400

OCT 19 1955

Mr. James L. Reed
Box 401
Bayard, New Mexico

Re: Docket No. DMEA 3850-Tungsten
Pacemaker Group
Grant County, New Mexico

Dear Mr. Reed:

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 a small amount of tungsten mineralization on the Pacemaker group of claims, indicates to us that the probability of disclosing minable tungsten ore reserves by your proposed program 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 Program and for bringing this property to our attention.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

cc: FT, Region 3
Docket
Code 400
Oper. Com.
T.Kiilsgaard, USGS
R. W. Holliday, USBM
Adm. Reading File

SPHolt/ls
10/13/55

October 14, 1955

MEMORANDUM

To: Acting Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $111,792.41
Docket No. DMEA 3850 - Tungsten
James L. Reed
Pacemaker Group
Grant County, New Mexico

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

(1) The applicant, James L. Reed, Box 401, Bayard, New Mexico, requested exploration assistance in the amount of $42,212.77 (minimum), to $111,792.41 (maximum), for bulldozer and hand trenching, diamond drilling, shaft sinking, and drifting on the Pacemaker group of claims.

(2) The applicant owns the following unpatented lode mining claims:
Pacemaker
Pacemaker Nos. 1 to 3, and
Pacemaker Extension Nos. 1 to 12 (No. 12 being a half claim)
situated in Sections 35 and 36, T. 18 S., R. 16 W., and Sections 1 and 2, T. 19 S., R. 16 W., Burro Mountain Mining District, Grant County, New Mexico. Claim notices are recorded in Book 44, pages 339 to 341, and Book 45, pages 23 to 28, and 536-537, in the County Recorder's office at Silver City, New Mexico.

(3) The proposed program is to excavate a maximum of 710 feet of hand trenches and 4,000 feet of bulldozer trenches, drill 6,960 feet (maximum) of diamond drill holes, sink 200 feet of inclined shaft, with an unstated length of drift therefrom, on and in the Pacemaker group of claims.

(4) In the area explored by the Pacemaker claim group, sparse tungsten mineralization occurs both in surface cuts and underground workings, but there is little or no indication that minable bodies of tungsten ore will be discovered by work under the applicant's proposed program.

(5) The Field Team concludes that there is little probability of making a significant discovery and recommends denial. 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

CC: Docket
Adm. Read. File
Code 400
Operating Committee

SPHolt/ls
10/14/55

400

October 13, 1955

Memorandum

Copy retained 400

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

From: Commodity Specialist

Subject: Docket No. DMEA 3850 - Tungsten
Pecomaker Tungsten Claims
Grant County, New Mexico
Review of Field Team Report.

The subject application requests $42,212.77 for exploration.

Although 250 tons have been mined, apparently there has been no recovery of marketable concentrate.

The Field Team reports low grade, lack of geologic evidence that a significant discovery might be made.

I concur in the recommended denial.

R. W. Halliday

RWHalliday/jbr

Copy to Ferrous Metals
Files

402
IN REPLY REFER TO:

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

October 6, 1955

Re: DMEA 3350
James L. Reed
Pecomaker Group
Grant County, N. M.
$42,212.77 - Tungsten

Copy retained 400

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 scheelite-bearing zone by trenching, diamond drilling, shaft sinking and drifting.

The scheelite occurs with vein quartz and epidote in or adjacent to masses of quartz-hornblende rock, which are inclusions in a coarse-grained Precambrian granite. Inclusions of crystalline limestone, quartz and hornfels also occur in the granite.

Two hundred and fifty tons of material, called ore, has been mined in an open pit. A 160-pound sample of the stockpile assayed 0.01% WO_3.

The examiners conclude that the deposit is too low grade to justify exploration. Their conclusions appear to be well taken, and the recommendation of denial of the Field Team substantiated.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-10/6/55

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

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

400

September 27, 1955

224 New Customhouse
Denver 2, Colorado

WSM

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Report of Examination, DMEA Docket 3870 (Tungsten), James L. Reed, Pacomber Tungsten claims, Grant County, New Mexico

Enclosed are the original and three copies of the report pertaining to the above application.

The field examiners conclude that there is no geologic evidence that a significant discovery of scheelite might be made on this property. They recommend that the application be denied.

We concur in this recommendation.

W. M. Travers
W. M. Travers

D R Macharen
for E. H. Kerchman

Enclosures

Box 4097
Tucson 3, Arizona

August 23, 1955

TRANSMITTED
SEP 27 1955

Memorandum

To : W. M. Traver, Executive Officer, BMA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Field Examination Report, Project BMA-3000, James L. Reed's Remember Tungsten Prospect, Mohave County, Ariz.

Enclosed are original and 8 copies of the sections on Summary, Conclusions and Recommendations by Leonid Gruner of the Geological Survey and T. H. Kunkle of the Bureau of Mines, and the section on Engineering by Kunkle for the above report. A separate section on Geology will be submitted by the Geological Survey.

As there seems little chance of making a significant discovery of tungsten ore by additional exploratory work on this property, the BMA examiners recommend denial of Government aid. I concur with this recommendation.

Structure is enclosed.

Walter R. Storms

Walter R. Storms

CC W. M. Traver (8 with report)
W. H. King (without report)
J. E. Fulk " "
BMA-3000
DF

WRS:cm:mfr;

UNITED STATES
DEPARTMENT OF THE INTERIOR
STEWART L. UDALL, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
SECTION XXI

[illegible], James L. [illegible]'s Prospector Transition Group

[illegible], [illegible], New Mexico

Leonard Beyer, Geologist
U. S. Geological Survey

T. M. [illegible], Mining Engineer
U. S. Bureau of Mines

August 1966

SUMMARY, CONCLUSIONS AND RECOMMENDATION

By Leonid Enzuer[1/] and T. M. Rasmussen[2/]

James L. Bond applied to the Defense Minerals Exploration Administration for aid on a proposed exploratory project on his Fannenber group of tungsten mining claims in Grant County, N. Mex. The proposed project involved trenching, diamond drilling, shaft sinking, and drifting. Estimated costs of the project, based on minimum and maximum requirements, ranged from $42,312.77 to $111,722.41. Field investigations of the property were carried out under the application's docket number DMEA-[illegible].

The applicant discovered scheelite on the Fannenber property in July 1954. During that month he located 4 of the present group of 15½ claims. In the following 9 months, the remaining claims were located, several shallow trenches and pits were excavated, and about 250 tons of scheelite-bearing rock was mined from an open-cut. About 120 tons of the rock was screened to 60 tons of coarse mesh and plus 10-mesh products. Gravity concentration of the mesh 10-mesh material reportedly yielded about 100 pounds of 50 to 55 percent WO_3 concentrate. The deposits and the mill have been idle for the past 3 months.

1/ Geologist, U. S. Geological Survey, Tucson, Arizona.
2/ Mining engineer, U. S. Bureau of Mines, Tucson, Arizona.

The dominant country rock is a coarse-grained pre-Cambrian granite. The granite includes small inclusions of a quartz-hornblende rock, and small to large inclusions of limestone, quartz, and hornfels. Other observed rocks are confined to a dike of altered rock, possibly andesite.

Tungsten mineralization is confined to scheelite. The scheelite is distributed erratically in the quartz-hornblende rock in crystals up to 1½ inches in diameter. It also occurs as disseminations, or as veinlets along shears in the country rock, and as fracture coatings and crystals in the quartz. A sample of run-of-mine material from the open-cut, partially filled with debris at present, assayed 0.61 percent WO_3. Another sample from a discovery pit contained <0.01 percent WO_3.

Detailed mapping that would be necessary for a reasonable estimate of reserves is not warranted because neither the extent nor degree of indicated tungsten mineralization is significant. Consequently, denial of the requested aid on exploration of the Pretember group of claims is recommended.

[illegible], JAMES L. REED'S PACHMANN TUNGSTEN GROUP
GRANT COUNTY, NEW MEXICO

Engineering Report

by T. A. Rennie
Mining Engineer
U. S. Bureau of Mines

August 1943

BAKA-2030, JAMES L. REED'S PACHAMAMA TUNGSTEN GROUP
GRANT COUNTY, NEW MEXICO

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Engineering report	Page
Introduction	1
Location and accessibility	1
Physical features, topography and climate	2
History and production	2
Extent and ownership of property	3
Present status	3
Description of deposits	4
Ore reserves	5
Conclusions and recommendations	5

ILLUSTRATIONS

Figure No.		Following page
1	Location map	1
2	Claim map	3
3	Geologic and assay map	(See geologic report)

INTRODUCTION

The Pantomber Group of tungsten mining claims in Grant County, N. Mex. was examined in connection with an application for aid in an exploration project, pursuant to DMEA Order 1 under the Defense Production Act of 1950, as amended. The application was made on May 31, 1955 by James Leslie Reed, Box 455, Bayard, N. Mex. It was designated as DMEA 3558, reviewed by the Operating Committee, then forwarded to the Field Team of Region III for a field examination of the property.

The applicant's proposed exploratory project involved diamond drilling, trenching, shaft sinking, and drifting. Cost of the minimum and maximum work requirements were estimated at $42,215.77 and $111,708.41, respectively.

The field examination of the property was made on August 15 and 16, 1956 by Leonid Peyser, geologist, U. S. Geological Survey, and T. M. Ramsle, mining engineer, U. S. Bureau of Mines. The applicant accompanied the examining team most of the time.

LOCATION AND ACCESSIBILITY

The Pantomber group of mining claims is situated about 12 air miles southwest of Silver City, N. Mex. in secs. 35 and 36, T. 18 S., R. 16 W. and secs. 1 and 2, T. 19 S., R. 16 W., Grant County, N. Mex. (figure 1). Silver City, the nearest large town, is situated on State Highway 180 and U. S. Highway 260, and is the terminus of a spur line of the Atchison, Topeka, and Santa Fe Railway.

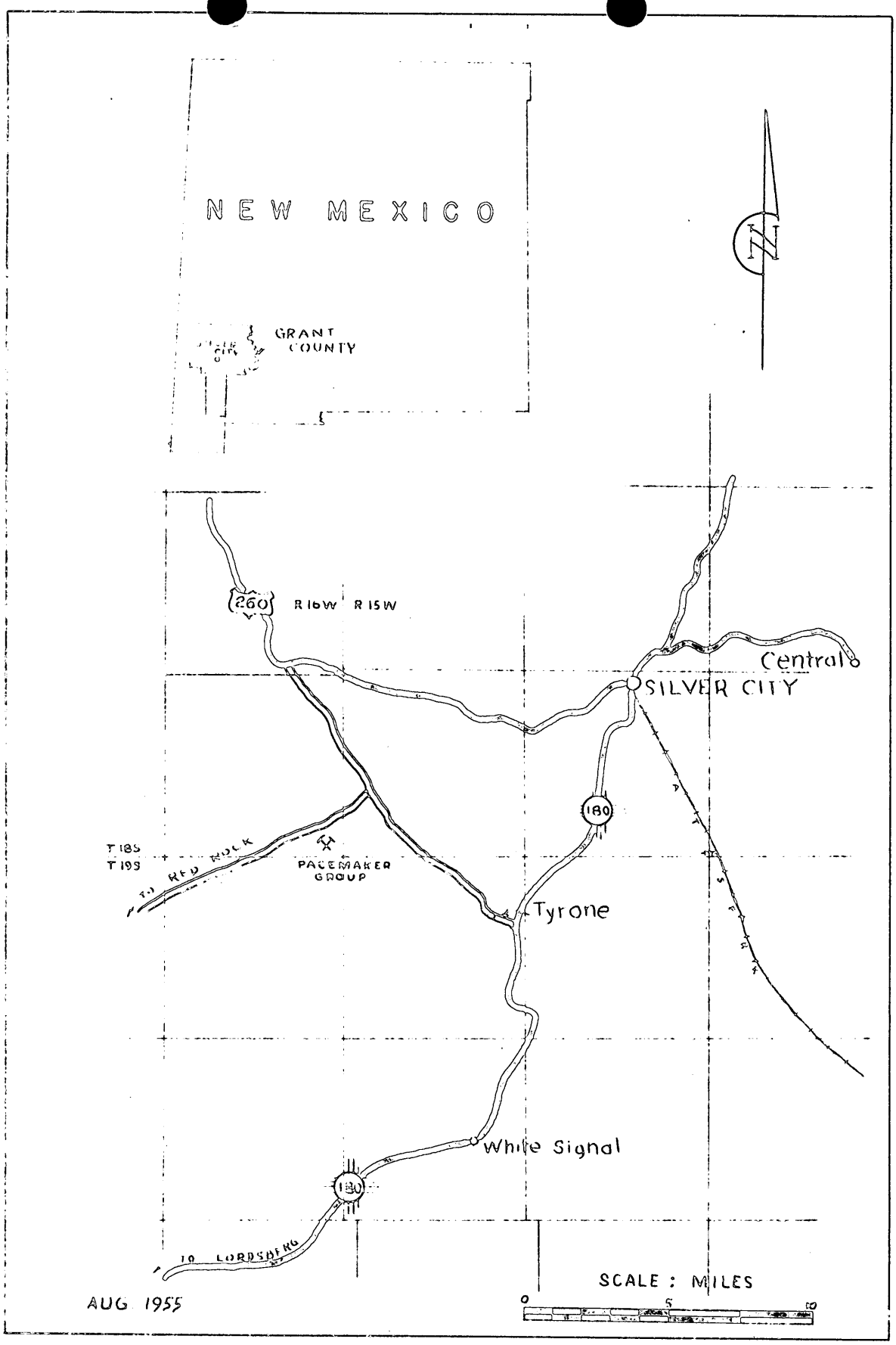

FIG 1. LOCATION MAP, PACEMAKER GROUP
GRANT COUNTY, N. MEX. DMEA-3850

The property is accessible from Silver City by traveling 18.5 miles south on State Highway 180, thence westerly through the town of Tyrone on the Mangas Valley graded road for about 8 miles to the Red Rock road, thence 3.5 miles southwesterly on this road to the claims. A bumpsing trail then is followed for 0.5 mile to a shack near an open cut on the Pacemaker claim.

PHYSICAL FEATURES, TOPOGRAPHY AND CLIMATE

The Pacemaker group is situated in the western foothills of the Big Burro Mountains at an altitude of 5,750 to 6,060 feet. Hill slopes are gentle.

Drainage is northeasterly via small arroyos to Mangas Valley. There are no permanent streams in the area.

Vegetation is largely confined to forage grasses and a light growth of scrub oak trees.

Summers are pleasant and winters normally are mild. Precipitation of about 16 inches annually occurs mainly as heavy thunder storms during July and August, and as light rain and snowfalls during January and February.

HISTORY AND PRODUCTION

The applicant said that he discovered ashcalite on the property and located 4 of the present 14½ claims in July 1954. During the following 18 months, the property was examined and worked by James C. Hall, who received a degree in geology from the University of New Mexico in 1952. Numerous shallow trenches were excavated with a bulldozer, a few discovery pits were put down, additional claims were located, and about 250 tons of ashcalite-bearing rock was open-cut mined from the deposit on the Pacemaker claim. This material was hauled to a gravity mill that the applicant had erected in OF Canyon about 1 mile north of the property.

Approximately 120 tons of the mined rock was crushed, and screened to an estimated 60 tons of each minus 10 mesh and plus 10 mesh material. All of the minus 10 mesh material was concentrated, a little by jigging and the remainder by tabling. The plus 10 mesh material and about 45 tons of run-of-mine ore were stockpiled separately near the mill. Tailings from the milling operations have been washed down the canyon by recent flood waters.

The applicant estimated total production at 100 pounds of concentrates containing 50 to 55 percent WO_3. About 30 percent of the concentrates were in the applicant's possession and the remainder reportedly was either lost to "people gatherers", or used in jigging and flotation tests.

ENTRY AND OWNERSHIP OF PROPERTY

The Pentacker group comprises 15½ lode mining claims (Figure 2). It is owned by the applicant, James Leslie Reed, Box 455, Bayard, N. Mex.

PRESENT STATUS

Workings on the presently inactive property consist of numerous shallow bulldozer trenches, from a few inches to a foot in depth and up to possibly 300 feet long, a few discovery pits, and the open-cut from which an estimated 300 tons of material was mined. The open-cut, about 5 feet wide and 75 feet long, reportedly had a minimum depth of 18 feet and an average depth of 10 feet. Rock debris and water have filled the cut to 10 feet at its deepest section.

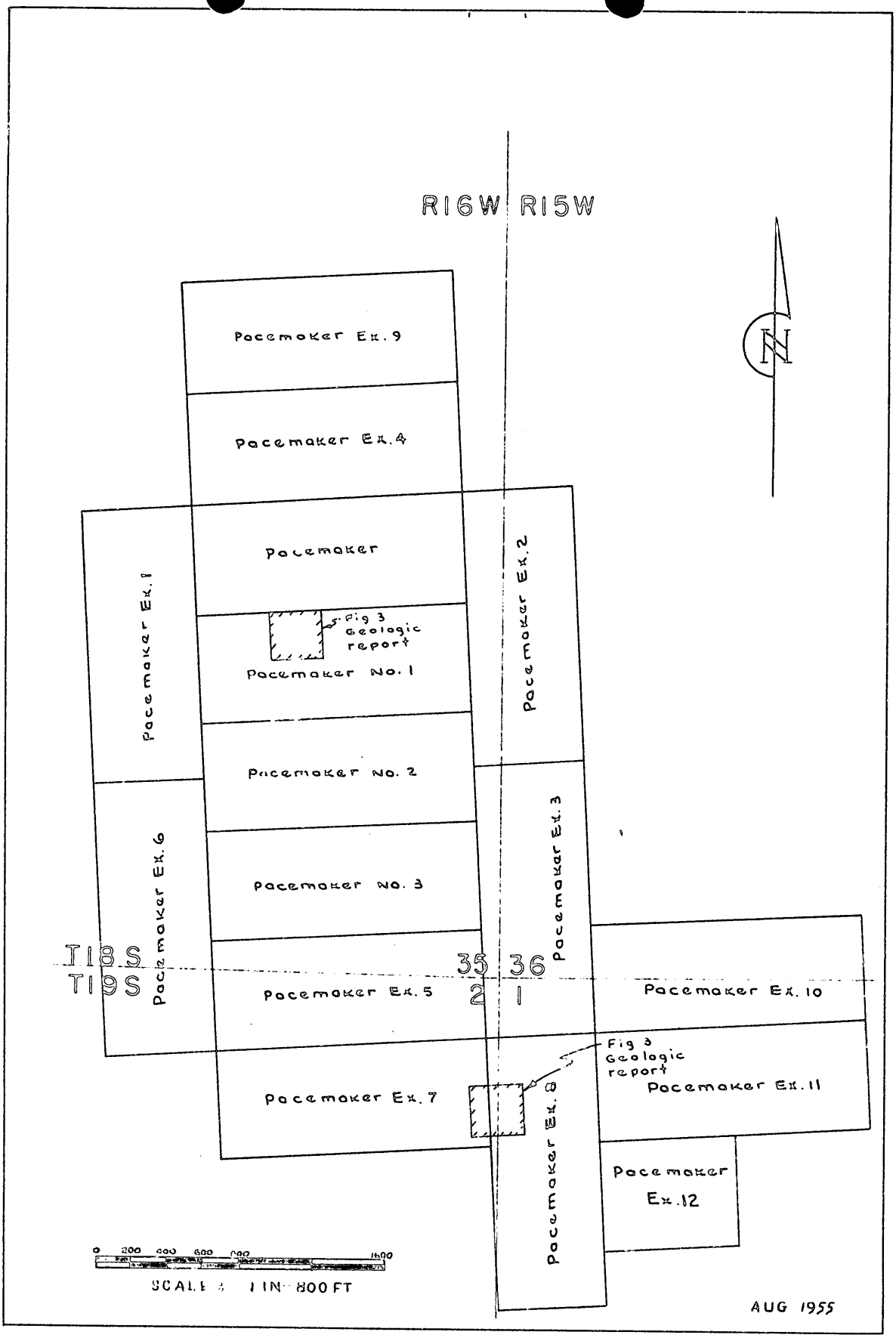

FIG. 2 CLAIM MAP, PACEMAKER GROUP
GRANT COUNTY, N.MEX. DMEA-3850

A small shack is the sole building on the mining claims.

Improvements at the mill site are confined to a 15-ton ore bin, a 500-gallon water storage tank, and a shed over a concentrating table. Milling equipment comprises a small jaw crusher, a trommel screen, a Wilfley table, and a small homemade jig. This equipment and a pump for raising water impounded in the creek are powered by gasoline engines. Other equipment at the mill site are a 5-ton flat-bed Dodge truck and a Model D-4 Caterpillar tractor with bulldozer.

Mining equipment in addition to the bulldozer is confined to 3 jackhammers. The jackhammers and hoses, drill steel with bits, and miscellaneous small tools are stored in the shack on the mining claims.

DESCRIPTION OF DEPOSITS

A coarse-grained pre-Cambrian granite is the dominant rock that crops out on the Rangefinder claims. It contains small inclusions of a fine-grained quartz-hornblende rock, and small to large inclusions of limestone, quartz, and hornfels. On the Rangefinder No. 1 claim, the granite also contains a dike of altered igneous rock, possibly rhyolite.

Scheelite in crystals up to 1½ inches in diameter is distributed erratically in or adjacent to the quartz-hornblende rock. It also occurs as disseminations, or as veinlets along shears in the country rock, and as fracture coatings and crystals in the quartz.

Two samples were taken for assay during the investigation (figure 3). Sample U.S.B.M. 11441, 15 pounds cut from a channel in the discovery pit of Pacemaker Extension No. 8 claim assayed 0.41 percent WO_3. According to the applicant, rock from this pit assayed 0.38 percent WO_3. "Sampling" of pit and dump material showed no occasional specks of scheelite. The other sample, USBM 11442, represented about 160 pounds of run-of-mine material from the open-cut on Pacemaker No. 1 claim. It contained 0.01 percent WO_3.

ORE RESERVES

Considerable detailed mapping would be necessary before a reasonably accurate estimate of reserves could be made. This work is not warranted on the basis of "sampling", mapping, and production data that indicates tungsten reserves are confined to very small scattered areas, none of which contain significant amounts of scheelite.

CONCLUSIONS AND RECOMMENDATIONS

Tungsten mineralization on the Pacemaker group of claims is confined to several very small areas, none of which contain significant amounts of scheelite. Furthermore, there is no geological indication that significant reserves might be discovered. Consequently, denial of the requested assistance is recommended.

IN REPLY REFER TO:
DMEA
Date Rec'd.
AUG 31 1955
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

August 30, 1955

TRANSMITTED
SEP 2 / 1988

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. W. Hershman

Subject: Geologic examination report, DMEA Docket 3850 (Tungsten), Peacemaker Tungsten Claims, Grant County, New Mexico

Transmitted herewith are the original and eight copies of a geologic report by Leonid Bryner on the subject property.

Bryner concludes that the occurrence of scheelite is erratic and low grade and that there is no geologic evidence that a significant discovery might be made on this property. He therefore recommends that the application be denied.

I concur with Bryner's conclusions and recommendations.

D R MacLaren
for E. W. Hershman
Member, Field Team

Enclosures (9)

DRMacLaren:ark

Box 4136 University Station
Tucson, Arizona

August 26, 1955

TRANSMITTED
SEP 27 1955

MEMORANDUM

To: Mr. E. H. Harshman

From: J. M. Faick

Subject: Geological Report of Examination of James L. Reed's Pecomber Tungsten Claims, Grant County, New Mexico

Enclosed are the original and 8 copies of a Geological Report by Leonid Bryner on the above subject property. This report recommends denial of the application for Government assistance in exploration because of the exceptionally low tungsten content in the deposit.

The report has my approval.

John M. Faick

John M. Faick

JMF:mm

cc. Mr. Harshman (8)
Mr. Storms

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY
DEFENSE MINERALS EXPLORATION ADMINISTRATION

REGION III

GEOLOGY

EXAMINATION REPORT

DMEA-3850

JAMES L. REED'S PACEMAKER GROUP

GRANT COUNTY, NEW MEXICO

(Tungsten)

By
Leonid Brymer
Geologist
U. S. Geological Survey

August 26, 1955

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM REGION III

GEOLOGY
EXAMINATION REPORT
DMEA-3850
JAMES L. REED
PACEMAKER GROUP OF CLAIMS
GRANT COUNTY, NEW MEXICO
(Tungsten)

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PRODUCTION AND GRADE	3
EXPLORATION	4
RESERVES	4
CONCLUSIONS AND RECOMMENDATIONS	4

ILLUSTRATIONS

Fig. 1, Location Map	See Engineering Report
Fig. 2, Claim Map	" " "
Fig. 3, Geologic and Assay Map	Following page 4

INTRODUCTION

In an application to the Defense Minerals Exploration Administration, dated May 31, 1955, James L. Reed requested government participation in a program estimated to cost $111,792, to explore for tungsten on the Pacemaker group of claims.

The Pacemaker group is located mainly in the SW¼ of Sec. 35, T. 18 S. and R. 16 W., Grant County, New Mexico. Elevation of the claims is about 5,800 feet. The property is most easily reached from State Highway 180, via Tyrone. From the highway the property is 11.6 miles west via the Red Rock road, a good County-maintained dirt road. Reed, as owner, has title to the 16 contiguous unpatented claims that comprise the group.

The examination was by T. M. Romslo of the U. S. Bureau of Mines and by the writer. A day and an evening, that is the afternoon and evening of July 15, and the morning of July 16, were spent going over the ground. During this time the examiners were accompanied by Reed.

Reed's Pacemaker deposit apparently includes a small part of Walter Bourland's Bullard Peak tungsten deposit which is described by John Soule of the U. S. Bureau of Mines in an unpublished report dated March 2, 1951. Soule considered the Bullard Peak deposit too low grade (most examples assayed less than 0.01 percent WO_3) and of too small a tonnage to be of interest to the government. This conclusion also applies to the Pacemaker deposit.

GEOLOGY

The rock in the exploration area is a coarse-grained Precambrian granite that crops out in the east foothills of the Burro Mountains. The granite contains inclusions of a dark-gray, fine-grained, quartz-hornblende rock that shows gradations between high and low degrees of schistosity. Inclusions of this rock from a few square feet to over 250 feet in maximum length were noted. The granite also contains large to small inclusions or lenses of crystalline limestone, quartz, and hornfels. On the Pacemaker No. 1 claim (fig. 3) the granite contains an elongated mass of dark-gray, altered igneous rock, possibly an andesite dike, of later origin than the above mentioned inclusions. This dike, as well as the inclusions, strikes about east-northeast and dips vertically to steeply to the south. The quartz lenses generally strike about north-northwest and have steep dips. Quartz, however, also occurs in veinlets and small lenses that have the same attitude as the surrounding inclusions and the schistosity.

The ore mineral is scheelite, some of which has a peculiar green tint resembling that of olivine. Most of the scheelite fluoresces in tints of yellow or green rather than bluish-white. Some of the scheelite occurs in crystals up to an inch-and-a-half in diameter, but many of the seemingly large crystals are merely fracture coatings. The gangue minerals are generally vein quartz and epidote, the epidote occurring mostly as fracture coatings.

The scheelite generally occurs in or adjacent to the quartz-hornblende rock. Aside from this general habit it seems to be very erratically distributed. It may occur either as disseminations or as veinlets along shears in the country rock, or as fracture coatings or segregations in the quartz. It does, however, have the characteristic of being very spotty in any of these environments and, if its distribution is considered over areas of more than a few square feet, of being very sparsely distributed. In all the cases noted during this examination scheelite occurs in the general vicinity of limestone and quartz, but not as closely associated with the limestone as it is with the quartz. The geology of the two areas where, according to the applicant, the best tungsten values are found, is shown in figure 3.

PRODUCTION AND GRADE

No ore is known to have been shipped from this prospect, but some rock is stockpiled at the mill site; about one mile from the prospect. In the application it is stated that "approximately 250 tons of rock have been mined, of which 100 tons could be classed as ore." The grade of this "ore" as indicated by a 160 pound sample (U.S.B.M. 11442) of the stockpile is 0.01 percent WO_3. Possibly the exceedingly low assay is due to the better grade material having already been milled. In any case the mill rock was too low grade to have been worth mining. Another sample was taken of the quartz-hornblende rock in the pit on Pacemaker Extension No. 8 (fig. 3). This sample (U.S.B.M. 11441) assayed less than 0.01 percent WO_3.

EXPLORATION

Fairly extensive areas have been scraped with a bulldozer, a few pits have been dug, and a cut 75 feet long, 5 feet wide and 10 feet deep has been opened. This cut, from which nearly all of the mill rock was extracted, has caved due to recent rains, but the rock taken from it was seen and sampled on the stockpile (U.S.B.M. 11448).

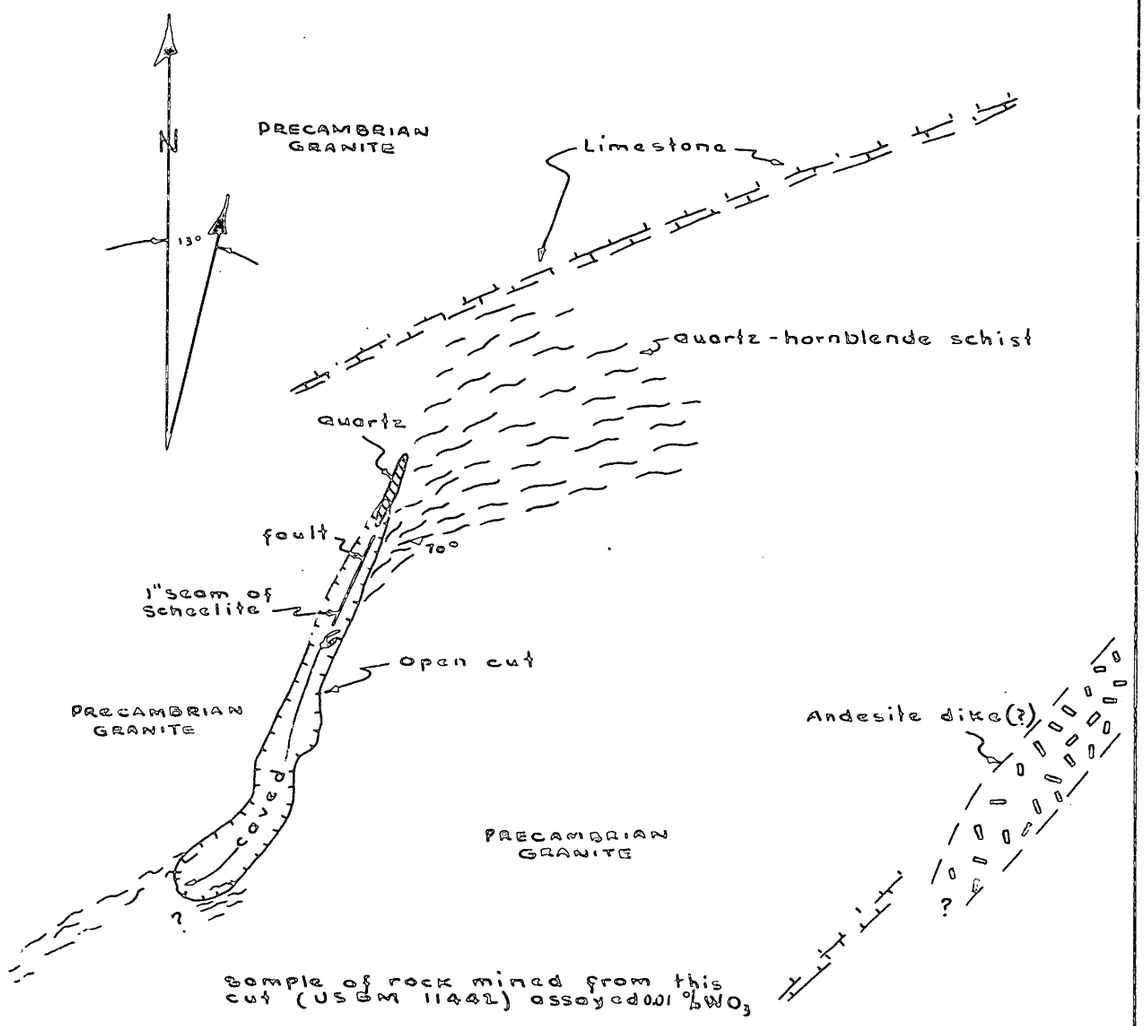
The proposed exploration consists of trenching, stripping, shaft sinking for 100 to 200 feet, and drifting for 300 feet. This work was planned for exploring 8 of the 16 claims.

RESERVES

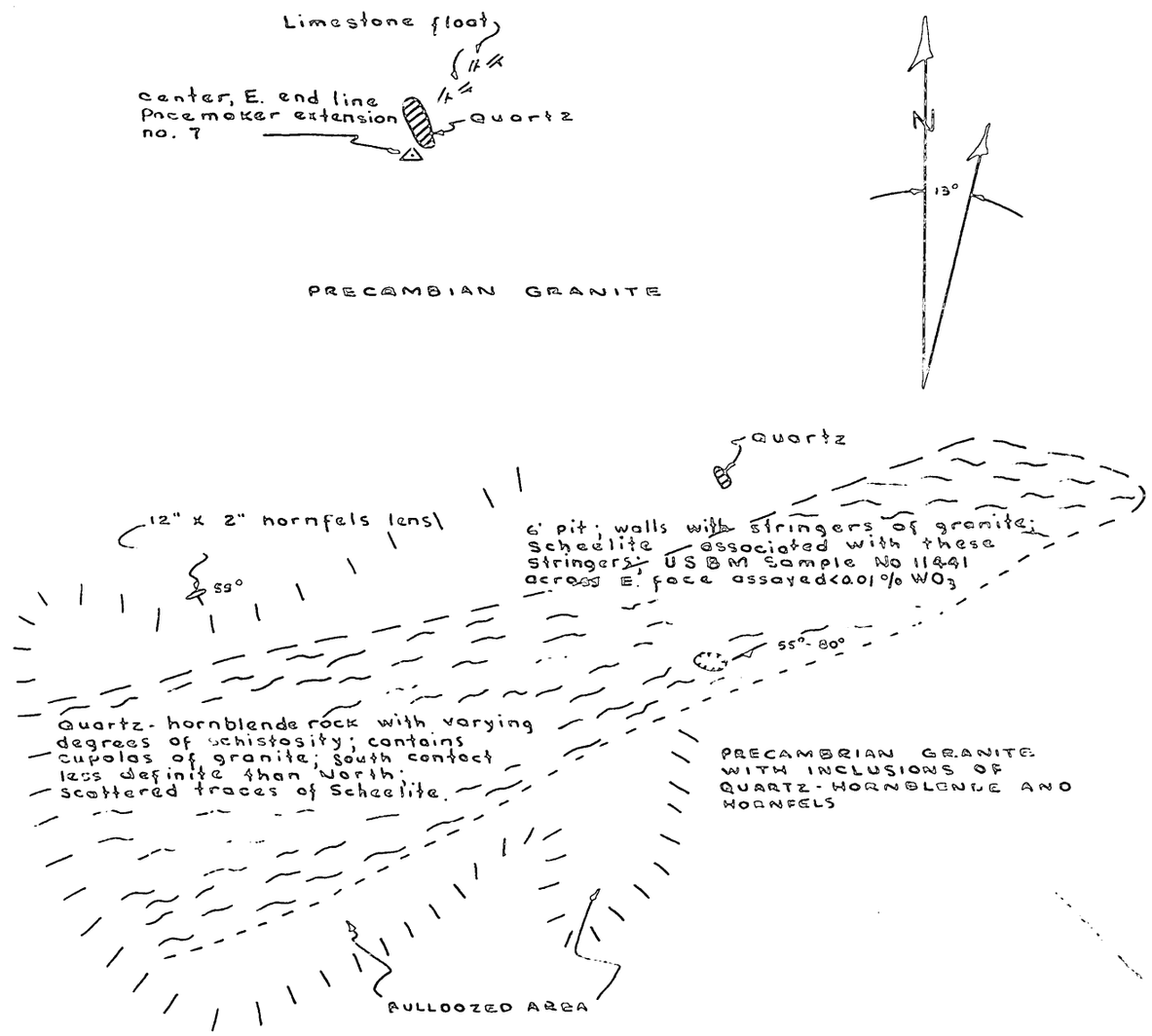
No reserves are estimated for this deposit. From the time spent on this property, however, the impression is unavoidable that reserves are small and the grade of these reserves submarginal.

CONCLUSIONS AND RECOMMENDATIONS

Because of the low grade of this deposit and the absence of any geologic indication that a significant tonnage might be discovered here, it is recommended that the application be denied.



PART OF PACEMAKER NO. 1 CLAIM



PART OF PACEMAKER EXTENSION NOS. 7 & 8

FIGURE - 3

GEOLOGIC AND ASSAY MAP

LOCATIONS SHOWN IN FIG. 2

From a Brunton pace survey by Leonid Bryner, USGS, 8 / 16 / 55

Direction and dip of schistosity 70°

40 0 40 80

SCALE — FEET

DMEA 3850

400

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

RECEIVED
JUL - 7 1955

224 New Customhouse
Denver 2, Colorado

June 30, 1955

Memorandum

To: W. R. Storms (w/brochure)
J. N. Faich

Copy retained 400

From: Field Team, Region III

Subject: Docket DMEA-3890 (Tungsten), James L. Reed, Pacemaker Group, Grant County, New Mexico

Enclosed is the subject application in the amount of $111,792.41.

Your attention is invited to the attached copy of the letter from the Chairman of the Operating Committee and the memorandum from N. B. Nelson.

A field examination and suitable report are required.

W. M. TRAVER

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

HMC:pw

cc: Subject
Chron
Harshman
Sec.Op.Comm. (2)

JUN 23 1955

Mr. James L. Reed
Box 401
Bayard, New Mexico

Re: Docket No. DMEA 3850 - Tungsten
Pacemaker Group
Grant County, New Mexico

Dear Mr. Reed:

Reference is made to the above-docketed application for exploration assistance which has been reviewed by the Defense Minerals Exploration Administration and referred to Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse, Denver 2, Colorado, 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. Mittenderf

Administrator

FARutledge:foc
6-21-55
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. III
Messrs. Holliday, USBM
Kiilsgaard, USGS

400

JUN 23 1955

Mr. W. M. Trever, Executive Officer
DMEA Field Team, Region III
22h New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 3850 - Tungsten
James L. Reed
Pacemaker Group
Grant County, New Mexico

Dear Mr. Trever:

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

Two copies of a relevant memorandum dated June 16, 1955, by N. E. Nelson, Geological Survey, are enclosed for your information.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosure

FARutledge:foc
6-21-55
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. III
Messrs. Holliday, USBM
Kiilsgaard, USGS

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

402

IN REPLY REFER TO:

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

June 16, 1955

RECEIVED
JUN 17 1955

Re: DMEA-3890
James L. Reed
Pocomahar Group
Grant Co., N. Mex.
$111,792.41 - Tungsten

Memorandum

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

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

Subject: Review of application

I have no information concerning this property or of the immediate area.

The information afforded by the application should be checked by the Field Team and refusal is recommended.

N. E. Nelson

N. E. Nelson

NENelson:hlm
G-6/16/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
Robert Holliday, 3513 Interior

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

RECEIVED
JUN - 6 1955

224 New Customhouse
Denver 2, Colorado

June 3, 1955

Dmea 3850

Mr. James L. Reed
P. O. Box 401
Bayard, New Mexico

Re: Application for DMEA assistance (Tungsten), James Leslie Reed, Pacemaker mine, Burro Mountain Mining District, Grant County, N.M.

Dear Mr. Reed:

We hereby acknowledge receipt of your application for Government assistance to explore your Pacemaker mine for tungsten. We have this date forwarded your application to our Washington DMEA office where it will be reviewed. If they consider that a field examination is required, you will be notified at the time the examination is requested. You will also be advised well in advance of the date that the field examination is to be scheduled in order that you or your representative may be present.

The heavy backlog of DMEA applications now in process prevents our giving a reasonable estimate of the time lag to be expected; however, a two or three month lag should be anticipated.

Very truly yours,

W. M. TRAVER,

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

RDB:pw

cc: Subject
Chron
Sec.Op.Comm. (2)

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

RECEIVED
JUN 6 1955

224 New Customhouse
Denver 2, Colorado

Amen 3/8/50

June 3, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA assistance (Tungsten), James Leslie Reed, Pacemaker mine, Burro Mountain Mining District, Grant County, New Mexico

Enclosed are the original and two copies of the subject application for Government assistance to explore the Pacemaker mine for tungsten at an estimated cost of $111,792.41.

One copy of the application has been retained in this office.

W. M. TRAVER,

W. M. Traver

Enclosures

400

DOCKET
Surname:
Holt
Martin
Kiilsgaard
Yoder
Selfridge

OCT 19 1955

Mr. James L. Reed
Box 401
Bayard, New Mexico

Re: Docket No. DMEA 3850-Tungsten
Pacemaker Group
Grant County, New Mexico

Dear Mr. Reed:

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 a small amount of tungsten mineralization on the Pacemaker group of claims, indicates to us that the probability of disclosing minable tungsten ore reserves by your proposed program 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 Program and for bringing this property to our attention.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

cc: FT, Region 3
Docket
Code 400
Oper. Com.
T.Kiilsgaard, USGS
R. W. Holliday, USBM
Adm. Reading File

SPHolt/ls
10/13/55

R.S.G.

DOCKET
Surname: Holt
Martin

October 14, 1955

MEMORANDUM

To: Acting Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $111,792.41
Docket No. DMEA 3850 - Tungsten
James L. Reed
Pacemaker Group
Grant County, New Mexico

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

(1) The applicant, James L. Reed, Box 401, Bayard, New Mexico, requested exploration assistance in the amount of $42,212.77 (minimum), to $111,792.41 (maximum), for bulldozer and hand trenching, diamond drilling, shaft sinking, and drifting on the Pacemaker group of claims.

(2) The applicant owns the following unpatented lode mining claims:
Pacemaker
Pacemaker Nos. 1 to 3, and
Pacemaker Extension Nos. 1 to 12 (No. 12 being a half claim)
situated in Sections 35 and 36, T. 18 S., R. 16 W., and Sections 1 and 2, T. 19 S., R. 16 W., Burro Mountain Mining District, Grant County, New Mexico. Claim notices are recorded in Book 44, pages 339 to 341, and Book 45, pages 23 to 28, and 536-537, in the County Recorder's office at Silver City, New Mexico.

(3) The proposed program is to excavate a maximum of 710 feet of hand trenches and 4,000 feet of bulldozer trenches, drill 6,960 feet (maximum) of diamond drill holes, sink 200 feet of inclined shaft, with an unstated length of drift therefrom, on and in the Pacemaker group of claims.

(4) In the area explored by the Pacemaker claim group, sparse tungsten mineralization occurs both in surface cuts and underground workings, but there is little or no indication that minable bodies of tungsten ore will be discovered by work under the applicant's proposed program.

(5) The Field Team concludes that there is little probability of making a significant discovery and recommends denial. 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

CC: Docket
Adm. Read. File
Code 400
Operating Committee

SPHolt/ls
10/14/55

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

October 14, 1955

MEMORANDUM

To: Acting Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $111,792.41
Docket No. DMEA 3850 - Tungsten
James L. Reed
Pacemaker Group
Grant County, New Mexico

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Pacemaker Extension Nos. 1 to 12 (No. 12 being a half claim)
situated in Sections 35 and 36, T. 18 S., R. 16 W., and Sections 1 and 2, T. 19 S., R. 16 W., Burro Mountain Mining District, Grant County, New Mexico. Claim notices are recorded in Book 44, pages 339 to 341, and Book 45, pages 23 to 28, and 536-537, in the County Recorder's office at Silver City, New Mexico.

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(4) In the area explored by the Pacemaker claim group, sparse tungsten mineralization occurs both in surface cuts and underground workings, but there is little or no indication that minable bodies of tungsten ore will be discovered by work under the applicant's proposed program.

(5) The Field Team concludes that there is little probability of making a significant discovery and recommends denial. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

W S Martin

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

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

October 13, 1955

Copy retained 400

Memorandum

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

From: Commodity Specialist

Subject: Docket No. DMEA 3850 - Tungsten
Pacemaker Tungsten Claims
Grant County, New Mexico
Review of Field Team Report.

The subject application requests $42,212.77 for exploration.

Although 250 tons have been mined, apparently there has been no recovery of marketable concentrate.

The Field Team reports low grade, lack of geologic evidence that a significant discovery might be made.

I concur in the recommended denial.

R. W. Holliday

R. W. Holliday

Copy retained 400

Copy retained 400

Copy retained 400

October 13, 1955

Memorandum

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

From: Commodity Specialist

Subject: Docket No. DMEA 3850 - Tungsten
Pacemaker Tungsten Claims
Grant County, New Mexico
Review of Field Team Report.

The subject application requests $42,212.77 for exploration.

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The Field Team reports low grade, lack of geologic evidence that a significant discovery might be made.

I concur in the recommended denial.

R. W. Halliday

RWHalliday/jur

Copy to Ferrous Metals
Files

October 13, 1955

Memorandum

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

From: Commodity Specialist

Subject: Docket No. DMEA 3850 - Tungsten
Pacomahar Tungsten Claims
Grant County, New Mexico
Review of Field Team Report.

The subject application requests $42,212.77 for exploration.

Although 250 tons have been mined, apparently there has been no recovery of marketable concentrate.

The Field Team reports low grade, lack of geologic evidence that a significant discovery might be made.

I concur in the recommended denial.

R. W. Holliday

RWHolliday/jbr

Copy to Ferrous Metals
Files

Docket

IN REPLY REFER TO:

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

RECEIVED
OCT 7 - 1955

October 6, 1955

Re: DMEA 3850
James L. Reed
Pacemaker Group
Grant County, N. M.
$42,212.77 - Tungsten

Copy retained 400

WSM

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 scheelite-bearing zone by trenching, diamond drilling, shaft sinking and drifting.

The scheelite occurs with vein quartz and epidote in or adjacent to masses of quartz-hornblende rock, which are inclusions in a coarse-grained Precambrian granite. Inclusions of crystalline limestone, quartz and hornfels also occur in the granite.

Two hundred and fifty tons of material, called ore, has been mined in an open pit. A 160-pound sample of the stockpile assayed 0.01% WO_3.

The examiners conclude that the deposit is too low grade to justify exploration. Their conclusions appear to be well taken, and the recommendation of denial of the Field Team substantiated.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

BUREAU OF MINES
WASHINGTON, D. C.
OCT 6 3 49 PM '55

IN REPLY REFER TO:

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

RECEIVED
OCT 7 - 1955

October 6, 1955

Re: DMEA 3850
James L. Reed
Pacemaker Group
Grant County, N. M.
$42,212.77 - Tungsten

Memorandum

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

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

Subject: Review of Field Team report.

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Two hundred and fifty tons of material, called ore, has been mined in an open pit. A 160-pound sample of the stockpile assayed 0.01% WO_3.

The examiners conclude that the deposit is too low grade to justify exploration. Their conclusions appear to be well taken, and the recommendation of denial of the Field Team substantiated.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-10/6/55

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

IN REPLY REFER TO:

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

RECEIVED
OCT 7 - 1955

October 6, 1955

Re: DMEA 3850
James L. Read
Peacemaker Group
Grant County, N. M.
$42,212.77 - Tungsten

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 scheelite-bearing zone by trenching, diamond drilling, shaft sinking and drifting.

The scheelite occurs with vein quartz and epidote in or adjacent to masses of quartz-hornblende rock, which are inclusions in a coarse-grained Precambrian granite. Inclusions of crystalline limestone, quartz and hornfels also occur in the granite.

Two hundred and fifty tons of material, called ore, has been mined in an open pit. A 160-pound sample of the stockpile assayed 0.01% WO_3.

The examiners conclude that the deposit is too low grade to justify exploration. Their conclusions appear to be well taken, and the recommendation of denial of the Field Team substantiated.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-10/6/55

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

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WASHINGTON 25, D. C.

RECEIVED

September 27, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Report of Examination, DMEA Docket 3850 (Tungsten), James L. Reed, Pacemaker Tungsten claims, Grant County, New Mexico

Enclosed are the original and three copies of the report pertaining to the above application.

The field examiners conclude that there is no geologic evidence that a significant discovery of scheelite might be made on this property. They recommend that the application be denied.

We concur in this recommendation.

W. M. Traver

for E. N. Harshman

Enclosures

Routed to DMEA Operating Committee

10-7-55
(date)

DMEA
Date Rec'd.

AUG 26 1955

BUREAU OF MINES
Denver, Colorado

TRANSMITTED

SEP 27 1955

Box 4097
Tucson 5, Arizona

August 23, 1955

Memorandum

To : W. M. Truver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Field Examination Report, Docket DMEA-3850, James L. Reed's Pacomador Tungsten Group, Grant County, N. Mex.

Enclosed are original and 8 copies of the section on Summary, Conclusions and Recommendation by Leonid Berner of the Geological Survey and T. M. Rumble of the Bureau of Mines, and the section on Engineering by Rumble for the above report. A separate section on Geology will be submitted by the Geological Survey.

As there seems little chance of making a significant discovery of tungsten ore by additional exploratory work on this property, the DMEA examiners recommend denial of Government aid. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC W. M. Truver (8 with report)
W. H. King (without report)
J. N. Faick " "
DMEA-3850
DF

WRStorms:fr;

10-7-55

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-3850, James L. Reed's Pacemaker Tungsten Group

Grant County, New Mexico

Leonid Bryner, Geologist
U. S. Geological Survey

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

August 1955

Reviewed by
DMEA OPERATING COMMITTEE
10-7-55
(Date)

SUMMARY, CONCLUSIONS AND RECOMMENDATION

By Leonid Bryner[1] and T. M. Romslo[2]

James L. Reed applied to the Defense Minerals Exploration Administration for aid on a proposed exploratory project on his Pacemaker group of tungsten mining claims in Grant County, N. Mex. The proposed project involved trenching, diamond drilling, shaft sinking, and drifting. Estimated costs of the project, based on minimum and maximum requirements, ranged from $42,212.77 to $111,792.41. Field investigations of the property were carried out under the application's docket number DMEA-3850.

The applicant discovered scheelite on the Pacemaker property in July 1954. During that month he located 4 of the present group of 15½ claims. In the following 9 months, the remaining claims were located, several shallow trenches and pits were excavated, and about 250 tons of scheelite-bearing rock was mined from an open-cut. About 120 tons of the rock was screened to 60 tons of each minus and plus 10-mesh products. Gravity concentration of the minus 10-mesh material reportedly yielded about 100 pounds of 50 to 55 percent WO_3 concentrate. The deposits and the mill have been idle for the past 3 months.

1/ Geologist, U. S. Geological Survey, Tucson, Arizona.
2/ Mining engineer, U. S. Bureau of Mines, Tucson, Arizona.

The dominant country rock is a coarse-grained pre-Cambrian granite. The granite includes small inclusions of a quartz-hornblende rock, and small to large inclusions of limestone, quartz, and hornfels. Other observed rocks are confined to a dike of altered rock, possibly andesite.

Tungsten mineralization is confined to scheelite. The scheelite is distributed erratically in the quartz-hornblende rock in crystals up to $1\frac{1}{2}$ inches in diameter. It also occurs as disseminations, or as veinlets along shears in the country rock, and as fracture coatings and crystals in the quartz. A sample of run-of-mine material from the open-cut, partially filled with debris at present, assayed 0.01 percent WO_3. Another sample from a discovery pit contained $<$0.01 percent WO_3.

Detailed mapping that would be necessary for a reasonable estimate of reserves is not warranted because neither the extent nor degree of indicated tungsten mineralization is significant. Consequently, denial of the requested aid on exploration of the Pacemaker group of claims is recommended.

DMEA-3850, JAMES L. REED'S PACEMAKER TUNGSTEN GROUP
GRANT COUNTY, NEW MEXICO

Engineering Report

By T. M. Romslo
Mining Engineer
U. S. Bureau of Mines

August 1955

Reviewed by
DMEA OPERATING COMMITTEE
10-7-55
(date)

DMEA-3850, JAMES L. REED'S PACEMAKER TUNGSTEN GROUP
GRANT COUNTY, NEW MEXICO

CONTENTS

Engineering report	Page
Introduction	1
Location and accessibility	1
Physical features, topography and climate	2
History and production	2
Extent and ownership of property	3
Present status	3
Descriptions of deposits	4
Ore reserves	5
Conclusions and recommendations	5

ILLUSTRATIONS

Figure No.		Following page
1	Location map	1
2	Claim map	3
3	Geologic and assay map	(See geologic report)

INTRODUCTION

The Pacemaker Group of tungsten mining claims in Grant County, N. Mex. was examined in connection with an application for aid in an exploration project, pursuant to DMEA Order 1 under the Defense Production Act of 1950, as amended. The application was made on May 31, 1955 by James Leslie Reed, Box 401, Bayard, N. Mex. It was docketed as DMEA 3850, reviewed by the Operating Committee, then forwarded to the Field Team of Region III for a field examination of the property.

The applicant's proposed exploratory project involved diamond drilling, trenching, shaft sinking, and drifting. Cost of the minimum and maximum work requirements were estimated at $42,212.77 and $111,792.41, respectively.

The field examination of the property was made on August 15 and 16, 1955 by Leonid Bryner, geologist, U. S. Geological Survey, and T. M. Romslo, mining engineer, U. S. Bureau of Mines. The applicant accompanied the examining team much of the time.

LOCATION AND ACCESSIBILITY

The Pacemaker group of mining claims is situated about 12 air miles southwest of Silver City, N. Mex. in secs. 35 and 36, T. 18 S., R. 16 W. and secs. 1 and 2, T. 19 S., R. 16 W., Grant County, N. Mex. (figure 1). Silver City, the nearest large town, is situated on State Highway 180 and U. S. Highway 260, and is the terminus of a spur line of the Atchison, Topeka, and Santa Fe Railway.

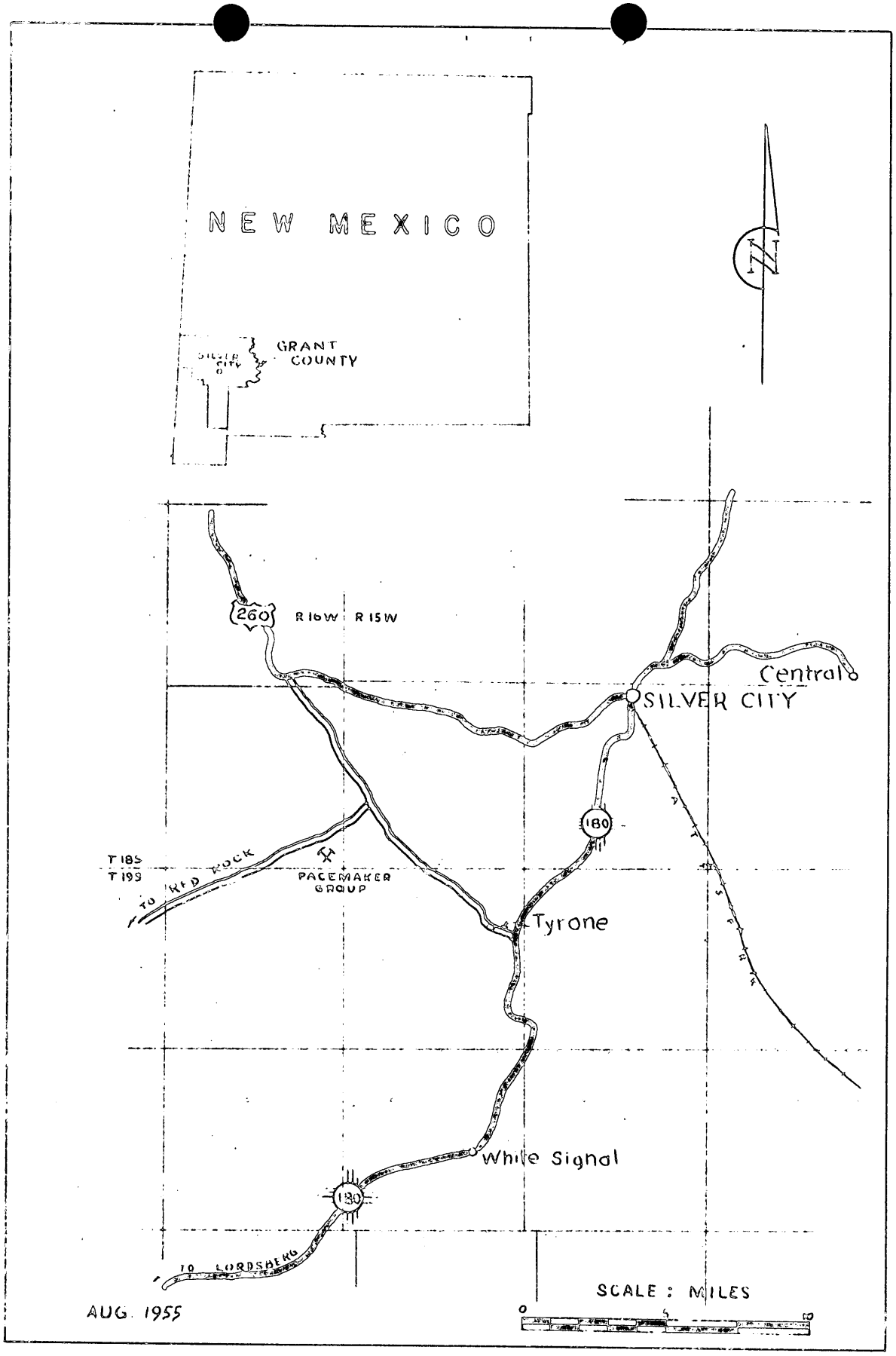

FIG 1. LOCATION MAP, PACEMAKER GROUP
GRANT COUNTY, N. MEX. DMEA-3850

The property is accessible from Silver City by traveling 10.5 miles south on State Highway 180, thence westerly through the town of Tyrone on the Mangas Valley graded road for about 8 miles to the Red Rock road, thence 3.5 miles southwesterly on this road to the claims. A branching trail then is followed for 0.5 mile to a shack near an open cut on the Pacemaker claim.

PHYSICAL FEATURES, TOPOGRAPHY AND CLIMATE

The Pacemaker group is situated in the western foothills of the Big Burro Mountains at an altitude of 5,750 to5,860 feet. Hill slopes are gentle.

Drainage is northeasterly via small arroyos to Mangas Valley. There are no permanent streams in the area.

Vegetation is largely confined to forage grasses and a light growth of scrub oak trees.

Summers are pleasant and winters normally are mild. Precipitation of about 15 inches annually occurs mainly as heavy thunder storms during July and August, and as light rain and snowfalls during January and February.

HISTORY AND PRODUCTION

The applicant said that he discovered scheelite on the property and located 4 of the present 15½ claims in July 1954. During the following 10 months, the property was examined and worked by James C. Hall, who received a degree in geology from the University of New Mexico in 1952. Numerous shallow trenches were excavated with a bulldozer, a few discovery pits were put down, additional claims were located, and about 250 tons of scheelite-bearing rock was open-cut mined from the deposit on the Pacemaker claim. This material was hauled to a gravity mill that the applicant had erected in CF Canyon about 1 mile north of the property.

Approximately 120 tons of the mined rock was crushed, and screened to an estimated 60 tons of each minus 10 mesh and plus 10 mesh material. All of the minus 10 mesh material was concentrated, a little by jigging and the remainder by tabling. The plus 10 mesh material and about 45 tons of run-of-mine ore were stockpiled separately near the mill. Tailings from the milling operations have been washed down the canyon by recent flood waters.

The applicant estimated total production at 100 pounds of concentrates containing 50 to 55 percent WO_3. About 50 percent of the concentrates were in the applicant's possession and the remainder reportedly was either lost to "sample gatherers", or used in jigging and flotation tests.

EXTENT AND OWNERSHIP OF PROPERTY

The Pacemaker group comprises $15\frac{1}{2}$ lode mining claims (figure 2). It is owned by the applicant, James Leslie Reed, Box 401, Bayard, N. Mex.

PRESENT STATUS

Workings on the presently inactive property consist of numerous shallow bulldozer trenches, from a few inches to a foot in depth and up to possibly 300 feet long, a few discovery pits, and the open-cut from which an estimated 250 tons of material was mined. The open-cut, about 5 feet wide and 75 feet long, reportedly had a maximum depth of 18 feet and an average depth of 10 feet. Rock debris and water have filled the cut to 10 feet at its deepest section.

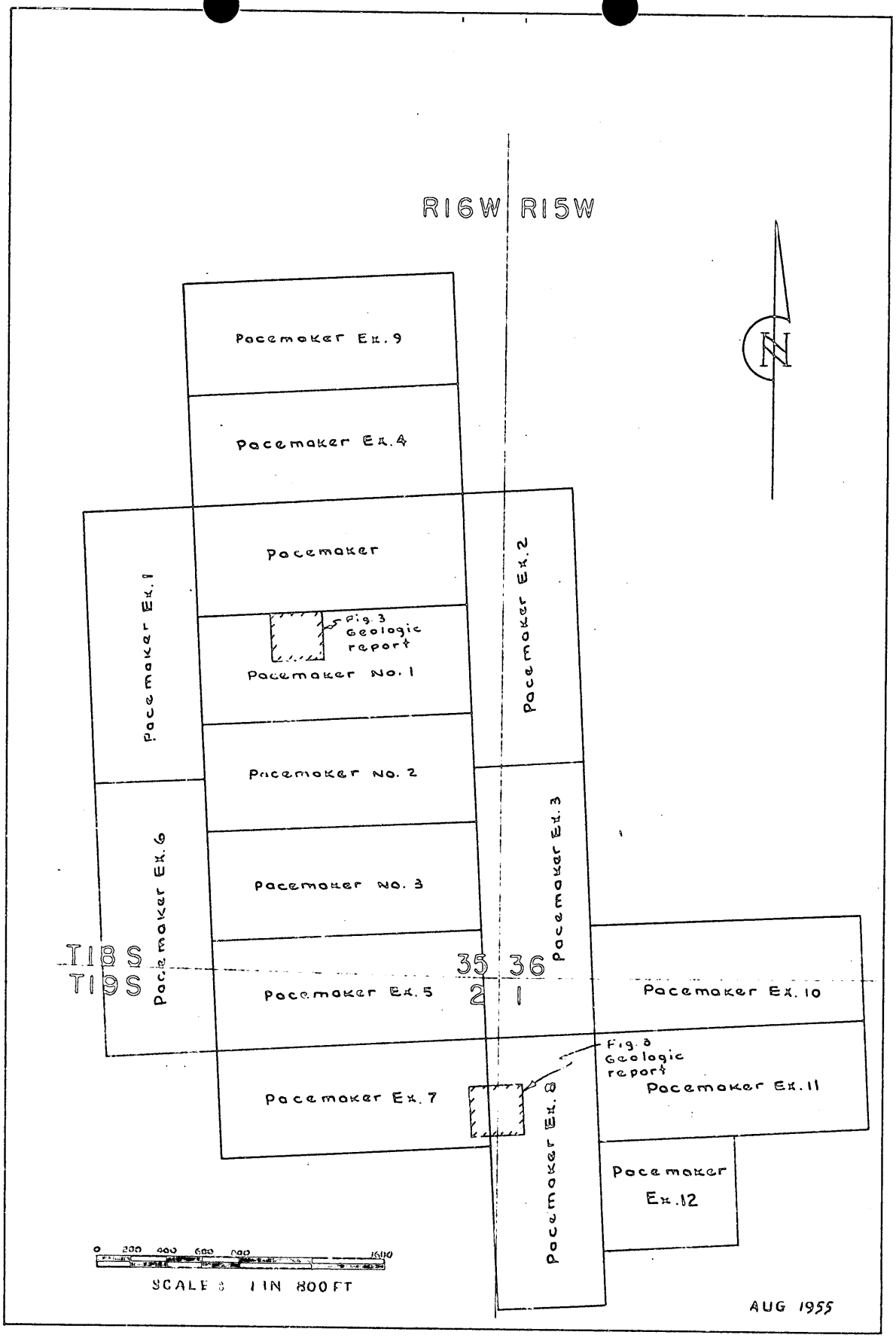

FIG. 2 CLAIM MAP, PACEMAKER GROUP
GRANT COUNTY, N. MEX. DMEA-3850

A small shack is the sole building on the mining claims.

Improvements at the mill site are confined to a 15-ton ore bin, a 500-gallon water storage tank, and a shed over a concentrating table. Milling equipment comprises a small jaw crusher, a trommel screen, a Wifley table, and a small homemade jig. This equipment and a pump for raising water impounded in the creek are powered by gasoline engines. Other equipment at the mill site are a 5-ton flat-bed Dodge truck and a Model D-7 Caterpillar tractor with bulldozer.

Mining equipment in addition to the bulldozer is confined to 2 jackhammers. The jackhammers and hoses, drill steel with bits, and miscellaneous small tools are stored in the shack on the mining claims.

DESCRIPTION OF DEPOSITS

A coarse-grained pre-Cambrian granite is the dominant rock that crops out on the Pacemaker claims. It contains small inclusions of a fine-grained quartz-hornblende rock, and small to large inclusions of limestone, quartz, and hornfels. On the Pacemaker No. 1 claim, the granite also contains a dike of altered igneous rock, possibly andesite.

Scheelite in crystals up to $1\frac{1}{2}$ inches in diameter is distributed erratically in or adjacent to the quartz-hornblende rock. It also occurs as disseminations, or as veinlets along shears in the country rock, and as fracture coatings and crystals in the quartz.

Two samples were taken for assay during the investigation (figure 3). Sample U.S.B.M. 11441, 15 pounds cut from a channel in the discovery pit of Pacemaker Extension No. 8 claim assayed <0.01 percent WO_3. According to the applicant, muck from this pit assayed 0.28 percent WO_3. "Lamping" of pit and dump material showed an occasional speck of scheelite. The other sample, USBM 11442, represented about 160 pounds of run-of-mine material from the open-cut on Pacemaker No. 1 claim. It contained 0.01 percent WO_3.

ORE RESERVES

Considerable detailed mapping would be necessary before a reasonably accurate estimate of reserves could be made. This work is not warranted on the basis of "lamping", sampling, and production data that indicates tungsten reserves are confined to very small scattered zones, none of which contain significant amounts of scheelite.

CONCLUSIONS AND RECOMMENDATIONS

Tungsten mineralization on the Pacemaker group of claims is confined to several very small zones, none of which contain significant amounts of scheelite. Furthermore, there is no geological indication that significant reserves might be discovered. Consequently, denial of the requested assistance is recommended.

DMEA
IN REPLY REFER TO:
Date Rec'd.

AUG 31 1955

BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

August 30, 1955

TRANSMITTED

SEP 27 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: Geologic examination report, DMEA Docket 3850 (Tungsten), Pacemaker Tungsten Claims, Grant County, New Mexico

Transmitted herewith are the original and eight copies of a geologic report by Leonid Bryner on the subject property.

Bryner concludes that the occurrence of scheelite is erratic and low grade and that there is no geologic evidence that a significant discovery might be made on this property. He therefore recommends that the application be denied.

I concur with Bryner's conclusions and recommendations.

DRMacLaren
for E. N. Harshman
Member, Field Team

Enclosures (9)

DRMacLaren:arh

10-7-55
(date)

MINERAL DEPOSITS
DMEA
RECEIVED
SEP 29 1955

Box 4126 University Station
Tucson, Arizona

August 26, 1955

TRANSMITTED
SEP 27 1955

MEMORANDUM

To: Mr. E. N. Harshman

From: J. N. Faick

Subject: Geological Report of Examination of James L. Reed's Pacemaker Tungsten Claims, Grant County, New Mexico

Enclosed are the original and 8 copies of a Geological Report by Leonid Brynar on the above subject property. This report recommends denial of the application for Government assistance in exploration because of the exceptionally low tungsten content in the deposit.

The report has my approval.

John N. Faick
John N. Faick

JNF:ms

cc. Mr. Harshman (8)
Mr. Storms

10-7-55

MINERAL DEPOSITS
DMEA
RECEIVED
AUG 29 1955
U. S.
GEOLOGICAL SURVEY,
DENVER, COLORADO

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY
DEFENSE MINERALS EXPLORATION ADMINISTRATION

REGION III

GEOLOGY

EXAMINATION REPORT

DMEA-3850

JAMES L. REED"S PACEMAKER GROUP

GRANT COUNTY, NEW MEXICO

(Tungsten)

By
Leonid Bryner
Geologist
U. S. Geological Survey

August 26, 1955

Reviewed by
DMEA CHIEFS [illegible]
10-7-55
(date)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM REGION III

GEOLOGY
EXAMINATION REPORT
DMEA-3850
JAMES L. REED
PACEMAKER GROUP OF CLAIMS
GRANT COUNTY, NEW MEXICO
(Tungsten)

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Fig. 1, Location Map	See Engineering Report
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INTRODUCTION

In an application to the Defense Minerals Exploration Administration, dated May 31, 1955, James L. Reed requested government participation in a program estimated to cost $111,792, to explore for tungsten on the Pacemaker group of claims.

The Pacemaker group is located mainly in the SE$\frac{1}{4}$ of Sec. 35, T. 18 S. and R. 16 W., Grant County, New Mexico. Elevation of the claims is about 5,800 feet. The property is most easily reached from State Highway 180, via Tyrone. From the highway the property is 11.6 miles west via the Red Rock road, a good County-maintained dirt road. Reed, as owner, has title to the 16 contiguous unpatented claims that comprise the group.

The examination was by T. M. Romslo of the U. S. Bureau of Mines and by the writer. A day and an evening, that is the afternoon and evening of July 15, and the morning of July 16, were spent going over the ground. During this time the examiners were accompanied by Reed.

Reed's Pacemaker deposit apparently includes a small part of Walter Bourland's Bullard Peak tungsten deposit which is described by John Soule of the U. S. Bureau of Mines in an unpublished report dated March 2, 1951. Soule considered the Bullard Peak deposit too low grade (most samples assayed less than 0.01 percent WO_3) and of too small a tonnage to be of interest to the government. This conclusion also applies to the Pacemaker deposit.

GEOLOGY

The rock in the exploration area is a coarse-grained Precambrian granite that crops out in the east foothills of the Burro Mountains. The granite contains inclusions of a dark-gray, fine-grained, quartz-hornblende rock that shows gradations between high and low degrees of schistosity. Inclusions of this rock from a few square feet to over 250 feet in maximum length were noted. The granite also contains large to small inclusions or lenses of crystalline limestone, quartz, and hornfels. On the Pacemaker No. 1 claim (fig. 3) the granite contains an elongated mass of dark-gray, altered igneous rock, possibly an andesite dike, of later origin than the above mentioned inclusions. This dike, as well as the inclusions, strikes about east-northeast and dips vertically to steeply to the south. The quartz lenses generally strike about north-northwest and have steep dips. Quartz, however, also occurs in veinlets and small lenses that have the same attitude as the surrounding inclusions and the schistosity.

The ore mineral is scheelite, some of which has a peculiar green tint resembling that of olivine. Most of the scheelite fluoresces in tints of yellow or green rather than bluish-white. Some of the scheelite occurs in crystals up to an inch-and-a-half in diameter, but many of the seemingly large crystals are merely fracture coatings. The gangue minerals are generally vein quartz and epidote, the epidote occurring mostly as fracture coatings.

The scheelite generally occurs in or adjacent to the quartz-hornblende rock. Aside from this general habit it seems to be very erratically distributed. It may occur either as disseminations or as veinlets along shears in the country rock, or as fracture coatings or segregations in the quartz. It does, however, have the characteristic of being very spotty in any of these environments and, if its distribution is considered over areas of more than a few square feet, of being very sparsely distributed. In all the cases noted during this examination scheelite occurs in the general vicinity of limestone and quartz, but not as closely associated with the limestone as it is with the quartz. The geology of the two areas where, according to the applicant, the best tungsten values are found, is shown in figure 3.

PRODUCTION AND GRADE

No ore is known to have been shipped from this prospect, but some rock is stockpiled at the mill site; about one mile from the prospect. In the application it is stated that "approximately 250 tons of rock have been mined, of which 100 tons could be classed as ore." The grade of this "ore" as indicated by a 160 pound sample (U.S.B.M. 11442) of the stockpile is 0.01 percent WO_3. Possibly the exceedingly low assay is due to the better grade material having already been milled. In any case the mill rock was too low grade to have been worth mining. Another sample was taken of the quartz-hornblende rock in the pit on Pacemaker Extension No. 8 (fig. 3). This sample (U.S.B.M. 11441) assayed less than 0.01 percent WO_3.

EXPLORATION

Fairly extensive areas have been scraped with a bulldozer, a few pits have been dug, and a cut 75 feet long, 5 feet wide and 10 feet deep has been opened. This cut, from which nearly all of the mill rock was extracted, has caved due to recent rains, but the rock taken from it was seen and sampled on the stockpile (U.S.B.M. 11442).

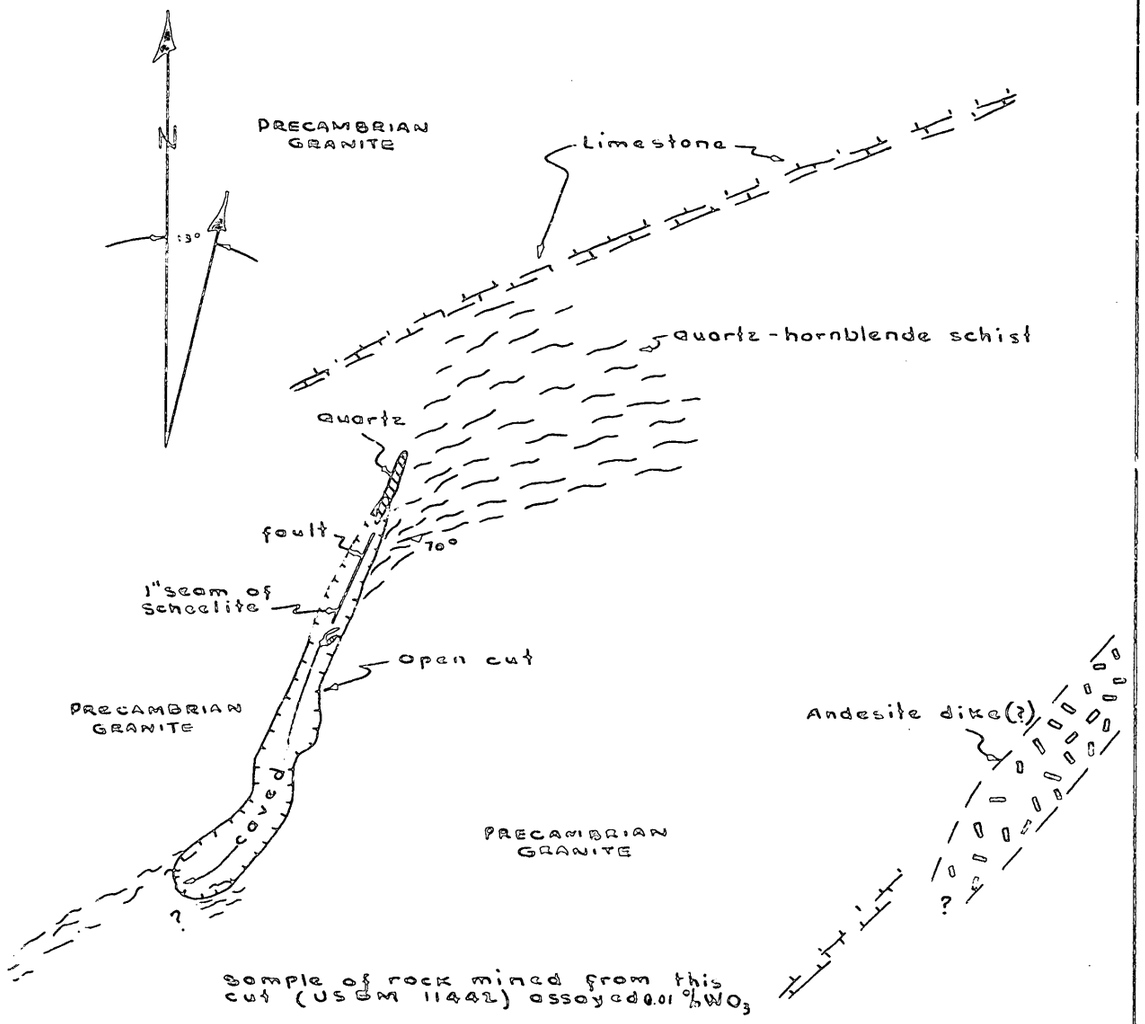
The proposed exploration consists of trenching, stripping, shaft sinking for 100 to 200 feet, and drifting for 300 feet. This work was planned for exploring 8 of the 16 claims.

RESERVES

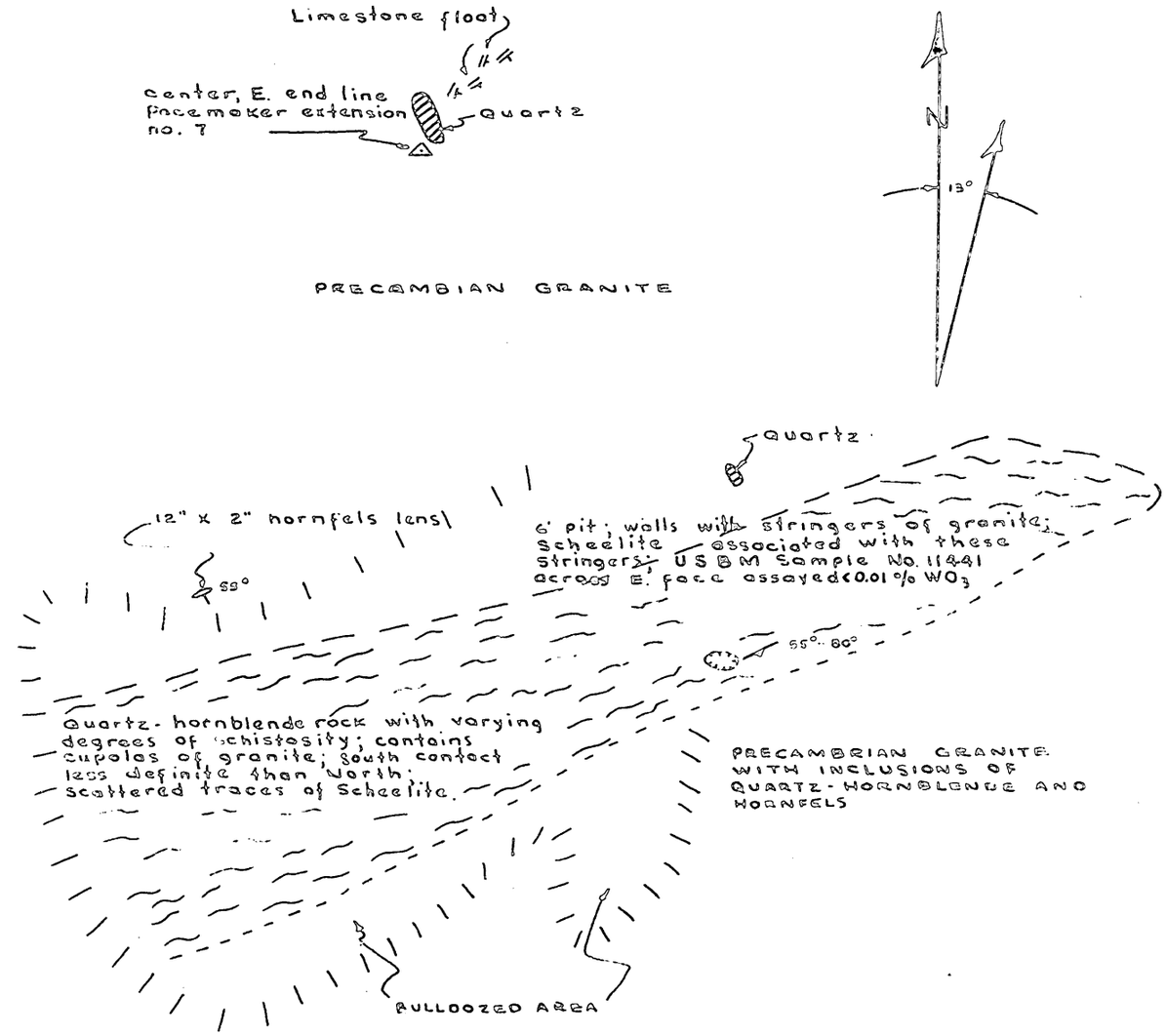
No reserves are estimated for this deposit. From the time spent on this property, however, the impression is unavoidable that reserves are small and the grade of these reserves submarginal.

CONCLUSIONS AND RECOMMENDATIONS

Because of the low grade of this deposit and the absence of any geologic indication that a significant tonnage might be discovered here, it is recommended that the application be denied.



PART OF PACEMAKER NO. 1 CLAIM



PART OF PACEMAKER EXTENSION NOS. 7 & 8

FIGURE - 3

GEOLOGIC AND ASSAY MAP

LOCATIONS SHOWN IN FIG. 2

From a Brunton pace survey by Leonid Bryner, USGS, 8 / 16 / 55

Direction and dip of schistosity 70°

40 0 40 80

SCALE — FEET

DMEA 3850

Docket

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

RECEIVED
JUL - 7 1955

224 New Customhouse
Denver 2, Colorado

June 30, 1955

Memorandum

W. R. Storms (w/brochure)
J. N. Faick

Copy retained 400

To: W. R. Storms (w/brochure)
J. N. Faick

From: Field Team, Region III

Subject: Docket DMEA-3950 (Tungsten), James L. Reed, Pacemaker Group, Grant County, New Mexico

Enclosed is the subject application in the amount of $111,792.41.

Your attention is invited to the attached copy of the letter from the Chairman of the Operating Committee and the memorandum from N. E. Nelson.

A field examination and suitable report are required.

W. M. TRAVER
W. M. Traver

E. N. Harshman
E. N. Harshman

Enclosures

HMC:pw

cc: Subject
Chron
Harshman
Sec.Op.Comm. (2)

DOCKET
SURNAME

400

Rutledge
Martin
Holliday
Selfridge
Hedges

JUN 23 1955

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

Re: Docket No. DMEA 3850 - Tungsten
James L. Reed
Pacemaker Group
Grant County, New Mexico

Dear Mr. Traver:

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

Two copies of a relevant memorandum dated June 16, 1955, by N. E. Nelson, Geological Survey, are enclosed for your information.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

Enclosure

FARutledge:foc
6-21-55
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. III
Messrs. Holliday, USBM
Kiilsgaard, USGS

APPROVED:

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

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

R.C.S.

DOCKET
SURNAME

400 Rutledge
Martin
Kiilsgaard
Hedges
Selfridge
Johnson

JUN 23 1955

Mr. James L. Reed
Box 401
Bayard, New Mexico

Re: Docket No. DMEA 3850 - Tungsten
Pacemaker Group
Grant County, New Mexico

Dear Mr. Reed:

Reference is made to the above-docketed application for exploration assistance which has been reviewed by the Defense Minerals Exploration Administration and referred to Mr. W. M. Trever, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse, Denver 2, Colorado, 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. Mittendorf

Administrator

FARutledge:foc
6-21-55
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. III
Messrs. Holliday, USBM
Kiilsgaard, USGS

R.C.G.

Docket

IN REPLY REFER TO:

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

RECEIVED
JUN 17 1955

, June 16, 1955

Re: DMEA-3850
James L. Reed
Pacemaker Group
Grant Co., N. Mex.
$111,792.41 - Tungsten

Memorandum

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

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

Subject: Review of application

I have no information concerning this property or of the immediate area.

The information afforded by the application should be checked by the Field Team and referral is recommended.

N. E. Nelson

Copy retained 400

N. E. Nelson

June 8, 1955

Memorandum

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

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 3850 James Leslie Reed

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

Subject: DMEA 3850
Re: Exploration Assistance
Pacemaker Mine

James Leslie Reed
Box 401
Bayard, New Mexico

Dear Mr. Reed:

The receipt of your application dated May 31, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 3850 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

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

RECEIVED
JUN - 6 1955

224 New Customhouse
Denver 2, Colorado

June 3, 1955

Mr. James L. Reed
P. O. Box 401
Bayard, New Mexico

Re: Application for DMEA assistance (Tungsten), James Leslie Reed, Pacemaker mine, Burro Mountain Mining District, Grant County, N.M.

Dear Mr. Reed:

We hereby acknowledge receipt of your application for Government assistance to explore your Pacemaker mine for tungsten. We have this date forwarded your application to our Washington DMEA office where it will be reviewed. If they consider that a field examination is required, you will be notified at the time the examination is requested. You will also be advised well in advance of the date that the field examination is to be scheduled in order that you or your representative may be present.

The heavy backlog of DMEA applications now in process prevents our giving a reasonable estimate of the time lag to be expected; however, a two or three month lag should be anticipated.

Very truly yours,

W. M. TRAVER,

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

RDB:pw

cc: Subject
Chron
Sec.Op.Comm. (2)

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

RECEIVED
JUN 6 1955

224 New Customhouse
Denver 2, Colorado

June 3, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA assistance (Tungsten), James Leslie Reed, Pacemaker mine, Burro Mountain Mining District, Grant County, New Mexico

Enclosed are the original and two copies of the subject application for Government assistance to explore the Pacemaker mine for tungsten at an estimated cost of $111,792.41.

One copy of the application has been retained in this office.

W. M. Traver

W. M. Traver

Enclosures

MF-[illegible]
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd
Form Approved.
Budget Bureau No. 42-R[illegible]5.2.

RECEIVED JUN 2 1955

JUN - 6 [illegible] BUREAU OF MINES
Denver, Colorado

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-3850
Metal or Mineral Tungsten
Date Received 6-6-55
Estimated Cost 111,792.41
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: JAMES LESLIE REED
Box 401
Bayard, New Mexico

(*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 The PACEMAKER GROUP of 15½ unpatented claims is located in the Burro Mountains Mining District, Sections 35 and 36, Township 18 South, Range 16 West, and Sections 1 and 2, Township 19 South, Range 16 West, Grant County, New Mexico

(*b*) State any mine name by which the property is known. PACEMAKER GROUP or PACEMAKER MINE

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

(*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.

(*c*) The work will start within 7 days and be completed within a mamimum of 12 months 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 [X] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated May 31, 1955

James L. Reed
(Applicant)

By

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

James L. Reed
Box 401
Bayard, New Mexico

RECEIVED
JUN - 6 1955

3(f) Applicant's property rights:

All claims in the Pacemaker Group are recorded at the Grant County Clerk's Office, Silver City, New Mexico

Claim	Book	Page
Pacemaker	44	339
"	44	339-40
"	44	340
"	44	341
Pacemaker Extension #1	45	23-4
" 2	45	24
" 3	45	24-5
" 4	45	25
" 5	45	25-6
" 6	45	26
" 7	45	27
" 8	45	27
" 9	45	28
" 10	45	536
" 11	45	536-7
Pacemaker Extension#12	45	537

James L. Reed
Box 401
Bayard, New Mexico

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4(a) Physical description:

Mining and exploration operations have consisted of blading with a D-7 Caterpillar tractor 8,093 feet of trenches 7½' wide and 6" deep; building 5,460 feet of access roads; sinking location shafts; 185 feet of hand trenching; drilling 8½' test holes with a jack hammer and panning the cuttings; and drilling and blasting an open cut 75' long, 5' wide and with an average depth of 10'.

I own and have personally directed these operations.

All workings are accessible.

(b) Past and current production:

Approximately 250 tons of rock have been mined, of which 100 tons could be classed as ore. We have erected a small pilot concentrating plant about 1½ miles from the property. It consists of a 10" x 10" jaw crusher, shimmed up, a screen and a wilfley table. The over all recovery is poor, about 40%, because the crusher we have can not crush to the desired screen size and because of the lack of feed classification to the table. However, we have proved with this mill that with the proper equipment the ore from the Pacemaker property can be easily concentrated. About 120 tons of low grade placer and rock from the open cut on Pacemaker #1 were put through the crusher of the pilot plant. Sixty tons were rejected as oversize. The remaining material went over the table. Of this, approximately 125# of 60% WO_3 and 120# of 14% WO_3 were recovered. About 50% of this concentrate has been lost to "sample gatherers" and for jigging and flotation tests. The remaining concentrates are on hand.

Test work that has been conducted on this ore include: a tabling test run at the Deming Milling Unit of AS&R Co.; a flotation and gravity separation mill test in Tucson; a flotation test at AS&R in Deming; a flotation test at the Allied Chemical & Dye Corp. mill in Deming; and numerous sink-float, magnetic separation and jig tests conducted on the property.

(c) Geologic features of the property:

The prevailing rock on the Pacemaker Group of claims is a pre-Cambrian decomposed granite. The granite has been intruded by dikes of granodiorite that grades into gneiss. These granodiorite dikes probably provide the structural control that determines the localization and continuity of the ore deposition. Their general strike is N65°E. Several high lime intrusions seem

James L. Reed
Box 401
Bayard, New Mexico

4(c) Geologic features of the property: (cont.)

to parallel the strike of the granodiorite dikes. The ore, scheelite, $CaWO_4$, occurs in (1) quartz veins, (2) granite, (3) granodiorite, (4) gneiss, (5) schist, (6) and what appears to be a tactite zone, but may be an altered granite gneiss. At the present time, the quartz veins and the tactite (?) zone seem to be the best possible sources of ore. The quartz veins are of presumed Tertiary age and hydrothermal in origin. Scheelite replacement in the wall rock, particularly the footwall, is common. The quartz veins contain finely disseminated particles and masses of scheelite up to several inches in diameter. Some pockets of scheelite, encountered in the open cut on Pacemaker #1 claim, weighed 12#. The decomposed pre-Cambrian granite footwall of Pacemaker #1 open cut contains finely disseminated particles and several high grade stringers of solid scheelite. The ore in the tactite (?) zone is scheelite associated with lime, magnesia and iron silicates. Epidote is abundant. Pacemaker Extension #8 claim seems to contain the better values in this type of deposit.

Most of the arroyos on the property will contain fair placer values indicating the presence of veins that have not been uncovered, A composite sample taken over an area of 80,000 square feet-above the known veins-on Pacemaker and Pacemaker #1 claims assayed .04% WO_3.

(d) Accessibility of the property:

The Pacemaker Group of 15½ unpatented claims is located in the rolling foothills of the Big Burro Mountains at an altitude of from 5,750' to 5,860' above the Pleistocene and Recent gravel-filled Mangus Valley. The property is drained by a series of southeastward flowing, small arroyos. The Continental Divide passes to the east of the property at a distance of about 8 miles. The claims are in the northern drainage system. The climate is dry and equable with maximum sunshine in the fall and winter months and maximum precipitation in the midsummer months of July and August. The property is 23.8 miles south west of Silver City, (12.2 miles of hard surfaced road, New Mexico State Highway #180, and 11.6 miles of good dirt road, the Red Rock Road, maintained by Grant County). Lordsburg, the county seat of Hidalgo county, is 46 miles to the south west. Tucson is 203 miles to the south west.

The AT&SF railroad serves Silver City and Lordsburg is on the main line of the SP. All supplies can be bought in Silver City. However, it would be cheaper to purchase some supplies, such as mine timber and explosives, outside this area. The nearest residence is Tyrone, New Mexico, a distance of 10.5 miles. It is an old time mining camp and is now the headquarters of the Phelps Dodge Corporation's copper mining activities in this section of New Mexico. Some supplies can be purchased there.

James L. Reed
Box 401
Bayard, New Mexico

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4(e) Availability of manpower, etc.:

Labor for the project will be hired from Silver City. The prevailing wage is $1.50 per hour. The diamond drilling, bull dozer work and rental of compressor and truck will be contracted out of Silver City. The analytical work can be done by Hawley and Hawley in Douglas, Arizona @$4.50 per Tungsten sample. However, it would be much cheaper to build a laboratory, buy the necessary chemicals and equipment, hire a chemist and do the work on the property. Lumber and mine timber can be purchased in Silver City, although a better grade of timber can be bought at a cheaper price in Reserve, New Mexico or Duncan, Arizona.

The water table in the Mangus Valley, about 2½ miles from the property, is at 70'. No water wells have been drilled on the property to determine the depth to water. Water can be hauled from our mill site, 1½ miles, or it can be hauled from Tyrone, a distance of 10½ miles.

A single phase, 110 volt power line is 2½ miles from the property. Three phase, 220 volts and 440 volts is available at Tyrone. A 1 KVA portable, gasoline driven, electric power plant would suffice for the needs of the project.

A telephone line to the C. F. ranch passes over the north east end of the property.

James L. Reed
Box 401
Bayard, New Mexico

5(b) The Exploration project: (Costs per claim of contract work)

PACEMAKER CLAIM:	Maximum	Minimum
Diamond Drilling, @$3.50 per ft	$2,100.00	$ -
Bull Dozer for D.D. Set-up, @$11 per hr	33.00	-
Hand Trenching, Operator's labor	-	-
Total:	$2,133.00	$ -

PACEMAKER #1:		
Shaft Sinking, @$150 per ft	$30,000.00	$15,000.00
Driving Drifts, @$40 per ft	12,000.00	-
Hand Trenching, Operator's labor	-	-
Total:	$42,000.00	$15,000.00

PACEMAKER #2:		
Diamond Drilling, @$3.50 per ft	$1,540.00	-
Bull Dozer Trenching, w/scarifier, @$12 per hr	720.00	720.00
Bull Dozer use for D.D. Set-up, @$11 per hr	44.00	-
Hand Trenching, Operator's labor	-	-
Total:	$2,304.00	$720.00

PACEMAKER EXTENSIONS #8, #3, and #10:		
Diamond Drilling, @$3.50 per ft	$15,400.00	$2,100.00
Bull Dozer Trenching, w/scarifier, @$12 per hr	624.00	624.00
Bull Dozer use for D.D. Set-up, @$11 per hr	242.00	33.00
Hand Trenching, Operator's labor	-	-
Total:	$16,266.00	$2,757.00

PACEMAKER EXTENSIONS #4 and #9:		
Diamond Drilling, @$3.50 per ft	$6,300.00	-
Bull Dozer Trenching, w/scarifier, @$12 per hr	480.00	480.00
Bull Dozer use for D.D. Set-up, @$11 per hr	99.00	-
Hand Trenching, Operator's labor	-	-
Total:	$6,879.00	$480.00

****

Diamond Drilling:	Maximum 38 holes, 7240 ft	$25,340.00	
	Minimum 3 holes, 600 ft		$2,100.00
Bull Dozer Trenching:	Maximum 152 hrs	1,824.00	
	Minimum 152 hrs		1,824.00
Bull Dozer Blade Work:	Maximum 38 hrs	418.00	
	Minimum 3 hrs		33.00
Shaft Sinking:	Maximum 200 ft	30,000.00	
	Minimum 100 ft		15,000.00
Driving Drift:	Maximum 300 ft	12,000.00	
	Minimum -		-
Total:		$69,582.00	$18,957.00

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5(b) The exploration project:

PACEMAKER CLAIM

General geology and existing workings:
The country rock in the area of the veins is decomposed pre-Cambrian granite. Locally, small inclusions of schist can be seen in the granite.

"A" - a quartz vein carrying good scheelite values. It has been trenched for a distance of 26'. Width of trench is 3', depth is 2½'.

"B" - a quartz outcrop carrying good scheelite values. Several large masses of scheelite have been taken from the trench on this outcrop. Length of trench is 6', width is 3', depth is 2½'.

"C" - a quartz outcrop carrying fair scheelite values. It has been trenched for a distance of 4'. Width of trench is 3', depth is 2½'.

It is indicated that the two outcrops are part of the main vein.

Proposed exploration work:
Starting at "A", "B", and "C" hand trench on the strike of vein in both directions. Continue trenching 4' deep and 3' wide as long as the vein is exposed. Probable trenching length will be 220'.

If the exposed vein justifies it, diamond drill 3 holes, each 200' in length. These holes should be drilled to cut the downward extension of the vein at a depth of 200' and from a location where the liklihood of intersecting any veins that are not exposed at the surface is most probable.

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5(b) The exploration project:

PACEMAKER #1 CLAIM

General geology and existing workings:
Both hanging and foot walls of the veins in this area are decomposed pre-Cambrian granite. The north east end of the main vein splits into several smaller veins when it enters a band of schist that cuts through the pre-Cambrian granite. The south west end of the main vein seems to terminate at a schist contact. However, large, high grade chunks of scheelite were found in the schist a few feet from the end of this vein. The rock between the open cut "A" and the outcrop "B" is granite with minor inclusions of schist.

"A" - an open cut, 75' in length, 5' wide, 16' deep at its deepest point but averaging 10' in depth. It is the main working on a quartz vein. The vein is composed of coarsely crystalline grayish white quartz that strikes N23°E and dips 68° to the south east. The length of the exposed vein is 68'; at an average depth of 10' the vein width varies from 8" to 51". When the location shaft was sunk on this vein, its length was only 3' and its width was 18".

"B" - a quartz outcrop carrying scheelite values. It has been trenched for a distance of 8'. Trench width is 3' and depth is 2½'.

"C" - a quartz stringer containing scattered showings of scheelite. It has been uncovered by bull dozer trenching. Its length is 73' and its width is 3" at a depth of 6" below the surface of the ground.

The main quartz vein contained good scheelite values from the surface to its present depth. A representative sample of the muck removed from the location shaft sunk on this vein assayed .76%WO_3. Some of the values in this vein occur as fine disseminations, but the bulk of the scheelite is found in high grade pockets. A diamond drill core of this vein could be highly misleading--fabulously rich if it happened to hit a high grade pocket, or disgustingly hungry if it cut a barren portion of the vein. These two extremes could be encountered within a few inches of each other. Therefore, it would seem that shaft sinking and drifting would be the best and surest method of determining the values in this vein.

Proposed exploration work:
At "A" sink a 4' by 8' inclined shaft (hoisting compartment with manway) to a depth of 216'. (200' plus the 16' already sunk) Drift both directions on the vein at the 100' level as long as

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5(b) The exploration project:

PACEMAKER #1 CLAIM (cont)

the drift is in ore. Drift both directions on the vein at the 200' level as long as the drift is in ore. If a faulted vein is encountered in any of the drifts, under ground diamond drilling could be used to again locate the vein or to determine if the drift should be abandoned. The entire project could be abandoned or revised if low grade ore was encountered between the surface and the 100' level. This is some thing that would have to be worked out by the Government geologists and engineers and the operator.

At "B" and "C" trench vein as far as it is exposed at a depth of 4'. Trench to be 3' wide. Probable length would be 90'.

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5(b) The exploration project:

PACEMAKER #2 CLAIM

General geology and existing workings:
A prominent flat-topped, granite ridge that strikes north west-south east is in the center of this claim. A location shaft was sunk on this ridge on a dull white quartz vein that strikes N45°W and dips 75° to the north east. This vein contained no visable signs of $CaWO_4$. However, both the granite hanging and foot walls contained scheelite. Very good placer values have been found on both sidesof the ridge. Some scheelite has been found in place on top of the ridge, but these outcrops do not indicate that they are the source of the scheelite in the arroyos. It is supposed that hidden veins on the ridge top or on its flanks are the source of these values.

Proposed exploration work:
At "A" begin 1500' of bull dozer trenches 7½'wide and 2' deep. These trenches will follow the general strike of the ridge.

At "B" hand trench outcrop to determine if it carries values at a depth of 4'. Trench 3' wide. Probable length of trenching 100'.

At "C" hand trench outcrop to determine if it carries values at a depth of 4'. Trench 3' wide. Probable length of trenching 100'.

If the veins uncovered merit it, diamond drill 4 holes, each 120' in length. These holes should be drilled at an inclination of -60° and should intersect the veins at a depth of 100'.

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5(b) The exploration project:

PACEMAKER EXTENSION #8, PACEMAKER EXTENSION #3
and PACEMAKER EXTENSION #10

General geology and existing workings:

"A"-The ore occurs disseminated through what appears to be a tactite zone, but may be an altered gneiss. According to the mill runs that have been made on ore taken from bull dozer trenches that have exposed ore in place over an area of 5,000 square feet, the scheelite values are fairly uniform through out the ore zone. (The trenches were cut to a depth of 18" below the surface of the ground.) Scheelite in the fine sizes, minus 100 mesh, seem to occur in the softer portions of the zone. The hard spots seem to contain the larger pieces of $CaWO_4$. A representative sample of the muck removed from the location shaft, sunk in the center of the area, assayed .28%WO_3.

"B"-Four small veins carrying fair scheelite values in quartz and granite. Abundant float was found on this hill side, but the veins that shed the float have not been uncovered.

"C"-Some scattered scheelite has been found on this hill side.

Proposed exploration work:

In the vicinity of "A" diamond drill 3 holes, each 200' in length to determine the dip of the ore zone. If these holes determine that an ore zone is present at depth, drill 200' diamond drill holes along the strike to determine the lateral extent of the ore zone. Total probable diamond drill holes, 18.

In the vicinity of "A" 300' of bull dozer trenches, 7½' wide by 2' deep.

At "B" 500' of bull dozer trenches to uncover hidden veins.

At "B" trench exposed outcrops to a depth of 4'. Trench width will be 3'. Probable length, 200'.

At "C" 500' of bull dozer trenches to uncover hidden veins.

In the vicinity of "C", diamond drill 4 holes 200' each in length if the veins uncovered by the bull dozing work merits it.

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5(b) The exploration project:

PACEMAKER EXTENSION #9 and PACEMAKER EXTENSION #4

General geology and existing workings:
The main ore occurances are on the top of a ridge that trends N50°E. The ridge is composed of granodiorite rock that grades into a gneiss. The ridge contains scattered showings of scheelite for a distance of 600' along the strike. Two quartz outcrops on the north flank of the ridge, show very good scheelite in much the same manner as the quartz veins on Pacemaker and Pacemaker #1 claims. Very little exploratory work has been done on this section of the property.

Proposed exploration work:
In the vicinity of "A" 1000' of bull dozer trenches, 7½' wide and 2' deep to determine the length and width of the ore zone on the surface.

If the bull dozer trenches show good values, in the vicinity of "A", diamond drill 3 holes, each 299' in length to determine the dip of the ore zone or to locate the contact. If these three holes show favorable results, diamond drill every 100'. Holes to be each 200' in length, to determine the lateral extent of the ore zone. Probable total holes, 9.

At "B" hand trench the quartz outcrop to a depth of 4'. Continue trenching as long as the vein is exposed. Trench width, 3'. Probable length of trench 100'.

At "C" hand trench the quartz outcrop to a depth of 4'. Continue trenching as long as the vein is exposed. Trench width, 3'. Probable length of trench, 100'.

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5(d) Operating experience and background of applicant:

The applicant, James L. Reed, is well versed in every phase of mining. He is the owner and operator of the Fluorspar-Reed mine in Grant County, New Mexico. He has worked underground in lead, zinc, copper, gold, silver and asbestos mines. He has worked in open pit copper mines. He has done contract shaft sinking, drifting and stoping. He has worked on diamond drilling rigs, both above and underground. He is an excellent heavy equipment operator. He is a first class mechanic and has had wide experience in the use of all types of welding equipment. His experience includes numerous positions held in the supervisory capacity.

The geologist who has been living and working on the property for the past ten months is James.C. Hall. He was graduated from the University of New Mexico in 1952 with a major in Geology and a minor in Engineering. He has worked as a student engineer for the Anaconda Copper Mining Company at the Leonard Mine in Butte, Montana; as a raise miner at the Badger Mine, Butte, Montana; as a lease operator on a lead-silver property in Pioche, Nevada; and as a technical trainee (superintendent) at the General Chemical Division of Allied Chemical & Dye Corp. in Deming, New Mexico. This experience includes surveying (underground, traverse, plane table and contour mapping), logging diamond drill cores, mapping mine workings, mine examinations, writing reports, estimation of ore reserves, and all types of sampling.

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6 Estimate of costs:

	Maximum	Minimum
(a) Independent contracts:	$69,582.00	$18,957.00
(b) Labor, supervision, consultants:	18,183.33	6,791.66
(c) Operating materials and supplies:	7,028.22	5,802.47
(d) Operating equipment:	2,056.00	2,056.00
(e) Rehabilitation and repairs:	None	None
(f) New buildings, improvements, installations:	3,752.53	3,752.53
(g) Miscellaneous:	7,190.33	2,853.11
(h) Contingencies:	4,000.00	2,000.00
Total:	$111,792.41	$42,212.77

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6(a) Independent contracts:

Hand trenching, trenching by the use of the compressor and jack hammer, construction of buildings, erecting the head frame and hoisting plant, hauling drinking water, gas and other fuel, hauling supplies (except mine timber and rough lumber for the construction of buildings) is to be done by the operator.

The responsibility for building access roads and clearing an area for the diamond drill rig to set up is the operator's, and is not included in the cost of diamond drilling.

Diamond Drilling:
All holes to be AX, 1 and 1/8" approximate diameter core.
The drilling contractor furnishes every thing but the core boxes.
Quoted price per foot of AX diamond drill core----------$3.50

Shaft Sinking:
Shaft to be 4' by 8' inclined (hoisting compartment with manway)

Quoted price per foot of shaft sinking (4' by 8')	$100.00
Quoted price per foot of timbering, pipe, etc.	50.00
Total price per foot of shaft (4' by 8')	$150.00

Drifting:
All drifts to be 6' by 4' in thebclear.

Quoted price per foot of 6' by 4' drift:	$30.00
Quoted price per foot of timbering, pipe, etc.:	10.00
Total price per foot of 6' by 4' drift:	$40.00

Bull Dozer Trenching:

A trench 7½' wide by 6" deep, at 200' per hr:	Per hr	$11.00
A trench 7½' wide by 1' deep (with scarifier attached to blade), 100' per hr:	Per hr	$12.00
A trench 7½' wide by 2' deep (with scarifier attached to blade), 25' per hr:	Per hr	$12.00

Bull Dozer Blade Work:

Blading access roads and benches for diamond drill set-ups:	Per hr	$11.00

	Maximum	Minimum
Total Cost of independent contracts:	$69,582.00	$18,957.00

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6(b) Labor, supervision, consultants:

Supervisor: Is responsible for the over all operation of the exploration project. Supervises the construction of buildings, the erection of head frame and hoisting plant, the purchasing of supplies, and is the liaison between the operator and the government. Works 6 days per week.
Wage: $500 per month

Geologist: Is responsible for the placing of diamond drill holes, and the sampling and logging of same. He will direct bull dozer and hand trenching operations and the sampling of these trenches. He will be responsibile for the sampling of the shaftsand drifts. At the completion of the exploration project, he will write the geologic and engineering report required by the government. Works 6 days per week.
Wage: $500 per month

Bookkeeper (part time): Does accounting and stenographic work.
Wage: $150 per month

Laborer: General labor for construction, hand trenching, drilling and blasting, miscellaneous jobs. Works 5 days per week.
Wage: $1.50 per hour

Laborer: General labor for construction, hand trenching, drilling and blasting, miscellaneous jobs. Works 5 days per week. To be released after 4 months.
Wage: $1.50 per hour

	Maximum	Minimum
Total cost for labor and supervision:	$18,183.33	$6,791.66

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6(c) Operating materials and supplies:

Pick Up Truck; with heavy duty tires and 4 speed transmission. To haul supplies, haul water and fuel, to pull the compressor, to haul electric power plant when lamping. Approx.	$3,000.00
Portable electric power plant (gasoline driven) to be used for light at the office and for power for the ultra-violet lamps when lamping workings.	250.00
Fuel, gasoline, 200 gals/mo. @32¢ per gal	768.00
Fuel, gasoline, white, 15 gals/mo. @30¢ per gal	54.00
Fuel, coal, 4 tons @$20 per ton	80.00
Ultra-violet lamp (2), @$39.50 ea	79.00
Repair parts for ultra-violet lamps	40.00
Extension cords, electric light (2)	4.80
Short handled round point shovel (2) @$4. ea	8.00
Long " " " " (4) @$3.11 ea	12.44
Contractors pick, (3) @$4.95 ea	14.85
Pick handles (3) @$1.40 ea	4.20
Prospectors pick	4.25
Single jack	4.25
Double jack	4.95
4½" D B Ax	5.65
3½" S B Ax	4.95
Level. 12"	3.50
Steel square, 12"	3.75
Brace, 10"	3.65
Hand saw, 26". (2) @$7.95 ea	15.90
Timber saw	8.50
Claw hammer, (2) @$4 ea	8.00
Safety glasses (4) @$1.50 per pr	6.00
Wheel Barrow	17.50
Cutting torch, regulators, tips, & hose	100.00
Oxygen & Acetylene	83.00
Forge, blacksmiths	40.00
Tools, blacksmiths	12.25
Combined anvil with vise	60.00
Door locks (5) @$1.25 ea	6.25
Manila rope, 5/8" (100) ft	12.06
Nails, mixed, (300#) @20¢ per lb	60.00
Hack saw	4.65
Canvas, 10' x 10' (2) @$15 ea	30.00
Chain hoist, hand operated	54.00
Barrels, 50 gal for water (4) @$10. ea	40.00
Barrels, 53 gal for gasoline (3) @$6 ea	18.00
Can, gasoline, 5 gal (2) @$2.75 ea	5.50
Grease gun, hand operated	17.80
Pipe wrench, 18"	6.95
Pipe wrench, 24"	9.75

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6(c) Operating materials and supplies: (cont.)

Coleman gasoline lantern, (2) @$15.25 ea	$ 30.50
Coleman gasoline stove, (2) @$13.21 ea	26.42
Space heater, coal burning, (2) @$10 ea	20.00
Hoisting bucket	325.00
Mine Car	110.00
Mine rail, 358 yds 24# @$180 per ton	774.00
Box blasting dynamite, 45% (15 boxes) @$13.50 ea	202.50
Safety fuse, 1800' @2¢ per ft	36.00
Blasting caps, (5) boxes @$3.25 ea	16.15
D.D. Core boxes, 5' x 10 3/4", (est 98) @$2.85 ea	279.30
Batteries, 45 volt, for use with ultra-violet lamp (10) @$2.75 ea	27.50
Carrying case, ultra-violet lamp and batteries	19.50
Timber, for use around workings, 1950 bd ft, native rough @10¢ per bd ft	195.00
Total cost: Maximum	$7,028.22

For mimimum operation (4 months):

Repair parts for ultra-violet lamps	$ 20.00
Fuel, gasoline, 800 gals	256.00
Fuel, gasoline, white, 60 gals	18.00
Fuel, coal, 1 ton	20.00
Mine rail for 116' shaft + 20' head frame	190.00
Batteries for ultra-violet lamp (5)	13.75
Total:	$517.57

Cost of items listed above for maximum operation	(1 year)	$1,743.50
Cost " " " " " minimum "	(4 mo.)	-517.57
		$1,225.75

Total maximum cost		$7,028.22
	minus	1,225.75
Total cost: Minimum		$5,802.47

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6(d) Operating equipment:

Equipment that will be rented during the exploration project.

Compressor, Air, portable, mounted on rubber-tired wheels, capable of delivering at least 85 cu ft per min
Jack hammer
3/4" air hose, 100', with oiler
Drill steel, 3 changes
Steel with chipping head for sampling quartz veins
Bits, 50, can be resharpened
The above equipment will be rented for 90 days at $20 per day: $1,800.00

Truck, 2½ ton, for hauling mine timber, rough lumber for the construction of buildings, and other items too large for the pick up truck. Truck to be rented for 32 hours at $8 per hr. $256.00

Total cost for operating equipment: $2,056.00

(e) Rehabilitation and repairs:

None.

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6(f) New Buildings, improvements, installations:

All lumber used in the construction of buildings is to be native rough, except that used in the head frame, which will be Oregon pine.

Office and residence: (20' x 30' x 8')

Walls, 1720 bd ft @12¢ per bd ft	$206.00
Studs, rafters, plates, 300 bd ft	36.00
Floor, concrete pad, 400 cu ft, @36¢ per cu ft	144.00
Door, (3) @$15 ea	45.00
Windows, (4) @$7 ea	28.00
Framing, hardware, nails	30.00
Roofing paper, heavy, 1700 sq ft @9½¢ per sq ft	161.50
Wiring, lights, fixtures	20.00
Desks, chairs, files	70.00
	$740.90

Bunkhouse: (10' x 20' x 8')

Walls, 920 bd ft @12¢ per bd ft	$110.40
Studs, rafters, plates, etc., 238 bd ft	27.84
Floor, concrete pad, 150 cu ft, @36¢ per cu ft	54.00
Door	15.00
Windows, (3) @$7 ea	21.00
Framing, hardware, nails	20.00
Roofing paper, heavy, 800 sq ft, @9½¢ per sq ft	76.00
	$332.24

Laboratory, core preparation and storage building:
(The same size and cost as bunkhouse.) $332.24

Tool shed: (10' x 10' x8')
(Dirt floor, 1/3 size and cost of bunkhouse) $110.75

Out Houses: (2) (4' x 4' x 8')
160 bd ft, @12¢ per bd ft, $18.20 ea $36.40

Head Frame:
20' high for 4' x 8' inclined shaft, includes reinforced concrete footing, Oregon pine @18¢ per bd ft $600.00

Hoisting Plant:
Includes hoisting engine, drum, 300' of 3/4" plow steel hoisting cable, sheave wheel, bell system. $1,300.00

Hoist House: (10' x 10' x 9')
Must be fire proof. Corrugated iron to be used. $310.00

Total: $3,752.53

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6(g) Miscellaneous:

All costs will vary between the maximum estimated length of time to complete the exploration project (1 year) and the estimated minimum length of time to complete the exploration project (4 mos:)

	Maximum	Minimum
Maintenance and repair of operating equiptment, pick up truck, power plant etc. @$50/mo.	$6 600.00	$ 200.00
Analytical work, 818 samples maximum, 348 samples minimum, @$4.50 per sample.	3,681.00	1,566.00
Accounting (see 6b)	-	-
Workmen's compensation @$9 per $100	1,636.50	611.69
Taxes, 7% @2% OAB, 2.7%Emp Sec. Comm. (state) 0.3% Excise (federal) 2% School tax on all income, 2% Compensating tax on purchases on which no state tax has been paid.	1,272.83	475.42
Total:	$7,190.33	$2,853.11

(h) Contingencies:	Maximum	Minimum
Estimate for necessary allowances for contingencies not included in costs:	$4,000.00	$2,000.00

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7(a) Yes

(b) I propose to furnish my share of the exploration project costs by money and by the use of equipment. Up to this time, I have spent a considerable amount of money in exploratory work on this property. This was my money, and I have therefore kept the property free from any liens or encumbrances. If, by the time the exploration project is approved, I do not have the necessary money to meet the expense of my share of the exploration costs, I am willing to borrow the money, or to give an interest in the property in return for the funds that are needed.

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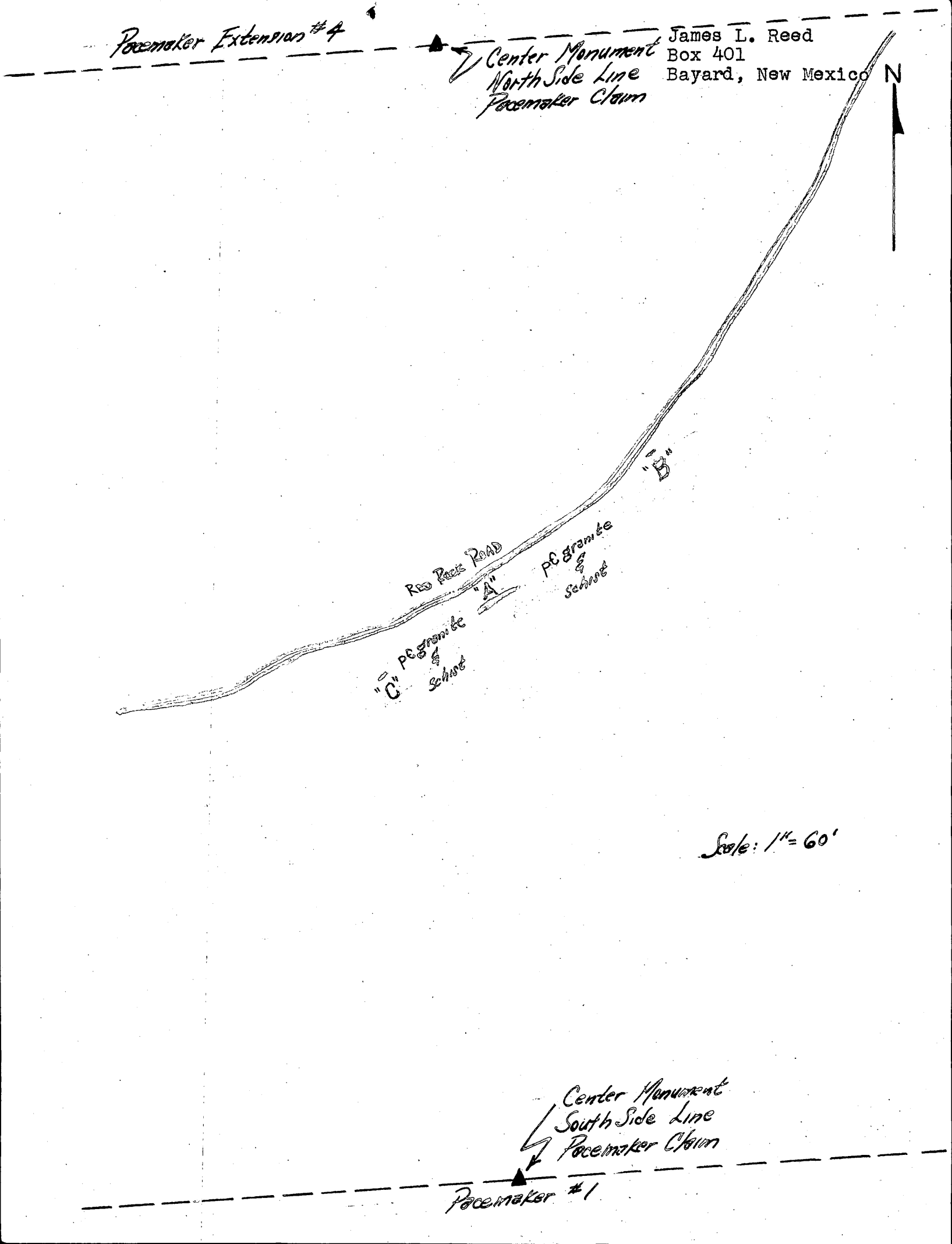

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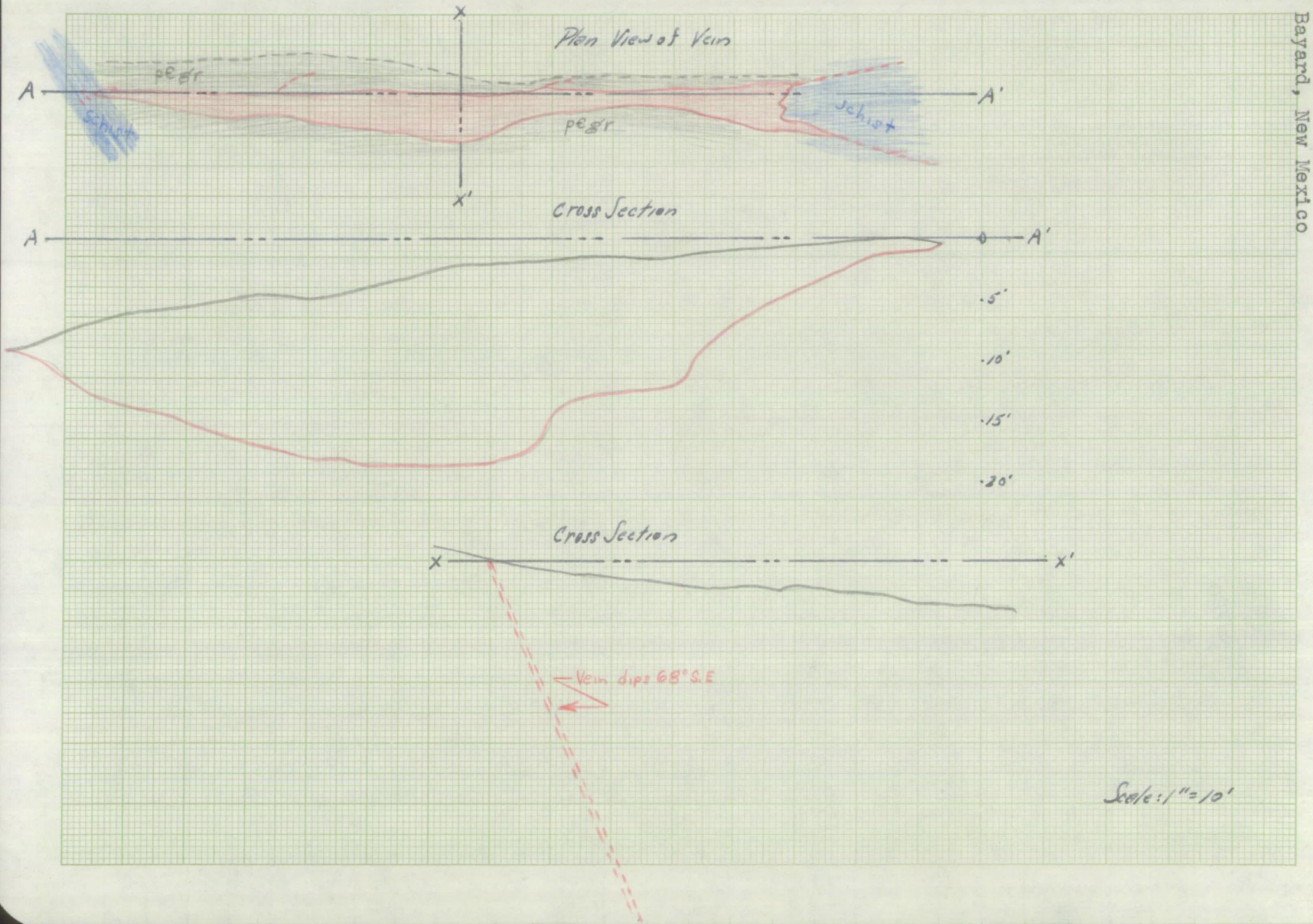
20 SQUARES TO THE INCH
Made in U. S. A.

Open Cut on Pacemaker #1 Claim



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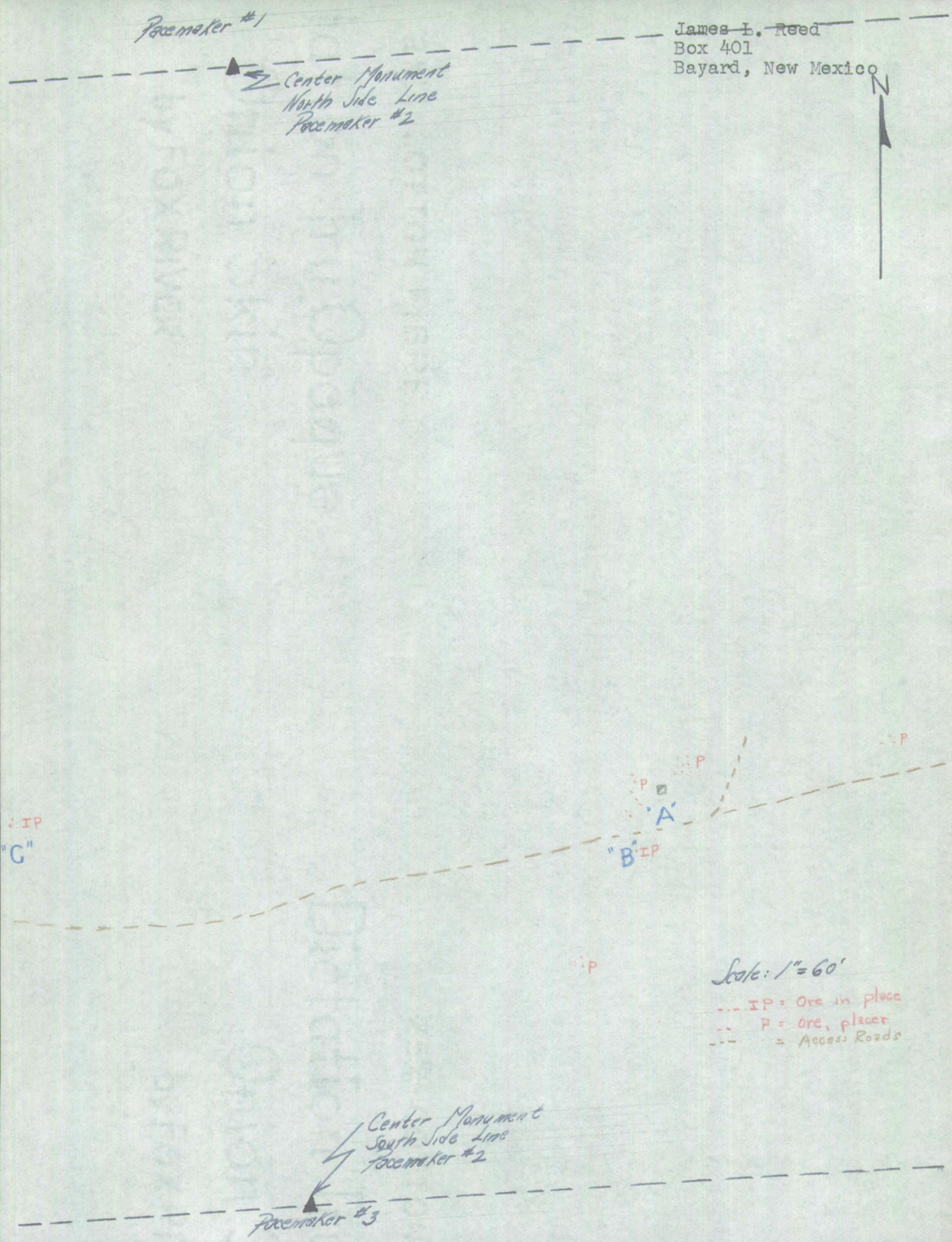

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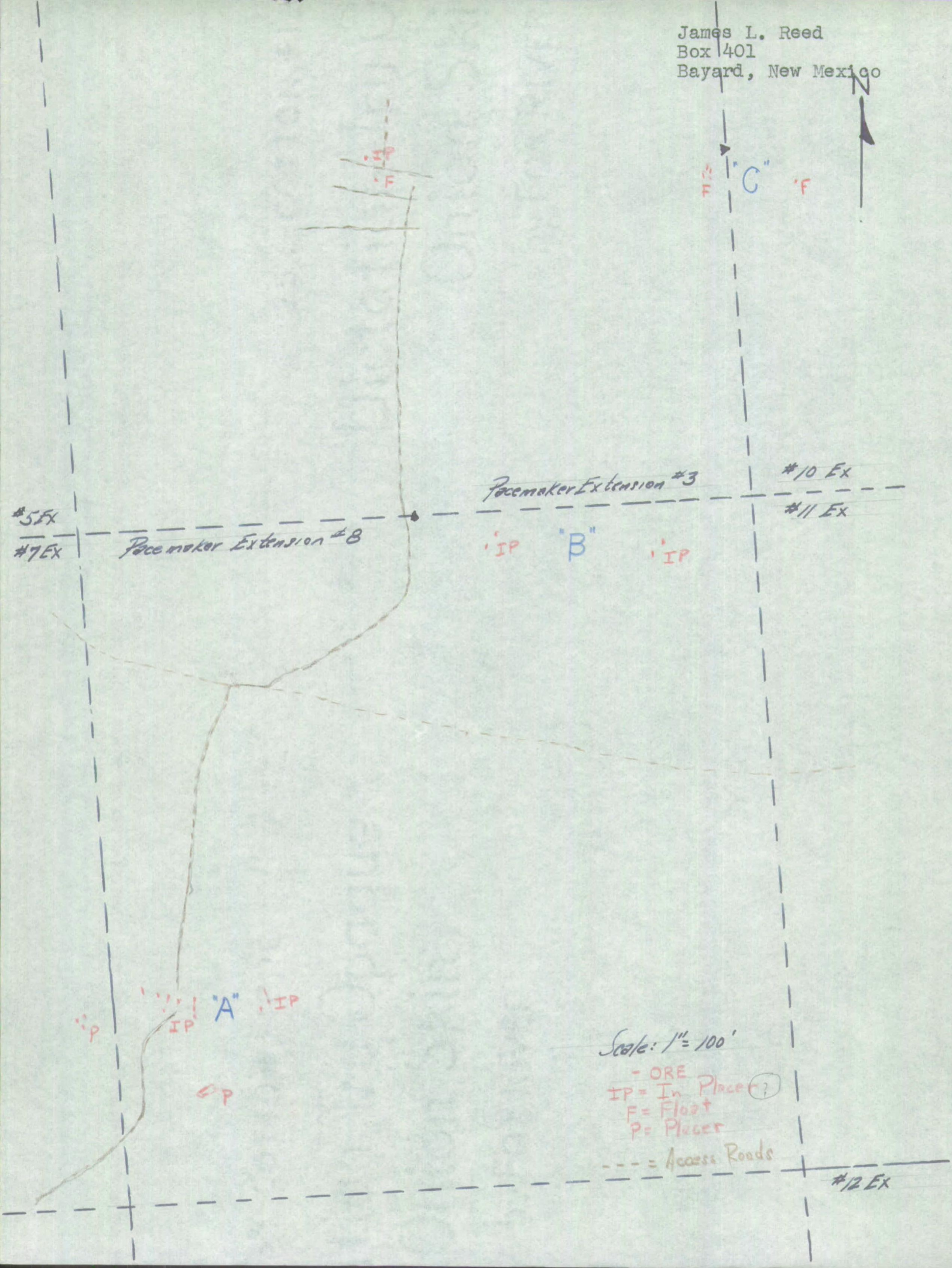

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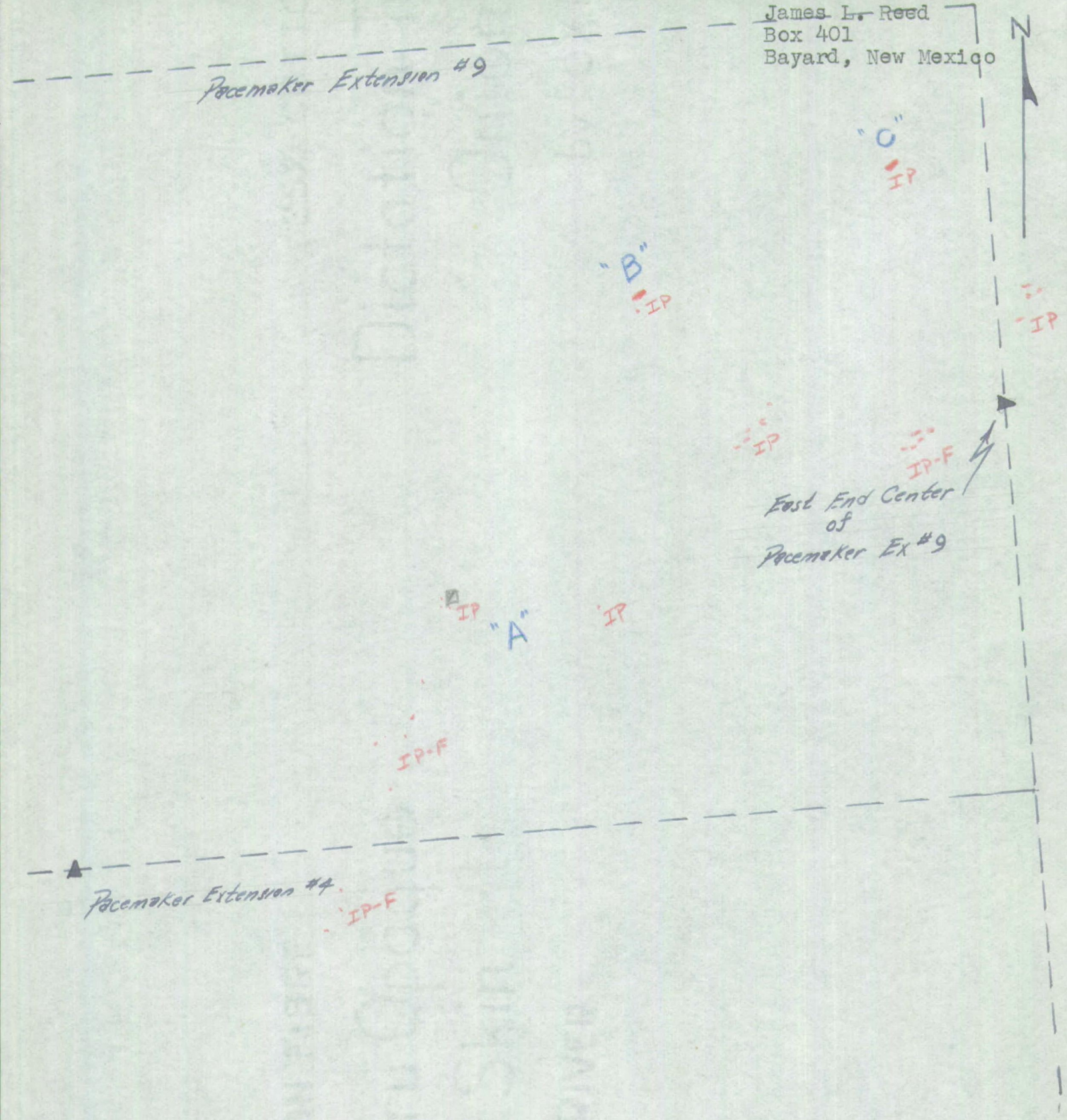
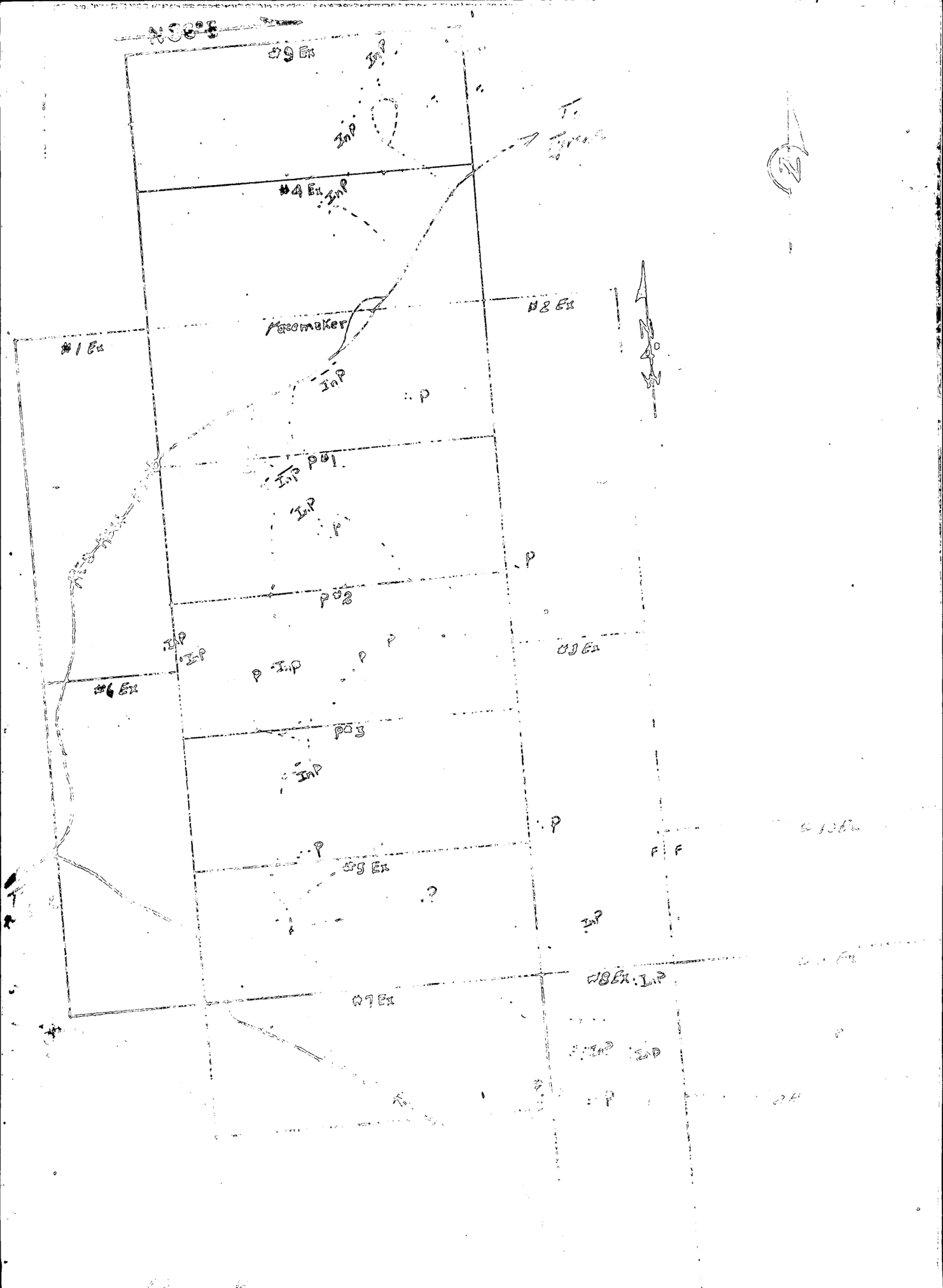


Scale: 1" = 100'

--- IP = Ore in place
-- F = Float



Pacemaker
Pacemaker Extension Claims

Section 35 & 36, T18S R16W
Sections 1 & 2 T19S R16W

Grant County, New Mexico

Scale 1" = 500'