400

JUL 6 - 1956

Bear Creek Mining Company
c/o D. G. Walbom
Trimmer Route
Sanger, California

Re: Docket No. 4215 - Tungsten
Bear Creek Mine
Fresno County, California

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington concerning the above referenced property have been reviewed.

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

Careful study of our information, although noting tungsten mineralization in the Bear Creek mine property, indicates to us that the probability of disclosing minable tungsten ore reserves is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing this property to our attention.

Sincerely yours,

G. O. Mittendorf

Administration

SPHolt/fcc
7/2/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

July 2, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $12,250.00
Docket No. DMEA 4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Denial of the subject application is recommended by this Division based on the following information:

(1) The applicant, Bear Creek Mining Company, c/o D. G. Walker, Trimmer Route, Sanger, California, requested exploration assistance in the amount of $12,250.00 for bulldozing and drifting at the Bear Creek mine, Fresno County, California.

(2) The applicant is the owner of seven unpatented lode mining claims, situated within the Sierra National Forest, in section 26, T. 11 S., R. 25 E., M. D. B. & M., Fresno County, California, and recorded in the records of Fresno County at Fresno, California, as follows:

Claim Name	Recorded Book No.	Recorded Page No.
Atomic Energy No. 1	3564	258
Atomic Energy No. 2	3570	659
Atomic Energy No. 3	3610	638
Atomic Energy No. 4	3613	49
Atomic Energy No. 5	3613	50
West Point No. 1	3742	7
West Point No. 2	3742	8

(3) The proposed program is to excavate a bulldozer trench, build an access road, prepare a site for an adit portal, and drive 50 feet of crosscut adit.

(4) In the area of the Bear Creek mine tungsten mineralization occurs as scheelite sparsely disseminated through small tactite bodies in gneissic granites and schists where calcareous beds are cut by minor faults or joints.

(5) The Field Team concludes that the potentially small size of the inferred tactite bodies and the low tungsten content of drill samples make the possibility of a significant discovery unlikely, and therefore recommends that Government (exploration) assistance be denied. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

SFHOLT/fec
7/2/56
cc to: Docket
Code 400 ✓
Admr. Read. File
Oper. Comm.

400

Copy [illegible]

June 28, 1956

Memorandum

To: W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Acting Chief, Branch of Ferrous Metals & Ferroalloys

From: R. W. Holliday, Commodity Specialist, Branch of Ferrous Metals & Ferroalloys

Subject: Review of Field Team Report of Examination
Docket No. DMEA-4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Subject report states that discovery of a large tactite body is not possible and the tactite that is present carries negligible amounts of scheelite.

For the above reasons the examiners recommend denial of the application and I concur in the recommendation.

R. W. Holliday

June 28, 1956

Memorandum

To: W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Acting Chief, Branch of Ferrous Metals & Ferroalloys

From: R. W. Halliday, Commodity Specialist, Branch of Ferrous Metals & Ferroalloys

Subject: Review of Field Team Report of Examination
Docket No. DMEA-4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Subject report states that discovery of a large tactite body is not possible and the tactite that is present carries negligible amounts of scheelite.

For the above reasons the examiners recommend denial of the application and I concur in the recommendation.

R. W. Halliday

IN REPLY REFER TO:

400

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

RECEIVED
JUN 2 2 1956

June 21, 1956

Re: DMEA 4215
Bear Creek Mining Co.,
Bear Creek Mine
Fresno Co., Calif.
$12,250.00 - Tungsten

Memorandum

To: [illegible]. E. Martin, Defense Minerals Exploration Administration

From: [illegible]. [illegible] Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicant requested assistance in exploring a tactite zone by bulldozing and crosscutting. The original discovery was made in 1955 and it has been prospected by a small amount of bulldozing and 190 feet of drilling.

Two of the percussion-drill holes are reported to have cut about 7 feet of scheelite-bearing tactite. As a dip of 80° is observed for the schist and gneissic granite the same is inferred for the tactite band and the 7-feet intercepts would indicate a thickness of about 1 feet for the scheelite bearing tactite. The applicant's assay of the cuttings of one hole showed 0.74% WO_3, but an assay of the rejects showed only 0.06% WO_3.

Assuming the 0.74% figure is correct a reserve of 250 tons of 0.74% material may be inferred, but the figures are subject to confirmation. The examiners found small signs of mineralization in the outcrops, consider the work outlined unwarranted and recommend that the application be denied.

With the Field Team I concur with that recommendation.

NENelson:btr
G 6/22/56

N. E. Nelson

N. E. Nelson

cc: Director's reading file
Branch reading file
DMEA (3)
Chron. file
Docket file
Robert Holliday, 3517

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

400

RECEIVED
JUN 15 1956

1605 Evans Avenue
Reno, Nevada

June 13, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4215 (Tungsten)
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Reference is made to your letter of March 28, 1956 requesting a field examination on subject property.

Attached are four copies of a report by Walter Bank, Bureau of Mines and Robert G. Reeves, Geological Survey in which it is recommended that the application of exploration aid be denied.

Roscoe Smith and I concur in the recommendation.

S. Ricker

Attach.

SRicker:gh
cc: R. M. Smith
File

Reviewed by
DMEA OPERATING COMMITTEE

(date)

RECEIVED
JUN 15 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRANK A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-4215 (Tungsten)
Bear Creek Mining Company
Bear Creek Mine, Fresno County, California

By

Robert G. Reeves
U. S. Geological Survey

Walter Bank
U. S. Bureau of Mines

June 8, 1956

Reviewed by
DMEA OPERATING COMMITTEE

(date)

CONTENTS

	Page
Introduction	1
Conclusions and Recommendations	2
Location, Accessibility and Local Facilities	3
History, Production, Property, and Ownership . . .	4
Development	4
Geology and Ore Deposits	5
Sampling and Ore Reserves	7
Proposed Exploration	7

ILLUSTRATIONS

Fig. 1 - Location Map, Bear Creek Mine, Fresno County, Calif.

Fig. 2 - Claim map.

INTRODUCTION

The Bear Creek Mining Company, a partnership of four men, c/o D. G. Walton, Trimmer Route, Sanger, California, applied for Government assistance in a $12,250.00 program under the Defense Minerals Exploration Administration, docket number 4215, to explore for tungsten at the Bear Creek Mine, Fresno County, California. The applicant wishes to explore a scheelite-bearing tactite zone by bulldozing and drifting near their drill hole number 1.

The application is dated March 12, 1956. A letter from the Operating Committee, dated March 28, 1956, requested a field examination of the property which was made by Robert G. Reeves and Walter Bluck on May 10-12, 1956. The examiners were accompanied by two of the partners, Rex Cunningham and A. E. Gardner.

A general reconnaissance of the property was made, rock exposures were lumped, and a geological map was prepared. No samples were taken because lumping failed to indicate more than a few grains of scheelite. Two samples supplied by the applicant were assayed by the U. S. Bureau of Mines.

CONCLUSIONS AND RECOMMENDATIONS

The Bear Creek Mine contains small scheelite-bearing tactite bodies in gneissic granites and schists. There are sufficient bedrock exposures of host material to preclude the possibility of a large tactite body, and the tactite carries negligible amounts of scheelite.

The current drilling campaign has not indicated an ore body. Applicant's assay of 0.74 percent WO_3 compares with the USBM assay of 0.06 percent WO_3 obtained from their rejects. Their sample was improperly collected, handled, and split as determined later in a conversation with Mr. MacDonald. Neither assay figure is considered representative.

The operators are inexperienced in mining and their cost figures are too high.

The potentially small size of the inferred tactite body and the low tungsten content of their drill samples make the possibility of a significant discovery unlikely. It is recommended that Government assistance be denied.

LOCATION, ACCESSIBILITY AND LOCAL FACILITIES

The claims are in Sec. 26, T. 11 S., R. 25 E., M.D.B.& M., at an altitude of 2000 to 3100 feet, within the Sierra National Forest, Fresno County, California (fig. 1).

The property is about 58 miles northeast of Fresno, California. The road log follows:

1.	Start from U.S. Post Office in Piedra	00.0 miles
2.	Travel north and east along county, paved road, past Pine Flat Reservoir, to intersection at	22.3 miles
3.	Take left fork; continue along Forest Service dirt road to intersection at	27.1 miles
4.	Take right fork; continue to intersection at	30.1 miles
5.	Take right fork; continue to trailer camp (on right) at	32.8 miles
6.	Drill site is one mile farther along the road at about	33.8 miles

Muddy road conditions make all mileage figures on the Forest Service road subject to slight revision.

The road is open to passenger cars except in extremely wet weather when excessive mud or occasional heavy snowfalls close the roads. Annual precipitation is about 25-30 inches.

An alternate approach to the property, past Balch Camp, is noted in figure 1; but this road requires a vehicle with 4-speed transmission.

The nearest power source, at Maxsons, is 25 miles away, supply and labor sources are at Fresno or farther. Water is hauled in from a nearby Government water tank (fig. 1).

HISTORY, PRODUCTION, PROPERTY, AND OWNERSHIP

The original discovery was made early in 1955 by Rex Cunningham, A. E. Gardner, and D. G. Walton, who staked five claims. Later two more claims were added to the group. Ray L. MacDonald of 4282 Knoll Avenue, Oakland, California, acquired his partnership share by furnishing and using the drilling equipment. All the partners possess a little knowledge of drilling, prospecting and mining methods.

There has been no production. Adjoining tungsten claims have been located to the south, but no production has been reported.

The following unpatented claims are recorded at Fresno, California:

Claim	Filed	Book	Page
Atomic Energy No. 1	2/25/55	3544	258
Atomic Energy No. 2	3/9/55	3570	659
Atomic Energy No. 3	5/25/55	3610	638
Atomic Energy No. 4	6/1/55	3613	49
Atomic Energy No. 5	6/1/55	3613	50
West Point No. 1	3/19/56	3742	7
West Point No. 2	3/19/56	3742	8

DEVELOPMENT

Bulldozing costing fifty dollars, a small test pit, and six drill holes totaling 190 feet represent the development work. Three holes reportedly showed scheelite, the other three holes were lost due to improper drilling procedures.

An Hatsfeld rock drill, rated for 70 feet, and a house trailer are owned by MacDonald. A 4-wheel drive Jeep, a 1/2-ton Ford pickup, a 1/2-ton utility trailer and a house trailer are owned by A. E. Gardner.

The Houghton Mill, about 20 miles away, can handle custom ore for $18-20 per ton. Shipping to the mill is estimated to be $5 per ton.

GEOLOGY AND ORE DEPOSITS

The prospect is on a northwest-trending ridge that is part of the western foothills of the Sierra Nevada. Rocks in the area are fine-grained schist intruded by granitic rocks of the Sierra Nevada batholith. Along the contact the schist has been intimately intruded by the granitic rock to form a gneissic granite or injection gneiss. The prospect is within an area mapped by Kesseskopf[1] and is in a part of the schist that contains but few calcareous beds.

The schist strikes from north to northwest and dips from vertical to 75° W. (fig. 3). Layering in the gneissic granite has the same general attitude as the schist, although generally more variable. The contact between the gneissic granite and schist is gradational and irregular, and in the vicinity of the mine is con-

1/ Kesseskopf, K. B., 1952, Tungsten deposits of Madera, Fresno, and Tulare Counties, Calif.: Calif. Div. Mines Sp. Rept. 35, Pl. 1.

coated by soil except in the creek bottoms. The schist contains small bodies of gneissic granite, at least several hundred feet from the contact.

Scheelite is sparsely distributed in small tactite zones in the schist and gneissic granite, where calcareous beds are cut by minor faults or joints. The two most promising tactite outcrops, one 50 feet SW and the other 1500 feet NW of the drill holes (Fig. 2), contained only a few 1/2 to 2 mm scheelite grains. A third small body of gneissic granite, explored by the drill holes and exposed by bulldozing, contained a half-dozen 1 to 2 mm scheelite grains. Layering in the gneissic granite and surrounding schist strikes N. 30° W. and dips 80° W. in the outcrop.

Two of the vertical percussion-drill holes were reported to have cut 7 feet of ore, both at about 50 feet below the surface. The true thickness represented by the 7-foot intercept is about 1 foot. From this information and by a comparison with similar tungsten deposits, an ore body about 2 feet wide and less than 50 feet along the strike and in vertical output and conformable with the schist or gneissic granite, is inferred. The expected grade would be about .75 percent WO_3.

SAMPLING AND ORE RESERVES

No outcrop samples were taken because lamping disclosed no material remotely approaching ore grade. Two samples of drill cuttings, one from each of two holes, supplied by the applicant, assayed as follows:

Sample No.	% WO_3	Description
B-11	0.06	Hole No. 1, between 45 and 52 feet.*
B-12	0.01**	Hole No. 2, down about 48 feet.

*Application figure of 56 feet is in error.
**Less than.

B-11 is the reject (?) from sample noted in application as assaying 0.74% WO_3. The variation in assays is attributed to improper sampling and splitting techniques.

Using a width of 1 foot and a length and depth of 50 feet, a maximum of 250 tons of less than 0.74 percent WO_3 ore is inferred in the area of the drill holes. No material of ore grade is inferred in the other areas. A factor of 10 cubic feet/ton is used in calculating ore reserves.

PROPOSED EXPLORATION

The applicants proposed to explore the drilled area by (1) excavating a trench (requiring about 200 hours of bulldozing) and (2) driving a 50-foot crosscut adit. The remainder (163 hours) of

the 363 hours of bulldozing requested would be used to construct a road to, and prepare a portal site for, the adit. After discussing this with the applicants, it appeared that their request for 50 feet of drifting was based on the idea, considered by the examiners to be erroneous, that the tungsten bodies are flat lying, and that a "bed" would be intersected 50 feet from the adit portal, at from 45 to 50 feet below the surface. The target is too small to justify exploration.

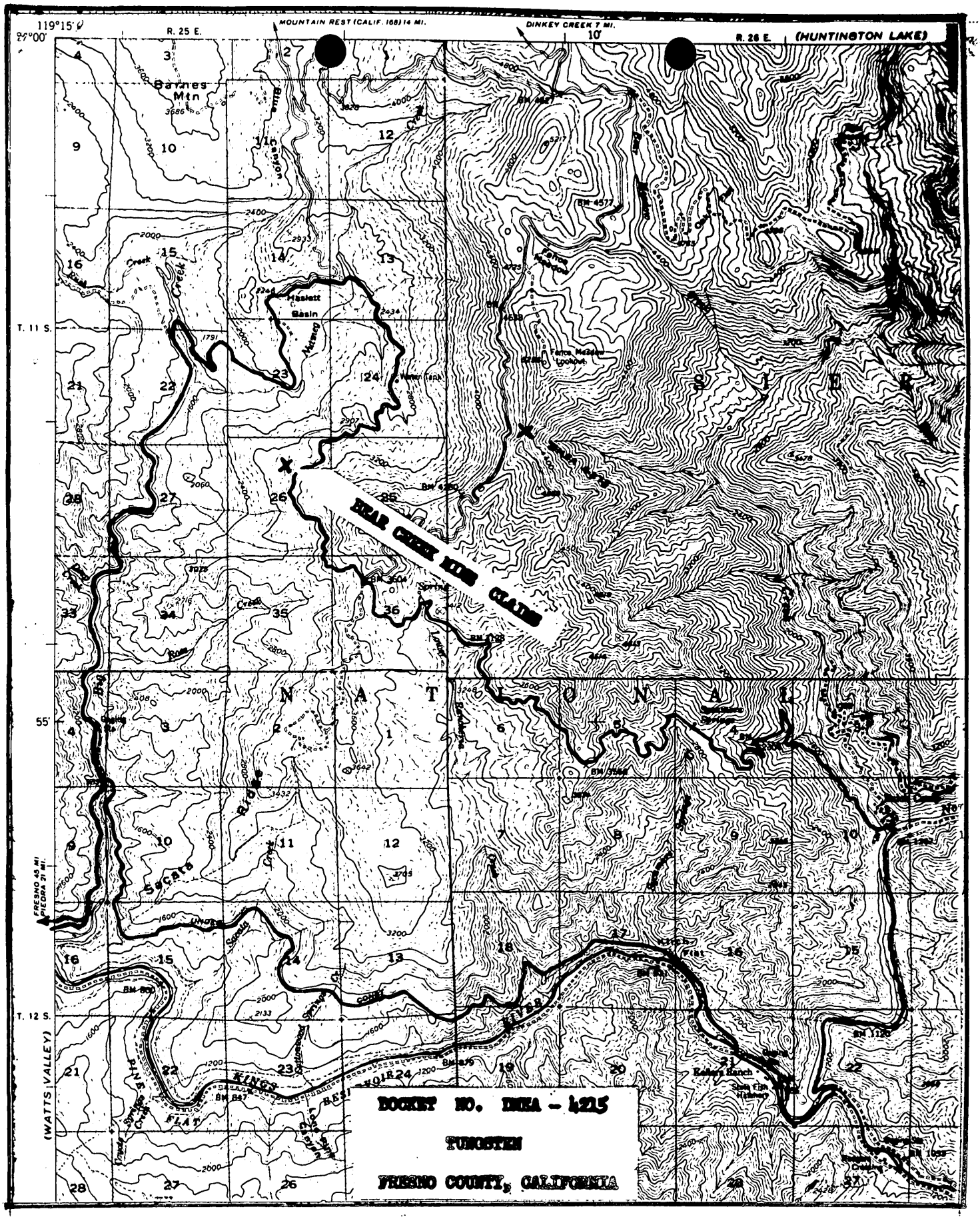


FIG. 1 LOCATION MAP CALIFORNIA

400

MAR 2 8 1956

Bear Creek Mining Company
c/o Mr. R. G. Walton
Kalamer Route
Sanger, California

Re: Docket No. DMEA 4215 - Tungsten
Bear Creek Mine
Fresno, County, California

Gentlemen:

The above-docketed application for exploration assistance for tungsten ores has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. Spangler Bicker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mitter[illegible]

Administrator

SFMalt/fee 3/27/56
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. II
Messrs. Holliday, USBM
Killingsaard, USGS

MAR 2 8 1956

Mr. Spangler Richey, Executive Officer
DMEA Field Team, Region II
2645 Burnes Avenue
Reno, Nevada

Re: Docket No. DMEA 1216 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Kern County, California

Dear Mr. Richey:

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

Copies of memoranda dated March 19 and March 23, 1956, by N. E. Nelson, Geological Survey, and R. H. Halliday, Bureau of Mines, respectively, relating to the project, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines

N. E. Nelson

Member, Geological Survey

SFMelt/fec 3/27/56
cc to: Docket
Code 400 ✓
Admr. Read. File
Operating Comm.
FT. REG. II
Messrs. Halliday, USBM
Nelson, USGS

402

March 23, 1956

Memorandum

Copy

To: Chief, Iron and Ferroalloys Division - DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist - Tungsten

Subject: Application
Docket No. DMEA 4215
Bear Creek Mine
Fresno County, California
% D. G. Walton
Trimmer Route
Sanger, California
$12,250.00 - Tungsten

Subject application does not state clearly what work is proposed but from an attached sketch it appears that removal of overburden by bulldozer, construction of road and 50 feet of drift are included. Geological references are listed also on the same sketch.

It is recommended that subject application be referred to the field team.

R. W. Holliday

IN REPLY REFER TO:

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

4070

RECEIVED
MAR 20 1956

March 19, 1956

Re: DMEA 4215
Bear Creek Mining Co. (Partnership)
Atomic Energy Group
Fresno County, California
$12,250.00 - Tungsten

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

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

Subject: Review of application.

The applicant requests financial assistance in exploring a scheelite-bearing tactite zone by bulldozing and 50 feet of drifting. The estimated cost is $12,250.00.

Work done to date consists of bulldozing and drilling one hole 56 feet. Cuttings from the vertical hole between depths of 45 and 56 feet (bottom) are said to have assayed 0.74% WO_3.

The meagre information suggests an examination is warranted.

Referral to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-3/19/56

cc: Director's reading, ~~4212~~ 4212
Branch reading, 4212
DMEA (3)
Docket file
R. Holliday, 3513

DOCKET
SURNAME

400

Holt
Chapman
Kiilsgaard
Gehm
Selfridge

JUL 9 - 1956

Bear Creek Mining Company
c/o D. G. Walton
Trimmer Route
Sanger, California

Re: Docket No. 4215 - Tungsten
Bear Creek Mine
Fresno County, California

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington concerning the above referenced property have been reviewed.

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

Careful study of our information, although noting tungsten mineralization in the Bear Creek mine property, indicates to us that the probability of disclosing minable tungsten ore reserves is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf

Administration

SPHolt/fcc
7/2/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

R.C.S.

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

July 2, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $12,250.00
Docket No. DMEA 4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Denial of the subject application is recommended by this Division based on the following information:

(1) The applicant, Bear Creek Mining Company, c/o D. G. Walter, Trimmer Route, Sanger, California, requested exploration assistance in the amount of $12,250.00 for bulldozing and drifting at the Bear Creek mine, Fresno County, California.

(2) The applicant is the owner of seven unpatented lode mining claims, situated within the Sierra National Forest, in section 26, T. 11 S., R. 25 E., M. D. B. & M., Fresno County, California, and recorded in the records of Fresno County at Fresno, California, as follows:

Claim Name	Recorded Book No.	Recorded Page No.
Atomic Energy No. 1	3564	258
Atomic Energy No. 2	3570	659
Atomic Energy No. 3	3610	638
Atomic Energy No. 4	3613	49
Atomic Energy No. 5	3613	50
West Point No. 1	3742	7
West Point No. 2	3742	8

(3) The proposed program is to excavate a bulldozer trench, build an access road, prepare a site for an adit portal, and drive 50 feet of crosscut adit.

(4) In the area of the Bear Creek mine tungsten mineralization occurs as scheelite sparsely disseminated through small tactite bodies in gneissic granites and schists where calcareous beds are cut by minor faults or joints.

(5) The Field Team concludes that the potentially small size of the inferred tactite bodies and the low tungsten content of drill samples make the possibility of a significant discovery unlikely, and therefore recommends that Government (exploration) assistance be denied. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

Thos. L. Hopkins

for W. S. Martin, Chief
Iron and Ferro-Alloys Division

DOCKET
SURNAME
Holt Chapman

400

July 2, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $12,250.00
Docket No. DMEA 4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Denial of the subject application is recommended by this Division based on the following information:

(1) The applicant, Bear Creek Mining Company, c/o D. G. Walter, Trimmer Route, Sanger, California, requested exploration assistance in the amount of $12,250.00 for bulldozing and drifting at the Bear Creek mine, Fresno County, California.

(2) The applicant is the owner of seven unpatented lode mining claims, situated within the Sierra National Forest, in section 26, T. 11 S., R. 25 E., M. D. B. & M., Fresno County, California, and recorded in the records of Fresno County at Fresno, California, as follows:

Claim Name	Recorded Book No.	Recorded Page No.
Atomic Energy No. 1	3564	258
Atomic Energy No. 2	3570	659
Atomic Energy No. 3	3610	638
Atomic Energy No. 4	3613	49
Atomic Energy No. 5	3613	50
West Point No. 1	3742	7
West Point No. 2	3742	8

(3) The proposed program is to excavate a bulldozer trench, build an access road, prepare a site for an adit portal, and drive 50 feet of crosscut adit.

(4) In the area of the Bear Creek mine tungsten mineralization occurs as scheelite sparsely disseminated through small tactite bodies in gneissic granites and schists where calcareous beds are cut by minor faults or joints.

(5) The Field Team concludes that the potentially small size of the inferred tactite bodies and the low tungsten content of drill samples make the possibility of a significant discovery unlikely, and therefore recommends that Government (exploration) assistance be denied. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

SPHOLT/foc
7/2/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.

Docket

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

June 28, 1956

Copy retained 400

Memorandum

To: W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Acting Chief, Branch of Ferrous Metals & Ferroalloys

From: R. W. Holliday, Commodity Specialist, Branch of Ferrous Metals & Ferroalloys

Subject: Review of Field Team Report of Examination
Docket No. DMEA-4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Subject report states that discovery of a large tactite body is not possible and the tactite that is present carries negligible amounts of scheelite.

For the above reasons the examiners recommend denial of the application and I concur in the recommendation.

R W Holliday
R. W. Holliday

June 28, 1956

Memorandum

To: W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Acting Chief, Branch of Ferrous Metals & Ferroalloys

From: R. W. Holliday, Commodity Specialist, Branch of Ferrous Metals & Ferroalloys

Subject: Review of Field Team Report of Examination
Docket No. DMEA-4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Subject report states that discovery of a large tactite body is not possible and the tactite that is present carries negligible amounts of scheelite.

For the above reasons the examiners recommend denial of the application and I concur in the recommendation.

R. W. Holliday

DOCKET

IN REPLY REFER TO:

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

RECEIVED
JUN 22 1956

June 21, 1956

Re: DMEA 4215
Bear Creek Mining Co.,
Bear Creek Mine
Fresno Co., Calif.
$12,250.00 - Tungsten

WSM

Copy retained 200

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant requested assistance in exploring a tactite zone by bulldozing and crosscutting. The original discovery was made in 1955 and it has been prospected by a small amount of bulldozing and 190 feet of drilling.

Two of the percussion-drill holes are reported to have cut about 7 feet of scheelite-bearing tactite. As a dip of 80° is observed for the schist and gneissic granite the same is inferred for the tactite band and the 7-foot intercepts would indicate a thickness of about 1 foot for the scheelite bearing tactite. The applicant's assay of the cuttings of one hole showed 0.74% WO_3, but an assay of the rejects showed only 0.06% WO_3.

Assuming the 0.74% figure is correct a reserve of 250 tons of 0.74% material may be inferred, but the figures are subject to confirmation. The examiners found small signs of mineralization in the outcrops, consider the work outlined unwarranted and recommend that the application be denied.

With the Field Team I concur with that recommendation.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
JUN 22 1956

June 21, 1956

Re: DMEA 4215
Bear Creek Mining Co.,
Bear Creek Mine
Fresno Co., Calif.
$12,250.00 - Tungsten

Memorandum

To: [illegible] Martin, Defense Minerals Exploration Administration

From: [illegible]. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicant requested assistance in exploring a tactite zone by bulldozing and crosscutting. The original discovery was made in 1955 and it has been prospected by a small amount of bulldozing and 190 feet of drilling.

Two of the percussion-drill holes are reported to have cut about 7 feet of scheelite-bearing tactite. As a dip of 80° is observed for the schist and gneissic granite the same is inferred for the tactite band and the 7-foot intercepts would indicate a thickness of about 1 foot for the scheelite bearing tactite. The applicant's assay of the cuttings of one hole showed 0.74% WO_3, but an assay of the rejects showed only 0.04% WO_3.

Assuming the 0.74% figure is correct a reserve of 250 tons of 0.74% material may be inferred, but the figures are subject to confirmation. The examiners found small signs of mineralization in the outcrops, consider the work outlined unwarranted and recommend that the application be denied.

With the Field Team I concur with that recommendation.

NENelson:btr
G 6/22/56

N. E. Nelson

N. E. Nelson

cc: Director's reading file
Branch reading file
DMEA (3)
Chron. file
Docket file
Robert Halliday, 3517

IN REPLY REFER TO:

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

RECEIVED
JUN 2 2 1956

June 21, 1956

Re: [illegible] 4215
Bear Creek Mining Co.,
Bear Creek Mine
Fresno Co., Calif.
$12,250.00 - Tungsten

Memorandum

To: [illegible]. F. Martin, Defense Minerals Exploration Administration

From: [illegible]. [illegible]. Nelson, [illegible]. [illegible] Geological Survey

Subject: Review of Field Team report.

The applicant requested assistance in exploring a tactite zone by bulldozing and crosscutting. The original discovery was made in 1955 and it has been prospected by a small amount of bulldozing and 190 feet of drilling.

Two of the percussion-drill holes are reported to have cut about 7 feet of scheelite-bearing tactite. As a dip of 80° is observed for the schist and gneissic granite the same is inferred for the tactite band and the 7-feet intercepts would indicate a thickness of about 1 feet for the scheelite bearing tactite. The applicant's assay of the cuttings of one hole showed 0.74% WO_3, but an assay of the rejects showed only 0.06% WO_3.

Assuming the 0.74% figure is correct a reserve of 250 tons of 0.74% material may be inferred, but the figures are subject to confirmation. The examiners found small signs of mineralization in the outcrops, consider the work outlined unwarranted and recommend that the application be denied.

With the Field Team I concur with that recommendation.

N. E. Nelson

N. E. Nelson

NENelson:btr
G 6/22/56

cc: Director's reading file
Branch reading file
DMEA (3)
Chron. file
Docket file
Robert Holliday, 3517

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

D M E A
Docket
RECEIVED
JUN 15 1956

1605 Evans Avenue
Reno, Nevada

June 13, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4215 (Tungsten)
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Reference is made to your letter of March 28, 1956 requesting a field examination on subject property.

Attached are four copies of a report by Walter Bank, Bureau of Mines and Robert G. Reeves, Geological Survey in which it is recommended that the application of exploration aid be denied.

Roscoe Smith and I concur in the recommendation.

S. Ricker

Attach.

Reviewed by
DMEA OPERATING COMMITTEE
6-20-56
(date)

RECEIVED
JUN 15 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRANK A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-4215 (Tungsten)
Bear Creek Mining Company
Bear Creek Mine, Fresno County, California

By

Robert G. Reeves
U. S. Geological Survey

Walter Bank
U. S. Bureau of Mines

June 8, 1956

Reviewed by
DMEA OPERATING COMMITTEE
6-20-56
(date)

RECEIVED
JUN 15 1956

CONTENTS

	Page
Introduction	1
Conclusions and Recommendations	2
Location, Accessibility and Local Facilities	3
History, Production, Property, and Ownership . . .	4
Development	4
Geology and Ore Deposits	5
Sampling and Ore Reserves	7
Proposed Exploration	7

ILLUSTRATIONS

Fig. 1 - Location Map, Bear Creek Mine, Fresno County, Calif.

Fig. 2 - Claim map.

INTRODUCTION

The Bear Creek Mining Company, a partnership of four men, c/o D. G. Walton, Trimmer Route, Sanger, California, applied for Government assistance in a $12,250.00 program under the Defense Minerals Exploration Administration, docket number 4215, to explore for tungsten at the Bear Creek Mine, Fresno County, California. The applicant wishes to explore a scheelite-bearing tactite zone by bulldozing and drifting near their drill hole number 1.

The application is dated March 12, 1956. A letter from the Operating Committee, dated March 28, 1956, requested a field examination of the property which was made by Robert G. Reeves and Walter Bank on May 10-12, 1956. The examiners were accompanied by two of the partners, Rex Cunningham and A. E. Gardner.

A general reconnaissance of the property was made, rock exposures were lamped, and a geological map was prepared. No samples were taken because lamping failed to indicate more than a few grains of scheelite. Two samples supplied by the applicant were assayed by the U. S. Bureau of Mines.

RECEIVED
JUN 1 5 1956

CONCLUSIONS AND RECOMMENDATIONS

The Bear Creek Mine contains small scheelite-bearing tactite bodies in gneissic granites and schists. There are sufficient bedrock exposures of host material to preclude the possibility of a large tactite body, and the tactite carries negligible amounts of scheelite.

The current drilling campaign has not indicated an ore body. Applicant's assay of 0.74 percent WO_3 compares with the USBM assay of 0.06 percent WO_3 obtained from their rejects. Their sample was improperly collected, handled, and split as determined later in a conversation with Mr. MacDonald. Neither assay figure is considered representative.

The operators are inexperienced in mining and their cost figures are too high.

The potentially small size of the inferred tactite body and the low tungsten content of their drill samples make the possibility of a significant discovery unlikely. It is recommended that Government assistance be denied.

LOCATION, ACCESSIBILITY AND LOCAL FACILITIES

The claims are in Sec. 26, T. 11 S., R. 25 E., M.D.B.& M., at an altitude of 2800 to 3100 feet, within the Sierra National Forest, Fresno County, California (fig. 1).

The property is about 58 miles northeast of Fresno, California. The road log follows:

1.	Start from U.S. Post Office in Piedra	00.0 miles
2.	Travel north and east along county, paved road, past Pine Flat Reservoir, to intersection at	22.3 miles
3.	Take left fork; continue along Forest Service dirt road to intersection at	27.1 miles
4.	Take right fork; continue to intersection at	30.1 miles
5.	Take right fork; continue to trailer camp (on right) at	32.8 miles
6.	Drill site is one mile farther along the road at about	33.8 miles

Muddy road conditions make all mileage figures on the Forest Service road subject to slight revision.

The road is open to passenger cars except in extremely wet weather when excessive mud or occasional heavy snowfalls close the roads. Annual precipitation is about 25-30 inches.

An alternate approach to the property, past Balch Camp, is noted in figure 1; but this road requires a vehicle with 4-speed transmission.

The nearest power source, at Maxsons, is 25 miles away, supply and labor sources are at Fresno or farther. Water is hauled in from a nearby Government water tank (fig. 1).

HISTORY, PRODUCTION, PROPERTY, AND OWNERSHIP

The original discovery was made early in 1955 by Rex Cunningham, A. E. Gardner, and D. G. Walton, who staked five claims. Later two more claims were added to the group. Ray L. MacDonald of 4282 Knoll Avenue, Oakland, California, acquired his partnership share by furnishing and using the drilling equipment. All the partners possess a little knowledge of drilling, prospecting and mining methods.

There has been no production. Adjoining tungsten claims have been located to the south, but no production has been reported.

The following unpatented claims are recorded at Fresno, California:

Claim	Filed	Book	Page
Atomic Energy No. 1	2/25/55	3564	258
Atomic Energy No. 2	3/9/55	3570	659
Atomic Energy No. 3	5/25/55	3610	638
Atomic Energy No. 4	6/1/55	3613	49
Atomic Energy No. 5	6/1/55	3613	50
West Point No. 1	3/19/56	3742	7
West Point No. 2	3/19/56	3742	8

DEVELOPMENT

Bulldozing costing fifty dollars, a small test pit, and six drill holes totaling 190 feet represent the development work. Three holes reportedly showed scheelite, the other three holes were lost due to improper drilling procedures.

An Hossfeld rock drill, rated for 70 feet, and a house trailer are owned by MacDonald. A 4-wheel drive Jeep, a 1/2-ton Ford pickup, a 1/2-ton utility trailer and a house trailer are owned by A. E. Gardner.

The Houghten Mill, about 20 miles away, can handle custom ore for $10-20 per ton. Shipping to the mill is estimated to be $5 per ton.

GEOLOGY AND ORE DEPOSITS

The prospect is on a northwest-trending ridge that is part of the western foothills of the Sierra Nevada. Rocks in the area are fine-grained schist intruded by granitic rocks of the Sierra Nevada batholith. Along the contact the schist has been intimately intruded by the granitic rock to form a gneissic granite or injection gneiss. The prospect is within an area mapped by Krauskopf [1/] and is in a part of the schist that contains but few calcareous beds.

The schist strikes from north to northwest and dips from vertical to 70° W. (fig. 2). Layering in the gneissic granite has the same general attitude as the schist, although generally more variable. The contact between the gneissic granite and schist is gradational and irregular, and in the vicinity of the mine is con-

1/ Krauskopf, K. B., 1953, Tungsten deposits of Madera, Fresno, and Tulare Counties, Calif.: Calif. Div. Mines Sp. Rept. 35, Pl. 1.

cealed by soil except in the creek bottoms. The schist contains small bodies of gneissic granite, at least several hundred feet from the contact.

Scheelite is sparsely distributed in small tactite zones in the schist and gneissic granite, where calcareous beds are cut by minor faults or joints. The two most promising tactite outcrops, one 50 feet SW and the other 1500 feet NW of the drill holes (fig. 2), contained only a few 1/2 to 2 mm scheelite grains. A third small body of gneissic granite, explored by the drill holes and exposed by bulldozing, contained a half-dozen 1 to 2 mm scheelite grains. Layering in the gneissic granite and surrounding schist strikes N. 30° W. and dips 80° W. in the outcrop.

Two of the vertical percussion-drill holes were reported to have cut 7 feet of ore, both at about 50 feet below the surface. The true thickness represented by the 7-foot intercept is about 1 foot. From this information and by a comparison with similar tungsten deposits, an ore body about a foot wide and less than 50 feet along the strike and in vertical extent and conformable with the schist or gneissic granite, is inferred. The expected grade would be about .75 percent WO_3.

RECEIVED
JUN 15 1956

SAMPLING AND ORE RESERVES

No outcrop samples were taken because lamping disclosed no material remotely approaching ore grade. Two samples of drill cuttings, one from each of two holes, supplied by the applicant, assayed as follows:

Sample No.	%, WO_3	Description
B-11	0.06	Hole No. 1, between 45 and 52 feet.*
B-12	0.01**	Hole No. 2, down about 40 feet.

*Application figure of 56 feet is in error.
**Less than.

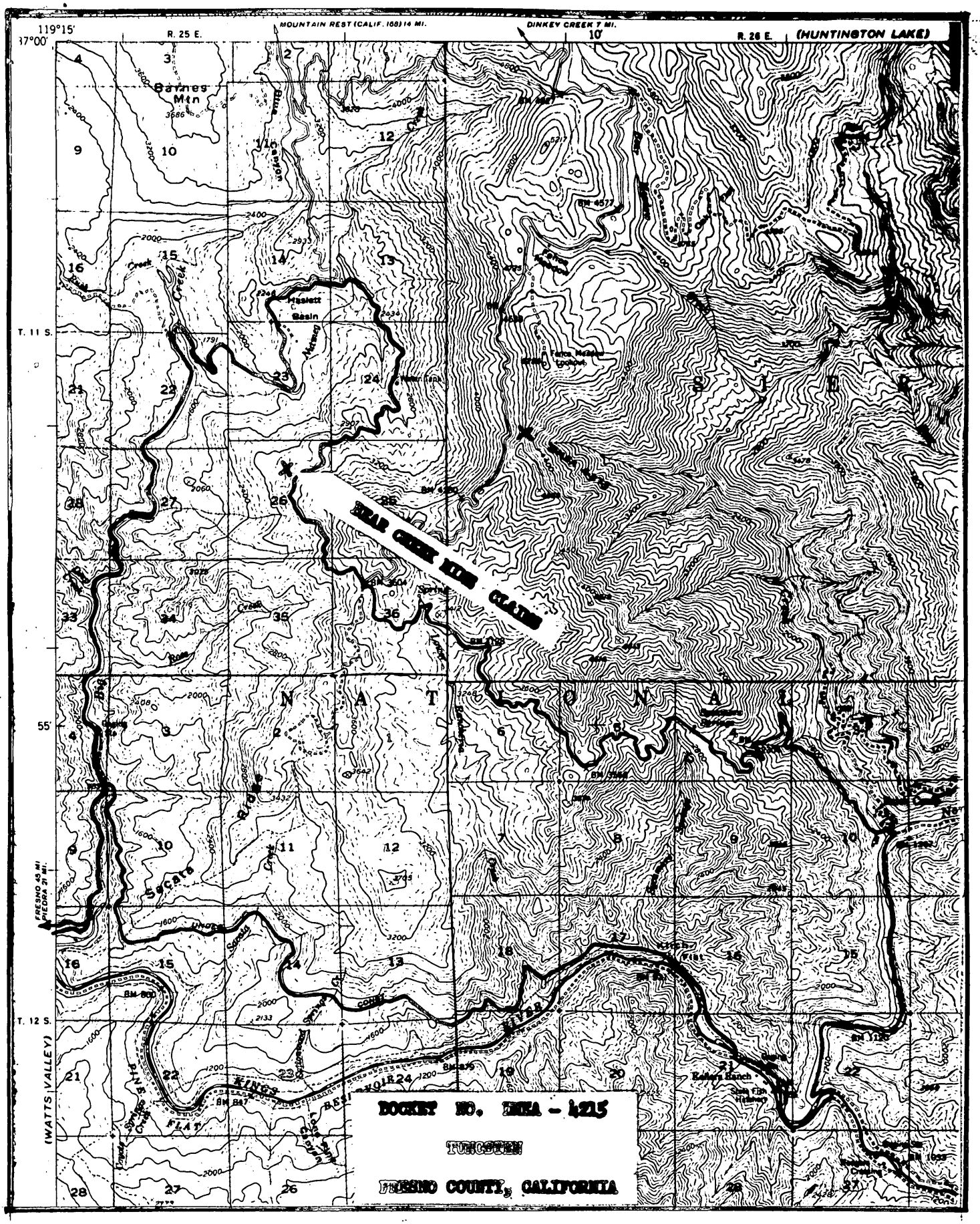
B-11 is the reject (?) from sample noted in application as assaying 0.74% WO_3. The variation in assays is attributed to improper sampling and splitting techniques.

Using a width of 1 foot and a length and depth of 50 feet, a maximum of 250 tons of less than 0.74 percent WO_3 ore is inferred in the area of the drill holes. No material of ore grade is inferred in the other areas. A factor of 10 cubic feet/ton is used in calculating ore reserves.

PROPOSED EXPLORATION

The applicants proposed to explore the drilled area by (1) excavating a trench (requiring about 200 hours of bulldozing) and (2) driving a 50-foot crosscut adit. The remainder (163 hours) of

the 363 hours of bulldozing requested would be used to construct a road to, and prepare a portal site for, the adit. After discussing this with the applicants, it appeared that their request for 50 feet of drifting was based on the idea, considered by the examiners to be erroneous, that the tungsten bodies are flat lying, and that a "bed" would be intersected 50 feet from the adit portal, at from 45 to 50 feet below the surface. The target is too small to justify exploration.


119°15'
37°00'
R. 25 E.
MOUNTAIN REST (CALIF. 168) 14 MI.
DINKEY CREEK 7 MI.
10'
R. 26 E.
(HUNTINGTON LAKE)
Barnes Mtn
Hazlett Basin
T. 11 S.
55'
T. 12 S.
FRESNO 45 MI
PIEDRA 21 MI.
(WATTS VALLEY)
Sycamore
Kings
Pine Flat
Reservoir
Kellogg Ranch
State Fish Hatchery
Fence McBride Lookout
Spring
Creek
Road
Trail
Fork
Canyon
Meadow
Bridge
Crossing
Falls
Mine
Cabin
Ranch
Flat
Pine
Blue
Bear
Big
Dry
Sycamore
Kings
River
Reservoir
BM 4577
BM 3686
BM 3604
BM 1120
BM 1033
BM 847
BM 839
BM 1128
BM 3644
BM 3705
BM 4250
BM 3648
BM 3432
BM 3200
BM 2133
BM 2434
BM 2933
BM 2791
BM 2408
BM 3028
BM 2060
BM 2400
BM 2000
BM 1600
BM 1200
BM 3000
BM 2600
BM 2200
BM 1800
BM 1400
BM 1000
BM 2800
BM 3200
BM 3600
BM 4000
BM 4400
BM 4800
BM 5200
BM 5600
BM 6000
BM 6400
BM 6800
BM 7200
BM 7600
BM 8000
BM 8400
BM 8800
BM 9200
BM 9600
BM 10000
BM 10400
BM

DOCKET
SURNAME

Holt
Martin
Selfridge
Hjelmeson

MAR 2 8 1956

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 4215 - Tungsten
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Dear Mr. Ricker:

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

Copies of memoranda dated March 19 and March 23, 1956, by N. E. Nelson, Geological Survey, and R. W. Halliday, Bureau of Mines, respectively, relating to the project, are enclosed for your information.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosure

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

N. E. Nelson
Member, Geological Survey

SPHolt/foc 3/27/56
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. II
Messrs. Holliday, USBM
Nelson, USGS

R.C.G.

DOCKET
SURNAME
Holt
Martin
Gehon
Nelson
Selfridge
Flytzanis

400

MAR 2 8 1956

Bear Creek Mining Company
c/o Mr. D. G. Walton
Trimmer Route
Sanger, California

Re: Docket No. DMEA 4715 - Tungsten
Bear Creek Mine
Fresno County, California

Gentlemen:

The above-docketed application for exploration assistance for tungsten ores has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mitchell

Administrator

SPHolt/fcc 3/27/56
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. II
Messrs. Holliday, USBM
Kiilsgaard, USGS

R.E.S.

Docket

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

March 23, 1956

Memorandum

Copy [illegible] 200

WGay

To: Chief, Iron and Ferroalloys Division - DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist - Tungsten

Subject: Application
Docket No. DMEA 4215
Bear Creek Mine
Fresno County, California
% D. G. Walton
Trimmer Route
Sanger, California
$12,250.00 - Tungsten

Subject application does not state clearly what work is proposed but from an attached sketch it appears that removal of overburden by bulldozer, construction of road and 50 feet of drift are included. Geological references are listed also on the same sketch.

It is recommended that subject application be referred to the field team.

R W Holliday
R. W. Holliday

Docket

IN REPLY REFER TO:

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

RECEIVED
MAR 20 1956

March 19, 1956

Copy retained 400

Re: DMEA 4215
Bear Creek Mining Co. (Partnership)
Atomic Energy Group
Fresno County, California
$12,250.00 - Tungsten

Memorandum

WSM

To: W. S. Martin, Defense Minerals Exploration Administration

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

Subject: Review of application.

The applicant requests financial assistance in exploring a scheelite-bearing tactite zone by bulldozing and 50 feet of drifting. The estimated cost is $12,250.00.

Work done to date consists of bulldozing and drilling one hole 56 feet. Cuttings from the vertical hole between depths of 45 and 56 feet (bottom) are said to have assayed 0.74% WO_3.

The meagre information suggests an examination is warranted.

Referral to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

Copy retained 400

Should be c/o D.G. Walton

March 15, 1956

Subject: DMEA-4215
Re: Exploration Assistance
Bear Creek Mine

Bear Creek Mining Company
Trimmer Route
Sanger, California

Gentlemen:

The receipt of your application dated March 12, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4215 and referred to the Iron & Ferro Alloys Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

March 15, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region II.

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA
- 4215 Bear Creek Mining Company

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

DMEA

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

RECEIVED
MAR 15 1956

1605 Evans Avenue
Reno, Nevada

March 13, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Tungsten)
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Attached are three sets of MF-103, Application for Aid forms relative to above subject. The fourth set has been retained in our files.

S. Ricker

Attach.

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

RECEIVED
MAR 15 1956

1605 Evans Avenue
Reno, Nevada

March 13, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Tungsten)
Bear Creek Mining Company
Bear Creek Mine
Fresno County, California

Attached are three sets of MF-103, Application for Aid forms relative to above subject. The fourth set has been retained in our files.

S. Ricker

Attach.

SRicker:gh
cc: R. M. Smith
File

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
MAR 15 1956

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-4215
Metal or Mineral Tungsten
Date Received 3/15/56
Estimated Cost $12,250.00
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: Partnership: D.G. Walton, Trimmer Route, Sanger, Calif., Rex Cunningham, 4346 Madison, Fresno, Calif., A.E. Gardner, 4515 E. Garland, Fresno, Calif., Ray L. MacDonald 4282 Knoll Ave. Oakland, Calif.,

Bear Creek Mining Company
c/o D.G. Walton
~~Trimmer Route~~
Sanger, California

(*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

For all additional information on this form please see attached sheets

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

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

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

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

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

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 .....

.....

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

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

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

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?

☐ Money ☑ Use of equipment owned by you ☑ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated March 12, 1956

Bear Creek Mining Co
(Applicant)

By R. H. Cunningham
D. E. Walton
Ray McDonald
A. E. Gardner

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

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

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

RECEIVED
MAR 15 1956

1. Bear Creek Mining Company
c/o D. G. Walton
Trimmer Route
Sanger, California

(d) Partnership: D. G. Walton, Trimmer Route, Sanger, California
Rex Cunningham, 4346 Madison, Fresno, California
A. E. Gardner, 4515 E. Garland, Fresno, California
Ray L. MacDonald 4282 Knoll Ave., Oakland, California

(Telephone: Fresno 7-6847 - A. E. Gardner)

3. Five (5) unpatented mining claims legally filed with all discovery and assessment work completed.

(b) Bear Creek Mine

(c) Owners

(c) None, free of liens or encumbrances

(f) Atomic Energy No. 1, filed Feb. 25, 1955 - Book 3564, Page 258

Atomic Energy No. 2, filed March 9, 1955 - Book 3570, Page 659

Atomic Energy No. 3, filed May 25, 1955 - Book 3610, Page 638

Atomic Energy No. 4, filed June 1, 1955 - Book 3613, Page 49

Atomic Energy No. 5, filed June 1, 1955 - Book 3613, Page 50

Fresno County, California Records.

4. Physical description: This property is situated along a gently sloping ridge where numerous outcroppings of garnet, epidote and lime occur over a wide area with traces of tungsten in the overburden. Exploration work to date consists of bulldozing a road, bulldozing a trench area 100 feet by 200 feet to a depth of approximately 10 feet, drilling one hole to 56 feet with assayed sample .74 tungsten between 45 feet and 56 feet, other drilling is in progress. This property is wholly owned by the above listed partners.

For examination of property telephone A. E. Gardner in Fresno, Calif., Tel. Fresno 7-6847 - The property site is situated on an all year road connecting with a paved highway from Fresno.

Bear Creek Mining Company
c/o D. G. Walton
Trimmer Route
Sanger, California

4. Continued-

(c) See attached Exhibits "A" and "B"

(d) Property is very accessible by all year road through center of property. This road connects to paved highway to Sanger and Fresno, California. Shipping distance is approximately 60 miles to Fresno.

(e) Availability of manpower is good as population centers are within driving distance. Materials, supplies and equipment are available close at Fresno. Plenty of water is also available close to the property.

5. Tungsten (sheelite)

(b) See attached Exhibit "B"

(c) Work will start immediately and be completed within 24 months or less from the date of an exploration project contract.

(d) All four partners have experience in heavy construction and equipment with some mining experience. Technical advise and help will be secured from engineers and mine operators in the area.

6. Estimate of costs.-

(a) None

(b) All work will be performed by the four partners except part time engineering and geological work and one powder man.

Bear Creek Mining Company
c/o D. G. Walton
Trimmer Route
Sanger, California

6. Continued-

(b)	Engineering and geological		$ 500.00
	Powder man - 360 hours @ $2.50 per hr.		800.00
(c)	20 carbide bits @ $18.00 each		360.00
	Air hose (5) @ $20.00 each		100.00
	2000 gal. gasoline @ .25¢ per gal.		500.00
(d)	One Hossfeld Drill (to be furnished)	$1500.00	
	One 315 CF Air compressor (used) to be purchased		1500.00
	One air leg & accessories to be purchased		400.00
	Rental on D-8 Bulldozer 363 Hours @ $11.00 per hour		4000.00
	Misc. supplies - drill steel, powder		1000.00
(e)	Small Building - furnished		
(f)	As (e)		
(g)	Equipment repair & maintenance		750.00
	Analytical work		340.00
	Insurance & accounting - Workman's Compensation & Liability & payroll taxes		750.00
(h)	Contingencies		1250.00
	Estimated Total Cost		$ 12250.00

7.

(b) Use of equipment owned by partners - Trucks, drills and miscellaneous items, also most of labor and work to be performed by the four partners and are to furnish all expenses not listed on application.

A unit cost contract is desireable to be paid for by production of mine in royalties.

EXHIBIT "B"

Bear Creek Mining Company
c/o D. G. Walton
Trimmer Route
Sanger, California

ATOMIC ENERGY CLAIMS

Cross Section, looking South on No. 2 and No.3 Claims, showing Drill Holes and outcropping (No. 1 in circle), solid formations was drilled into at depth 25 feet in both holes, also some showing of scheelite from surface.

No. 2 in circle, Fence Meadow Road, distance about 300 feet from workings.

No. 3 in circle- a road on even grade can be made to connect with main road 100 feet below outcropping ; Area is all heavily brush covered.

For Geology, and surrounding tungsten deposits, refer to the State Report 35, Tungsten, Madera, Fresno and Tulare Counties, and the United States Geological Survey of the Area.

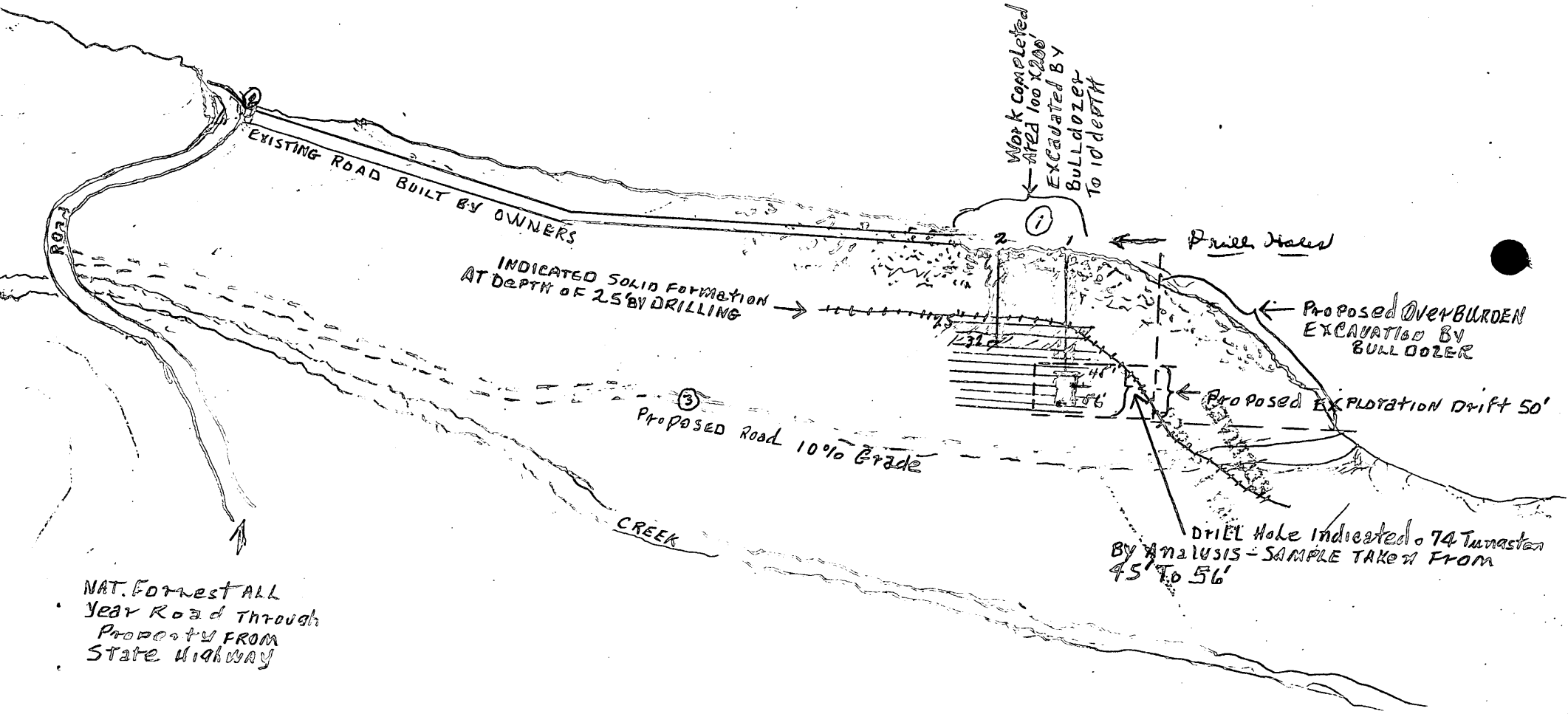


EXHIBIT "A"

Bear Creek Mining Company
c/o D.G. Walton
Trimmer Route
Sanger, California

ATOMIC ENERGY GROUP OF LODE MINING CLAIMS

Section 26, Township 11 South, Range 25 East, MDB&M, Fresno County, California, Located 1955, by Rex Cunningham, 4346 Madison, Fresno Calif, A.E. Gardner, 4515 E. Garland, Fresno California and D.G. Walton, Trimmer Route, Sanger, California

Atomic Energy No. 1,
Filed Feb. 25,1955.
Book 3564, Page 258

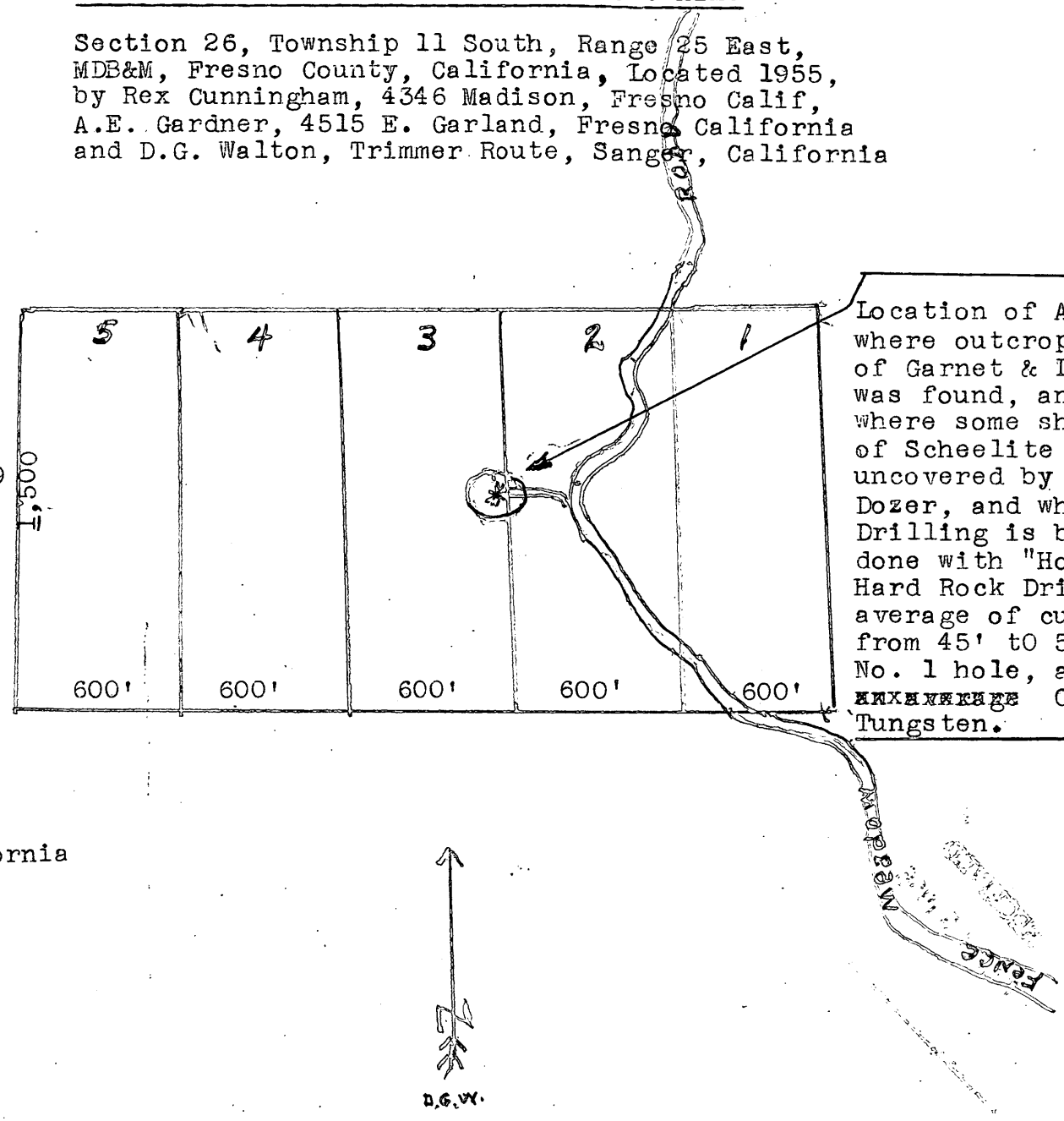
Atomic Energy No. 2
Filed March 9, 1955
Book, 3570., Page 659

Atomic Energy No. 3
Filed May 25, 1955
Book 3610, Page 638

Atomic Energy No. 4
Filed June 1, 1955.
Book 3613, Page 49.

Atomic Energy No. 5.
Filed June 1, 1955
Book 3613, Page 50.

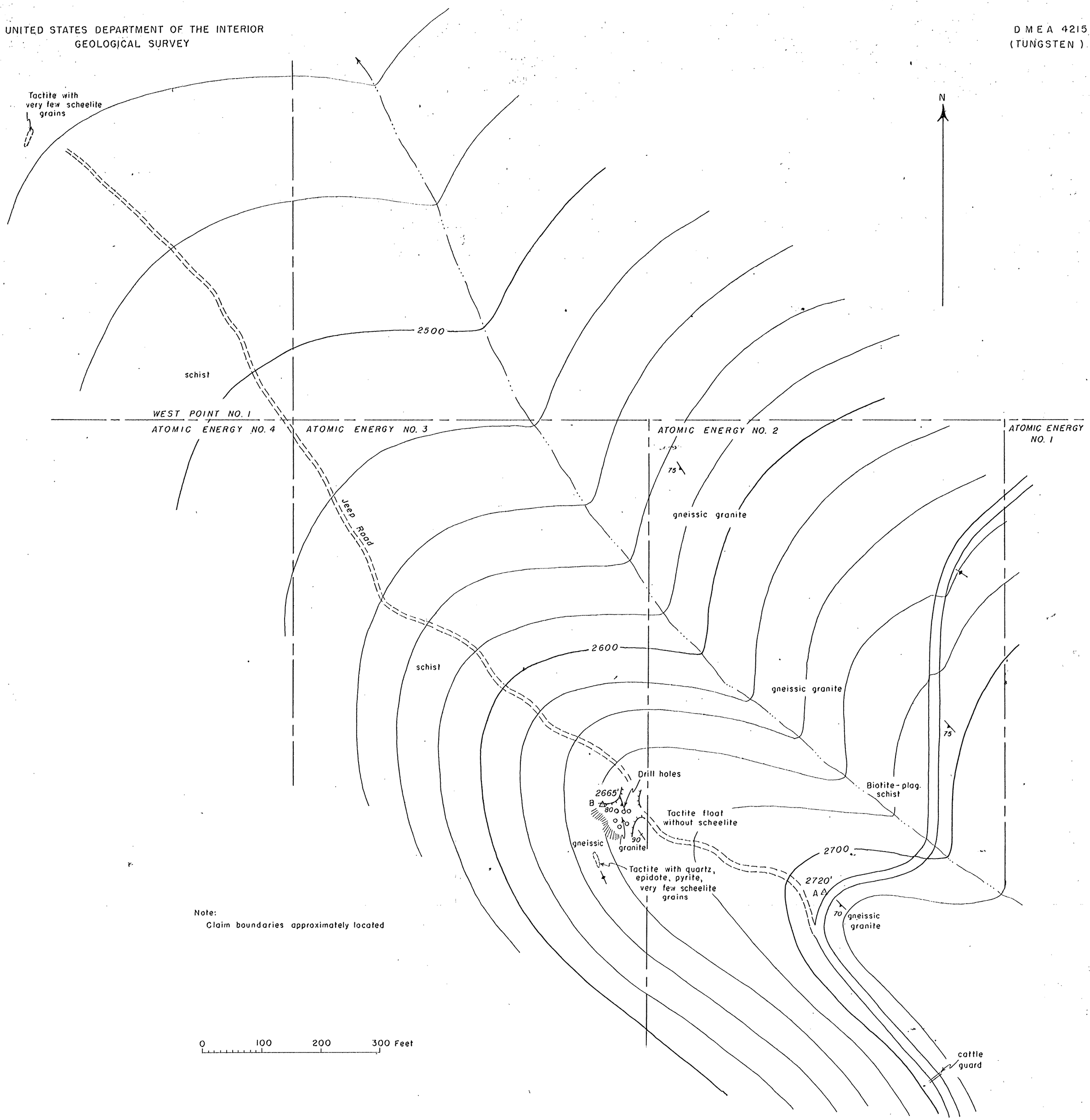
Fresno County, California
Records.



Location of Area where outcropping of Garnet & Lime was found, and where some showings of Scheelite was uncovered by Bull Dozer, and where Drilling is being done with "Hossfeld Hard Rock Drill, the average of cuttings from 45' to 56 'in No. 1 hole, assayed average 0.74 Tungsten.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

D M E A 4215
(TUNGSTEN)



ATOMIC ENERGY CLAIMS, BEAR CREEK MINING COMPANY
FRESNO COUNTY, CALIFORNIA

Figure 2