district near Ouray, Colorado (fig. 1), at altitudes of 9,600 to 11,000 feet above sea level. The claims (fig. 2) straddle the route of the crosscut adit or tunnel to the 14th level of the Camp Bird mine. The property is near the center of the extensive San Juan mining region. Colorado state secondary highway 316 connects Ouray to the Camp Bird mine and the site of exploration. The six miles of gravelled road is maintained by Ouray County throughout the year with the exception of occasional two- or three-day periods during severe storms. The altitude of the portal of the adit leading to the Camp Bird mine and passing beneath the Fortuna claims is about 9,800 feet.

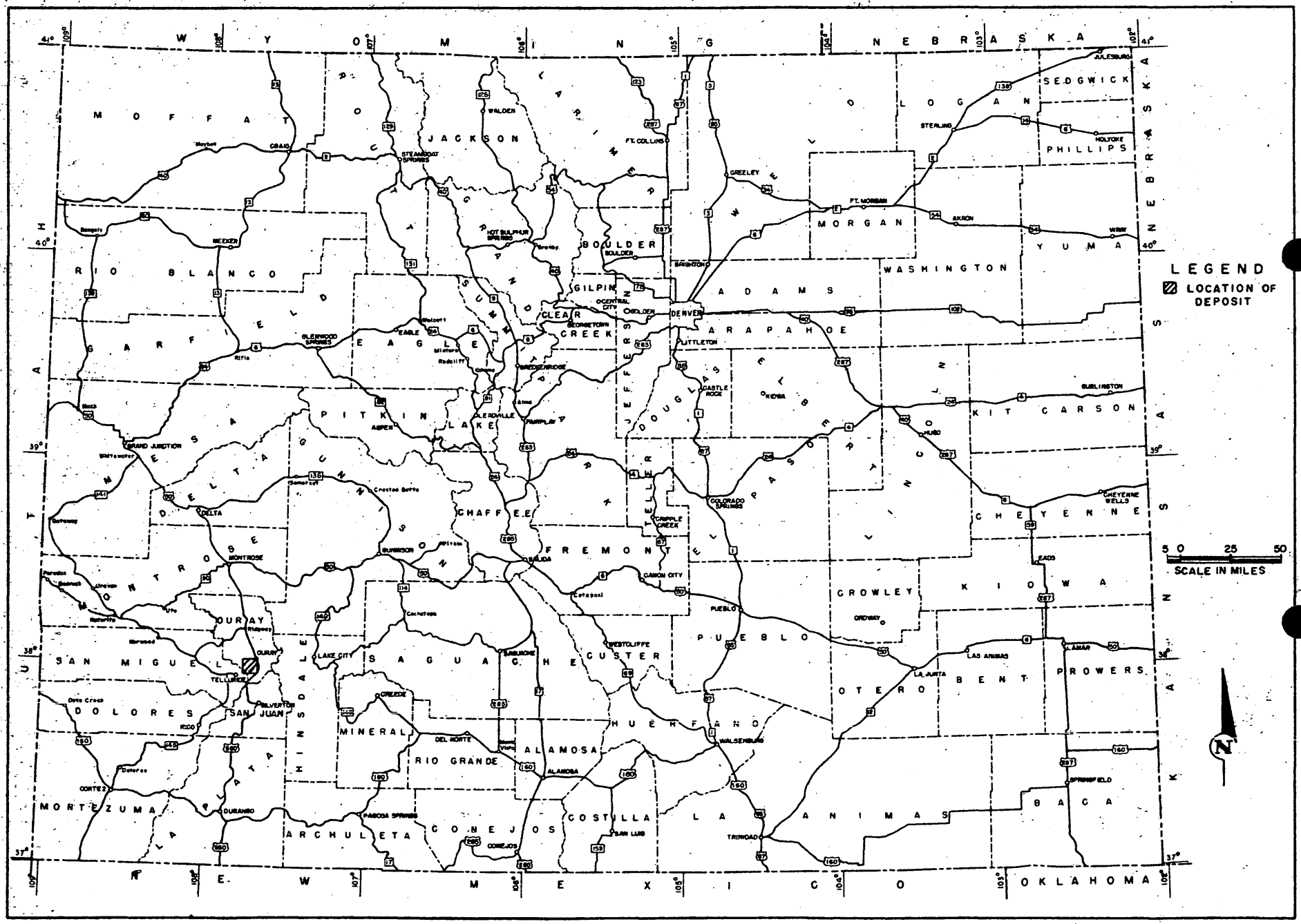

FIGURE 1 - LOCATION MAP, KING LEASE INC., FORTUNA CLAIMS, OURAY COUNTY, COLO. DMEA 4042

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The region is one of rugged and precipitous slopes and heavy snowfall. Water is plentiful from Canyon Creek and its tributaries. The area is served by the Denver and Rio Grande Western Railroad at Ridgway, Colorado.

HISTORY AND PRODUCTION

The original mineral discovery in the area was made during 1877 on what is known as the Camp Bird, Ltd., property. In 1896, Thomas F. Walsh consolidated a large group of claims under the name of Camp Bird mine. In 1902 Walsh sold part of his holdings to a Colorado Corporation known as the Camp Bird Mining Co. In 1913 all claims were disposed of to the Camp Bird, Ltd., of London, England, present owners of the Camp Bird mine. By 1916 mining operations in the Camp Bird mine had progressed to a point where water in the lowest levels made further sinking impossible. A subsidiary, known as the Camp Bird Tunnel, Mining and Transportation Co., was then incorporated by Camp Bird, Ltd., to drive a lower level crosscut adit, known as the 14th level, for 11,078 feet on a bearing of S. 11° 52' W., to intersect the Camp Bird vein 2,000 feet below its apex. In 1925 the property was leased to the Camp Bird Leasing Co., later incorporated under the name of King Lease, Inc. King Lease, Inc., is presently operating the Camp Bird mine from the 14th level crosscut adit.

King Lease, Inc., located the Fortuna No. 1 and No. 2 lode claims (fig. 2) on August 8, 1955. The discovery is described as a vein

exposure in the crosscut adit 3,455 feet in from its portal and 900 feet below the surface.

There has been no production from the Fortuna claims to date.

The Yellow Rose claim to the southeast of the Fortuna No. 1 claim is credited with some production at a considerably higher level (± 1,000) and there are several large dumps and the remains of two old mills. This claim and the underground workings were completely inaccessible to the examining team.

OWNERSHIP

King Lease, Inc., a Colorado corporation, owns the Fortuna No. 1 and Fortuna No. 2 claims (fig. 2) by right of location. The claims are standard (600 by 1,500 feet) lode locations which straddle the Camp Bird 14th level crosscut adit to the Camp Bird vein and mine. The claims were located on the basis of a vein exposure in the Camp Bird, Ltd. (Camp Bird Tunnel, Mining and Transportation Co.) crosscut adit, about 3,455 feet in from its portal. The claims were located by L. D. Barry, general manager of King Lease, Inc., on August 8, 1955, and recorded at the Ouray County courthouse at Ouray, Colorado on September 13, 1955.

The Fortuna No. 1 claim location certificate is recorded on page 73 of book 152. The "Portal notice of location" is recorded on page 74 of book 152.

The Fortuna No. 2 claim location certificate is recorded on page 74 of book 152. Its "Portal notice of location" is recorded on page 75 of book 152.

While the applicant's vein exposure in the 14th level crosscut is directly beneath the Fortuna claims (fig. 2), the vein appears to be the Yellow Rose vein which crops out on the Millionaire and U. S. Depository claims about 1,400 feet above. King Lease, Inc., does not own or control these claims. The southeast extension of the Yellow Rose vein crosses the Yellow Rose claim which is part of the Camp Bird Ltd., property under lease to King Lease, Inc.

Camp Bird, Ltd., has agreed to only one year extensions on their lease to the applicant, and there is some question as to whether it will be renewed after this year or whether it will be for longer than the customary one year. The current lease expires December 31, 1956.

Any exploration of the Yellow Rose vein at the crosscut adit level would require the subordination of the patented U. S. Depository (474) and Millionaire (472) patented claims owned by the Walsh-McLean estate. The Chief Deposit (167) to the northwest and the Yellow Rose (576) patented claims to the southeast should also be included.

The lease between Camp Bird, Ltd., and the applicant stipulates that if the lease is recorded in any public office it will be subject to immediate cancellation.

GEOLOGY

The geology of the Sneffels-Telluride area is described in U. S. Geological Survey Folio 57 by Whitman Cross and C. W. Purington (1899), and Folio 120 by Whitman Cross, Ernest Howe, and F. L. Ransome (1905); in Economic Geology, Vol. XX, number 2 by J. E. Spurr (1925), and in U. S. Geological Survey Bulletin 906-E by W. S. Burbank (1940). Each of these papers has been used as a source of general background information in the preparation of this report.

In the Richmond Basin-Imogene Basin area, where the applicant proposes to explore, the only rock of known economic importance is the San Juan tuff formation of early Eocene age. This formation comprises about 2,600 feet of andesitic breccia containing all sizes of angular fragments of andesite imbedded in fine-grained andesitic material. This is overlain by a sheet of andesite about 50 feet thick called the first andesite flow. Above the flow is 200 to 300 feet of breccia similar to that below it. Above this breccia is another andesite sheet about 150 feet thick. Next there is about 500 feet of andesite breccias with andesite flows and flow-breccias. Finally, there is about 600 feet of rhyolite flows.

In 1945 and 1946 the U. S. Bureau of Mines drilled seven diamond drill holes in the walls of the Camp Bird vein. This drilling indicated that the bottom of the San Juan tuff is about 380 feet below the 14th level.

There are two principal sets of fissures, one set striking northwesterly and dipping northerly, the other set striking nearly east and west and dipping southerly. Fissures of the northwesterly-striking set are much more numerous than those of the east-west set. Most of the production, however, has come from the latter set of fissures in the Camp Bird, Tomboy, Smuggler Union, and Virginius mines.

In the Camp Bird mine a zone of high grade gold ore extends about 500 feet from the bottom of the first andesite flow to the 3rd level. The average grade of ore mined from this zone, as given by the applicant in Docket DMA 1144-X, is 1.4 ounces gold and 2 ounces silver per ton. No grade is available for lead, zinc, and copper in this zone. Below the 3rd level to the 6th level the average gold content decreased to 0.13 ounce per ton, and the average silver content increased to 4.5 ounces per ton. This zone is reported by the applicant (Docket DMA 1144-X) to have an average content of 2.2 percent lead and 2.4 percent zinc. In a section along the vein, accompanying application DMA 1144-X, three blocks of calculated ore totalling 36,160 tons, are shown as having the following average grade:

1. Below the 12th level: 0.03 ounce gold and 2.9 ounces silver per ton, 1.8 percent lead, 3.8 percent zinc, and 0.47 percent copper.

2. Below the 5th level: 0.08 ounce gold and 2.3 ounces silver per ton, 3.1 percent lead, 2.5 percent zinc, and 0.32 percent copper.

3. Above the 5th level: 0.02 ounce gold and 1.8 ounces silver per ton, 3.2 percent lead, 4.0 percent zinc, and 0.32 percent copper.

There appears to be little change in the grade of ore between the 5th and the 14th levels, the average values being: 0.04 ounce gold and 2.3 ounces silver per ton, 2.7 percent lead, 3.4 percent zinc, and 0.37 percent copper.

The vein which the applicant proposes to explore is one of the northwesterly-striking set of veins. It has an average strike of N. 45° W. and dips about 70° NE at the surface, according to a report by C. W. Vaupell, made for the applicant in 1930. In a report written by A. Von Schultz in 1883-84 it is stated that the Yellow Rose vein is traceable on the surface for more than 3 miles and that it ranges in width from 4 to 8 feet. It is stated in the same report that the Yellow Rose vein has been developed on the Yellow Rose claims by a drift 480 feet long, and on the Declaration and Agnes claims southeast of the Yellow Rose claim by two tunnels 100 feet and 610 feet long, respectively. This work was all done southeast of the proposed project area and at a horizon that has been eroded from the applicant's claims.

In the Camp Bird 14th level crosscut, about 3,455 feet from the portal, is a vein which is believed to be the Yellow Rose. It is about 5 feet wide, strikes N. 38° W. and dips 70° NE. This vein has been followed for 65 feet to the southeast by a drift. At distances of 26 feet and 39 feet from the crosscut, raises have been driven to heights of 44 feet and 49 feet, respectively. At a height of 24 feet

above the drift floor the dip of the vein begins to flatten from 72° NE until at the breast, it is 50° NE. On the level the vein is 4.5 to 7 feet wide consisting of quartz and brecciated wall rock with lead and zinc sulfides as stringers and nodules replacing many of the breccia fragments. Along the hangingwall side of the vein, at the breast of the drift, is a 2- to 3-foot zone of massive sulfides. Two samples of the vein taken by the applicant, one at the crosscut and one at a distance of 59 feet from the crosscut, assayed:

	Width (feet)	Ounces per ton Gold	Silver	Lead	Percent Zinc	Copper
At the crosscut	3.8	.01	6.2	4.4	2.9	.30
At 59 feet	3.0	.02	8.3	7.8	3.6	.30

A sample taken by the examiners over a width of 7 feet at the breast of the drift assayed 0.02 ounce gold and 15.6 ounces silver per ton, 4.4 percent lead, 5.8 percent zinc, and 0.60 percent copper. The average width and grade of these three samples is 4.6 feet, and 0.02 ounce gold and 10.7 ounces silver per ton, 5.1 percent lead, and 0.45 percent copper.

In the raises, as the vein flattened, the quartz pinched out and the sulfides disappeared. At the top of the raises the vein was a sheeted zone, unmineralized except for one small lens of quartz about 2 feet long and 1 foot thick.

Whether or not the vein on the 14th level and in the raises continues as shown in the section, figure 2, or whether it steepens and outcrops on the surface north of the Yellow Rose cannot be positively

stated. However, no such vein on the surface is known to the applicant between the Yellow Rose vein and the Fortuna vein, and to be the Fortuna, the vein on the level would have to reverse dip. Moreover, there is no other vein in the crosscut that is as close to the projected dip of the Yellow Rose as determined by a line through its outcrop and the lower level workings. Therefore, it is reasonable to believe, as the applicant states in Docket 1144-X, that the proposed exploration will be on the Yellow Rose vein. Moreover, it is probable that the dip of the Yellow Rose vein will not steepen appreciably until it is about 200 feet below the Yellow Rose lower adit, a distance of 800 to 1,000 feet above the 14th level along the dip of the vein.

The only data on the tenor of the ore in the higher portions of the Yellow Rose vein are the assays of samples taken by C. W. Vaupell from the Yellow Rose dump some 1,000 feet above, and about 1,500 to 2,000 feet southeast of the 14th level crosscut. In the application DMA 1144-X the applicant quotes Vaupell "Samples have been taken off the Yellow Rose dumps at the site of the upper mill as follows:

	Ounces per ton		Percent	
	Gold	Silver	Lead	Zinc
No. 1	Trace	20.9	Not assayed	
No. 2	0.04	47.9	"	"
No. 3	0.04	200.5	"	"
No. 4	0.16	29.0	20.0	9.0

"The best looking part of the Yellow Rose outcrop is southeast of the Camp Bird Ltd. ownership at elevations of 11,000 to 12,000 feet in the Sunflower claim. An outcrop sample over a width of 6 feet gave assays as follows: No. 5, 0.02 ounce gold and 5.3 ounces silver per ton, 5.3 percent lead."

ORE RESERVES

There is no basis on which to make an estimate of ore reserves on the Yellow Rose vein. The vein has been reported by A. Von Schultz (1883-84) as cropping out 4 to 8 feet wide and as traceable for over 3 miles. In 1908 J. E. Spurr recommended development of the Yellow Rose vein below the first andesite flow. This horizon has been eroded immediately above the applicant's claims, but is present 1,200 to 1,500 feet southeast of the crosscut.

PRESENT STATUS

Exploration and development

The Fortuna claims (fig. 2) straddle the Camp Bird 14th level crosscut adit which was driven 11,078 feet on a S. 11° - 52' W., bearing to the Camp Bird vein and mine. At a location 3,455 feet in from the portal of the above-mentioned access adit to the Camp Bird mine, the Yellow Rose vein crosses the adit with a strike of about N. 38° W. This vein has been drifted on for 65 feet to the southeast. In addition, two untimbered raises have been advanced to 44 feet and 49 feet, respectively, above the drift sill. The raise centers are 26 and 39 feet in, respectively, from the side of the crosscut. A

horizontal EX-size hole was core drilled from a location 32 feet south of the vein crossing and in the crosscut adit. The hole was drilled on a S. 80° W. bearing from the west wall of the adit to a depth of 37 feet. About 3 feet of vein was cut between hole depths of 23' 7" and 26' 7". This segment of the vein was quartz with small scattered crystals of galena and sphalerite.

Mining, milling, and other facilities

The applicant, King Lease, Inc., owns and operates a mine plant which is presently producing about 175 tons of lead-zinc-copper ore per day from the Camp Bird mine which they have under lease. This ore is hauled from stopes above the 14th level of the Camp Bird mine and through the 11,078-foot Camp Bird crosscut adit. King Lease, Inc., also owns and operates a 175-ton per day differential flotation mill which produces both lead-copper and zinc concentrates. The plant is completely electrified and electric trolley locomotives are used for haulage of 40-cubic-foot mine cars.

King Lease, Inc., is completely equipped for mining and exploration. Shops and personnel are adequate for any repairs, maintenance, and mining operations. Electrical energy is supplied by the Western Colorado Power Company. Water is available for all mining and milling operations. Timber is available locally. All supplies are readily transported to the portal and buildings of the Camp Bird 14th level

crosscut adit from many sources including Denver. Transportation is by truck and railroad facilities.

Labor is readily obtainable locally and living accomodations are available at the mine and in Ouray. Zinc ores and concentrates are trucked to Ridgway and shipped by rail to Amarillo, Texas. Lead-copper ores are trucked to the American Smelting and Refining Company smelter at Leadville, Colorado.

PROJECT PROPOSALS

King Lease, Inc., proposes to drift 1,500 feet southeast and 1,000 feet northwest along a vein exposed in the Camp Bird 14th level crosscut adit 3,455 feet in from the portal (fig. 2). The proposed exploration is within the confines of the Fortuna claims No. 1 and No. 2. In addition, the applicant proposes to drive three 300-foot exploration raises on the vein at locations shown on figure 2. The total cost of exploration was originally estimated at $150,170.

King Lease, Inc., proposes to operate two drift headings simultaneously with an advance of 5 feet per day in each heading. At an estimated advance of 250 feet per month, at least 10 months would be required to complete the drifting. An estimated 3 feet of advance per day in each raise, working more or less simultaneously with drifting would complete the total exploration in about 1 year.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that:

1. The bottom of the best ore in the Yellow Rose vein is about 800 to 1,000 feet above and 1,200 to 1,500 feet southeast of the intersection of the Yellow Rose vein and the 14th level crosscut, and that the average grade below the best ore horizon will not exceed 0.04 ounce gold and 5.6 ounces silver per ton, 5.0 percent lead, 4.0 percent zinc, and 0.40 percent copper.

2. For a distance of about 800 to 1,000 feet above the 14th level, the dip of the Yellow Rose vein is too flat to be a favorable host for ore deposition in significant amounts.

3. The applicant does not own the apex rights to the vein he proposes to explore (Yellow Rose vein);

4. There is no assurance that the existing lease between the King Lease and Camp Bird, Ltd., will be renewed after it expires December 31, 1956.

Therefore, it is recommended that this application be denied. However, should the applicant acquire satisfactory control of the Millionaire and U. S. Depository claims and the intervening ground, as well as access to the Camp Bird, Ltd., 14th level crosscut, a program of diamond drilling to explore the vein below the 14th level can be recommended for approval. This possibility was not discussed with the applicant because the data available at the time of the examination were incomplete.

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
November 22, 1955

Docket

Memorandum

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

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

Subject: Docket DMEA 4042 (Lead-Zinc-Copper), The King Lease, Inc., Fortuna Lode claims, Ouray County, Colorado

The above brochure was received in this office on November 21, 1955.

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

John F. Shaw

cc 2 w/orig.
E. N. Harshman

Sec.Op.Comm. (2)

RECEIVED
NOV 25 1955

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

RECEIVED
NOV 21 1955

November 18, 1955

224 New Customhouse
Denver 2, Colorado

Docket Granted
Betty

Memorandum

To: J. F. Shaw (With brochure)
E. N. Harshman

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4042 (Lead-Zinc-Copper), The King Lease, Inc., Fortuna Lode claims, Ouray County, Colorado

Enclosed is the subject application in the amount of $150,170.00. Also enclosed for your information are the following:

1. Letter from the Chairman of the Operating Committee Dated November 15, 1955

2. Letter from the Administrator to the applicant dated November 15, 1955

3. Copy of a review of the application by O. M. Bishop

4. Copy of a review of the application by N. E. Nelson

5. Copy of our letter to the applicant dated November 18, 1955

A field examination and suitable report are requested.

W. M. Traver

By J. W. Townsend

Enclosures

HMC:ab
cc: Sec. Op. Comm. (2)

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

RECEIVED
NOV 21 1955

November 18, 1955

224 New Customhouse
Denver 2, Colorado

Mr. L. D. Barry, General Manager
The King Lease, Inc.
Ouray, Colorado

Re: Docket DMEA 4042 (Lead-Zinc-Copper), The King Lease, Inc., Fortuna Lode claims, Ouray County, Colorado

Dear Mr. Barry:

It is noted that your proposed exploration work is only accessible through the Camp Bird Mining and Tunnel Transportation Company tunnel. If you have easement rights to work the Fortuna claims through this tunnel, please submit a copy of your Lease, or other instrument which shows your right to use this tunnel for working other ground not owned by the owners of the property which you hold under lease.

Also please advise if Camp Bird, Lmtd., is the sole owner of the Camp Bird Mining and Tunnel Transporation Company tunnel.

Very truly yours,

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

By J. W. Townsend

HMC:ab

cc: Chair. Op. Comm. (2)

-500

MH 7

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

Please file this slip

DATE 11/10/55

REFERRED TO:

1. ~~Operating Committee~~
2. ~~Mr. Johnson~~
3. ~~Mr. Mitchell~~
4. Mails & Files

FOR:

	Action		Recommendation
X	Approval		Record
	Comment		of
	Conference		Referring
	Consideration		to
	Filing		Reply for signature of
	Instructions		
	Investigation		Rewriting
X	Initials	X	Signature
X	Mailing		Suggestions
	Previous correspondence		Your information

REMARKS:

Check (X) before the items needing attention.

W. R. C[illegible]

Initials of sender.

Document with Mr. Johnson. Cannot delay in light country.

bjm

JEL

GPO 16—67915-1

File Copy
Surname
Swanson
Martin
F. E. Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

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

NOV - - 1955

Re: Docket No. DMEA-402 (Lead-Zinc-Copper)
The King Lease, Inc.
Fortuna Lode Claims
Ouray County, Colorado

Dear Mr. Traver:

With reference to the cited application, we are enclosing the memorandums dated November 7 of Mr. O. M. Bishop, USBM, and Mr. N. E. Nelson, USGS. You will note that a field examination is recommended.

The application provides for 1500 feet of drifting within the Fortuna No. 1 claim, which would carry to the claim end line. This obviously could not be allowed unless the Applicant could secure additional ground.

Since access to the proposed project is through the Camp Bird tunnel, the Applicant must be required to show easement rights; their Camp Bird lease may or may not include such rights, as applied to ground not owned by the Camp Bird Company.

Undoubtedly any ore which might be produced during the course of the project would have to be commingled with Camp Bird property ores for milling. Hence, some satisfactory arrangement would have to be worked out regarding royalties on project ores.

Sincerely yours,

By ESJ
Chairman, Operating Committee

Enclosures

WRGriswold/er 11/10/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

APPROVED:

By ESJ
Member, Bureau of Mines

By ESJ
Member, Geological Survey

cc

File Copy
Surname

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

Noted
500
noted - Kilsgaard
Gilkey
Martin
Hyman

NOV 15 1955

Mr. L. D. Barry, General Manager
The King Lease, Inc.
Ouray, Colorado

Re: Docket No. DMEA-402 (Lead-Zinc-Copper)
The King Lease, Inc.
Fortuna Lode Claims
Ouray County, Colorado

Dear Mr. Barry:

The application of your company for Government assistance to explore its property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration and has been referred for a field examination to:

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

The Regional Office will contact you at an early date as to when an examination is to be made. Any assistance that you may give the members of the Field Team during the examination will be appreciated.

We note that your application provides for 1500 feet of drifting within the Fortuna No. 1 claim, with the drift projected to the southeast end line of the claim. It would therefore be advisable for you to obtain possession of the ground immediately adjacent, if at all possible.

Sincerely yours,

C. O. Mitterdorf

Administrator

WRGriswold/er 11/10/55
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kilsgard, USGS
Base Metals
Region III (2)
Chron.

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

Griswold

November 7, 1955

Re: DMEA Docket-4042
The King Lease, Inc.
Fortuna No. 1 and No. 2
Lode Claims
Sneffels Mining District
Ouray County, Colorado
Lead-Zinc-Copper; $150,170

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of Application dated October 24, 1955, Received November 2, 1955

I have reviewed the application noting that King Lease, Inc. is now exploring a lead-zinc-copper-gold-silver-bearing vein which was cut by the Camp Bird 14 level tunnel about 3,450 feet S. 11° 52' W. from the portal. A 60-foot drift to the eastward with two exploration raises respectively 42 and 48 feet high have been driven on the vein. The two samples reported indicate a vein width of 3.4 feet containing 5.9% lead, 3.2% zinc, 0.30% copper and 7.1 oz. silver per ton.

The tentative exploration program consists of a 1500-foot drift through the length of the Fortuna No. 1 claim with two 300-foot raises, and a 1,000-foot drift on the vein through the Fortuna No. 2 claim with one 300-foot raise.

It would appear that the exploration is well worthwhile. If the exploration proves the vein to be productive, the value of the ground beyond the end lines of Fortuna No. 1 and No. 2 will be greatly increased. For that reason, if possible, a portion of the area which may benefit should be included in the boundaries of the project.

I recommend that the application be referred to the Region III field team for review and examination of the property.

O. M. Bishop

O. M. Bishop

Copy to - Minerals Division
Mr. Kilsgaard, Room 5222
O. M. Bishop
Files

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

November 7, 1955

Re: DMEA Docket-4042
The King Lease, Inc.
Fortuna No. 1 and No. 2
Lode Claims
Sneffels Mining District
Ouray County, Colorado
Lead-Zinc-Copper; $150,170

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From: O. M. Bishop, Branch of Base Metals

Subject: Review of Application dated October 24, 1955, Received November 2, 1955

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O. M. Bishop

O. M. Bishop

Copy to - Minerals Division
Mr. Kilsgaard, Room 5222
O. M. Bishop
Files

IN REPLY REFER TO:

RECEIVED
NOV 14 1955

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

November 7, 1955

Re: DMEA 4042 Griswold
The King Lease, Inc.
Fortuna Lode
Ouray Co., Colorado
$150,170 - Lead, Zinc, Copper

Memorandum

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

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

Subject: Review of application.

The applicant asks assistance in exploring a narrow lead-zinc-copper vein by drifting and raising. The vein was cut in the long Camp Bird 14 Tunnel but apparently received little attention at that level.

Two samples taken, (a) on the east wall of the tunnel, and (b) at the face of a short southeast drift on the vein, assayed:--

Width (feet)	Oz. Au	Oz. Ag	% Pb	% Cu	% Zn
3.8	0.01	6.2	4.4	0.30	2.9
3.0	0.02	8.3	7.8	0.30	3.6

The map which accompanies the application shows a diamond drill hole drilled into the west wall of the tunnel. Nothing is said concerning the indicated intersection of the vein.

That the entire program outlined in the application can be justified as exploration may be questioned, but a staged project would seem to be in order.

Referral to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
NOV 8 1955

November 7, 1955

Re: DMEA 4042
The King Lease, Inc.
Fortune Lode
Ouray Co., Colorado
$150,170 - Lead, Zinc, Copper

Memorandum

To: W. H. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of application.

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The map which accompanies the application shows a diamond drill hole drilled into the west wall of the tunnel. Nothing is said concerning the indicated intersection of the vein.

That the entire program outlined in the application can be justified as exploration may be questioned, but a staged project would seem to be in order.

Referral to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-11/7/55
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617

Subject: DMEA-4042
Re: Fortune No. 1 and 2

The King Lease, Inc.,
Ouray, Colorado.

November 3, 1955

Gentlemen:

The receipt of your application dated October 24, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4042 and referred to the Base Metals Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

November 3, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA 4042 The King Lease, Inc.

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

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

RECEIVED
NOV - 2 1955

October 30, 1955

224 New Customhouse
Denver 2, Colorado

DMEA-4042

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Copper-Lead-Zinc), The King Lease, Inc., Fortuna No. 1 and Fortuna No. 2 claims, Ouray County, Colorado

Enclosed are three copies of the subject application in the amount of $150,170.00. One copy of the application is being retained in our files.

W. M. Traver

By J. W. Townsend
J. W. Townsend

Enclosures

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

RECEIVED
NOV - 2 1955

October 30, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Copper-Lead-Zinc), The King Lease, Inc., Fortuna No. 1 and Fortuna No. 2 claims, Ouray County, Colorado

Enclosed are three copies of the subject application in the amount of $150,170.00. One copy of the application is being retained in our files.

W. M. Traver

By J. W. Townsend
J. W. Townsend

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
NOV - 2 1955

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

Not to be filled in by applicant

Docket No. 4042
Metal or Mineral Lead Zinc Copper
Date Received 11-2-55
Estimated Cost 150,170.
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: The King Lease, Inc., a Colorado Corporation.
Ouray, Colorado
President - Kenneth Moore; Vice President - Joseph King, Sr.; /Moore
Secretary and Assistant Treasurer - Franklin A. Bell; Treasurer - Kenneth

(*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 SHEET ATTACHED

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

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

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

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

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

SEE SHEET ATTACHED

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 SEE SHEET ATTACHED

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

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

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

SEE SHEET ATTACHED

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)? see SHEET ATTACHED

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated October 24, 1955

The King Lease, Inc.
(Applicant)

By L. D. Barry

General Manager

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

RECEIVED
NOV - 2 1955

a. Fortuna No. 1 Lode Mining Claim situated in the Sneffels Mining District in Ouray County, Colorado, described as follows:

Beginning at Corner No. 1 which is North 7°30' West 700 feet from the concrete slab West of the Yellow Rose Cabins at the Old Camp Bird Aerial Tram Angle Station; thence North 44°45' West 750 feet to the North side center; thence North 44°45' West 750 feet to Corner No. 2; thence South 46°03' West 300 feet to the West end center, which is 950 feet directly above the 14 level tunnel of the Camp Bird Tunnel Mining and Transportation Company at a point 3,455 feet in said tunnel measured from the portal thereof (the surface notice of location of this claim is at a point South 44°45' East 15 feet from said West end center); thence South 46°03' West 300 feet to Corner No. 3; thence South 44°45' East 750 feet to the South side center; thence South 44°45' East 750 feet to Corner No. 4; thence North 46°03' East 600 feet to corner No. 1, the point of beginning.

Fortuna No. 2 Lode Mining Claim situated in the Sneffels Mining District in Ouray County, Colorado, described as follows:

Beginning at Corner No. 1 which is the same as Corner No. 2 of the Fortuna No. 1 Mining Claim and which is located as follows:

Beginning at the concrete slab West of the Yellow Rose Cabins at the Old Camp Bird Aerial Tram Angle Station; thence North 7°30' West 700 feet to Corner No. 1 of the Fortuna No. 1 Mining Claim; thence North 44°45' West 1,500 feet to the point of beginning;

thence North 44°45' West 750 feet to the North side center; thence North 44°45' West 750 feet to Corner No. 2; thence South 46°03' West 600 feet to Corner No. 3; thence South 44°45' East 750 feet to the South side center; thence South 44°45' East 750 feet to Corner No. 4; thence North 46°03' East 300 feet to the East end center which is a point 950 feet directly above the 14 level of the Camp Bird Tunnel Mining and Transportation Company at a point 3,455 feet in along said tunnel measured from the portal (the surface notice of location of this claim is located North 44°45' West 15 feet from this East end center monument); thence North 46°03' East 300 feet to Corner No. 1, the point of beginning.

b. None

c. Owner

RECEIVED
NOV - 2 1955

a. Drifting on vein at point of discovery. Drift started east on Camp Bird 14 level tunnel for a distance of 60 feet. Two raises, East No. 1 and East No. 2, have been advanced 42 feet and 48 feet, respectively. Such operations are being carried on by applicant as owner of the Fortuna No. 1 and Fortuna No. 2 claims. Such workings are readily accessible for examination purposes.

b. None

c. Vein deposit striking approximately North 45° West. Vein consists of lead, zinc, copper, gold and silver, with pyrite, rodonite, calcite, quartz and flourspar. Walls are andesite. Samples taken on vein are as follows:

Channel sample taken on east wall of Camp Bird Tunnel in vein. Width 3.8'. Au. .01 oz. Ag. 6.2 oz. Pb. 4.4%. Cu. .30%. Zn. 2.9%.

Channel sample taken in face of East Fortuna No. 1 Drift. Width 3.0'. Au. .02 oz. Ag. 8.3 oz. Pb. 7.8%. Cu. .30%. Zn. 3.6%.

d. Project accessible through Camp Bird Mining and Tunnel Transportation Company tunnel. The King Lease, Inc. has a lease on the Camp Bird Limited property at Camp Bird, Ouray, Colorado. The King Lease, Inc. has been operating the Camp Bird mine continuously under lease since 1925.

The Fortuna No. 1 and No. 2 exploration program would be carried on in conjunction with the Camp Bird Limited lease agreement. The King Lease, Inc. owns and operates a modern 175 ton per day flotation mill located near the 14 level Camp Bird Tunnel. Distance from the mill to Ouray, Colorado and State Highway 550 is six miles. Fellin Brothers of Ouray do the hauling by truck on a contract basis. Lead concentrate is shipped via Fellin Brothers truck direct to American Smelting and Refining Company's smelter at Leadville, Colorado. Zinc concentrate is shipped via Fellin Brothers truck to Ridgway, Colorado, 16 miles from the mill and transferred into D & R G W railroad cars for rail shipment to American Smelting and Refining Company's zinc smelter at Amarillo, Texas.

Personnel lives in Ouray, Colorado and surrounding area. Road from Ouray to mine is a secondary state road maintained the year around. Snow removal equipment is used during the winter months.

e. The Ouray district has a fairly constant supply of man-power available which migrates between the different mines in the San Juan Triangle. No difficulty has been experiences in obtaining sufficient labor for operations.

Timber is available locally.

Supplies are available through sources in Colorado and Utah.

Equipment is available on the property from equipment owned by The King Lease, Inc.

Water is available in ample quantities the year around. The Camp Bird 14 Level Tunnel alone furnishes over 2,000 gallons per minute the year around.

Power is supplied by the Western Colorado Power Company.

RECEIVED
NOV - 2 1955

a. Lead, zinc, copper, gold and silver

b. The tentative exploration program is to drive a drift east to the Fortuna No. 1 claim a distance of 1500 feet. In addition to a drift, two raises driven on the vein are planned. These should reach a height above the 14 Level of approximately 300 feet.

On the Fortuna No. 2 claim the program calls for a drift to be driven west on the 14 Level a distance of 1000 feet with one 300 foot raise driven on the vein.

All exploration work will be done on the vein structure.

Attached to this Instruction No. 5 is a map, marked Exhibit A, showing location of the proposed exploration work.

c. The work will start within ten days and be completed within twelve months from the date of an exploration project contract.

d. The King Lease, Inc. has operated Camp Bird Mine continuously since 1925. The experience records of L. D. Barry, General Manager, and Franklin A. Bell, Assistant to Manager, are set forth below.

L. D. Barry:

From October, 1952, to Present Time -
General Manager of The King Lease, Inc., operators of the Camp Bird Mine, Ouray, Colorado. Operation consists of mining and milling lead, zinc, copper, gold and silver ore.

From September, 1951, to October, 1952 -
Superintendent in charge of underground and surface operations. Responsible to General Manager.

From March, 1950, to September, 1951 -
The King Lease, Inc., Camp Bird Mine, Ouray, Colorado. Mine foreman in charge of underground operations.

March, 1949 to March, 1950 -
Private engineering practice, Vernal, Utah. Surveying, mining, sand asphalt construction of small irrigation project.

August, 1940 to March, 1949 -
Barber Oil Company, New York City. Manager of Gilsonite Mining Operation at Bonanza, Utah. In complete charge of underground and surfact operation.

d. Continued.

November, 1939 to August, 1940 --
Barber Oil Company, New York City. Engineer of gilsonite mining operation. This period was spent as understudy of retiring manager.

October,1938 to October, 1939 -
Clear Creek Consolidated Mining & Milling Company, Idaho Springs, Colorado. Mine superintendent in charge of underground operations of gold mining operation.

September, 1937 to August, 1939 -
Thunder Mountain Mining & Milling Company, Stibnite, Idaho. Superintendent of surface and milling operations in complete charge of small gold mine.

October, 1936 to September, 1937 -
Associate in Mines Contracting Company, Wallace, Idaho. In charge of tunnel contract driving 3000 feet of tunnel for Callahan Lead-Zinc Company at their Vulcan Tunnel, Wallace, Idaho.

May, 1935 to August, 1936 -
American Smelting & Refining Company, c/o Federal Mining and Smelting Company, Wallace, Idaho. Superintendent of Azurite Mine, Masama, Washington, in charge of underground and surface development work prior to production operations.

September, 1933 to May, 1935 -
Jack Waite Mine, Duthie, Idaho. American Smelting & Refining Company, c/o Federal Mining and Smelting Company, Wallace, Idaho. Miner, timberman, mill repairman, mill operator, assayor; lead, zinc, silver mine.

1928 to 1933 -
Attending College of Mines, University of Arizona, Tuscon, Arizona, 1928-1930. University of Washington, Seattle, Washington, 1931-1933. Graduated June, 1933, B.S., Mining and Geology.

1926 to 1927 -
Phelps-Dodge Corporation, Nacozari, Sonora, Mexico. Supervisor at Pilares mine in charge of waste filling of cut and fill stopes with slushers. Timber salvage of abandoned square set stopes.

1925 to 1926 -
Placer mining. Burnt River District, Baker, Oregon.

d. Continued.

1924 to 1925 -
Chontales Mines, Ltd., Chontales, Nicaragua. Cyanide plant. Shift boss, gold mining operation.

1923 to 1924 -
Iron Dyke Copper Mine, Homestead, Oregon. Mucker, trammer, timberman helper.

Other experience includes working in logging and lumbering operations of northwestern Washington and clerical work for Northern Pacific Railroad, Seattle, Washington.

Mr. Barry is a graduate engineer with a degree from the University of Washington in Mining and Geology.

Franklin A. Bell:
October, 1953 to Present Time:
Assistant to the Manager, general supervision of operations, The King Lease, Inc., Ouray, Colorado.

March, 1950 to October, 1953 -
The King Lease, Inc., Camp Bird Mine, Ouray, Colorado. General superintendent and secretary in charge of mill, office and shop. Director in The King Lease, Inc.

January, 1947 to 1949 -
General superintendent and vice president in charge of surface and milling operations, The King Lease, Inc., Ouray, Colorado.

January, 1945 to 1947 -
The King Lease, Inc., Ouray, Colorado. General superintendent and vice president. In charge of mining and milling operations under Charles Bell, Sr., president and general manager.

January, 1939 to 1944 -
Mill superintendent, The King Lease, Inc., Ouray, Colorado.

January, 1936 to 1938 -
Mine sampler and shifter, The King Lease, Inc., Ouray, Colorado.

June, 1934 to 1936 -
Gardner-Denver Company, Quincy, Illinois. Repair and service engineer on pumps and rock drills and compressors. Heat Treat Department (Steel analysis).

1928 to 1933 -
Colorado School of Mines, Golden, Colorado. Metallurigical engineering.

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		Amount	Cost Per Foot
a.	Fortuna No. 1 East Drift 1500 feet	$ 15,000.00	$10.00
	Fortuna No. 2 West Drift 1000 feet	10,000.00	10.00
	Fortuna No. 1 East No. 1 Raise 300 feet	6,000.00	20.00
	Fortuna No. 1 East No. 2 Raise 300 feet	6,000.00	20.00
	Fortuna No. 2 West No. 1 Raise 300 feet	6,000.00	20.00
		$ 43,000.00	$12.65
b.	Manager, $400.00/month	$ 4,800.00	$ 1.41
	2 Shift Bosses, $800.00/month	9,600.00	2.82
	Office Personnel, $100.00/month	1,200.00	.35
	Master Mechanic, $100.00/month	1,200.00	.35
		$ 16,800.00	$ 4.93
c.	5000 feet 30# used rail	$ 2,000.00	$ .58
	1000 Splice bars	500.00	.15
	Spikes and track bolts	500.00	.15
	Ties	400.00	.12
	Rail Bonds	500.00	.15
	2000 feet 1/o Trolley wire	1,700.00	.50
	Trolley hangers	250.00	.07
	Compressed Airline 4"	3,600.00	1.06
	Drill Water Line 1"	1,000.00	.29
	Ventilating Line, Galvanized 12"	3,000.00	.88
	I-R Carset TC Bits	10,000.00	2.94
	Alloy Drill Steel	5,000.00	1.47
	Explosives	18,000.00	5.29
	Power, Water, Utilities	6,000.00	1.76
	Compressed Air Line 2"	750.00	.22
	Hoisting Rope 1200 feet ½"	350.00	.10
	Timber for Raises	2,500.00	.74
	Track Switches for Car Transfers	800.00	.24
		$ 56,850.00	$16.71
d.	2 Trolley Locomotives, $100.00/month	$ 1,200.00	$ .35
	16 Card 40 Cubic Foot Rocker Dump Cars, $200.00/month	2,400.00	.71
	1 Eimco 12-B Rocker Shovel, $200.00/month	2,400.00	.71
	1 Joy HL-3 Rocker Shovel, $200.00/month	2,400.00	.71
	1 I-R JR38 Jackdrill, $50.00/month	600.00	.18
	1 I-R JR 38A Jackdrill, $50.00/month	600.00	.18
	1 G-D 48 Jackdrill, $50.00/month	600.00	.18
	3 I-R R38 Stopehammers, $150.00/month	1,800.00	.53
	1 7x3 Air Receiver, $5.00/month	60.00	.02

(continued)

d. Continued.	Amount	Cost Per Foot
1 Gould Electric Drill Water Pump, $10.00/month	$ 120.00	$ .04
1 Roots No. 3 Blower (Electric Drive), $50.00/month	600.00	.18
Hand Tools, $50.00/month	600.00	.18
500 Foot 1" Compressed Air Hose, $10.00/month	120.00	.04
500 Foot ½" Drill Water Hose, $10.00/month	120.00	.04
3 G-D Air Hoists, $50.00/month	600.00	.18
1 75 H.P. M.G. set, $100.00/month	1,200.00	.35
2 100 H.P. I-R Compressor, $200.00/month	2,400.00	.71
Machine Shop Facilities, $50.00/month	600.00	.18
	$ 18,420.00	$ 5.44

e. None

f. None

g. Repairs and Maintenance to Operating	$ 1,000.00	$ .29
Analytical work	50.00	.01
Accounting	100.00	.03
Workmen's Compensation	2,350.00	.69
Employer's Liability Insurance	200.00	.06
Federal O.A.B.	1,200.00	.35
Federal Employment Security	200.00	.06
	$ 5,100.00	$ 1.50
h. Contingencies	$ 10,000.00	$ 2.94
ESTIMATED TOTAL COST	$150,170.00	

a. Yes

b. Money
Use of equipment owned by The King Lease, Inc.

The total estimated cost of the proposed project is $150,170.00. 50% of such amount would be $75,085.00. The King Lease, Inc. proposes to furnish its 50% as follows:

Use of equipment owned by The King Lease, Inc. and listed in 6-d above	$18,420.00
Cash furnished by The King Lease, Inc.	56,665.00
	$75,085.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICIAL BUSINESS

224 New Customhouse
Denver 2, Colorado

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE $300

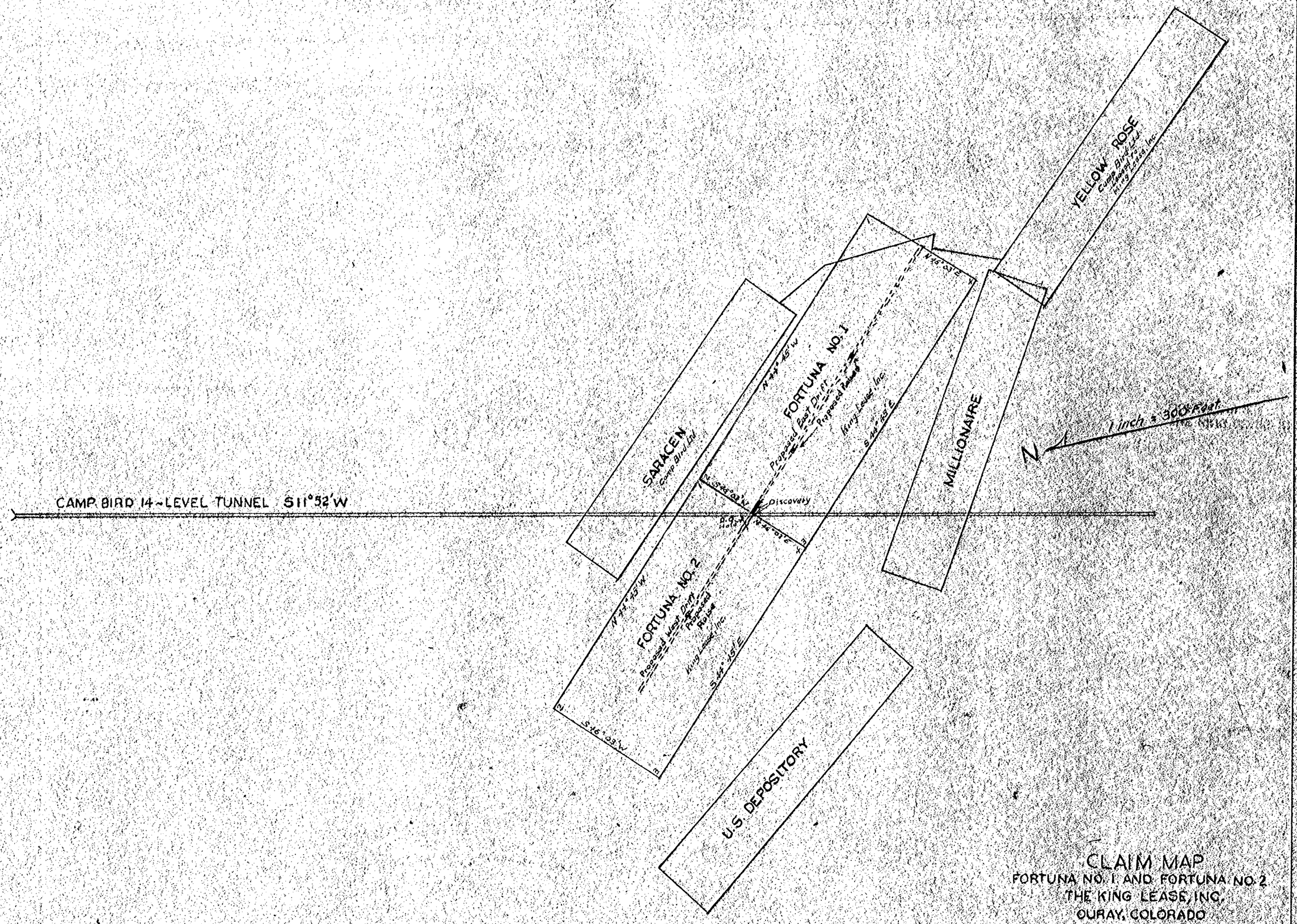
DENVER
OCT
27
5:30PM
1955
COLO.

UNITED STATES POSTAGE
5 CENTS 5

Chairman, Operating Committee
Defense Minerals Exploration Administration
U. S. Department of the Interior
Interior Building
Washington 25, D. C.

CERTIFIED MAIL
NO.
RETURN RECEIPT REQUESTED

INTERIOR DEPT.
NOV - 2 1955
SECRETARY'S
MAIL CENTER



CLAIM MAP
FORTUNA NO. 1 AND FORTUNA NO. 2
THE KING LEASE, INC.
OURAY, COLORADO

SEPT. 1955 L.D.B.

UNITED STATES DEPARTMENT OF THE INTERIOR

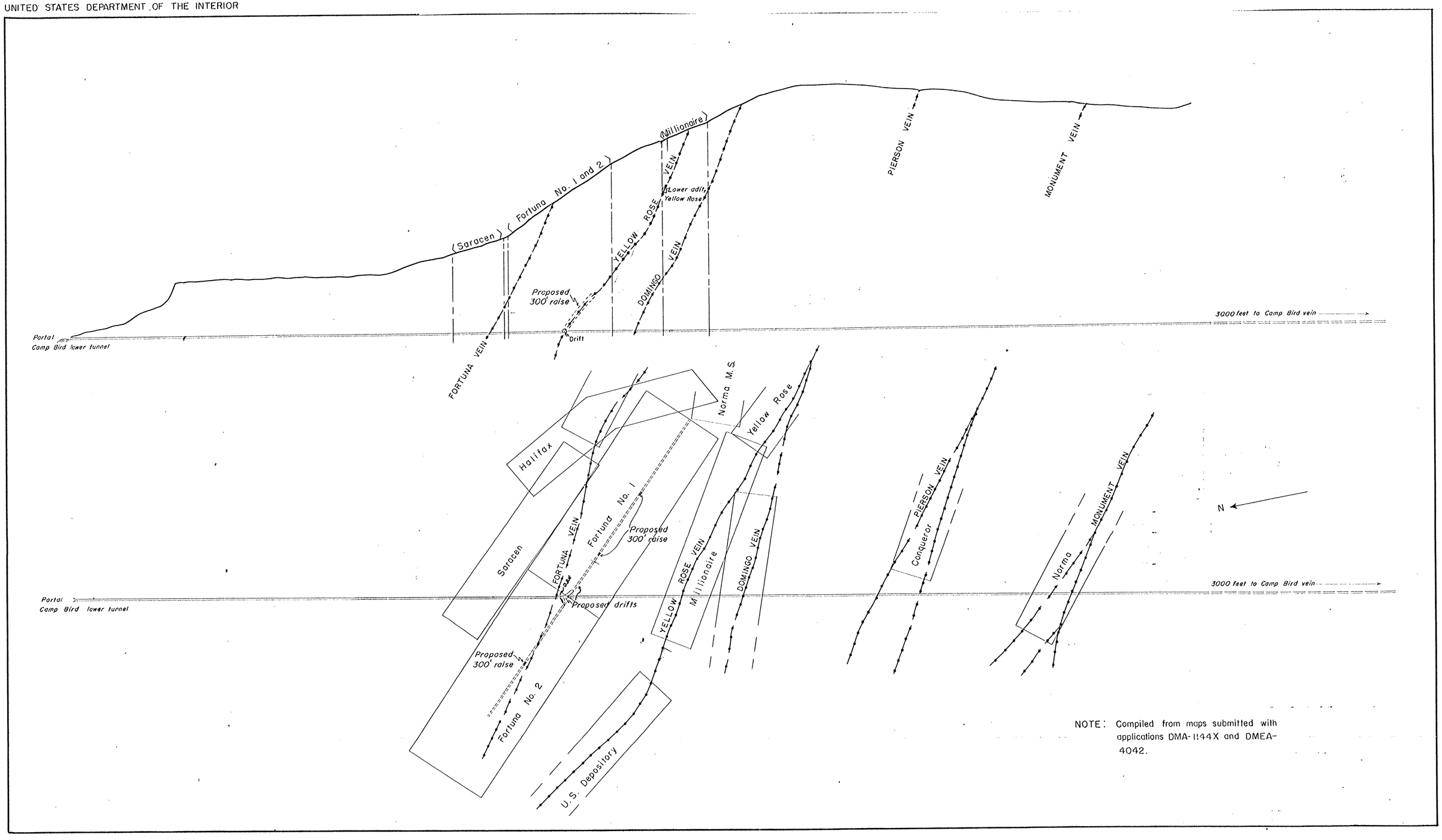


FIGURE 2.—PLAN AND SECTION SHOWING APPLICANT'S AND NEARBY CLAIMS, GEOLOGY, AND PROPOSED EXPLORATION. KING LEASE, INC., OURAY COUNTY, COLORADO. JANUARY, 1956.