DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. DMEA-3217

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This document has been recorded as **Exploration Assistance**.

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

lcy to USGS, USBM, DOCKET & REGION

Routing Slip

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MAY 6 - 1954

3217

Tung

Mr. L. K. Requa, President
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA 3217-Tungsten
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Requa:

In accordance with the request contained in your letter of May 1, 1954, the subject application has been withdrawn from our active files and will receive no further processing.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: DOCKET
FIELD TEAM, REG. III
CODE 400
ADM. READ. FILE
R. W. GEEHAN, USBM
T. P. THAYER, USGS

LScott 5/5/54

400

Defense Minerals Administration
RECEIVED
MAY 4 - 1954

Jennals

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah

May 1, 1954

Mr. C. O. Mittendorf,
Administrator
Defense Minerals Exploration
Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3217
(Tungsten)
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Mittendorf:

Due to certain unfavorable conditions that are developing in the tungsten situation we have decided to go no further with our application for exploration assistance and we therefore request that our application be terminated and withdrawn from further consideration.

Very truly yours,

CLEVE CREEK MINES, INC.

By L. N. Regus
President

400

JAN 14 1954

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 3217, Tungsten
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Miller:

Reference is made to a supplement to the above-docketed application, forwarded to you on January 5, 1954.

We are enclosing two copies of a memorandum of January 7, 1954, by Mr. T. P. Thayer, Geologist, U. S. Geological Survey, for your consideration.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

cc: DOCKET
CODE 400
OPER. COMMITTEE
ADM. READ. FILE
R.W.GEEHAN, USBM
T.P.THAYER, USGS

JHopkins/ls
1/13/53

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

400
RECEIVED
JAN 1 1 1934

January 7, 1934

Memorandum

To: [illegible] Martin, [illegible]

From: T.P. Thayer

Subject: [illegible]-3217 Tungsten, Amended

As an exploration proposal, I see little to recommend the amended proposal in preference to the original. If it strikes ore, I can see advantages in mining. The new proposal, however, would call for practically all the works in unfavorable ground, whereas the original tunnel would explore several hundred feet of the favorable zone.

I recommend that the original proposal be given preference.

The copy of the revised proposal is returned herewith.

T.P. Thayer

Attachment

400

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah

December 30, 1953
Ref: DMEA 3217

Mr. G. O. Mittenderf, Acting Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittenderf:

Under date of November 27, 1953, we sent you our application for aid in an exploration project.

Herewith we submit four copies of a supplement to this application, together with maps which describe an alternate tunnel drive, which we believe warrants your consideration.

Very truly yours,

L. K. Requa

L. K. Requa, President,
Cleve Creek Mines, Inc.

LKR:fbr

Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

December 30, 1953
Ref: DMEA 3217

An Alternate Tunnel Proposal

Under date of November 27, 1953, an application was made to the Defense Minerals Exploration Administration for exploration assistance in the development of the Kelchek tungsten mine located on Cleve Creek in White Pine County, Nevada.

This proposal had as its objective the exploration of the Combined Metals Bed, of lower Cambrian age, which occurs in this location on top of the thick Prospect Mountain quartzite and some 600 feet stratigraphically below the latest ore mined in the Chisholm limestone.

In our opinion, the Combined Metals Bed, or C. M. Bed as it is more frequently called, is an exceptionally fine objective, as it has the unique characteristic of dependable localization of ore when this bed is found in conjunction with favorable structure. This characteristic has been proven at Pioche, Nevada, for lead, zinc, and manganese ore deposits; as it is now in the process of being proven for tungsten ore deposits at the Mt. Wheeler mine, some 35 miles south of the Kelchek mine. At that locality, the bed is known as the Wheeler Bed; but it is the same geological horizon.

The original proposal made to the Defense Minerals Exploration Administration was for a tunnel starting from the north side of the hill under which the tungsten ore zone occurs. For a number of reasons listed below it now seems advisable to call attention to and to describe an alternate tunnel drive to reach the identical objective.

This alternate tunnel drive would start from the south side of the hill on which the ore occurs and follow a course of N 65° W for 1,500 feet until it encountered the C. M. Bed. If our reasoning is correct, ore should be found at that locality.

A plan map is attached showing the course of this alternate tunnel drive as well as the course of the original tunnel proposal. A cross section is also attached showing the relationship of the tunnels to the geological section.

This alternate tunnel proposal could be driven at an elevation of about 125 feet below the original tunnel proposal; and it would have the following operational advantages:

1. Being on the south side of the hill, the portal would be more accessible in winter.

2. The drive would be all in quartzite with little timbering required. Less fracturing and faulting would be encountered.

3. Due to the lower elevation, better drainage would be obtained.

4. For numerous operational reasons, it would provide a better working level.

The only disadvantage would be that it would all, except the end of the tunnel, be driven in quartzite under the C. M. Bed.

Both drives are the identical footage and are estimated at almost the same cost and time for completion.

With reference to the numbered paragraph of form MF-103, the following estimate of cost is made. Time required for driving this tunnel is estimated at 14 months; and monthly cost items are estimated on this basis.

Paragraph 6: Estimate of Costs

Wage rates expected to prevail:		Estimated Total Cost
Miners	$14.50 per day	
Muckers	$12.60 " "	
Laborers	$11.30 " "	
Carpenters	$15.08 " "	
(a) Independent Contractors		None
(b) Labor, Supervision, Consultants		

Direct Costs

Labor	$14.00 per foot	
Trackage	$ 2.60 " "	
Vent pipe	$ 2.10 " "	
Explosives	$ 3.00 " "	
Drill Steel	$ 1.55 " "	
Timber	$ .30 " "	

		Estimated Total Cost
Fuel & lube oil	$1.32 per foot	
Small tools	$ .55 " "	
Comp. Insurance	$ .98 " "	
Payroll taxes	$ .60 " "	
1,500 feet of 6 x 8 tunnel @ $27 per foot		$40,500.00
Supervision		
Management, Engineering and Geology	$500 per month	
Tunnel supervision	$500 per month	
Travel & Car expense	$150 per month	
Bookkeeping	$100 per month	
	$1250 per month	$17,500.00

(c) Operating Material and Supplies

Figured in Direct Costs under (b)

(d) Operating Equipment

Rented Equipment

1-315 cu.ft. air compressor	$513 per mo.	$ 7,182.00
1-3/4 ton pick-up truck	$ 75 " "	$ 1,050.00
1-Bulldozer 4 winter months	$400 " "	$ 1,600.00

Purchased Equipment

1-Battery locomotive with extra battery & charger	$5,000.00	
1-Tunnel mucker (rebuilt)	$2,000.00	
1-Tunnel vent fan & motor 18"	$ 718.00	
1-Tunnel drilling jumbo	$2,310.00	
8-Ore cars @ $200	$1,600.00	
2-Jackhammers & drill steel	$2,200.00	
1-10KW electric generator for mine	$1,717.00	
1-5KW electric generator for camp	$1,052.00	
		$17,097.00

(e) Rehabilitation & Repair

Repair camp buildings	$5,000.00
Additional camp equipment	$1,000.00

			Estimated Total Cost
(e)	Rehabilitation & Repair (Cont'd.)		
	Dig water well at camp	$ 500.00	
	Ice Box at camp	350.00	
	Water line to mine portal 2500 ft. 2" line in trench and covered	1,500.00	
			$ 8,350.00
(f)	New Buildings		
	General utility building at mine portal	$1,000.00	
	Powder magazine	500.00	
			$ 1,500.00
(g)	Miscellaneous		
	Minimum royalty payments on lease, per month	$ 200.00	
	Loss on boarding house, per month	$ 300.00	
	Legal expense, per month	$ 25.00	
	Assaying, per month	$ 50.00	
	Total, per month	$ 575.00	$ 8,050.00
(h)	Contingencies		
	For variations in wage scale, cost of materials, character of ground encountered, and other contingencies now unforeseen.		$10,000.00
	Total Estimated Cost of Project		$112,829.00

This alternate tunnel proposal is submitted for the consideration of the Defense Minerals Exploration Administration; and it is requested that it be considered a part of our original application dated November 27, 1953.

All things considered, we would prefer to make this alternate drive rather than the drive outlined in our original application.

Respectfully submitted,

L. K. Requa

L. K. Requa, President,
Cleve Creek Mines, Inc.

LKR:fbr

400

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

December 22, 1953

Memorandum

To: W.S. Martin, DMEA

From: T.P. Thayer, USGS

Subject: DMEA-3217 Tungsten
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Mine known as
Kolchek Mine or
Kolchek Tungsten Mine

The applicants propose to spend $112,434 on an adit and winze to explore the stratigraphic equivalent of the CM limestone bed near intrusive porphyry for tungsten. The Geological Survey has no real information on this deposit in its Washington files.

The company appears to have done a competent job of geological mapping and proposed a program that makes good geologic sense. As presented, I see no better alternative method of exploration, b ut I would recommend that the Field Team investigate the proposal with the following items in mind.

1. What evidence is there of mineralization in the CM bed in the area, especially along the Kolchek fault, and is the fault pre- or post-ore?

2. Should the present shallow deposits in limestone be explored first, to get more information on relation of ore to porphyry? The New Discovery looks like a promising subject for exploration, between the two north-south faults. If the company plans to do this anyway, that question is answered.

3. As gold and silver appear to be at least as important as tungsten, should government participation be proportioned, presumably to 37½ percent (half the tungsten rate) or 50 percent (2/3 the tungsten rate)? Do the various metals come together, or are there recognizable distinct controls on ore deposition?

Copy retained 400

4. How about the Rambo fault as a possible ore zone to be tested--there is a tungsten prospect on it, apparently in the relatively unfavorable (?) Prospect Mountain quartzite.

The proposed drift does seem well placed to explore a good length of the CM bed in the swing of the fold, up the dip from the porphyry intersection. The general geologic relations should be carefully checked, as this is fundamental to definition of the geologic target. Any information bearing on justification for a possible $84,000 government gamble should be presented.

T.P. Thayer

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

40V

December 11, 1953

Memorandum

To: W. S. Martin, DMEA

From: Robert W. Geehan

Subject: Docket DMEA 3217 - Tungsten
Kolchek Tungsten Mine, White Pine County, Nevada

The applicant proposes underground work, estimated to cost $112,434, to explore the CM bed in a favorable area.

From the standpoint of locating ore, this is probably a sound proposal; however, there is no apparent evidence to indicate that it will be tungsten ore. As you know, the CM bed is the host rock at the Pioche, Nevada, lead-zinc mines. The same bed is known to contain tungsten minerals in the Pan American district west of Pioche and in other eastern Nevada areas. I do not know of any tungsten production from workings in the CM bed.

It is recommended that the docket be referred to the field team with a specific request that the probability of locating tungsten ore, rather than ore in general, should be reported.

Robert W. Geehan

Attachment

RWGeehan:lds
Copy to: Ferrous Metals
RWGeehan
FILES
DMEA

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEC 3 - 1953

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

Not to be filled in by applicant

Docket No. DMEA-3217
Metal or Mineral
Date Received 12-4-53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

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

Cleve Creek Mines, Inc.
218 Felt Bldg.
Salt Lake City, Utah

(*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 attached data

(*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

Lease and Option in part, Owner in part

(*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 None

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

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

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

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

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

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

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

(*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. By Apr.15,1954

(*c*) The work will start within ..... days and be completed within 14 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated November 27th, 1953

Cleve Creek Mines, Inc
(Applicant)

By L. K. Requa
L. K. Requa, President
218 Felt Bldg.
Salt Lake City, Utah

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 3 1953

D. M. E. A.

APPLICATION
By

CLEVE CREEK MINES, INC.
218 Felt Bldg.
Salt Lake City, Utah

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah

November 27, 1953

Mr. C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

We are sending to you herewith four copies of an application for a D. M. E. A. loan for mining exploration made by the Cleve Creek Mines, Inc., a Nevada corporation (now being incorporated).

This is a tungsten property.

We will be very pleased to receive a docket number for this project. If there is any further information needed we will gladly supply it on request.

Very truly yours,

L. K. Requa

L. K. Requa, President
Cleve Creek Mines, Inc.

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

INSTRUCTIONS

1 (a) L. K. Requa, President
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

(b) Cleve Creek Mines, Inc., a Nevada Corporation now being incorporated

(c) L. K. Requa, President
W. J. Franklin Vice President
Frances B. Requa Secretary-Treasurer

(d) Does not apply

2 Noted

3 The applicant's property rights as follows:

(a) Unpatented Lode Mining Claims

Cash, Cash No. 2, Cash No. 3, Kolchek, Manie, Sam, Street, Rambo, Rambo No. 2, Eagle, Taft

Claims are in the name of Alex Kolchek, deceased Under lease and option to L. K. Requa, to be assigned to Cleve Creek Mines, Inc.

Tom, Claire, Bill, Pat, Sue, Quartzite, Alex

Claims are in the name of L. K. Requa, to be assigned to Cleve Creek Mines, Inc.

(b) This mine has been known as the Kolchek Mine or Kolchek Tungsten Mine

(c) State above in (a)

(d) Copy of the lease and option is attached

(e) There are no liens or encumbrances

(f)

Claim	Record Reference		Located
Cash	Book 15	- Page 501	June 1, 1907
Cash No. 2	62	481	Jan. 3, 1912
Cash No. 3	62	482	Jan. 3, 1912
Kolchek	62	601	May 10, 1912
Manie	62	600	May 10, 1912
Sam	62	602	May 10, 1912
Street	15	500	June 1, 1907
Rambo	15	64	Apr. 20, 1907
Rambo No. 2	15	499	Apr. 20, 1907
Eagle	62	484	Jan. 3, 1912
Taft	62	483	June 3, 1912
Tom	166	446	Oct. 27, 1952
Claire	166	450	Oct. 27, 1952
Bill	166	444	Sept. 26, 1952
Pat	166	445	Sept. 26, 1952
Sue	166	453	Nov. 7, 1952
Quartzite	166	428	Aug. 14, 1952
Alex	166	451	Nov. 8, 1952

All recorded in the records of White Pine County, State of Nevada

4. Physical Description:

(a) The Cash was the first mining claim located in June, 1907, and small mining operations have been conducted on this claim for gold first and then for tungsten.

The largest operation was conducted by Alvin Marti and partners, who leased from Alex Kolchek during 1946-49. It is reported that 22 railroad cars of silicious gold ore were mined and sent to the McGill Smelter of Kennecott Copper Corporation. This ore was said to have averaged 0.68 ozs. gold and 6.0 ozs. silver per ton.

These same leasers mined 458 tons of tungsten ore from an immediately adjacent orebody. The reported recovery was 370.702 units of tungsten, or 0.809 units per ton. This was scheelite ore in a silicious replacement of limestone.

The location of both of these operations was at the Cash mine on the Cash claim.

In 1951, Hullinger and McFarland mined one railroad car of ore and sent it to the McGill Smelter. It is reported to have run 0.67 ozs. gold and 8 ozs.silver.

On November 19, 1951, L. K. Requa took a lease and option on the Kolchek eleven unpatented claims and during 1952 mining and exploration operations were conducted at the Cash mine. The main drift was extended for 80 feet to cut the Kolchek fault and various short drives were made to prospect for ore.

Shipments totaling 107.4 tons of silicious gold ore were made to the McGill Smelter, which averaged 0.38 ozs. gold and 1.75 ozs. silver per ton. We also mined and stockpiled 25 tons of tungsten ore, which sampled 0.48% WO_3.

As a part of this same operation we explored the Rambo prospect on the Rambo claim. This was a small operation, but we have stockpiled about 25 tons of ore that we estimate to run 1.0% WO_3.

In July of this year a blined orebody was located on the Cash No. 2 claim by following high grade float. This orebody occurs 600 feet S 70° E from the Cash mine. From this orebody 31.6 dry tons of ore were mined and shipped to the Stopper mill at the Minerva mine for milling. Results of this mill run are as follows -

Dry tons of ore	31.6 Tons
Net weight of concentrates	2,161.5 Lbs.
Assay value	65.78% WO_3
Units of tungsten	71.09
Units recovered per ton	2.25% WO_3
Units lost in tailings per ton	.90 WO_3
Calculated grade crude ore	3.15% WO_3

All of this production has come from surface, or near surface workings. The Cash mine has about 250 feet of workings and stopes. All of these workings are now open and can be examined.

In July and August of this year four diamond drill holes were put down for a total footage of 448 feet. The deepest was a vertical hole at the Cash mine. It went 200 feet from the surface, but found no ore. The other three were shallow surface holes in the area of the new ore discovery. They added to our geological knowledge, but did not find ore. It is noteworthy that after drilling these holes with negative ore results we found the orebody by bulldozer work close to the drill holes. L. K. Haqua and associates have spent $35,000 on development.

(b) The past production is as shown above. The mine is now shut down for the winter. No significant amount of positive ore can be measured but there is a large potential of inferred ore and it is on the basis of this inferred ore that this application is being made.

(c) The surface geology is shown on the attached map entitled "Surface Geology and Claims, Cleve Creek Mines, Inc." Also attached are geological sections showing the proposed development.

The sedimentary beds involved are lower and middle Cambrian limestones, shales and quartzites. The Pioche log names are used for these formations, even though it is believed that the section may turn out to be more similar to the Eureka, Nevada section. These are the two best known Cambrian sections in this immediate area. Eventually these forma-

tions will carry their own names as they do not exactly fit into either section.

The area has been intruded by considerable quartz porphyry, which is a light to dark grey porphyritic rock. On the surface this porphyry weathers to a grey sand and is obscure unless dug out with a bulldozer. The known porphyry is mapped, but considerably more is suspected due to the mentioned obscure nature of outcrops. This porphyry is intimately associated with the ore.

All of the ore produced to date has come from limestone beds and quartz fissures in a limestone, which we can class as Davidson and from another limestone, in the Chisholm shale, which is found under the Davidson formation. These orebodies occur along an East-West zone about 600 feet long and 100 feet wide, which contains a large amount of hydrothermal quartz, secondary calcite and iron oxide.

This ore zone parallels a strong N 70° W fault, which we have called the Kalchek fault.

We consider the orebodies found to date only as indicators of larger and more persistent orebodies that may be found in the first limestone bed above the quartzite. This we have called the C.M. Bed, as it is called in the Dioche log. This bed has demonstrated an ability to localize ore more readily than any other bed when it occurs in a good ore structure.

It is the exploration of the C.M. Bed that is the object of this application.

The C.M. Bed is exposed for about a total length of 3,000 feet to the East of our known ore area. This outcrop lies outside of the favorable ore structure, but for a length of about 2,000 feet this bed has been completely replaced and altered by silica, calcite, iron carbonate and other minor secondary minerals. Where so altered it is 6 to 8 feet thick. Where this bed is unaltered it is from 10 to 12 feet thick. This difference in thickness suggests a shrinkage of the bed due to the process of alteration.

From our evidence to date we believe that the C.M. Bed will contain ore in important amounts, but to see this bed where ore is suspected it will be necessary to drive a 1,200 foot tunnel and do some exploration up and down the bed. This tunnel will be described in detail later. Such a tunnel should be confined to the most favorable structural zone. The proposed tunnel is so located.

The general regional structure consists of major North and Northeast faulting. While these are the strongest faults the ore is more associated with the East-West faulting. All this is shown on the surface geological map.

The major Northeast fault has been called the Rambo fault. There are numerous parallel faults and fractures.

The quartz porphyry parallels the ore zone, but it is mostly in the hanging wall of the Kolchek fault.

All of the faults are believed to be normal and have displacements of 100 to 300 feet, except the Rambo fault, which is suspected to have a throw of from 600 to 800 feet.

To summarize the geological situation we can say that -

1. Scheelite and gold occur at various places in an alteration zone in the footwall of the Kolchek fault. This zone is 600 feet long and 100 feet wide. This is all replacement in limestone.

2. The C.M. Bed occurs in this same ore structure, but 600 feet lower. This is a good objective and can be explored by a tunnel 1,200 feet long, 700 feet of which will be in the C.M. Bed and near the ore forming faults. If this bed does make ore along the Kolchek fault there would be about 1,500 feet of it, in an East-West direction, that might be replaced with ore.

3. We have numerous intersecting faults and fractures of small to moderate throw in the vicinity of the Rambo fault which has a throw of 600 to 800 feet.

4. We have intrusive porphyry in abundance.

(d) This mine is located in the Shell Creek Range on Clove Creek in White Pine County, Nevada, and is approximately in Section 14, Township 16 North, Range 65 East, M.D.B. & M. It is in the Nevada National Forest.

It is 48 miles from Ely by road, of which 38 miles is paved highway and the balance good dirt road. In a direct line it is 14 miles due East of Ely and there is good reason to believe that the East-West structure at the Ely copper district continues Eastward into this area.

(e) Ely is a good center for manpower. Materials, supplies and equipment will have to come from Salt Lake City. A moderate, but what is believed to be ample water supply exists on the property. There is no power line near the property and power will have to be developed by diesel engines.

5 (a) The mineral to be explored for is tungsten.

(b) The proposed project is a 1,200 foot tunnel as shown on the surface geology map. This tunnel will start in Prospect Mountain Quartzite and run for about 400 feet before encountering the C.M. Bed. It will then follow this bed until it reaches the Kolchek fault. In the 700 to 800 feet that this tunnel will be driven in the C.M. Bed, it has a good chance of find-

ing ore, as it will be in, or close to, the ore forming structure.

On reaching the Kolchek fault, which is considered the most important mineralizer, an inclined winze will be sunk on the C.M. Bed for about 300 feet. This winze is shown on the East-West cross section of the geology attached herewith.

This constitutes the project as proposed herein. If the C.M. Bed is to be an important producer of ore we will know it at the completion of the project.

The eventual development of this mine would include the exploration of the entire length of the C.M. Bed, in the footwall of the Kolchek fault, until the Rambo fault is reached. This is a total length along the C.M. Bed of about 1,500 feet. Beyond the Rambo fault the country is dropped 600 to 800 feet and exploration beyond here will not be considered at this time.

This possible additional exploration is dotted in on the geological section.

The hanging wall section of the Kolchek fault may be favorable for ore in the C.M. Bed, but as ore has not yet been found on that side of the fault it has not been considered.

In all this property has the possibility of being a big mine and the grade of the ore could be considerably above average.

It should be mentioned that there are several other means of accomplishing the proposed development. A shaft could be sunk from the surface. An incline could be sunk from the outcrop of the C.M. Bed, or below this location a low level tunnel could be driven, mostly in quartzite. All of these have been given careful consideration and were found to be inferior to the selected tunnel site for either geological or operational reasons.

(c) The work can start by April 15, 1954, or sooner if necessary, and should be completed in fourteen months from the date of starting.

(d) The work will be under the supervision of L. K. Requa. The tunnel work will be under the direction of W. J. Franklin. Both individuals have had about thirty-five years of experience in exploration, development and operation.

6 Estimate of Costs

It is our desire to expedite this report and get it to DMEA as soon as possible. For this reason the following costs are approximate and some of the details called for are omitted. A more detailed and supplemental report will be furnished later. However, these costs are sufficiently accurate to permit an appraisal of the project.

All monthly expense items are figured for fourteen months.

Direct Costs

1200 Feet of 6 x 8 tunnel	@ $27/Ft.	$32,400	
300 Feet of 7 x 8 winze	35/Ft	10,500	$ 42,900

Rental Equipment

1 -315 Cu. Ft. air compressor	@ $513/Mo.	$ 7,182	
1 -3/4 Ton pick-up	75/Mo.	1,050	
1 -Bulldozer during winter - 4 months	400/Mo	1,600	9,932

Equipment Purchased

1	Battery locomotive, with extra battery and charger	$ 5,000	
1	Tunnel mucker (reconditioned)	2,000	
1	18" Tunnel vent fan and motor	718	
1	Tunnel drilling jumbo	2,310	
8	Ore cars @ $200	1,600	
1	1-Ton air hoist	855	
2	Jackhammers and drill steel	2,200	
	Miscellaneous small tools	500	
1	Self-dumping skip for incline	250	
	Hoisting cable, sheaves, bells, etc.	300	
1	10-KW Gasoline-electric set for mine	1,717	
1	5-KW Gasoline-electric set for camp	1,052	18,502

Supervision

Management, Engineering & Geology	@ $500/Mo.	$ 7,000	
Tunnel supervision	500/Mo.	7,000	
Travel and car expense	150/Mo.	2,100	
Bookkeeping	100/Mo	1,400	17,500

Rehabilitation & Repairs

Repair camp buildings	$ 5,000	
Additional camp equipment	1,000	
Water well	500	
Ice box	350	6,850

New Buildings

General utility building at tunnel portal	$ 1,000	
Powder magazine	500	1,500

Miscellaneous

Loss on boarding house operation	@ $300/Mo.	$ 4,200	
Legal expense	25/Mo.	350	
Assaying	50/Mo.	700	$ 5,250

Contingencies

For variation in price of material, variation in character of ground encountered in tunnel drive and other intangibles	10,000
Total Cost	$112,434

Respectfully submitted,

L. K. Requa

L. K. Requa, President
Cleve Creek Mines, Inc.

K

A

REFERENCES

COMBINED METALS REDUCTION CO.

LOCATION MAP
KOLCHEK MINE

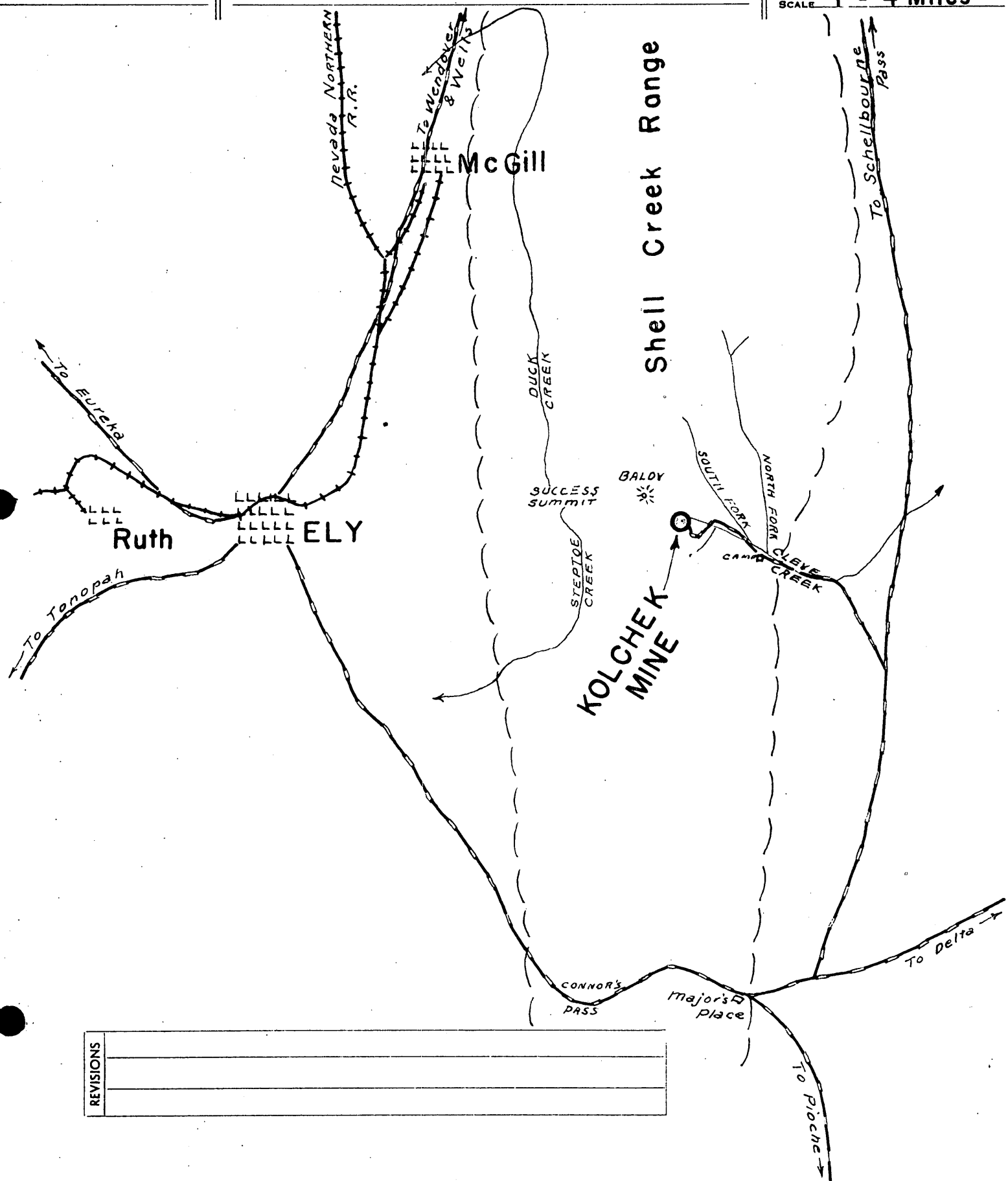
11/30 1952

MADE BY

TRACED BY

CHECKED BY

SCALE 1" = 4 Miles



REVISIONS

A

REFERENCES

COMBINED METALS REDUCTION CO.

MAP OF KOLCHEK CLAIMS.
WHITE PINE COUNTY
NEVADA

Nov. 8 19 52

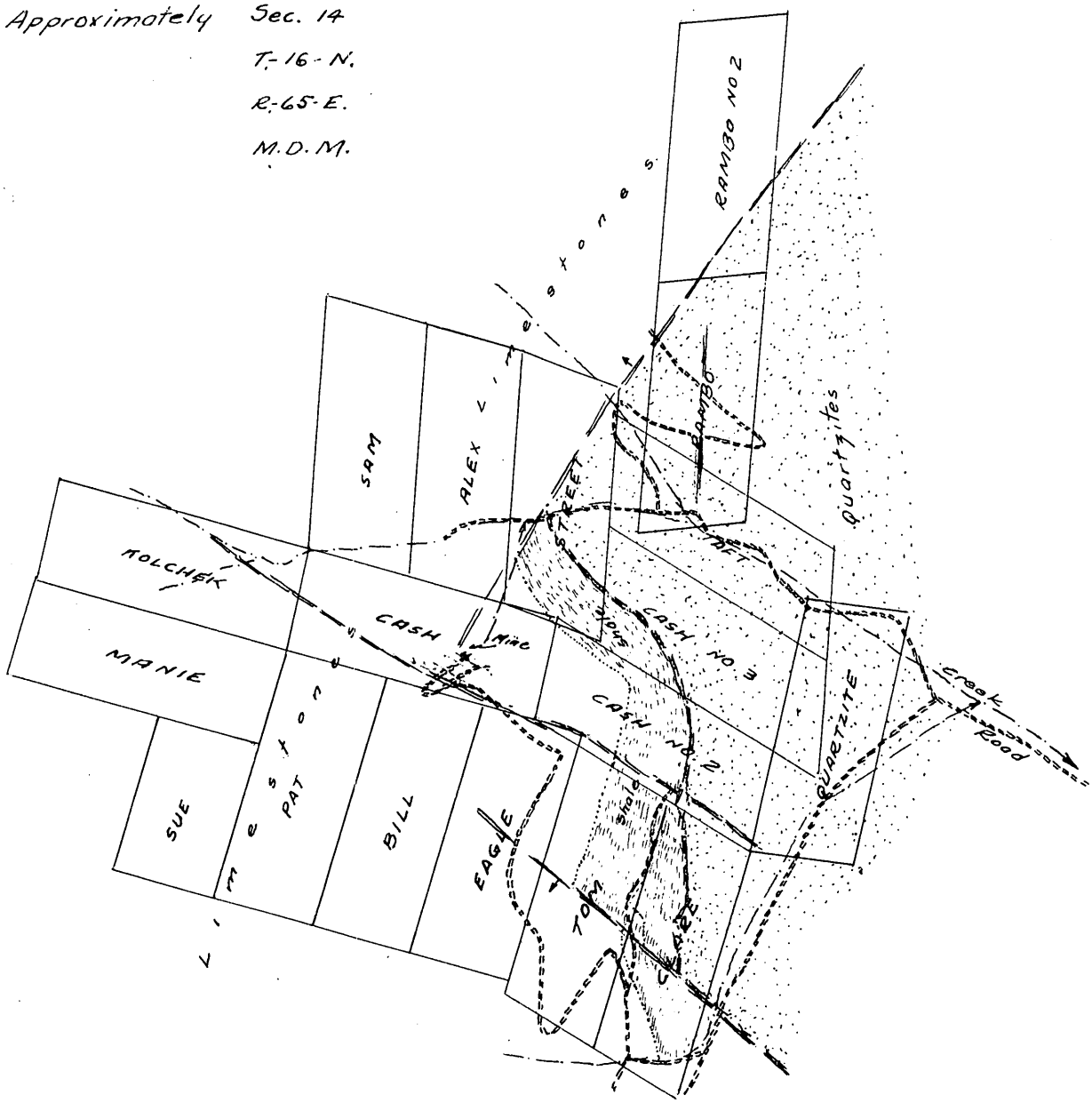
MADE BY C.R.H.

TRACED BY

CHECKED BY

SCALE 1" = 1000'

LOCATION:
Approximately Sec. 14
T-16-N.
R-65-E.
M.D.M.



Martin

MAY 6 - 1954

Mr. L. K. Requa, President
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA 3217-Tungsten
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Requa:

In accordance with the request contained in your letter of May 1, 1954, the subject application has been withdrawn from our active files and will receive no further processing.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

cc: DOCKET
FIELD TEAM, REG. III
CODE 400
ADM. READ. FILE
R. W. GEEHAN, USBM
T. P. THAYER, USGS

LScott 5/5/54

Docket

Defense Minerals Administration
RECEIVED
MAY 4 - 1954

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah

May 1, 1954

Mr. C. O. Mittendorf,
Administrator
Defense Minerals Exploration
Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3217
(Tungsten)
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Mittendorf:

Due to certain unfavorable conditions that are developing in the tungsten situation we have decided to go no further with our application for exploration assistance and we therefore request that our application be terminated and withdrawn from further consideration.

Very truly yours,

CLEVE CREEK MINES, INC.

By L. V. Regan
President

Copy retained 4[illegible]

L. K. REQUA
FELT BUILDING
SALT LAKE CITY, UTAH

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 8 1954

February 6, 1954

Mr. C. O. Mittendorf
Administrator
Defense Minerals Exploration
Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA - 3217
(Tungsten)
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine Co., Nevada

WSM
Hzj

Dear Mr. Mittendorf:

With reference to your letter of the 2nd regarding modifications of the lease and option, dated Nov. 19, 1951, between Alex Kolchek and L. K. Requa we enclose herewith the following;

4 copies Modification dated May 7, 1953

4 copies Modification dated July 16, 1953

You will see that these modifications are only slight changes in small option payments, but we wish to apologize for our oversight in not sending them to you before.

Very truly yours,

Cleve Creek Mines, Inc.

By L. K. Requa
President

No reply necessary
[but note that we still need the
OCL's which will be forthcoming
according to Requa's letter of Nov 19]
WSM
2/10/54

RECEIVED
FEB 9 - 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 8 1954

Ely, Nevada
May 7, 1953

Continental National Bank and
Trust Company of Salt Lake City
Salt Lake City, Utah

L. K. Requa
Felt Building
Salt Lake City, Utah

In re: Kolchek-Requa Lease, Option and Escrow

Gentlemen:

The undersigned, Alex Kolchek, First Party in that certain Lease and Option dated November 19, 1951, hereby consents, in consideration of the matters hereinafter set forth, that the payment in the sum of Five Thousand Dollars ($5,000.00) required under said Lease and Option, to be paid on May 19, 1953, may be extended until September 19, 1953, in consideration of L. K. Requa, the Second Party in said Lease and Option dated November 19, 1951, guaranteeing and continuing to make all monthly payments in the sum of Two Hundred Dollars ($200.00) per month up to and including August 19, 1953; provided that all payments made up to September 19, 1953, shall apply upon and reduce the aforesaid payment of $5,000.00.

This letter in addition to the foregoing changes will serve as authority for the above named Continental National Bank and Trust Company of Salt Lake City, the escrow agent herein, to accept payments as herein modified.

Alex Kolchek

Witness:
C. E. Horton

The foregoing is hereby agreed to:
L. K. Requa

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
JUN 8 1954

Ely, Nevada
May 7, 1953

Continental National Bank and
Trust Company of Salt Lake City
Salt Lake City, Utah

L. K. Requa
Felt Building
Salt Lake City, Utah

In re: Kolchek-Requa Lease, Option and Escrow

Gentlemen:

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Alex Kolchek

Witness:
C. E. Horton

The foregoing is hereby agreed to:
L. K. Requa

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUNE 8 1954

Ely, Nevada
May 7, 1953

Continental National Bank and
Trust Company of Salt Lake City
Salt Lake City, Utah

L. K. Requa
Felt Building
Salt Lake City, Utah

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This letter in addition to the foregoing changes will serve as authority for the above named Continental National Bank and Trust Company of Salt Lake City, the escrow agent herein, to accept payments as herein modified.

Alex Kolchek

Witness:
C. E. Horton

The foregoing is hereby agreed to:
L. K. Requa

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
RECEIVED
JUN 8 1954

Ely, Nevada
May 7, 1953

Continental National Bank and
Trust Company of Salt Lake City
Salt Lake City, Utah

L. K. Requa
Felt Building
Salt Lake City, Utah

In re: Kolchek-Requa Lease, Option and Escrow

Gentlemen:

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This letter in addition to the foregoing changes will serve as authority for the above named Continental National Bank and Trust Company of Salt Lake City, the escrow agent herein, to accept payments as herein modified.

Alex Kolchek

Witness:
C. E. Horton

The foregoing is hereby agreed to:
L. K. Requa

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 8 1954

Filed _____, 1953 No. _____

_____, Clerk GRAY AND HORTON
ELY, NEVADA
By _____, Deputy ATTORNEYS FOR EXECUTRIX

IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA, IN AND FOR THE COUNTY OF WHITE PINE

* * * * * * *

IN THE MATTER OF THE ESTATE OF ALEX KOLCHUK, DECEASED.	O R D E R

The verified Petition of LOUISE LONG, duly appointed, qualified and acting Executrix in the above estate coming on regularly for hearing on this, the 16th day of July, 1953, the said Executrix being personally present in Court by and with her attorney C. E. HORTON, ESQ., of the firm of GRAY AND HORTON, ESQS., attorneys for said Executrix and said estate, and the Court having heard testimony in support of said Petition and having considered the same and it appearing to the Court, and the Court so finding, that it is to the best interests and welfare of said estate and those therein interested that the prayer in said Petition be granted, and upon good cause appearing therefore,

IT IS HEREBY ORDERED that that certain Lease and Option Agreement dated November 19, 1951, wherein the above named Decedent was first party and L. K. REQUA is second party, as amended under date of May 7, 1953 in consideration of the said L. K. REQUA making the minimum monthly payments in the said Lease and Option Agreement provided for during such period of time as the said L. K. REQUA is operating under said Lease and Option Agreement, be further amended in the following respects:

That the date for the payment of the unpaid balance of the Five Thousand Dollar ($5,000.00) payment originally required, under the terms of said Lease and Option Agreement, to have been paid on or before May 19, 1953, be extended, and such payment shall be payable on or before five and one-half (5½) years after said date of November 19, 1951.

IT IS HEREBY FURTHER ORDERED that the said Lease and Option Agreement, except as hereinabove amended, shall remain in full force and effect.

Done in open Court this 16th day of July, 1953.

Harry L. Olson
District Judge

(2 and last)

Filed _____, 1953 No. _____

_____, Clerk GRAY AND HORTON
ELY, NEVADA
By _____, Deputy ATTORNEYS FOR EXECUTRIX

IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA, IN AND FOR THE COUNTY OF WHITE PINE

* * * * * * *

IN THE MATTER OF THE ESTATE OF ALEX KOLCHEK, DECEASED.	O R D E R

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Done in open Court this 16th day of July, 1953.

Harry N. Wilson
District Judge

(2 and last)

Filed _____, 1953 No. _____

_____, Clerk GRAY AND HORTON
ELY, NEVADA
By _____, Deputy ATTORNEYS FOR EXECUTRIX

IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA, IN AND FOR THE COUNTY OF WHITE PINE

* * * * * * *

IN THE MATTER OF THE ESTATE OF ALEX KOLCHEK, DECEASED.	O R D E R

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Done in open Court this 16th day of July, 1953.

District Judge

(2 and last)

Filed _____, 1953 No. _____

_____, Clerk GRAY AND HORTON
ELY, NEVADA

By _____, Deputy ATTORNEYS FOR EXECUTRIX

IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA, IN AND FOR THE COUNTY OF WHITE PINE

* * * * * * *

IN THE MATTER OF THE ESTATE OF ALEX KOLCHUK, DECEASED.	O R D E R

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IT IS HEREBY FURTHER ORDERED that the said Lease and Option Agreement, except as hereinabove amended, shall remain in full force and effect.

Done in open Court this 16th day of July, 1953.

District Judge

(2 and last)

140

FILE COPY
SURNAME:

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

Rubin
Hofflund
Martin

FEB -2 1954

Mr. L. K. Requa
President
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA-3217
(Tungsten)
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine Co., Nevada

Dear Mr. Requa:

We acknowledge receipt of your letter dated January 19, and the enclosed copies of deed and assignment.

It was noted that the assignment recites that the lease and option agreement dated November 19, 1951, between Kolchek and yourself, which is the subject of the assignment, was amended on May 17 and July 16, 1953. This fact was not known to us when we wrote our letter of December 30, 1953, and it is, therefore, necessary that we have copies of these documents.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

HCRubin:ep 2-1-54

Copy to: Docket
Admr. Reading File
Field Team, Reg. III (2)
Mr. Martin
Mr. Hofflund
Mr. Rubin
Chron.
Pending

R.C.S. 2-2-54

ME-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 1/25/54

REFERRED TO:

1. Legal Division
2.
3.
4.

FOR:

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

RECEIVED
JAN 25 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

REMARKS:

Use these copies of deed and assignment adequate?
Should O.C.D. be requested now?

Check (X) before the items needing attention.

400
JK. H
Initials of sender.

GPO 16—63815-1

Docket

CLEVE CREEK MINES, INC.
218 Felt Bldg.
Salt Lake City, Utah

Defense Minerals Administration
RECEIVED
JAN 22 1954

January 19, 1954

Re: Docket No. DMEA 3217
Tungsten
Kolchek Tungsten Mine
White Pine County, Nevada

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

WBM

Dear Mr. Mittendorf:

Your letter of December 30th, 1953 has been received and the contents noted.

In reply we are enclosing copies of the deed and assignment whereby Cleve Creek Mines, Inc. took over title to the Kolchek Tungsten Mine;

4 Copies — Assignment by L. K. Requa to Cleve Creek Mines, Inc. of lease and option from Alex Kolchek, dated November 19th, 1951.

4 Copies — Deed from L. K. Requa to Cleve Creek Mines, Inc. conveying seven unpatented lode mining claims.

We note the necessity of an owners subordination agreement when our application is approved. The attorney for the Kolchek estate has assured us that this will be forthcoming when needed.

Very truly yours,

Cleve Creek Mines, Inc.

By L. K. Requa
President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1954

DEED

THIS INDENTURE made the 8th day of December, 1953, between L. K. Requa of Salt Lake City, Utah, the party of the first part, and Cleve Creek Mines, Inc., a corporation under the laws of Nevada, party of the second part,

WITNESSETH:

That the said party of the first part in consideration of the sum of One Dollar and other good and valuable consideration, does hereby convey and quitclaim unto the party of the second part, its successors and assigns, the following named unpatented lode mining claims in Cleve Creek canyon, White Pine County, State of Nevada -

Claim	Record Reference	
Tom	Book 166 -	Page 446
Clare	166	450
Bill	166	444
Pat	166	445
Sue	166	453
Quartzite	166	428
Alex	166	451

To HAVE and to HOLD the said premises, together with the appurtenances unto the party of the second part and to its successors and assigns forever.

IN WITNESS whereof the party of the first part has hereunto set his hand the day and year first above written.

L. K. Requa

STATE OF UTAH :
) ss
County of Salt Lake:

On this 8th day of December, 1953, personally appeared before me, a Notary Public in and for said County and State, L. K. Requa, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS whereof I have hereunto set my hand and affixed my official seal the day and year last above written.

H. VAN DAM NOTARY PUBLIC SALT LAKE CITY, STATE OF UTAH

H. VAN DAM
NOTARY PUBLIC
Salt Lake City, Utah
My Commission Expires Sept. 7, 1956

H. Van Dam
Notary Public
Salt Lake City, Utah

H. VAN DAM
NOTARY PUBLIC
Salt Lake City, Utah
My Commission Expires Sept. 7, 1956

92830

RECORDED January 12, 1954 AT 9:03 a.m.
BOOK 164, PAGE 227 Mining Deeds Record
J. B. Sheehy RECORDER OF WHITE PINE COUNTY, NEVADA
9.9 1c

DEED

THIS INDENTURE made the 8th day of December, 1953, between L. K. Requa of Salt Lake City, Utah, the party of the first part, and Cleve Creek Mines, Inc., a corporation under the laws of Nevada, party of the second part,

WITNESSETH:

That the said party of the first part in consideration of the sum of One Dollar and other good and valuable consideration, does hereby convey and quitclaim unto the party of the second part, its successors and assigns, the following named unpatented lode mining claims in Cleve Creek canyon, White Pine County, State of Nevada -

Claim	Record Reference	
Tom	Book 166 -	Page 446
Clare	166	450
Bill	166	444
Pat	166	445
Sue	166	453
Quartzite	166	428
Alex	166	451

To HAVE and to HOLD the said premises, together with the appurtenances unto the party of the second part and to its successors and assigns forever.

IN WITNESS whereof the party of the first part has hereunto set his hand the day and year first above written.

L. K. Requa

STATE OF UTAH :
) ss
County of Salt Lake:

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BOOK 164 PAGE 227 Mining Deeds Record
J. B. Shaughty RECORDER OF WHITE PINE COUNTY, NEVADA
9.5 1c

ASSIGNMENT

Undersigned, L. K. Requa, for a valuable consideration hereby assigns and transfers to Cleve Creek Mines, Inc., a corporation under the laws of Nevada, that certain Lease and Option Agreement dated November 19, 1951 (recorded in the office of the County Recorder for White Pine County, Nevada, June 26, 1952, in Book 157, page 216), wherein Alex Kolchek is the first party and assignor the second party; which agreement was modified and amended May 7, 1953, and again modified and amended July 16, 1953.

This assignment is made upon the condition and consideration that assignee shall keep and perform the obligations of said agreement on the part of the assignor to be kept and performed, and that assignee shall save harmless the assignor of and from all loss, cost, damage and expense arising or to arise out of any failure on the part of assignee to keep and perform such obligations.

IN WITNESS WHEREOF assignor has caused the due execution hereof this 8th day of December, 1953.

L. K. Requa

STATE OF UTAH :
) ss
County of Salt Lake:

On this 8th day of December, 1953, personally appeared before me, a Notary Public in and for said County and State, L. K. Requa, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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H. VAN DAM NOTARY PUBLIC SALT LAKE CITY, STATE OF UTAH

H. Van Dam
Notary Public
Salt Lake City, Utah

H. VAN DAM
NOTARY PUBLIC
Salt Lake City, Utah
My Commission Expires Sept. 7, 1956

RECORDED January 12 1954 AT 9:05 A. M.
BOOK 150, PAGE 332, Lease Record
J. B. Geraghty RECORDER OF WHITE PINE COUNTY, NEVADA
92831

ASSIGNMENT

Undersigned, L. K. Requa, for a valuable consideration hereby assigns and transfers to Cleve Creek Mines, Inc., a corporation under the laws of Nevada, that certain Lease and Option Agreement dated November 19, 1951 (recorded in the office of the County Recorder for White Pine County, Nevada, June 26, 1952, in Book 157, page 216), wherein Alex Kolchek is the first party and assignor the second party; which agreement was modified and amended May 7, 1953, and again modified and amended July 16, 1953.

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Notary Public
Salt Lake City, Utah

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Notary Public
Salt Lake City, Utah

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My Commission Expires Sept. 7, 1956

RECORDED January 12 19 54 AT 9:05 A. M.
BOOK 150, PAGE 332 Lease Record
J. B. Geraghty RECORDER OF WHITE PINE COUNTY, NEVADA
re

92831

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1954

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Notary Public
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Salt Lake City, Utah
My Commission Expires Sept. 7, 1956

RECORDED January 12 19 54 AT 9:05 A. M.
BOOK 157, PAGE 332 Lease Record
J. B. Sanpety RECORDER OF WHITE PINE COUNTY, NEVADA
92831

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

Docket

January 7, 1954

Memorandum

To: W.S. Martin, DMEA

From: T.P. Thayer

Subject: DMEA-3217 Tungsten, Amended

As an exploration proposal, I see little to recommend the amended proposal in preference to the original. If it strikes ore, I can see advantages in mining. The new proposal, however, would call for practically all the works in unfavorable ground, whereas the original tunnel would explore several hundred feet of the favorable zone.

I recommend that the original proposal be given preference.

The copy of the revised proposal is returned herewith.

T.P. Thayer

Attachment

W. S. Martin

Hopkins
Martin
Selfridge
Yeomans
Mattendorf

JAN 14 1954

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 3217, Tungsten
Cleve Creek Mines, Inc.
Kolobok Tungsten Mine
White Pine County, Nevada

Dear Mr. Miller:

Reference is made to a supplement to the above-docketed application, forwarded to you on January 5, 1954.

We are enclosing two copies of a memorandum of January 7, 1954, by Mr. T. P. Thayer, Geologist, U. S. Geological Survey, for your consideration.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHO)

Enclosures

APPROVED:

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

T. P. Thayer (JHO)
Member, Geological Survey

cc: DOCKET
CODE 400
OPER. COMMITTEE
ADM. READ. FILE
R.W.GEEHAN, USBM
T.P.THAYER, USGS

JHopkins/ls
1/13/53

R.C.M.
1-14-54

Docket

IN REPLY REFER TO:

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

January 7, 1954

W309

Memorandum

To: W.S. Martin, DMEA

From: T.P. Thayer

Subject: DMEA-3217 Tungsten, Amended

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T.P. Thayer

T.P. Thayer

Attachment

MDL

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 31 1953

December 30, 1953
Ref: DMEA 3217

To F.T. for exam 12/30

WSG

Mr. C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

Under date of November 27, 1953, we sent you our application for aid in an exploration project.

Herewith we submit four copies of a supplement to this application, together with maps which describe an alternate tunnel drive, which we believe warrants your consideration.

Very truly yours,

L. K. Requa

L. K. Requa, President,
Cleve Creek Mines, Inc.

LKR:fbr

Since supplement to application, Mail Records Rent: 1 copy to F T
1 " " USGS
1 " " USBM.

1-5-54

LS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 4 1954

Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

December 30, 1953
Ref: DMEA 3217

An Alternate Tunnel Proposal

Under date of November 27, 1953, an application was made to the Defense Minerals Exploration Administration for exploration assistance in the development of the Kolchek tungsten mine located on Cleve Creek in White Pine County, Nevada.

This proposal had as its objective the exploration of the Combined Metals Bed, of lower Cambrian age, which occurs in this location on top of the thick Prospect Mountain quartzite and some 600 feet stratigraphically below the latest ore mined in the Chisholm limestone.

In our opinion, the Combined Metals Bed, or C. M. Bed as it is more frequently called, is an exceptionally fine objective, as it has the unique characteristic of dependable localization of ore when this bed is found in conjunction with favorable structure. This characteristic has been proven at Pioche, Nevada, for lead, zinc, and manganese ore deposits; as it is now in the process of being proven for tungsten ore deposits at the Mt. Wheeler mine, some 35 miles south of the Kolchek mine. At that locality, the bed is known as the Wheeler Bed; but it is the same geological horizon.

The original proposal made to the Defense Minerals Exploration Administration was for a tunnel starting from the north side of the hill under which the tungsten ore zone occurs. For a number of reasons listed below it now seems advisable to call attention to and to describe an alternate tunnel drive to reach the identical objective.

This alternate tunnel drive would start from the south side of the hill on which the ore occurs and follow a course of N 65° W for 1,500 feet until it encountered the C. M. Bed. If our reasoning is correct, ore should be found at that locality.

A plan map is attached showing the course of this alternate tunnel drive as well as the course of the original tunnel proposal. A cross section is also attached showing the relationship of the tunnels to the geological section.

This alternate tunnel proposal could be driven at an elevation of about 125 feet below the original tunnel proposal; and it would have the following operational advantages:

1. Being on the south side of the hill, the portal would be more accessible in winter.

2. The drive would be all in quartzite with little timbering required. Less fracturing and faulting would be encountered.

3. Due to the lower elevation, better drainage would be obtained.

4. For numerous operational reasons, it would provide a better working level.

The only disadvantage would be that it would all, except the end of the tunnel, be driven in quartzite under the C. M. Bed.

Both drives are the identical footage and are estimated at almost the same cost and time for completion.

With reference to the numbered paragraph of form MF-103, the following estimate of cost is made. Time required for driving this tunnel is estimated at 14 months; and monthly cost items are estimated on this basis.

Paragraph 6: Estimate of Costs

Wage rates expected to prevail:		Estimated Total Cost
Miners	$14.50 per day	
Muckers	$12.60 " "	
Laborers	$11.30 " "	
Carpenters	$15.08 " "	
(a) Independent Contractors		None
(b) Labor, Supervision, Consultants		
Direct Costs		
Labor	$14.00 per foot	
Trackage	$ 2.60 " "	
Vent pipe	$ 2.10 " "	
Explosives	$ 3.00 " "	
Drill Steel	$ 1.55 " "	
Timber	$ .30 " "	

		Estimated Total Cost
Fuel & lube oil	$1.32 per foot	
Small tools	$ .55 " "	
Comp. Insurance	$ .98 " "	
Payroll taxes	$ .60 " "	
1,500 feet of 6 x 8 tunnel @ $27 per foot		$40,500.00
Supervision		
Management, Engineering and Geology	$500 per month	
Tunnel supervision	$500 per month	
Travel & Car expense	$150 per month	
Bookkeeping	$100 per month	
	$1250 per month	$17,500.00

(c) Operating Material and Supplies

Figured in Direct Costs under (b)

(d) Operating Equipment

Rented Equipment

1-315 cu.ft. air compressor	$513 per mo.	$ 7,182.00
1-3/4 ton pick-up truck	$ 75 " "	$ 1,050.00
1-Bulldozer 4 winter months	$400 " "	$ 1,600.00

Purchased Equipment

1-Battery locomotive with extra battery & charger	$5,000.00	
1-Tunnel mucker (rebuilt)	$2,000.00	
1-Tunnel vent fan & motor 18"	$ 718.00	
1-Tunnel drilling jumbo	$2,310.00	
8-Ore cars @ $200	$1,600.00	
2-Jackhammers & drill steel	$2,200.00	
1-10KW electric generator for mine	$1,717.00	
1-5KW electric generator for camp	$1,052.00	
		$17,097.00

(e) Rehabilitation & Repair

Repair camp buildings	$5,000.00
Additional camp equipment	$1,000.00

		Estimated Total Cost
(e) Rehabilitation & Repair (Cont'd.)		
Dig water well at camp	$ 500.00	
Ice Box at camp	350.00	
Water line to mine portal 2500 ft. 2" line in trench and covered	1,500.00	
		$ 8,350.00
(f) New Buildings		
General utility building at mine portal	$1,000.00	
Powder magazine	500.00	
		$ 1,500.00
(g) Miscellaneous		
Minimum royalty payments on lease, per month	$ 200.00	X See DMEA Order 1
Loss on boarding house, per month	$ 300.00	
Legal expense, per month	$ 25.00	
Assaying, per month	$ 50.00	
Total, per month	$ 575.00	$ 8,050.00
(h) Contingencies		
For variations in wage scale, cost of materials, character of ground encountered, and other contingencies now unforeseen.		$10,000.00
Total Estimated Cost of Project		$112,829.00

This alternate tunnel proposal is submitted for the consideration of the Defense Minerals Exploration Administration; and it is requested that it be considered a part of our original application dated November 27, 1953.

All things considered, we would prefer to make this alternate drive rather than the drive outlined in our original application.

Respectfully submitted,

L. K. Requa

L. K. Requa, President,
Cleve Creek Mines, Inc.

LKR:fbr

DEC 30 1953

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 3217 - Tungsten
Cleve Creek Mines, Inc.
Kolchak Tungsten Mine
White Pine County, Nevada

Dear Mr. Miller:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

The following memoranda are enclosed for your information:

Memorandum by Robert W. Geehan, USBM, dated December 11, 1953.

Memorandum by T. P. Thayer, USGS, dated December 22, 1953.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

JHopkins:foc
12-29-53
cc: Docket
Code 400
FT. Reg. 3
Operating Comm.
Admr. Reading File
R. W. Geehan, USBM
T. P. Thayer, USGS

Enclosures

400

DEC 3 0 1953

Mr. L. K. Requa, President
Cleve Creek Mines, Inc.
228 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA 3217 - Tungsten
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Requa:

The above-docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination of the property.

The Regional Office will contact you at an early date with regard to an examination of the property. Any assistance that you can render the members of the Field Team during the examination will be appreciated.

Prior to entering into any exploration project contract, it is required that the applicant have a sufficient interest in the land for the purposes of such contract. In the case of a lessee, an Owner's Consent to Lien is required for all claims held under lease. Therefore, in your case, if a project should be approved, we would require for the Alex Kolchek claims for which you will receive a lease and option by assignment from L. K. Requa that an Owner's Consent to Lien be obtained from the present owners of the claims, or someone authorized to execute such instrument, as the case may be. We would also require a copy of the assignment of the lease and option from L. K. Requa to Cleve Creek Mines, Inc. As to those claims owned by L. K. Requa, we would require a copy of the instrument (lease, quitclaim deed, etc.) by which the claims are transferred. If the transfer from L. K. Requa to the company of the claims owned by the former is less than full ownership, we would also require an Owner's Consent to Lien from L. K. Requa.

Sincerely yours,

C. O. Mittendorf

Administrator

CC: DOCKET
CODE 400
FT. REG. 3
OPER. COMMITTEE
ADM. READ. FILE
R. W. GERHAN, USBM
T. P. THAYER, USGS

JHopkins/WSMartin/ls
12/29/53

If a project should be proposed, we would require

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

Mr. L. K. Requa, President
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA 3217 - Tungsten
Kolchek Tungsten Mine
White Pine County, Nevada

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Sincerely yours,

Administrator

408

FILE COPY
SURNAME:

Hopkins
Martin
Nelson
Fuehling
Dufanafek
Selfridge

DEC 3 0 1953

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Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

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Kelchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Requa:

The above-docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination of the property.

The Regional Office will contact you at an early date with regard to an examination of the property. Any assistance that you can render the members of the Field Team during the examination will be appreciated.

Prior to entering into any exploration project contract, it is required that the applicant have a sufficient interest in the land for the purposes of such contract. In the case of a lessee, an Owner's Consent to Lien is required for all claims held under lease. Therefore, in your case, if a project should be approved, we would require for the Alex Kolchek claims for which you will receive a lease and option by assignment from L. K. Requa that an Owner's Consent to Lien be obtained from the present owners of the claims, or someone authorized to execute such instrument, as the case may be. We would also require a copy of the assignment of the lease and option from L. K. Requa to Cleve Creek Mines, Inc. As to those claims owned by L. K. Requa, we would require a copy of the instrument (lease, quitclaim deed, etc.) by which the claims are transferred. If the transfer from L. K. Requa to the company of the claims owned by the former is less than full ownership, we would also require an Owner's Consent to Lien from L. K. Requa.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

R. L. G. 12-30-53

CC: DOCKET
CODE 400
FT. REG. 3
OPER. COMMITTEE
ADM. READ. FILE
R. W. GEEHAN, USBM
T. P. THAYER, USGS

JHopkins/WSMartin/ls
12/29/53

400

~~Hopkins~~
Martin
Selfridge

DEC 30 1953

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 3217 - Tungsten
Cleve Creek Mines, Inc.
Kolchek Tungsten Mine
White Pine County, Nevada

Dear Mr. Miller:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

The following memoranda are enclosed for your information:

Memorandum by Robert W. Geehan, USBM, dated December 11, 1953.

Memorandum by T. P. Thayer, USGS, dated December 22, 1953.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

APPROVED:

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

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

JHopkins:foc
12-29-53
cc: Docket
Code 400
FT. Reg. 3
Operating Comm.
Admr. Reading File
R. W. Geehan, USBM
T. P. Thayer, USGS

Enclosures

R.C.S.
12-30-53

Dorkest

IN REPLY REFER TO:

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

December 22, 1953

WSM

Memorandum

To: W.S. Martin, DMEA

From: T.P. Thayer, USGS

Subject: DMEA-3217 Tungsten
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Mine known as
Kolchek Mine or
Kolchek Tungsten Mine

The applicants propose to spend $112,434 on an adit and winze to explore the stratigraphic equivalent of the CM limestone bed near intrusive porphyry for tungsten. The Geological Survey has no real information on this deposit in its Washington files.

The company appears to have done a competent job of geological mapping and proposed a program that makes good geologic sense. As presented, I see no better alternative method of exploration, but I would recommend that the Field Team investigate the proposal with the following items in mind.

1. What evidence is there of mineralization in the CM bed in the area, especially along the Kolchek fault, and is the fault pre- or post-ore?

2. Should the present shallow deposits in limestone be explored first, to get more information on relation of ore to porphyry? The New Discovery looks like a promising subject for exploration, between the two north-south faults. If the company plans to do this anyway, that question is answered.

3. As gold and silver appear to be at least as important as tungsten, should government participation be proportioned, presumably to 37½ percent (half the tungsten rate) or 50 percent (2/3 the tungsten rate)? Do the various metals come together, or are there recognizable distinct controls on ore deposition?

Copy retained 400

4. How about the Rambo fault as a possible ore zone to be tested--there is a tungsten prospect on it, apparently in the relatively unfavorable (?) Prospect Mountain quartzite.

The proposed drift does seem well placed to explore a good length of the CM bed in the swing of the fold, up the dip from the porphyry intersection. The general geologic relations should be carefully checked, as this is fundamental to definition of the geologic target. Any information bearing on justification for a possible $84,000 government gamble should be presented.

T.P. Thayer

T.P. Thayer

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

December 22, 1953

Memorandum

To: D.G. Martin, Utah

From: T.P. Thayer, USGS

Subject: DMM-3217 Tungsten
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Mine known as
Holcheck Mine or
Holcheck Tungsten Mine

The applicants propose to spend $112,434 on an adit and winze to explore the stratigraphic equivalent of the CM limestone bed near intrusive porphyry for tungsten. The Geological Survey has no real information on this deposit in its Washington files.

The company appears to have done a competent job of geological mapping and proposed a program that makes good geologic sense. As presented, I see no better alternative method of exploration, b ut I would recommend that the Field Team investigate the proposal with the following items in mind.

1. What evidence is there of mineralization in the CM bed in the area, especially along the Holcheck fault, and is the fault pre- or post-ore?

2. Should the present shallow deposits in limestone be explored first, to get more information on relation of ore to porphyry? The New Discovery looks like a promising subject for exploration, between the two north-south faults. If the company plans to do this anyway, that question is answered.

3. As gold and silver appear to be at least as important as tungsten, should government participation be proportioned, presumably to 37½ percent (half the tungsten rate) or 50 percent (2/3 the tungsten rate)? Do the various metals come together, or are there recognizable distinct controls on ore deposition?

4. How about the Jumbo fault as a possible ore zone to be tested--there is a tungsten prospect on it, apparently in the relatively unfavorable (?) Prospect Mountain quartzite.

The proposed drift does seem well placed to explore a good length of the CM bed in the swing of the fold, up the dip from the porphyry intersection. The general geologic relations should be carefully checked, as this is fundamental to definition of the geologic target. Any information bearing on justification for a possible $84,000 government gamble should be presented.

T.P. Thayer

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

December 22, 1953

Memorandum

To: [illegible] Martin, [illegible]

From: T.P. Thayer, [illegible]

Subject: [illegible]-3217 Tungsten
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Mine known as
Kolchek Mine or
Kolchek Tungsten Mine

The applicants propose to spend $112,434 on an adit and winze to explore the stratigraphic equivalent of the [illegible] limestone bed near intrusive porphyry for tungsten. The Geological Survey has no real information on this deposit in its Washington files.

The company appears to have done a competent job of geological mapping and proposed a program that makes good geologic sense. As presented, I see no better alternative method of exploration, b ut I would recommend that the Field Team investigate the proposal with the following items in mind.

1. What evidence is there of mineralization in the [illegible] bed in the area, especially along the Kolchek fault, and is the fault pre- or post-ore?

2. Should the present shallow deposits in limestone be explored first, to get more information on relation of ore to porphyry? The New Discovery looks like a promising subject for exploration, between the two north-south faults. If the company plans to do this anyway, that question is answered.

3. As gold and silver appear to be at least as important as tungsten, should government participation be proportioned, presumably to 37½ percent (half the tungsten rate) or 50 percent (2/3 the tungsten rate)? Do the various metals come together, or are there recognizable distinct controls on ore deposition?

4. How about the Rambo fault as a possible ore zone to be tested--there is a tungsten prospect on it, apparently in the relatively unfavorable (?) Prospect Mountain quartzite.

The proposed drift does seem well placed to explore a good length of the Ck bed in the swing of the fold, up the dip from the porphyry intersection. The general geologic relations should be carefully checked, as this is fundamental to definition of the geologic target. Any information bearing on justification for a possible $64,000 government gamble should be presented.

T.P. Thayer

Director's reading file 4212
Branch reading file 4212

TPThayer:md

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

Docket

December 11, 1953

Memorandum

To: W. S. Martin, DMEA

From: Robert W. Geehan

Subject: Docket DMEA 3217 - Tungsten
Kolchek Tungsten Mine, White Pine County, Nevada

The applicant proposes underground work, estimated to cost $112,434, to explore the CM bed in a favorable area.

From the standpoint of locating ore, this is probably a sound proposal; however, there is no apparent evidence to indicate that it will be tungsten ore. As you know, the CM bed is the host rock at the Pioche, Nevada, lead-zinc mines. The same bed is known to contain tungsten minerals in the Pan American district west of Pioche and in other eastern Nevada areas. I do not know of any tungsten production from workings in the CM bed.

It is recommended that the docket be referred to the field team with a specific request that the probability of locating tungsten ore, rather than ore in general, should be reported.

Robert W. Geehan

Robert W. Geehan

Attachment

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

December 11, 1953

Memorandum

To: W. S. Martin, DMEA

From: Robert W. Geehan

Subject: Docket DMEA 3217 - Tungsten
Kolchek Tungsten Mine, White Pine County, Nevada

The applicant proposes underground work, estimated to cost $112,434, to explore the CM bed in a favorable area.

From the standpoint of locating ore, this is probably a sound proposal; however, there is no apparent evidence to indicate that it will be tungsten ore. As you know, the CM bed is the host rock at the Pioche, Nevada, lead-zinc mines. The same bed is known to contain tungsten minerals in the Pan American district west of Pioche and in other eastern Nevada areas. I do not know of any tungsten production from workings in the CM bed.

It is recommended that the docket be referred to the field team with a specific request that the probability of locating tungsten ore, rather than ore in general, should be reported.

Robert W. Geehan

Attachment

RWGeehan:lds
Copy to: Ferrous Metals
RWGeehan
FILES
DMEA

Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

December 4, 1953
DMEA-3217
Subject: Exploration Assistance
Re: Kelchek Tungsten Mine

Dear Mr. Requa:

The receipt of your application dated November 27, 1953, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3217 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-3217 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams
Chief, Operations Control
and Statistics Division

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
DEC 3 1953

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

Not to be filled in by applicant

Docket No. DMEA-3217
Metal or Mineral
Date Received 12-4-53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

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

Cleve Creek Mines, Inc.
218 Felt Bldg.
Salt Lake City, Utah

(*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 attached data

(*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

Lease and Option in part, Owner in part

(*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 None

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

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

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

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

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

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

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

(*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. By Apr.15,1954

(*c*) The work will start within ..... days and be completed within 14 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated November 27th, 1953

Cleve Creek Mines, Inc
(Applicant)

By L. K. Requa
L. K. Requa, President
218 Felt Bldg.
Salt Lake City, Utah

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 3 1953

D. M. E. A.

APPLICATION
By

CLEVE CREEK MINES, INC.
218 Felt Bldg.
Salt Lake City, Utah

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
RECEIVED
DEC 2 1953

November 27, 1953

Mr. C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

We are sending to you herewith four copies of an application for a D. M. E. A. loan for mining exploration made by the Cleve Creek Mines, Inc., a Nevada corporation (now being incorporated).

This is a tungsten property.

We will be very pleased to receive a docket number for this project. If there is any further information needed we will gladly supply it on request.

Very truly yours,

L. K. Requa

L. K. Requa, President
Cleve Creek Mines, Inc.

12/29/53

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

INSTRUCTIONS

1 (a) L. K. Requa, President
Cleve Creek Mines, Inc.
218 Felt Building
Salt Lake City, Utah

(b) Cleve Creek Mines, Inc., a Nevada Corporation now being incorporated

(c) L. K. Requa, President
W. J. Franklin Vice President
Frances B. Requa Secretary-Treasurer

(d) Does not apply

2 Noted

3 The applicant's property rights as follows:

(a) Unpatented Lode Mining Claims

Cash, Cash No. 2, Cash No. 3, Kolchek, Manie, Sam, Street, Rambo, Rambo No. 2, Eagle, Taft

Claims are in the name of Alex Kolchek, deceased
Under lease and option to L. K. Requa, to be assigned to Cleve Creek Mines, Inc.

Tom, Claire, Bill, Pat, Sue, Quartzite, Alex

Claims are in the name of L. K. Requa, to be assigned to Cleve Creek Mines, Inc.

(b) This mine has been known as the Kolchek Mine or Kolchek Tungsten Mine

(c) State above in (a)

(d) Copy of the lease and option is attached

(e) There are no liens or encumbrances

(f)

Claim	Record Reference		Located
Cash	Book 15	- Page 501	June 1, 1907
Cash No. 2	62	481	Jan. 3, 1912
Cash No. 3	62	482	Jan. 3, 1912
Kolchek	62	601	May 10, 1912
Manie	62	600	May 10, 1912
Sam	62	602	May 10, 1912
Street	15	500	June 1, 1907
Rambo	15	64	Apr. 20, 1907
Rambo No. 2	15	499	Apr. 20, 1907
Eagle	62	484	Jan. 3, 1912
Taft	62	483	June 3, 1912
Tom	166	446	Oct. 27, 1952
Claire	166	450	Oct. 27, 1952
Bill	166	444	Sept. 26, 1952
Pat	166	445	Sept. 26, 1952
Sue	166	453	Nov. 7, 1952
Quartzite	166	428	Aug. 14, 1952
Alex	166	451	Nof. 8, 1952

All recorded in the records of White Pine County, State of Nevada

4. Physical Description:

(a) The Cash was the first mining claim located in June, 1907, and small mining operations have been conducted on this claim for gold first and then for tungsten.

The largest operation was conducted by Alvin Marti and partners, who leased from Alex Kolchek during 1946-49. It is reported that 22 railroad cars of silicious gold ore were mined and sent to the McGill Smelter of Kennecott Copper Corporation. This ore was said to have averaged 0.68 ozs. gold and 6.0 ozs. silver per ton.

These same leasers mined 458 tons of tungsten ore from an immediately adjacent orebody. The reported recovery was 370.702 units of tungsten, or 0.809 units per ton. This was scheelite ore in a silicious replacement of limestone.

The location of both of these operations was at the Cash mine on the Cash claim.

In 1951, Hullinger and McFarland mined one railroad car of ore and sent it to the McGill Smelter. It is reported to have run 0.67 ozs. gold and 8 ozs.silver.

On November 19, 1951, L. K. Requa took a lease and option on the Kolchek eleven unpatented claims and during 1952 mining and exploration operations were conducted at the Cash mine. The main drift was extended for 80 feet to cut the Kolchek fault and various short drives were made to prospect for ore.

Shipments totaling 107.4 tons of silicious gold ore were made to the McGill Smelter, which averaged 0.38 ozs. gold and 1.75 ozs. silver per ton. We also mined and stockpiled 25 tons of tungsten ore, which sampled 0.48% WO_3.

As a part of this same operation we explored the Rambo prospect on the Rambo claim. This was a small operation, but we have stockpiled about 25 tons of ore that we estimate to run 1.0% WO_3.

In July of this year a blinded orebody was located on the Cash No. 2 claim by following high grade float. This orebody occurs 600 feet S 70° E from the Cash mine. From this orebody 31.6 dry tons of ore were mined and shipped to the Stopper mill at the Minerva mine for milling. Results of this mill run are as follows -

Dry tons of ore	31.6 Tons
Net weight of concentrates	2,161.5 Lbs.
Assay value	65.78% WO_3
Units of tungsten	71.09
Units recovered per ton	2.25% WO_3
Units lost in tailings per ton	.90 WO_3
Calculated grade crude ore	3.15% WO_3

All of this production has come from surface, or near surface workings. The Cash mine has about 250 feet of workings and stopes. All of these workings are now open and can be examined.

In July and August of this year four diamond drill holes were put down for a total footage of 448 feet. The deepest was a vertical hole at the Cash mine. It went 200 feet from the surface, but found no ore. The other three were shallow surface holes in the area of the new ore discovery. They added to our geological knowledge, but did not find ore. It is noteworthy that after drilling these holes with negative ore results we found the orebody by bulldozer work close to the drill holes. L. K. Requa and associates have spent $35,000 on development.

(b) The past production is as shown above. The mine is now shut down for the winter. No significant amount of positive ore can be measured but there is a large potential of inferred ore and it is on the basis of this inferred ore that this application is being made.

(c) The surface geology is shown on the attached map entitled "Surface Geology and Claims, Cleve Creek Mines, Inc." Also attached are geological sections showing the proposed development.

The sedimentary beds involved are lower and middle Cambrian limestones, shales and quartzites. The Pioche log names are used for these formations, even though it is believed that the section may turn out to be more similar to the Eureka, Nevada section. These are the two best known Cambrian sections in this immediate area. Eventually these forma-

tions will carry their own names as they do not exactly fit into either section.

The area has been intruded by considerable quartz porphyry, which is a light to dark grey porphyritic rock. On the surface this porphyry weathers to a grey sand and is obscure unless dug out with a bulldozer. The known porphyry is mapped, but considerably more is suspected due to the mentioned obscure nature of outcrops. This porphyry is intimately associated with the ore.

below

All of the ore produced to date has come from limestone beds and quartz fissures in a limestone, which we can class as Davidson and from another limestone, in the Chisholm shale, which is found under the Davidson formation. These orebodies occur along an East-West zone about 600 feet long and 100 feet wide, which contains a large amount of hydrothermal quartz, secondary calcite and iron oxide.

This ore zone parallels a strong N 70° W fault, which we have called the Kolchek fault.

We consider the orebodies found to date only as indicators of larger and more persistent orebodies that may be found in the first limestone bed above the quartzite. This we have called the C.M. Bed, as it is called in the Pioche log. This bed has demonstrated an ability to localize ore more readily than any other bed when it occurs in a good ore structure.

It is the exploration of the C.M. Bed that is the object of this application.

The C.M. Bed is exposed for about a total length of 3,000 feet to the East of our known ore area. This outcrop lies outside of the favorable ore structure, but for a length of about 2,000 feet this bed has been completely replaced and altered by silica, calcite, iron carbonate and other minor secondary minerals. Where so altered it is 6 to 8 feet thick. Where this bed is unaltered it is from 10 to 12 feet thick. This difference in thickness suggests a shrinkage of the bed due to the process of alteration.

From our evidence to date we believe that the C.M. Bed will contain ore in important amounts, but to see this bed where ore is suspected it will be necessary to drive a 1,200 foot tunnel and do some exploration up and down the bed. This tunnel will be described in detail later. Such a tunnel should be confined to the most favorable structural zone. The proposed tunnel is so located.

The general regional structure consists of major North and Northeast faulting. While these are the strongest faults the ore is more associated with the East-West faulting. All this is shown on the surface geological map.

The major Northeast fault has been called the Rambo fault. There are numerous parallel faults and fractures.

The quartz porphyry parallels the ore zone, but it is mostly in the hanging wall of the Kolchek fault.

All of the faults are believed to be normal and have displacements of 100 to 300 feet, except the Rambo fault, which is suspected to have a throw of from 600 to 800 feet.

To summarize the geological situation we can say that -

1. Scheelite and gold occur at various places in an alteration zone in the footwall of the Kolchek fault. This zone is 600 feet long and 100 feet wide. This is all replacement in limestone.

2. The C.M. Bed occurs in this same ore structure, but 600 feet lower. This is a good objective and can be explored by a tunnel 1,200 feet long, 700 feet of which will be in the C.M. Bed and near the ore forming faults. If this bed does make ore along the Kolchek fault there would be about 1,500 feet of it, in an East-West direction, that might be replaced with ore.

3. We have numerous intersecting faults and fractures of small to moderate throw in the vicinity of the Rambo fault which has a throw of 600 to 800 feet.

4. We have intrusive porphyry in abundance.

(d) This mine is located in the Shell Creek Range on Cleve Creek in White Pine County, Nevada, and is approximately in Section 14, Township 16 North, Range 65 East, M.D.B. & M. It is in the Nevada National Forest.

It is 48 miles from Ely by road, of which 38 miles is paved highway and the balance good dirt road. In a direct line it is 14 miles due East of Ely and there is good reason to believe that the East-West structure at the Ely copper district continues Eastward into this area.

(e) Ely is a good center for manpower. Materials, supplies and equipment will have to come from Salt Lake City. A moderate, but what is believed to be ample water supply exists on the property. There is no power line near the property and power will have to be developed by diesel engines.

5 (a) The mineral to be explored for is tungsten.

(b) The proposed project is a 1,200 foot tunnel as shown on the surface geology map. This tunnel will start in Prospect Mountain Quartzite and run for about 400 feet before encountering the C.M. Bed. It will then follow this bed until it reaches the Kolchek fault. In the 700 to 800 feet that this tunnel will be driven in the C.M. Bed, it has a good chance of find-

ing ore, as it will be in, or close to, the ore forming structure.

On reaching the Kolchek fault, which is considered the most important mineralizer, an inclined winze will be sunk on the C.M. Bed for about 300 feet. This winze is shown on the East-West cross section of the geology attached herewith.

This constitutes the project as proposed herein. If the C.M. Bed is to be an important producer of ore we will know it at the completion of the project.

The eventual development of this mine would include the exploration of the entire length of the C.M. Bed, in the footwall of the Kolchek fault, until the Rambo fault is reached. This is a total length along the C.M. Bed of about 1,500 feet. Beyond the Rambo fault the country is dropped 600 to 800 feet and exploration beyond here will not be considered at this time.

This possible additional exploration is dotted in on the geological section.

The hanging wall section of the Kolchek fault may be favorable for ore in the C.M. Bed, but as ore has not yet been found on that side of the fault it has not been considered.

In all this property has the possibility of being a big mine and the grade of the ore could be considerably above average.

It should be mentioned that there are several other means of accomplishing the proposed development. A shaft could be sunk from the surface. An incline could be sunk from the outcrop of the C.M. Bed, or below this location a low level tunnel could be driven, mostly in quartzite. All of these have been given careful consideration and were found to be inferior to the selected tunnel site for either geological or operational reasons.

See Supplement of 12/30/53

(c) The work can start by April 15, 1954, or sooner if necessary, and should be completed in fourteen months from the date of starting.

(d) The work will be under the supervision of L. K. Requa. The tunnel work will be under the direction of W. J. Franklin. Both individuals have had about thirty-five years of experience in exploration, development and operation.

6 Estimate of Costs

It is our desire to expedite this report and get it to DMEA as soon as possible. For this reason the following costs are approximate and some of the details called for are omitted. A more detailed and supplemental report will be furnished later. However, these costs are sufficiently accurate to permit an appraisal of the project.

All monthly expense items are figured for fourteen months.

Direct Costs

1200 Feet of 6 x 8 tunnel	@ $27/Ft.	$32,400	
300 Feet of 7 x 8 winze	35/Ft	10,500	$ 42,900

Rental Equipment

1 -315 Cu. Ft. air compressor	@ $513/Mo.	$ 7,182	
1 -3/4 Ton pick-up	75/Mo.	1,050	
1 -Bulldozer during winter - 4 months	400/Mo	1,600	9,932

Equipment Purchased

1 Battery locomotive, with extra battery and charger	$ 5,000	
1 Tunnel mucker (reconditioned)	2,000	
1 18" Tunnel vent fan and motor	718	
1 Tunnel drilling jumbo	2,310	
8 Ore cars @ $200	1,600	
1 1-Ton air hoist	855	
2 Jackhammers and drill steel	2,200	
Miscellaneous small tools	500	
1 Self-dumping skip for incline	250	
Hoisting cable, sheaves, bells, etc.	300	
1 10-KW Gasoline-electric set for mine	1,717	
1 5-KW Gasoline-electric set for camp	1,052	18,502

Supervision

Management, Engineering & Geology	@ $500/Mo.	$ 7,000	
Tunnel supervision	500/Mo.	7,000	
Travel and car expense	150/Mo.	2,100	
Bookkeeping	100/Mo	1,400	17,500

Rehabilitation & Repairs

Repair camp buildings	$ 5,000	
Additional camp equipment	1,000	
Water well	500	
Ice box	350	6,850

New Buildings

General utility building at tunnel portal	$ 1,000	
Powder magazine	500	1,500

Miscellaneous

Loss on boarding house operation	@ $300/Mo.	$ 4,200	
Legal expense	25/Mo.	350	
Assaying	50/Mo.	700	$ 5,250

Contingencies

For variation in price of material, variation in character of ground encountered in tunnel drive and other intangibles	10,000
Total Cost	$112,434

Respectfully submitted,

L. K. Requa

L. K. Requa, President
Cleve Creek Mines, Inc.

K

LEASE AND OPTION

THIS AGREEMENT made in duplicate this 19 day of November, 1951, between Alex Kolchek of Ely, Nevada, first party, and L. K. Requa of Salt Lake City, Utah, second party,

WITNESSETH:

In consideration of the sum of One Hundred Dollars paid by second party to first party, receipt whereof is hereby acknowledged, and of the terms, conditions and covenants herein stated to be kept and performed by the parties respectively it is agreed:

1. First party hereby sells to second party the option to purchase upon the terms and conditions hereinafter set forth, the following named unpatented lode mining claims situated in Cleve Creek Canyon, in White Pine County, State of Nevada, about fifteen miles Easterly from Ely, in said county and state, to-wit:

Cash	Taft
Cash #2	Kolchek
Cash #3	Sam
Rambo	Manie
Rambo #2	Eagle
	Street

Together with all appurtenances, including water and water rights.

For the particular description of each said claim reference is made to location certificate thereof of record in the office of the County Recorder for White Pine County, Nevada.

(a) The purchase price is $30,000.00, of which $100.00 has been paid. The balance of $29,900.00 is to be paid on or before five and one-half years from the date of this agreement, as follows:

$5,000	or more	on or before	one and one-half years	after date
5,000	"	"	two and one-half years	"
5,000	"	"	three and one-half years	"
5,000	"	"	four and one-half years	"

And the remaining balance on or before five and one-half years after date.

(b) For the consideration paid as above stated, second party shall have the exclusive right for a period of thirty days from date hereof to enter into and

upon said claims for the purpose of examination, exploration and sampling; provided, that if second party during this thirty day period shall pay $500.00 more to first party this period shall be extended an additional five months.

(c) All payments required to be made under this agreement shall apply upon and reduce the next ensuing installment of purchase price coming due, and all such payments except the $600.00 paid, or to be paid for the examination period, shall be paid to the escrow holder hereinafter named for the account of first party, and said escrow holder shall forthwith upon receipt pay the same to first party, together with copy of settlement sheet for royalty payments.

(d) This is a continuing option to be kept in force and effect by compliance on the part of second party with all the terms and conditions herein stated on the part of second party to be kept and performed.

2. After the expiration of the examination period as above provided, this agreement shall remain in effect at the election of second party, and for this purpose first party does hereby demise, lease and let to second party for the purpose of carrying on mining operations and of extracting and shipping ores and minerals therefrom, all of the property described in paragraph 1 hereof upon the following terms and conditions, to-wit:

(a) Second party will go into possession of said property and during each year he remains in possession will do all assessment work required by Federal law to prevent forfeiture of said claims. At his sole discretion he may do other development and mining work in said property; all such work to be done in good miner-like fashion, properly securing the ground wherever necessary and with a view to the preservation of said property for future mining operations.

(b) All ores mined under this agreement shall be shipped and marketed in the name of second party and shall be sold on the highest competitive bid obtained by either party hereto, time and terms of ore purchase contract considered.

(c) Until payment of the purchase price provided for herein second party will pay to the escrow holder for the account of first party a royalty of 10% of net mill and smelter returns on ores produced from the property. Net returns shall mean the gross returns (including therein all premium production payments made by the United States government or any of its agencies, but no royalty payments shall accrue on exploration or development allowances) less transportation, treatment, sampling and assaying charges; provided that in any month when earned royalties amount to less than $200.00 second party will pay in addition to the earned royalty, a sufficient sum to equal a minimum monthly royalty of $200.00 per month cumulative over a twelve month period.

(d) Second party shall be solely responsible for all labor, materials, supplies and equipment furnished for his operation, and shall keep the demised premises free and clear of incumbrances and mechanic's liens.

(e) Second party will indemnify and save harmless first party of and

from all liability, cost and expense that may arise out of damage or injury to persons or property occurring in the operations of second party under this agreement, but second party shall be notified of the commencement of any suit and shall have the right to defend the same.

(f) Second party will comply with the laws of Nevada in regard to posting notices and recording affidavits as to non-liability on the part of first party and will also comply with the laws of Nevada as to industrial compensation insurance, and with all applicable laws of Nevada and of the United States affecting its operations.

(g) During the life of this agreement second party will pay all property taxes and all taxes based on production laid upon the property describedin paragraph 1 hereof.

(h) First party or his agent may at all reasonable times enter upon and into the demised premises for the purpose of inspecting, surveying and sampling.

(i) Upon termination of this agreement in any manner second party shall have the right of removal of all equipment, machinery, tools and supplies placed on the demised premises by it, such right of removal to be exercised within ninety days after such termination, but no track or timbering shall be removed.

3. On or before sixty days after date hereof first party will execute and deposit in escrow with the Continental National Bank & Trust Company, Salt Lake City, Utah, a good and sufficient deed naming second party as grantee and describing the demised premises; said deed to be delivered to second party upon full payment of the purchase price and compliance otherwise with the provisions of this agreement.

4. Time is of the essence of this agreement and if second party fails to keep and perform the conditions herein stated to be by him kept and performed, then at the option of first party this agreement may be terminated, provided that first party shall first serve upon second party a thirty day written notice setting forth the default or omission complained of, and if such default or omission is not remedied or is not in the process of being remedied within said period, then this agreement shall become null and void; and in such event first party shall retain as liquidated damages all monies theretofore paid by second party, and the escrow holder shall return to first party the deed herein provided for.

5. Second party may relinquish his rights under this agreement by serving upon first party a ten day written notice of his intention so to do and returning the demised premises to first party and paying to first party all accrued obligations for royalty. Thereafter second party shall have no further liability under this contract.

6. Nonperformance of this contract by second party is excused so far as

caused by acts of God, war, accident, fire, unavailability of labor or materials, failure of water supply or transportation, shut down of treatment and refining plants, low price of metals, or acts of the public authorities.

7. This agreement shall in all things be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns and personal representatives.

IN WITNESS WHEREOF the said parties hereto have caused this instrument to be duly executed this the day and year first above written.

First Party

Second Party

State of Utah, }
County of Salt Lake. } ss.

On this 26th day of November, 1951, personally appeared before me, a Notary Public in and for said County and State, L. K. REQUA, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

NOTARY PUBLIC COMMISSION EXPIRES APR 4 1952 SALT LAKE CITY, STATE OF UTAH

Hortense White
Notary Public

My Commission Expires: 4/4/52

State of Nevada, }
County of White Pine. } ss.

On this 19 day of NOV., 1951, personally appeared before me, a Notary Public in and for said County and State, ALEX KOLCHEK, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

C. E. Horton
Notary Public

My Commission Expires: 11-1-53

C. E. HORTON NOTARY PUBLIC WHITE PINE COUNTY, NEVADA

89448

RECORDED June 26, 1952 at 9:01 a.m.
J. B. Geraghty
RECORDER OF WHITE PINE COUNTY, NEVADA
FC J. B.

LEASE AND OPTION

THIS AGREEMENT made in duplicate this 19 day of November, 1951, between Alex Kolchek of Ely, Nevada, first party, and L. K. Requa of Salt Lake City, Utah, second party,

WITNESSETH:

In consideration of the sum of One Hundred Dollars paid by second party to first party, receipt whereof is hereby acknowledged, and of the terms, conditions and covenants herein stated to be kept and performed by the parties respectively it is agreed:

1. First party hereby sells to second party the option to purchase upon the terms and conditions hereinafter set forth, the following named unpatented lode mining claims situated in Cleve Creek Canyon, in White Pine County, State of Nevada, about fifteen miles Easterly from Ely, in said county and state, to-wit:

Cash	Taft
Cash #2	Kolchek
Cash #3	Sam
Rambo	Manie
Rambo #2	Eagle
	Street

Together with all appurtenances, including water and water rights.

For the particular description of each said claim reference is made to location certificate thereof of record in the office of the County Recorder for White Pine County, Nevada.

(a) The purchase price is $30,000.00, of which $100.00 has been paid. The balance of $29,900.00 is to be paid on or before five and one-half years from the date of this agreement, as follows:

$5,000	or more	on or before	one and one-half years	after date
5,000	"	"	two and one-half years	"
5,000	"	"	three and one-half years	"
5,000	"	"	four and one-half years	"

And the remaining balance on or before five and one-half years after date.

(b) For the consideration paid as above stated, second party shall have the exclusive right for a period of thirty days from date hereof to enter into and

upon said claims for the purpose of examination, exploration and sampling; provided, that if second party during this thirty day period shall pay $500.00 more to first party this period shall be extended an additional five months.

(c) All payments required to be made under this agreement shall apply upon and reduce the next ensuing installment of purchase price coming due, and all such payments except the $600.00 paid, or to be paid for the examination period, shall be paid to the escrow holder hereinafter named for the account of first party, and said escrow holder shall forthwith upon receipt pay the same to first party, together with copy of settlement sheet for royalty payments.

(d) This is a continuing option to be kept in force and effect by compliance on the part of second party with all the terms and conditions herein stated on the part of second party to be kept and performed.

2. After the expiration of the examination period as above provided, this agreement shall remain in effect at the election of second party, and for this purpose first party does hereby demise, lease and let to second party for the purpose of carrying on mining operations and of extracting and shipping ores and minerals therefrom, all of the property described in paragraph 1 hereof upon the following terms and conditions, to-wit:

(a) Second party will go into possession of said property and during each year he remains in possession will do all assessment work required by Federal law to prevent forfeiture of said claims. At his sole discretion he may do other development and mining work in said property; all such work to be done in good miner-like fashion, properly securing the ground wherever necessary and with a view to the preservation of said property for future mining operations.

(b) All ores mined under this agreement shall be shipped and marketed in the name of second party and shall be sold on the highest competitive bid obtained by either party hereto, time and terms of ore purchase contract considered.

(c) Until payment of the purchase price provided for herein second party will pay to the escrow holder for the account of first party a royalty of 10% of net mill and smelter returns on ores produced from the property. Net returns shall mean the gross returns (including therein all premium production payments made by the United States government or any of its agencies, but no royalty payments shall accrue on exploration or development allowances) less transportation, treatment, sampling and assaying charges; provided that in any month when earned royalties amount to less than $200.00 second party will pay in addition to the earned royalty, a sufficient sum to equal a minimum monthly royalty of $200.00 per month cumulative over a twelve month period.

(d) Second party shall be solely responsible for all labor, materials, supplies and equipment furnished for his operation, and shall keep the demised premises free and clear of incumbrances and mechanic's liens.

(e) Second party will indemnify and save harmless first party of and

from all liability, cost and expense that may arise out of damage or injury to persons or property occurring in the operations of second party under this agreement, but second party shall be notified of the commencement of any suit and shall have the right to defend the same.

(f) Second party will comply with the laws of Nevada in regard to posting notices and recording affidavits as to non-liability on the part of first party and will also comply with the laws of Nevada as to industrial compensation insurance, and with all applicable laws of Nevada and of the United States affecting its operations.

(g) During the life of this agreement second party will pay all property taxes and all taxes based on production laid upon the property describedin paragraph 1 hereof.

(h) First party or his agent may at all reasonable times enter upon and into the demised premises for the purpose of inspecting, surveying and sampling.

(i) Upon termination of this agreement in any manner second party shall have the right of removal of all equipment, machinery, tools and supplies placed on the demised premises by it, such right of removal to be exercised within ninety days after such termination, but no track or timbering shall be removed.

3. On or before sixty days after date hereof first party will execute and deposit in escrow with the Continental National Bank & Trust Company, Salt Lake City, Utah, a good and sufficient deed naming second party as grantee and describing the demised premises; said deed to be delivered to second party upon full payment of the purchase price and compliance otherwise with the provisions of this agreement.

4. Time is of the essence of this agreement and if second party fails to keep and perform the conditions herein stated to be by him kept and performed, then at the option of first party this agreement may be terminated, provided that first party shall first serve upon second party a thirty day written notice setting forth the default or omission complained of, and if such default or omission is not remedied or is not in the process of being remedied within said period, then this agreement shall become null and void; and in such event first party shall retain as liquidated damages all monies theretofore paid by second party, and the escrow holder shall return to first party the deed herein provided for.

5. Second party may relinquish his rights under this agreement by serving upon first party a ten day written notice of his intention so to do and returning the demised premises to first party and paying to first party all accrued obligations for royalty. Thereafter second party shall have no further liability under this contract.

6. Nonperformance of this contract by second party is excused so far as

caused by acts of God, war, accident, fire, unavailability of labor or materials, failure of water supply or transportation, shut down of treatment and refining plants, low price of metals, or acts of the public authorities.

7. This agreement shall in all things be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns and personal representatives.

IN WITNESS WHEREOF the said parties hereto have caused this instrument to be duly executed this the day and year first above written.

First Party

Second Party

State of Utah, }
County of Salt Lake. } ss.

On this 26th day of November, 1951, personally appeared before me, a Notary Public in and for said County and State, L. K. REQUA, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

HORTENSE WHITE NOTARY PUBLIC COMMISSION EXPIRES APR. 4, 1952 SALT LAKE CITY, STATE OF UTAH

Hortense White
Notary Public

My Commission Expires: 4/4/52

State of Nevada, }
County of White Pine. } ss.

On this 19 day of Nov., 1951, personally appeared before me, a Notary Public in and for said County and State, ALEX KOLCHEK, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

C. E. Horton
Notary Public

My Commission Expires: 11-1-53

C. E. HORTON NOTARY PUBLIC WHITE PINE COUNTY, NEVADA

89448

RECORDED June 26, 1952 at 9:01 a.m.
J. B. Geraghty
RECORDER OF WHITE PINE COUNTY, NEVADA
FC J. B.

LEASE AND OPTION

THIS AGREEMENT made in duplicate this 19 day of November, 1951, between Alex Kolchek of Ely, Nevada, first party, and L. K. Requa of Salt Lake City, Utah, second party,

WITNESSETH:

In consideration of the sum of One Hundred Dollars paid by second party to first party, receipt whereof is hereby acknowledged, and of the terms, conditions and covenants herein stated to be kept and performed by the parties respectively it is agreed:

1. First party hereby sells to second party the option to purchase upon the terms and conditions hereinafter set forth, the following named unpatented lode mining claims situated in Cleve Creek Canyon, in White Pine County, State of Nevada, about fifteen miles Easterly from Ely, in said county and state, to-wit:

Cash	Taft
Cash #2	Kolchek
Cash #3	Sam
Rambo	Manie
Rambo #2	Eagle
	Street

Together with all appurtenances, including water and water rights.

For the particular description of each said claim reference is made to location certificate thereof of record in the office of the County Recorder for White Pine County, Nevada.

(a) The purchase price is $30,000.00, of which $100.00 has been paid. The balance of $29,900.00 is to be paid on or before five and one-half years from the date of this agreement, as follows:

$5,000 or more	on or before	one and one-half years	after date
5,000	"	"	two and one-half years	"
5,000	"	"	three and one-half years	"
5,000	"	"	four and one-half years	"

And the remaining balance on or before five and one-half years after date.

(b) For the consideration paid as above stated, second party shall have the exclusive right for a period of thirty days from date hereof to enter into and

upon said claims for the purpose of examination, exploration and sampling; provided, that if second party during this thirty day period shall pay $500.00 more to first party this period shall be extended an additional five months.

(c) All payments required to be made under this agreement shall apply upon and reduce the next ensuing installment of purchase price coming due, and all such payments except the $600.00 paid, or to be paid for the examination period, shall be paid to the escrow holder hereinafter named for the account of first party, and said escrow holder shall forthwith upon receipt pay the same to first party, together with copy of settlement sheet for royalty payments.

(d) This is a continuing option to be kept in force and effect by compliance on the part of second party with all the terms and conditions herein stated on the part of second party to be kept and performed.

2. After the expiration of the examination period as above provided, this agreement shall remain in effect at the election of second party, and for this purpose first party does hereby demise, lease and let to second party for the purpose of carrying on mining operations and of extracting and shipping ores and minerals therefrom, all of the property described in paragraph 1 hereof upon the following terms and conditions, to-wit:

(a) Second party will go into possession of said property and during each year he remains in possession will do all assessment work required by Federal law to prevent forfeiture of said claims. At his sole discretion he may do other development and mining work in said property; all such work to be done in good miner-like fashion, properly securing the ground wherever necessary and with a view to the preservation of said property for future mining operations.

(b) All ores mined under this agreement shall be shipped and marketed in the name of second party and shall be sold on the highest competitive bid obtained by either party hereto, time and terms of ore purchase contract considered.

(c) Until payment of the purchase price provided for herein second party will pay to the escrow holder for the account of first party a royalty of 10% of net mill and smelter returns on ores produced from the property. Net returns shall mean the gross returns (including therein all premium production payments made by the United States government or any of its agencies, but no royalty payments shall accrue on exploration or development allowances) less transportation, treatment, sampling and assaying charges; provided that in any month when earned royalties amount to less than $200.00 second party will pay in addition to the earned royalty, a sufficient sum to equal a minimum monthly royalty of $200.00 per month cumulative over a twelve month period.

(d) Second party shall be solely responsible for all labor, materials, supplies and equipment furnished for his operation, and shall keep the demised premises free and clear of incumbrances and mechanic's liens.

(e) Second party will indemnify and save harmless first party of and

from all liability, cost and expense that may arise out of damage or injury to persons or property occurring in the operations of second party under this agreement, but second party shall be notified of the commencement of any suit and shall have the right to defend the same.

(f) Second party will comply with the laws of Nevada in regard to posting notices and recording affidavits as to non-liability on the part of first party and will also comply with the laws of Nevada as to industrial compensation insurance, and with all applicable laws of Nevada and of the United States affecting its operations.

(g) During the life of this agreement second party will pay all property taxes and all taxes based on production laid upon the property describedin paragraph 1 hereof.

(h) First party or his agent may at all reasonable times enter upon and into the demised premises for the purpose of inspecting, surveying and sampling.

(i) Upon termination of this agreement in any manner second party shall have the right of removal of all equipment, machinery, tools and supplies placed on the demised premises by it, such right of removal to be exercised within ninety days after such termination, but no track or timbering shall be removed.

3. On or before sixty days after date hereof first party will execute and deposit in escrow with the Continental National Bank & Trust Company, Salt Lake City, Utah, a good and sufficient deed naming second party as grantee and describing the demised premises; said deed to be delivered to second party upon full payment of the purchase price and compliance otherwise with the provisions of this agreement.

4. Time is of the essence of this agreement and if second party fails to keep and perform the conditions herein stated to be by him kept and performed, then at the option of first party this agreement may be terminated, provided that first party shall first serve upon second party a thirty day written notice setting forth the default or omission complained of, and if such default or omission is not remedied or is not in the process of being remedied within said period, then this agreement shall become null and void; and in such event first party shall retain as liquidated damages all monies theretofore paid by second party, and the escrow holder shall return to first party the deed herein provided for.

5. Second party may relinquish his rights under this agreement by serving upon first party a ten day written notice of his intention so to do and returning the demised premises to first party and paying to first party all accrued obligations for royalty. Thereafter second party shall have no further liability under this contract.

6. Nonperformance of this contract by second party is excused so far as

caused by acts of God, war, accident, fire, unavailability of labor or materials, failure of water supply or transportation, shut down of treatment and refining plants, low price of metals, or acts of the public authorities.

7. This agreement shall in all things be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns and personal representatives.

IN WITNESS WHEREOF the said parties hereto have caused this instrument to be duly executed this the day and year first above written.

First Party

Second Party

State of Utah, }
County of Salt Lake. } ss.

On this 26th day of November, 1951, personally appeared before me, a Notary Public in and for said County and State, L. K. REQUA, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

HORTENSE WHITE NOTARY PUBLIC COMMISSION EXPIRES SALT LAKE CITY STATE UTAH

Hortense White
Notary Public

My Commission Expires: 4/4/52

State of Nevada, }
County of White Pine. } ss.

On this 19 day of NOV., 1951, personally appeared before me, a Notary Public in and for said County and State, ALEX KOLCHEK, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

C. E. Horton
Notary Public

My Commission Expires: 11-1-53

C. E. HORTON NOTARY PUBLIC WHITE PINE COUNTY NEVADA

89448

RECORDED June 26, 1952 at 9:01 a.m.
J. B. Geraghty
RECORDER OF WHITE PINE COUNTY, NEVADA
FC J. B.

LEASE AND OPTION

THIS AGREEMENT made in duplicate this 19 day of November, 1951, between Alex Kolchek of Ely, Nevada, first party, and L. K. Requa of Salt Lake City, Utah, second party,

WITNESSETH:

In consideration of the sum of One Hundred Dollars paid by second party to first party, receipt whereof is hereby acknowledged, and of the terms, conditions and covenants herein stated to be kept and performed by the parties respectively it is agreed:

1. First party hereby sells to second party the option to purchase upon the terms and conditions hereinafter set forth, the following named unpatented lode mining claims situated in Cleve Creek Canyon, in White Pine County, State of Nevada, about fifteen miles Easterly from Ely, in said county and state, to-wit:

Cash	Taft
Cash #2	Kolchek
Cash #3	Sam
Rambo	Manie
Rambo #2	Eagle
	Street

Together with all appurtenances, including water and water rights.

For the particular description of each said claim reference is made to location certificate thereof of record in the office of the County Recorder for White Pine County, Nevada.

(a) The purchase price is $30,000.00, of which $100.00 has been paid. The balance of $29,900.00 is to be paid on or before five and one-half years from the date of this agreement, as follows:

$5,000	or more	on or before	one and one-half years	after date
5,000	"	"	two and one-half years	"
5,000	"	"	three and one-half years	"
5,000	"	"	four and one-half years	"

And the remaining balance on or before five and one-half years after date.

(b) For the consideration paid as above stated, second party shall have the exclusive right for a period of thirty days from date hereof to enter into and

upon said claims for the purpose of examination, exploration and sampling; provided, that if second party during this thirty day period shall pay $500.00 more to first party this period shall be extended an additional five months.

(c) All payments required to be made under this agreement shall apply upon and reduce the next ensuing installment of purchase price coming due, and all such payments except the $600.00 paid, or to be paid for the examination period, shall be paid to the escrow holder hereinafter named for the account of first party, and said escrow holder shall forthwith upon receipt pay the same to first party, together with copy of settlement sheet for royalty payments.

(d) This is a continuing option to be kept in force and effect by compliance on the part of second party with all the terms and conditions herein stated on the part of second party to be kept and performed.

2. After the expiration of the examination period as above provided, this agreement shall remain in effect at the election of second party, and for this purpose first party does hereby demise, lease and let to second party for the purpose of carrying on mining operations and of extracting and shipping ores and minerals therefrom, all of the property described in paragraph 1 hereof upon the following terms and conditions, to-wit:

(a) Second party will go into possession of said property and during each year he remains in possession will do all assessment work required by Federal law to prevent forfeiture of said claims. At his sole discretion he may do other development and mining work in said property; all such work to be done in good miner-like fashion, properly securing the ground wherever necessary and with a view to the preservation of said property for future mining operations.

(b) All ores mined under this agreement shall be shipped and marketed in the name of second party and shall be sold on the highest competitive bid obtained by either party hereto, time and terms of ore purchase contract considered.

(c) Until payment of the purchase price provided for herein second party will pay to the escrow holder for the account of first party a royalty of 10% of net mill and smelter returns on ores produced from the property. Net returns shall mean the gross returns (including therein all premium production payments made by the United States government or any of its agencies, but no royalty payments shall accrue on exploration or development allowances) less transportation, treatment, sampling and assaying charges; provided that in any month when earned royalties amount to less than $200.00 second party will pay in addition to the earned royalty, a sufficient sum to equal a minimum monthly royalty of $200.00 per month cumulative over a twelve month period.

(d) Second party shall be solely responsible for all labor, materials, supplies and equipment furnished for his operation, and shall keep the demised premises free and clear of incumbrances and mechanic's liens.

(e) Second party will indemnify and save harmless first party of and

from all liability, cost and expense that may arise out of damage or injury to persons or property occurring in the operations of second party under this agreement, but second party shall be notified of the commencement of any suit and shall have the right to defend the same.

(f) Second party will comply with the laws of Nevada in regard to posting notices and recording affidavits as to non-liability on the part of first party and will also comply with the laws of Nevada as to industrial compensation insurance, and with all applicable laws of Nevada and of the United States affecting its operations.

(g) During the life of this agreement second party will pay all property taxes and all taxes based on production laid upon the property describedin paragraph 1 hereof.

(h) First party or his agent may at all reasonable times enter upon and into the demised premises for the purpose of inspecting, surveying and sampling.

(i) Upon termination of this agreement in any manner second party shall have the right of removal of all equipment, machinery, tools and supplies placed on the demised premises by it, such right of removal to be exercised within ninety days after such termination, but no track or timbering shall be removed.

3. On or before sixty days after date hereof first party will execute and deposit in escrow with the Continental National Bank & Trust Company, Salt Lake City, Utah, a good and sufficient deed naming second party as grantee and describing the demised premises; said deed to be delivered to second party upon full payment of the purchase price and compliance otherwise with the provisions of this agreement.

4. Time is of the essence of this agreement and if second party fails to keep and perform the conditions herein stated to be by him kept and performed, then at the option of first party this agreement may be terminated, provided that first party shall first serve upon second party a thirty day written notice setting forth the default or omission complained of, and if such default or omission is not remedied or is not in the process of being remedied within said period, then this agreement shall become null and void; and in such event first party shall retain as liquidated damages all monies theretofore paid by second party, and the escrow holder shall return to first party the deed herein provided for.

5. Second party may relinquish his rights under this agreement by serving upon first party a ten day written notice of his intention so to do and returning the demised premises to first party and paying to first party all accrued obligations for royalty. Thereafter second party shall have no further liability under this contract.

6. Nonperformance of this contract by second party is excused so far as

caused by acts of God, war, accident, fire, unavailability of labor or materials, failure of water supply or transportation, shut down of treatment and refining plants, low price of metals, or acts of the public authorities.

7. This agreement shall in all things be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns and personal representatives.

IN WITNESS WHEREOF the said parties hereto have caused this instrument to be duly executed this the day and year first above written.

A. C. Pickaker
First Party

T. V. Rogers
Second Party

State of Utah, }
County of Salt Lake. } ss.

On this 26th day of November, 1951, personally appeared before me, a Notary Public in and for said County and State, L. K. REQUA, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

HORTENSE WHITE NOTARY PUBLIC COMMISSION EXPIRES APRIL 4 1952 SALT LAKE CITY, STATE OF UTAH

Hortense White
Notary Public

My Commission Expires: 4/4/52

State of Nevada, }
County of White Pine. } ss.

On this 19 day of NOV., 1951, personally appeared before me, a Notary Public in and for said County and State, ALEX KOLCHEK, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

C. E. Horton
Notary Public

C. E. HORTON NOTARY PUBLIC WHITE PINE COUNTY NEVADA

My Commission Expires: 11-1-53

89448

RECORDED June 26, 1952 at 9:01 a.m.
J. B. Geraghty
RECORDER OF WHITE PINE COUNTY, NEVADA
FC J. B.

A

REFERENCES.

COMBINED METALS REDUCTION CO.

MAP OF KOLCHEK CLAIMS
WHITE PINE COUNTY
NEVADA

Nov. 8 1952

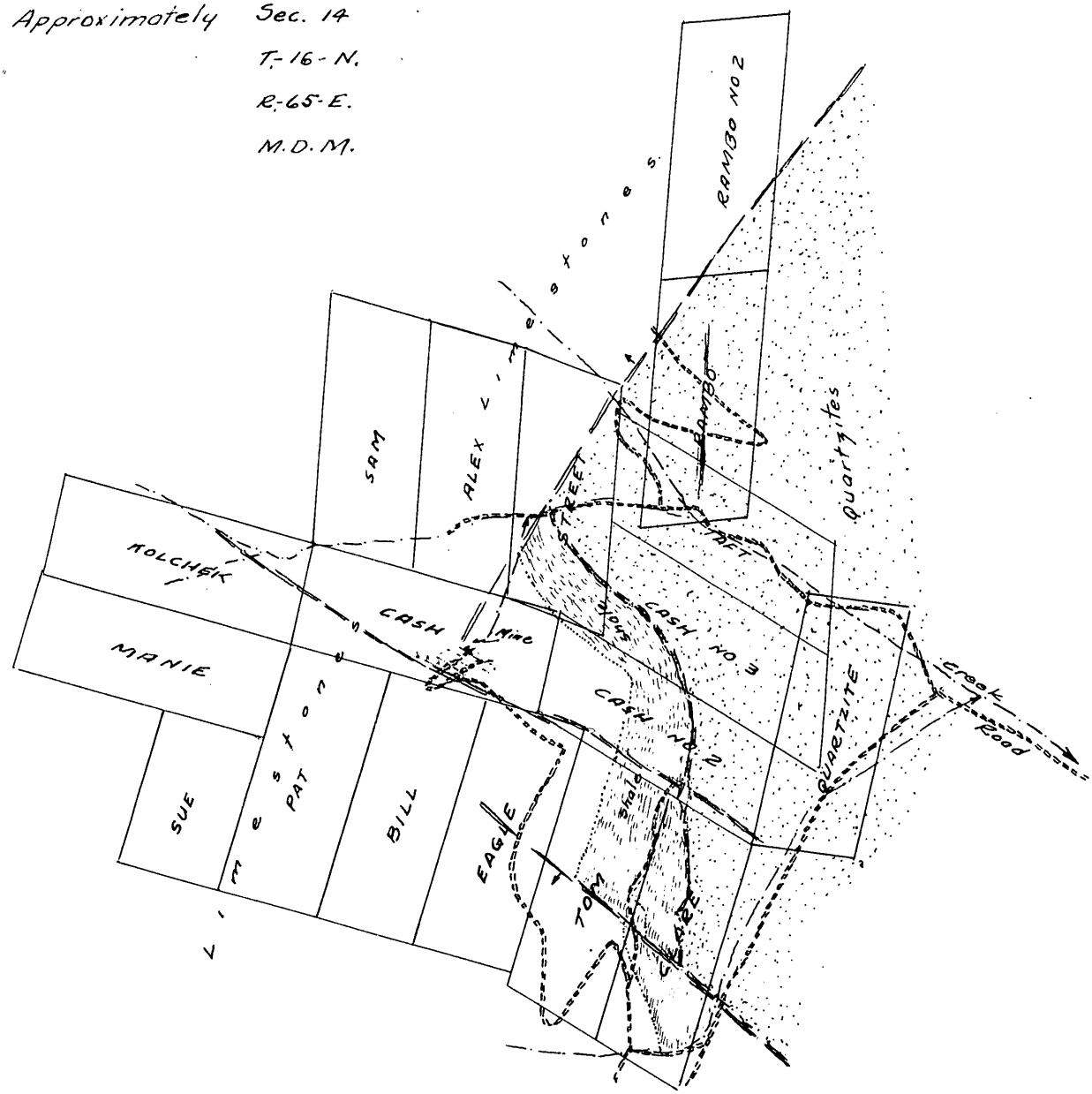
MADE BY C.R.H.

TRACED BY

CHECKED BY

SCALE 1" = 1000'

LOCATION:
Approximately Sec. 14
T-16-N.
R-65-E.
M.D.M.



A

REFERENCES

COMBINED METALS REDUCTION CO.

LOCATION MAP
KOLCHEK MINE

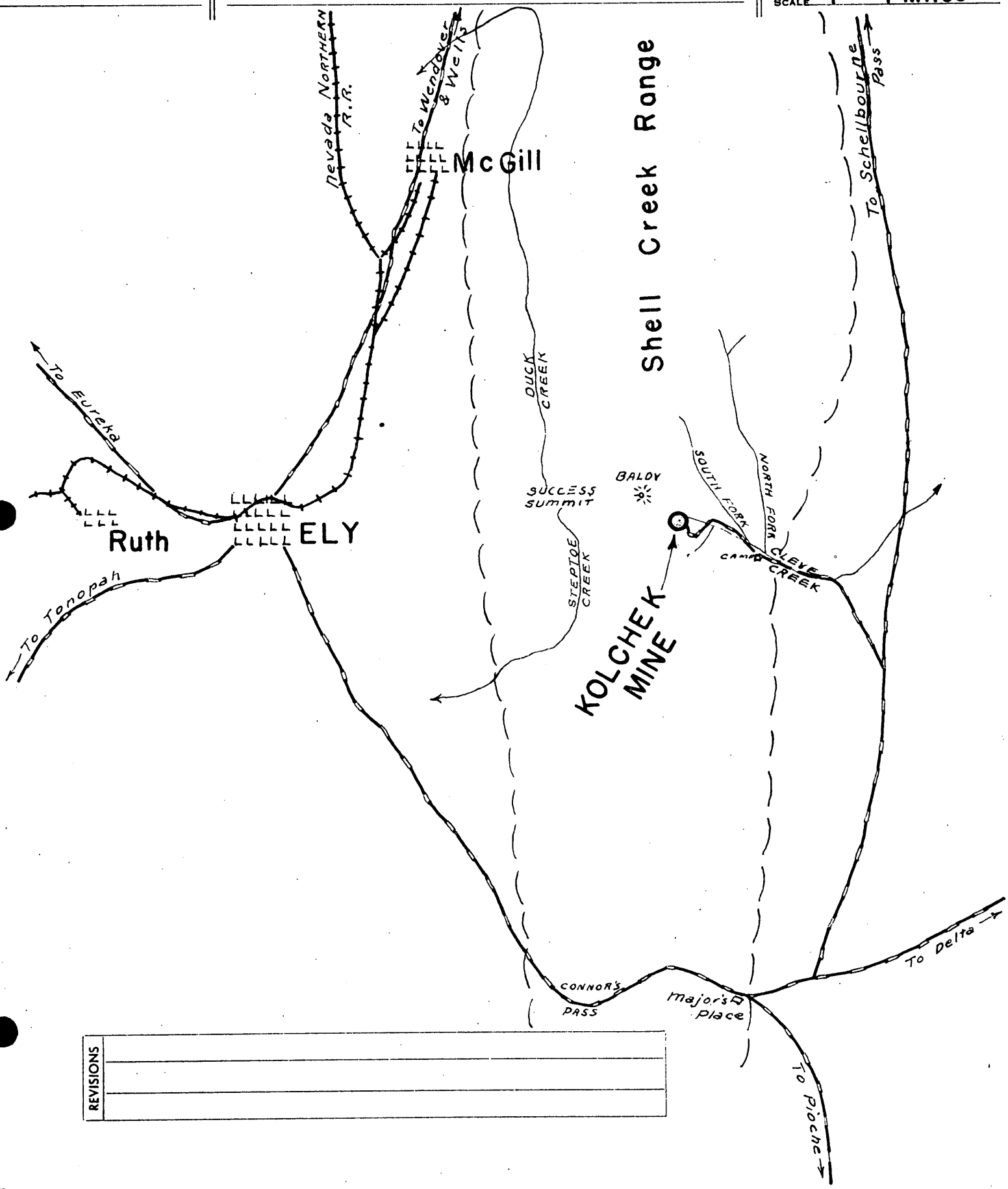
11/30 1952

MADE BY

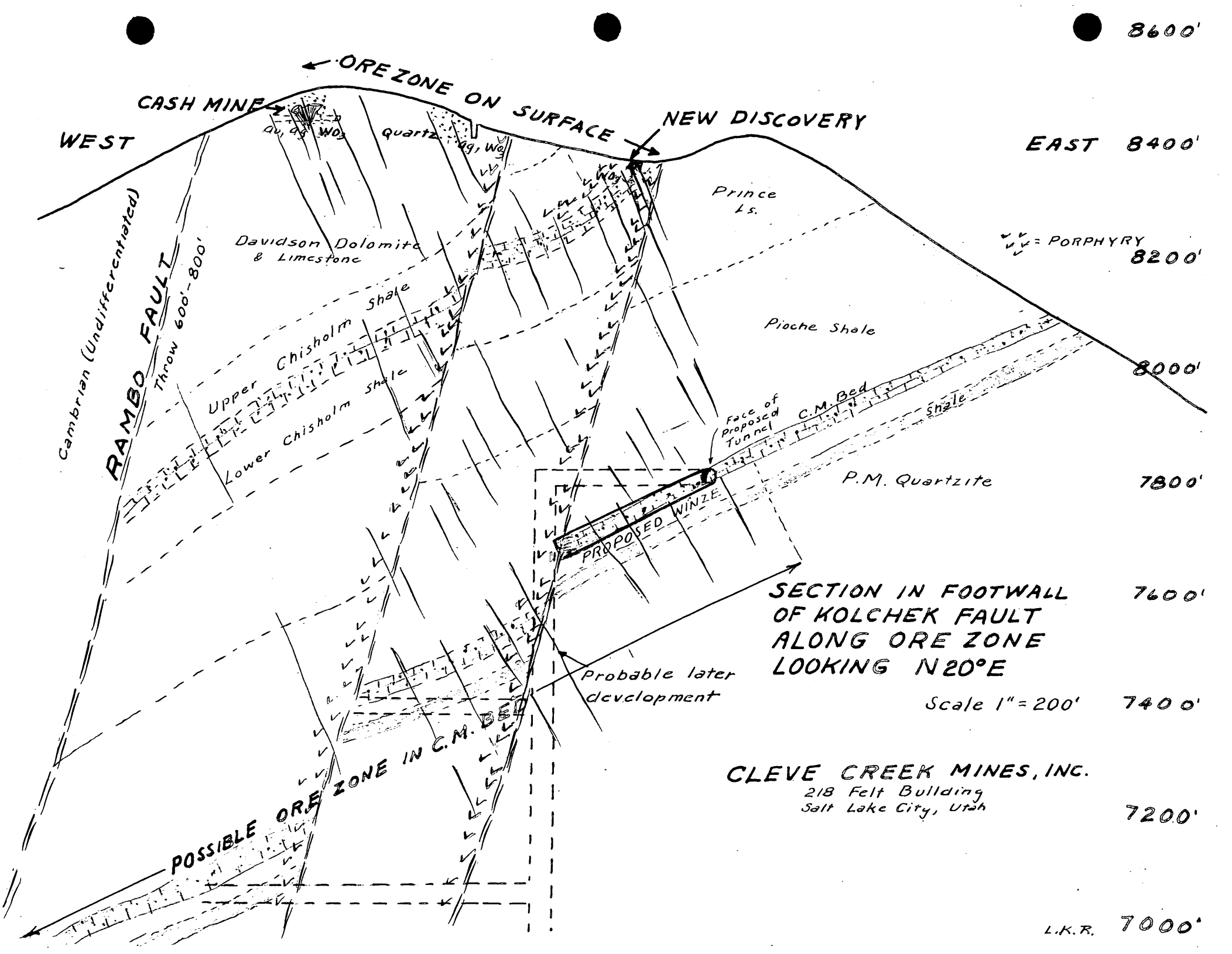
TRACED BY

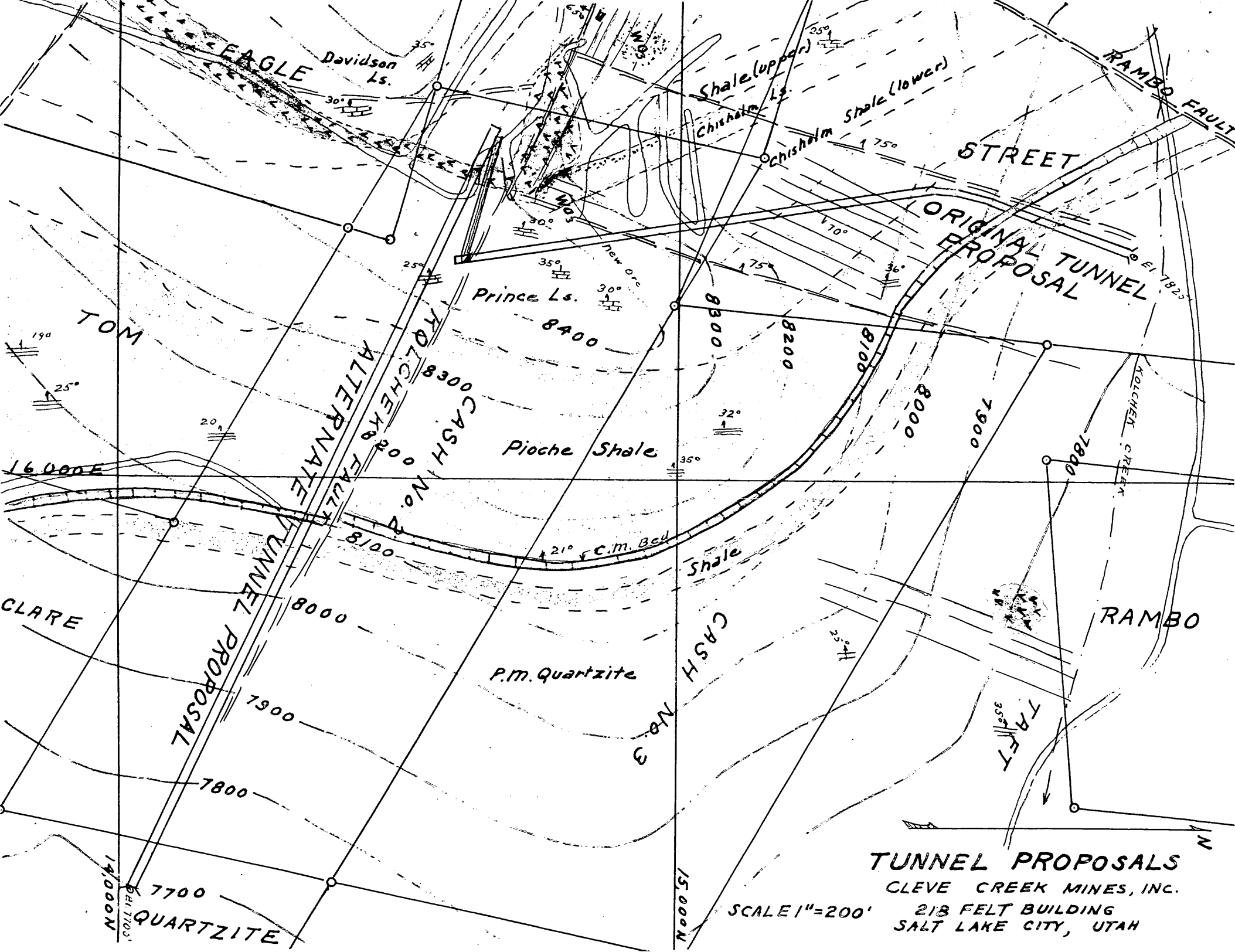
CHECKED BY

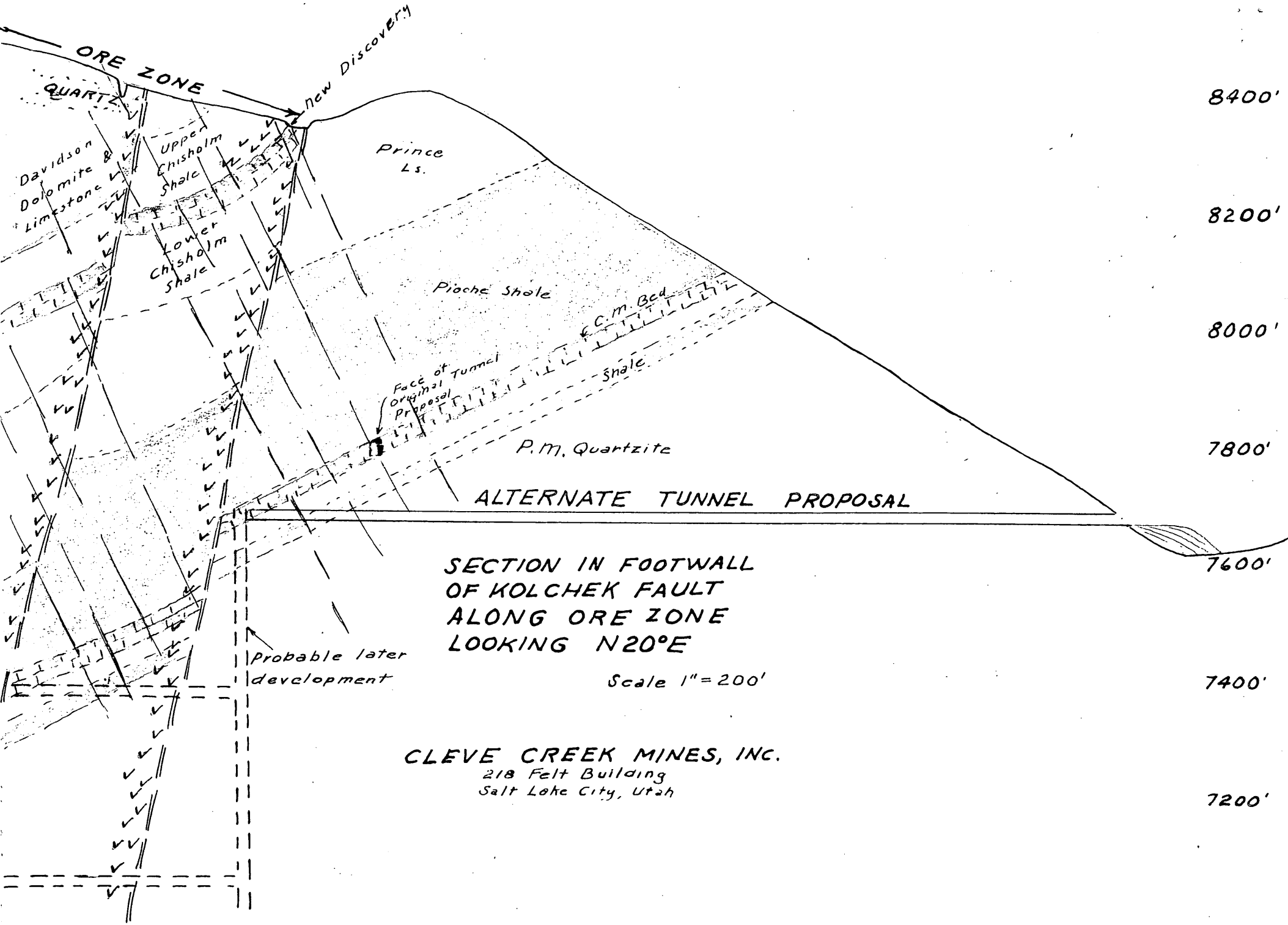
SCALE 1" = 4 Miles



REVISIONS


8600'
ORE ZONE ON SURFACE
CASH MINE
NEW DISCOVERY
WEST
EAST
8400'
Au, Ag, WO3
Quartz
Ag, WO3
WO3
Prince Ls.
= PORPHYRY
8200'
Davidson Dolomite & Limestone
Cambrian (Undifferentiated)
RAMBO FAULT
Throw 600'-800'
Upper Chisholm Shale
Lower Chisholm Shale
Pioche Shale
8000'
Face of Proposed Tunnel
C.M. Bed
Shale
P.M. Quartzite
7800'
PROPOSED WINZE
SECTION IN FOOTWALL OF KOLCHEK FAULT ALONG ORE ZONE LOOKING N20°E
7600'
Probable later development
Scale 1" = 200'
7400'
POSSIBLE ORE ZONE IN C.M. BED
CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah
7200'
L.K.R.
7000'

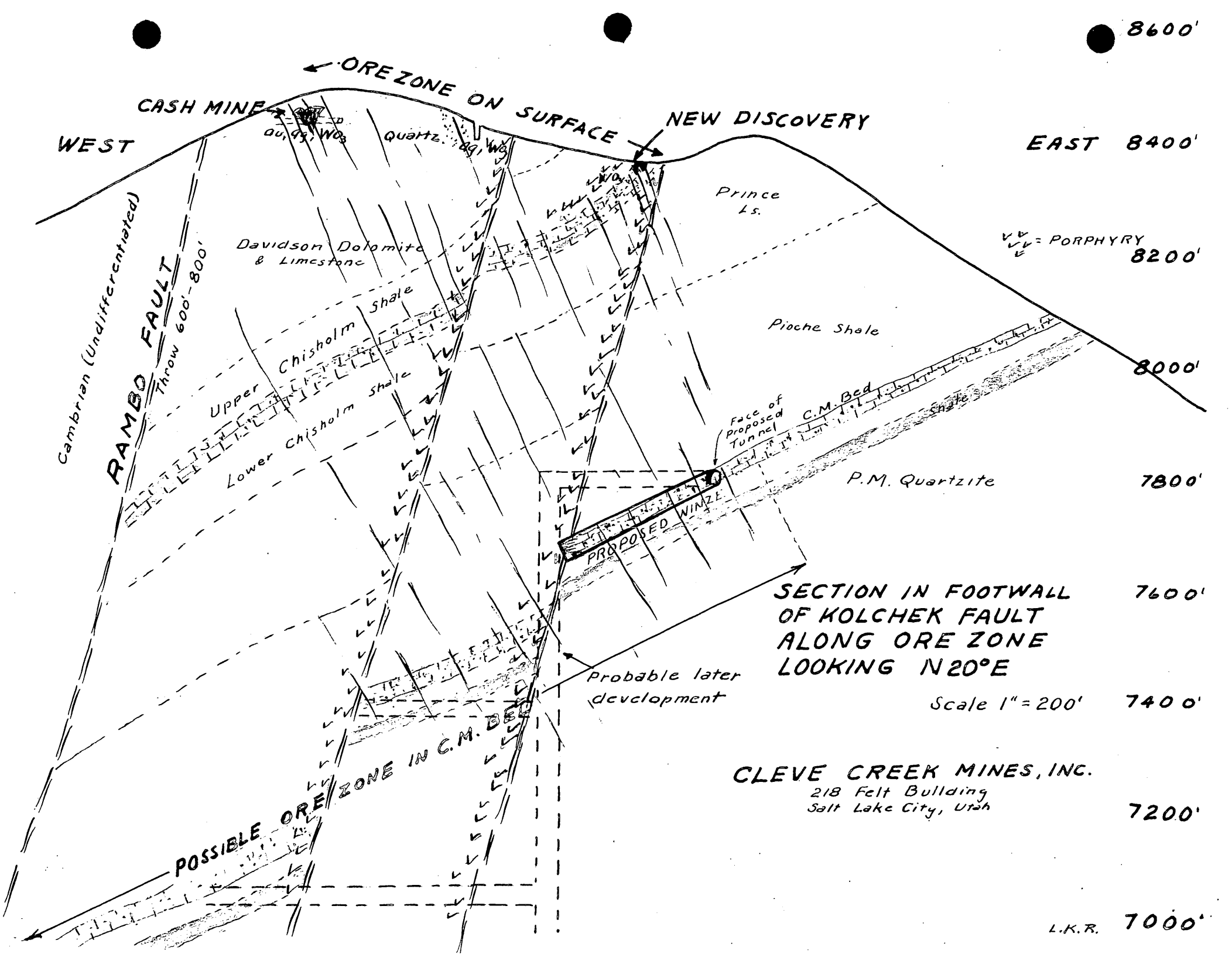

EAGLE
Davidson Ls.
Shale (upper)
Chisholm Ls.
Chisholm Shale (lower)
RAMBO FAULT
STREET
ORIGINAL TUNNEL PROPOSAL
Prince Ls.
New Ore
TOM
ALTERNATE TUNNEL PROPOSAL
KOLCHEKA FAULT
CASH No. 2
Pioche Shale
16,000E
C.M. Bed
Shale
CLARE
CASH No. 3
P.M. Quartzite
RAMBO
TRAFT
KOLCHEK CREEK
QUARTZITE
14,000N
15,000N
N
SCALE 1"=200'
TUNNEL PROPOSALS
CLEVE CREEK MINES, INC.
218 FELT BUILDING
SALT LAKE CITY, UTAH

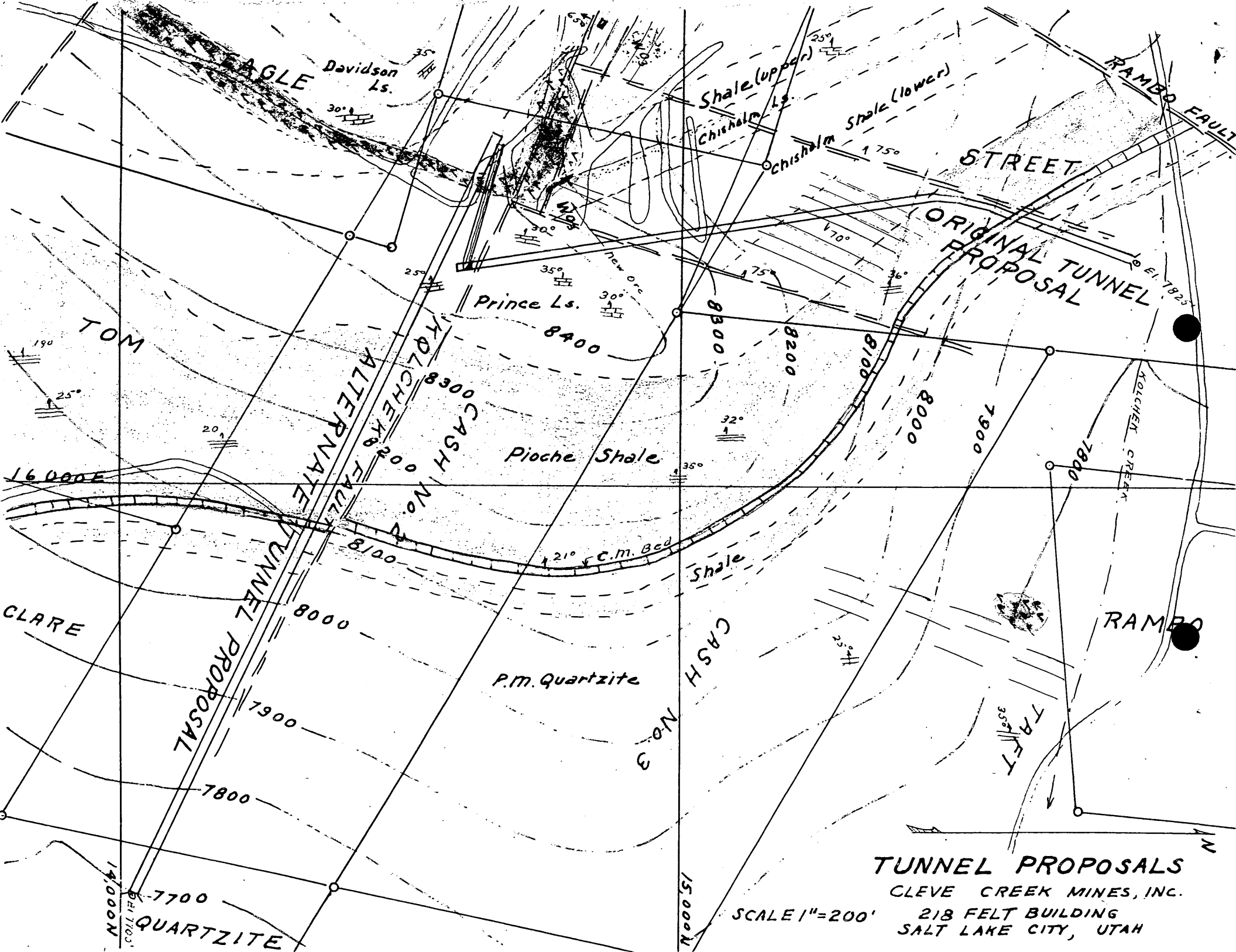


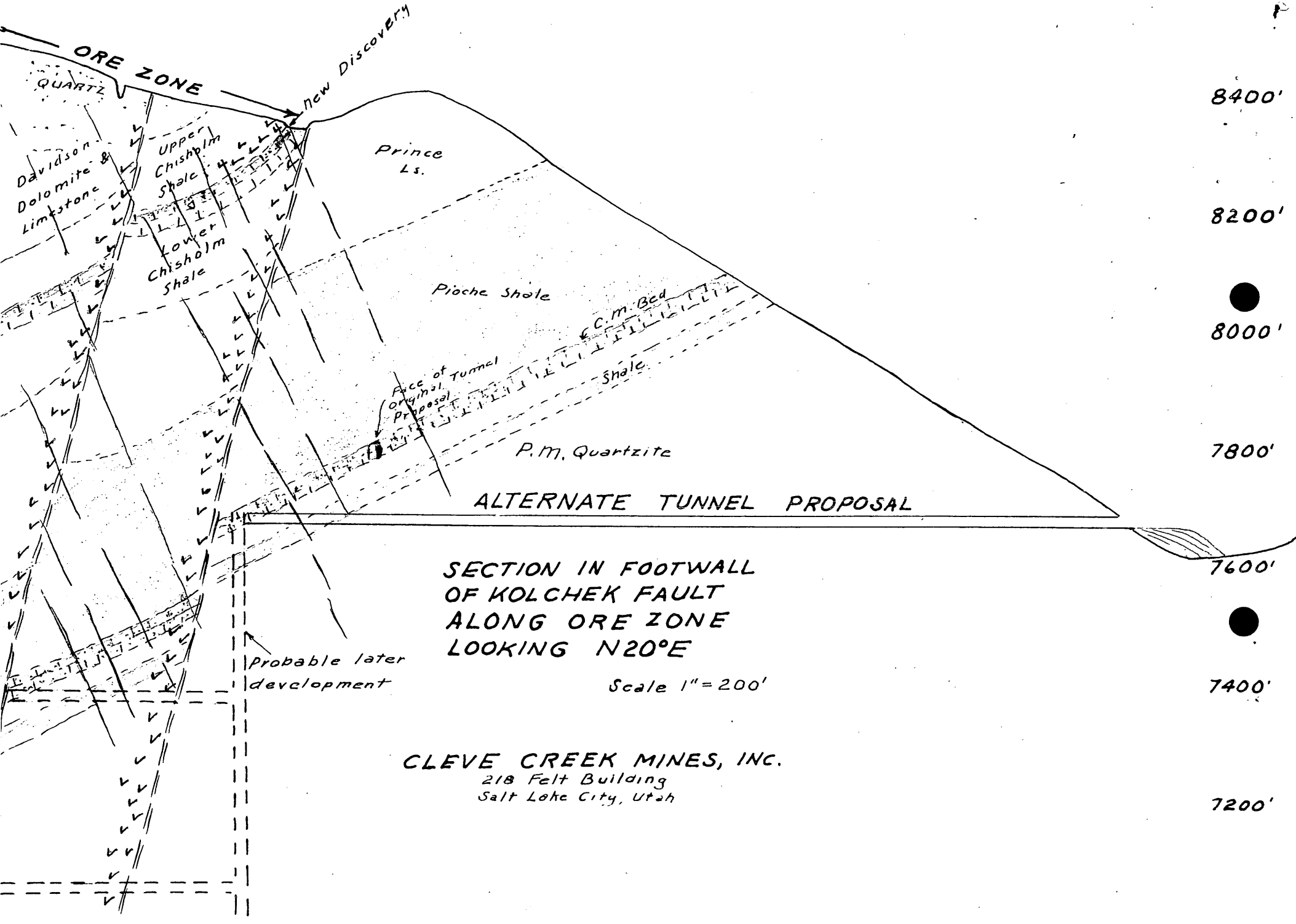
SECTION IN FOOTWALL OF KOLCHEK FAULT ALONG ORE ZONE LOOKING N20°E

Scale 1" = 200'

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah


8600'
ORE ZONE ON SURFACE
CASH MINE
NEW DISCOVERY
WEST
EAST
8400'
Au, Ag, WO3
Quartz
Ag, WO3
WO3
Prince Ls.
= PORPHYRY
8200'
Cambrian (Undifferentiated)
RAMBO FAULT
Throw 600'-800'
Davidson Dolomite & Limestone
Upper Chisholm Shale
Lower Chisholm Shale
Pioche Shale
8000'
Face of Proposed Tunnel
C.M. Bed
Shale
P.M. Quartzite
7800'
PROPOSED WINZE
SECTION IN FOOTWALL OF KOLCHEK FAULT ALONG ORE ZONE LOOKING N20°E
7600'
Probable later development
Scale 1" = 200'
7400'
POSSIBLE ORE ZONE IN C.M. BED
CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah
7200'
L.K.R.
7000'

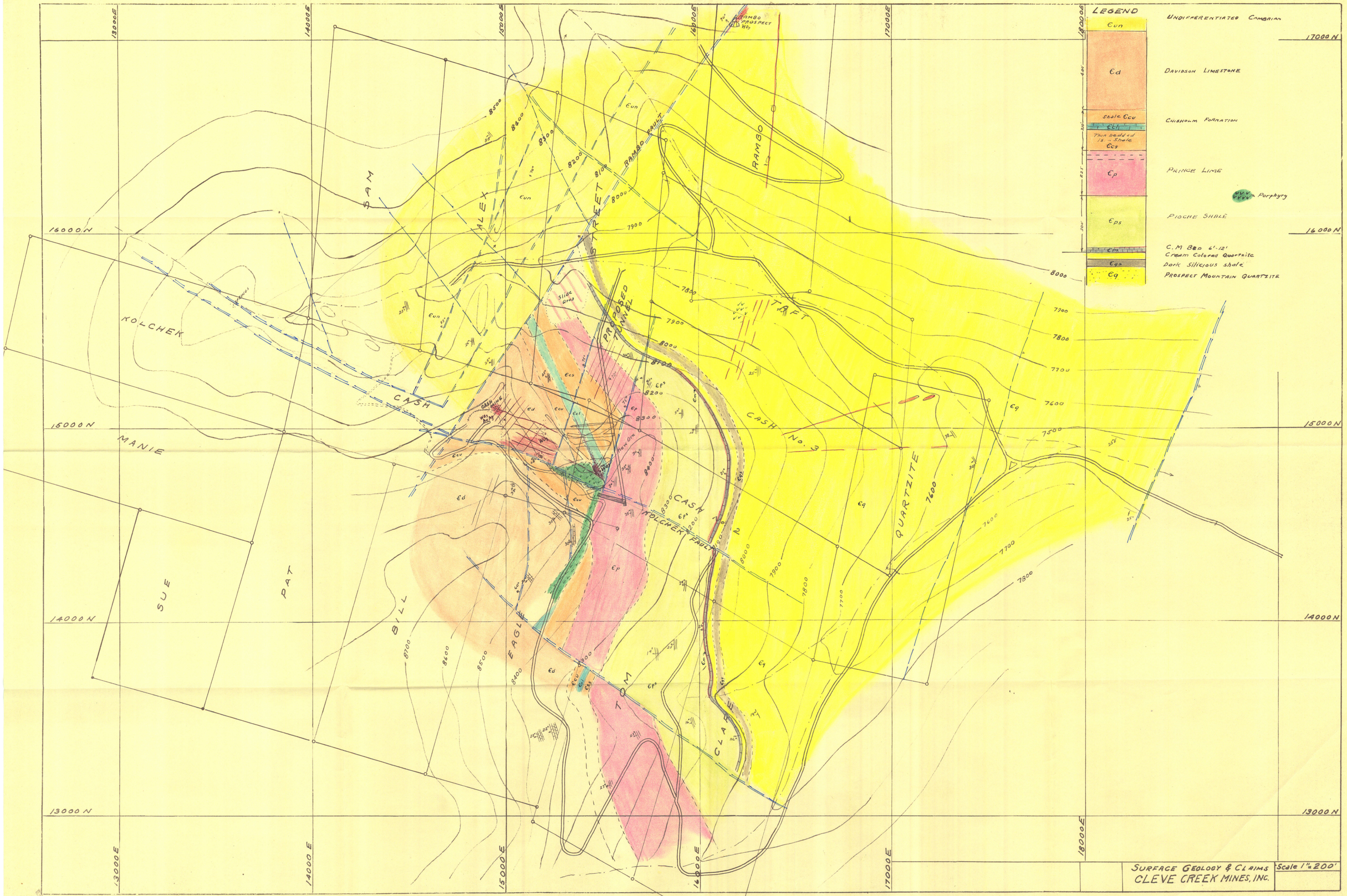

EAGLE
Davidson Ls.
Shale (upper)
Chisholm Ls.
Chisholm Shale (lower)
RAMBO FAULT
STREET
ORIGINAL TUNNEL PROPOSAL
El. 7825
New ore
Prince Ls.
TOM
ALTERNATE TUNNEL PROPOSAL
KOLCHEK FAULT
CASH No. 2
Pioche Shale
C.M. Bed
Shale
CLARE
P.M. Quartzite
CASH No. 3
RAMBO
TRAFT
KOLCHEK CREEK
QUARTZITE
16,000E
14,000N
15,000N
8400
8300
8200
8100
8000
7900
7800
7700
N
TUNNEL PROPOSALS
CLEVE CREEK MINES, INC.
218 FELT BUILDING
SALT LAKE CITY, UTAH
SCALE 1"=200'

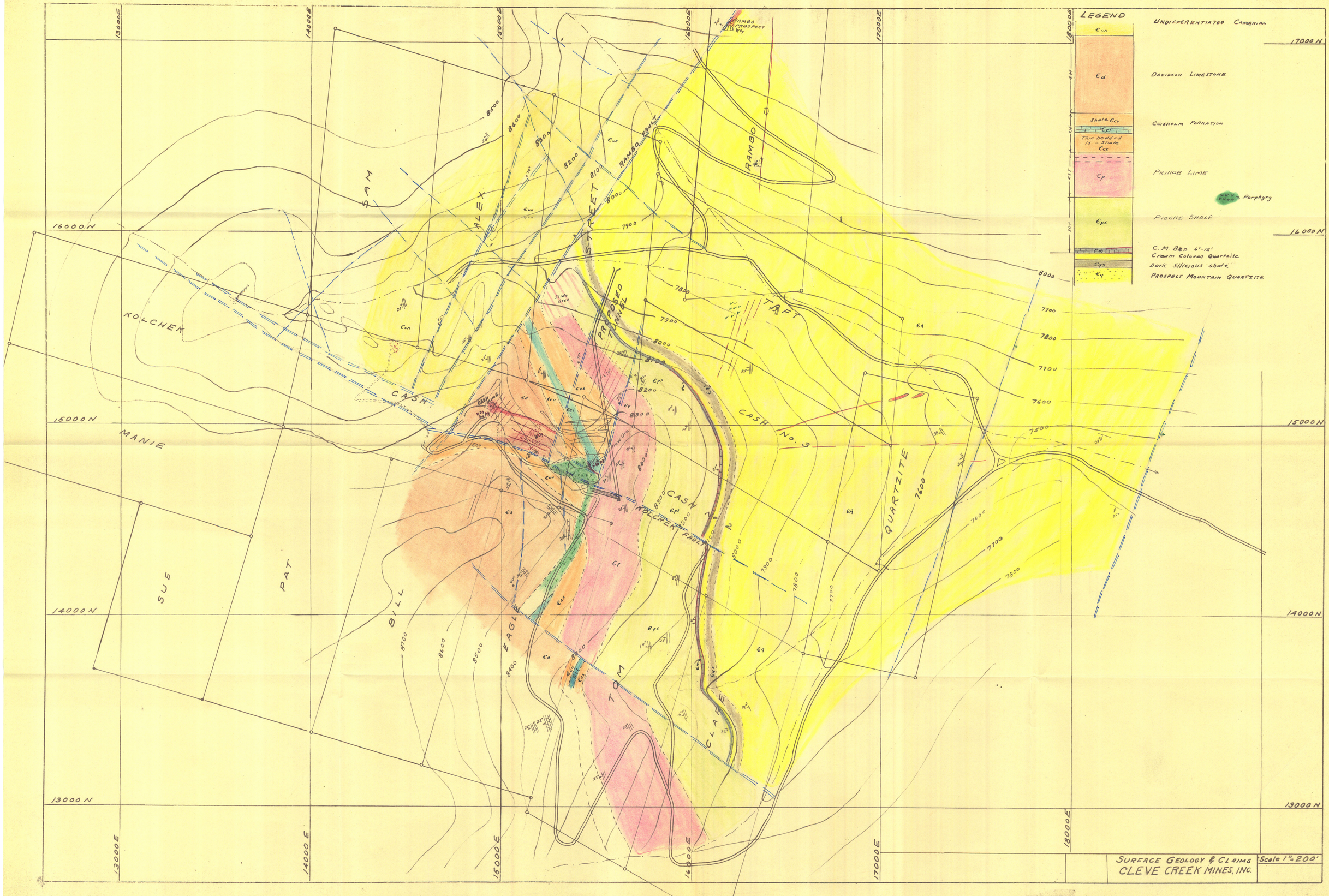


SECTION IN FOOTWALL
OF KOLCHEK FAULT
ALONG ORE ZONE
LOOKING N20°E

Scale 1" = 200'

CLEVE CREEK MINES, INC.
218 Felt Building
Salt Lake City, Utah


LEGEND
Undifferentiated Cambrian
Davidson Limestone
Chisholm Formation
Thin bedded 1½ - Shale
Prince Lime
Porphyry
Pioche Shale
C.M. Bed 6'-12'
Cream Colored Quartzite
Dark Siliceous shale
Prospect Mountain Quartzite
RAMBO PROSPECT
RAMBO
RAMBO FAULT
SAM
ALEX
STREET
PROPOSED TUNNEL
TAFT
KOLCHEK
CASH
CASH No. 3
MANIE
QUARTZITE
CASH No. 2
KOLCHEK FAULT
SUE
PAT
BILL
EAGLE
TOM
CLAIM
Slide area
New Dike
17000 N
16000 N
15000 N
14000 N
13000 N
13000 E
14000 E
15000 E
16000 E
17000 E
18000 E
SURFACE GEOLOGY & CLAIMS
CLEVE CREEK MINES, INC.
Scale 1" = 200'


LEGEND
UNDIFFERENTIATED CAMBRIAN
DAVIDSON LIMESTONE
CHISHOLM FORMATION
PRINCE LIME
Porphyry
PIOCHE SHALE
C.M. BED 6'-12'
Cream Colored Quartzite
Dark Siliceous shale
PROSPECT MOUNTAIN QUARTZITE
RAMBO PROSPECT
RAMBO FAULT
RAMBO
SAM
ALEX
STREET
PROPOSED TUNNEL
TRAFT
KOLCHEK
CASH
CASH No. 3
CASH No. 2
KOLCHEK FAULT
QUARTZITE
MANIE
SUE
PAT
BILL
EAGLE
TOM
CLARE
Slide area
17000 N
16000 N
15000 N
14000 N
13000 N
13000 E
14000 E
15000 E
16000 E
17000 E
18000 E
SURFACE GEOLOGY & CLAIMS
CLEVE CREEK MINES, INC.
Scale 1" = 200'