DMA Form 1

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400

FILE COPY
SURNAME: GB

Rutledge
Martin

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

NOV 9 1953

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. DMEA 3135 - Tungsten
Strawberry mine
Madison County, Montana

Dear Mr. Clary:

This will acknowledge receipt on November 2, 1953, of your letter advising us that on October 17, 1953, you forwarded to us the assay and geological information requested in our letter to you of August 10, 1953.

Your letter apparently crossed in the mail with our letter of October 26, 1953, thanking you for transmitting Mr. G. S. Gluck's "Report on Mining Properties of Pony Tungsten Enterprise, Pony, Montana," and informing you that we regretted the information contained therein did not change the basis for the denial in our letter of October 14, 1953, of your application for exploration assistance.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WSMartin & FARutledge/ls
11/6/53

cc: Code 400
Docket
FT, Region 2
Adm. Read. File
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.S.
11-9-53

DEPARTMENT OF THE INTERIOR
NOV 2 1953

523 West Silver Street
Butte, Montana

Mr. C. O. Mittendorf
United States Department of the Interior
Defense Minerals Exploration Administration

Re: Docket No. DMEA 3135
Tungsten
Pony Tungsten Enterprise
Strawberry Mine
Madison County, Montana

WSM

Dear Mr. Mittendorf:

Your letter dated Oct. 14, 1953, denying the exploration assistance for the above property has been received and it seems that this denial was made prior to your receiving all the information that you had requested. You had requested assay and geological data per your letter dated 10th August 1953, this information was not forwarded to your office until October 17, 1953, three days after your letter of denial was mailed.

It would please us very much if this latter information requested by your office, would be considered before the application is denied.

A quote from your letter 14 October 1953, states, "noting small scattered showings of scheelite in contact zones, " - the application for assistance was not requested for all our holdings but only for the Strawberry Group alone. This last report made by G. S. Gluck, Consulting Engineer, E.M., was made on this property, andit was forwarded to your office 17th October, 1953.

rctd 10/26.

The known scheelite at the present time is over a much larger area than controlled by us, there is at present a small operation being carried on approximately four miles south of us, at which is being produced premium grade scheelite concentrates.

We believe it worthwhile to be reconsidered at your pleasure now that you have the information that you had requested.

Thank you very much.

Applicant has no money! LS

Sincerely yours,

Emmett J. Clary

E. J. Clary
President
PONY TUNGSTEN ENTERPRISE

EJC:mjf

400

FILE COPY
SURNAME:

Rutledge
Martin

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

OCT 26 1953

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. DMEA 3135 - Tungsten
Strawberry mine
Madison County, Montana

Dear Mr. Clary:

This will acknowledge receipt of your letter of October 16, 1953, transmitting G. S. Gluck's "Report on Mining Properties of Pony Tungsten Enterprise, Pony, Montana."

We thank you for this opportunity to review the referenced report. We regret to inform you, however, that the information contained therein does not change the basis for the denial in our letter of October 14, 1953, of your application for exploration assistance.

The above-referenced report by G. S. Gluck is returned herewith as you requested.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Enclosure

FARutledge/ls
10/26/53

cc: Docket
FT, Reg. 2
Code 400
Adm. Read. File
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.G. 11-26-53

COPY

Report on Mining Properties
of Pony Tungsten Enterprise, Inc.
Pony, Montana
by George S. Gluck, E.M.

October, 1953. Ramsay, Montana

The properties of Pony Tungsten Enterprise, Inc. comprise 4 groups consisting of both patented and unpatented claims as follows:

1. Multimetal group - north most part of the properties consisting of 2 unpatented claims.

2. Strawberry-Keystone group - central part of the properties consisting of 7 patented claims.

3. Rarus group - southern portion of the properties consisting of 3 unpatented claims.

4. Placer group - a forklike piece of ground consisting of 18 unpatented placer claims. The north fork of this group lies between the Multimetal and Strawberry-Keystone groups, and the south fork between the Strawberry-Keystone and the Rarus groups.

All these claims are located in Sections 13 and 14 of T 2 S, R 3 W, Principal Meridian of Montana, with the exception of portions of the Multimetal and Rarus groups that are in Sections 10 and 11, and Section 23 respectively of the same township, about 2 miles west of Pony, Madison county, Montana at elevation of 6500 to 7500 ft. above sea level, and as shown on the claim map attached to this report.

Good gravel road connects Pony with State Highway Trunk line at Harrison, 8 miles eastward, the nearest shipping point on the spur of the Northern Pacific RR. Nearest supply point is Butte, about 65 miles distant, although lumber and miner supplies may be obtained at Harrison and local saw mills.

Pony has sufficient accommodations for men required for mining and milling operations. There are 10-12 men available locally. The wages are governed by Butte-Union scales, being usually about $1.00-$1.50 lower than at Butte.

Adequate water and timber are available on the property to meet all mining and milling requirements. The Montana Power Co. at request of Pony Tungsten Enterprise, is conducting at present survey to bring 3 phase line to the mill building located on the Strawberry-Keystone group at the portal of the Lower Adit.

Geology.

As may be seen from the geologic map of the region, attached to this report, the claims are almost entirely within the area of Archean metamorphic rocks, known as Pony Series, hemmed in between bodies of quartz-monzonite, which apparently have a sub-surface connection with the Tobacco Root Batholith, further south.

On the Strawberry-Keystone group the core of the Pony Series is a bed of dark hornblende gneiss with minor amounts of feldspar and quartz. This bed can be readily traced along the West Strawberry, East Strawberry and Strawberry Extension claims.

It strikes N 72 W and dips steeply north. Flanks of this core are formed by light gray or light brown quartz-feldspar gneiss with subordinate hornblende and mica and narrow bands of black hornblende schist and dark brown mica-garnet schist.

It is my opinion that the mineralization of the area in this group occurred in the following sequence:

a. The intrusion of quartz monzonite caused folding of the Pony Series the structure of which might have been already quite complex due to intrusion of earlier sills. Pegmatitic dikes, an acidic phase of magmatic differentiation, which cross the core of the Series almost at right angle, brought along mineralizers carrying tungsten. These mineralizers carrying tungsten. These mineralizers channeled into openings formed in gneisses by folding and gave rise to formation of scheelite by chemical interaction between mineralizers and lime carrying constituents of the gneisses.

b. Subsequent cooling of intruded igneous mass accompanied by its shrinkage caused fracturing and faulting of the host rocks (Pony Series) both at a sharp angle to the banding of gneisses, in places paralleling to it, and at some angle to the first set of fractures.

Hydro-thermal solutions ascending along these two sets of fault planes formed two sets of veins carrying gold pyrite and chalcoprite, one set being represented by Strawberry and Keystone veins and the other by the Crevice and minor cross veins.

Position of these two sets of fault veins in respect to the dark hornblende gneiss bed is shown on the map of Strawberry-Keystone group attached to this report.

Correct interpretation of genetic relationship between scheelite Scheelite deposit and the Strawberry-Keystone veins is of utmost importance for successful exploration of ground beyond the known boundaries of scheelite.

Description of geological features of other groups I shall for the present limit to brief quotations from the geological report by Mr. Winston M. Sahinen who examined the properties in July, 1953.

Multimetal group - "The most outstanding feature of this area is a cupola-like mass of highly altered and silicified wallrock containing irregular masses of coarsly crystalline epidote, tremolite-actinolite, garnet and quartz, with minor amounts of scheelite and sphene. An altered granodiorite appears to sheathe this zone, and fresh granodiorite outcrops nearby. This feature appears to be a blowout" that allowed the channelling of the mineralizing solutions through a small area."

Rarus group - "Cut F on the Rarus claim again shows an east-striking, north-dipping structure, similar, and probably related to the Strawberry vein. Mineralization is less intense, but contact metamorphic effects appear to be more pronounced. In addition to the usual mineral assemblage, magnetite was observed to be much more plentiful. The scheelite content here was lower than at the other exposures. The wallrock in this deposit is an altered gneiss similar to that found at the Strawberry."

Development:

The development of the properties is mainly confined to Strawberry-Keystone group due to former activities in gold mining and consists of the Lower X-cut Adit, 970 feet long, with drifts along both the Keystone and Strawberry veins, the Upper X-cut Adit, 200 ft. long with short drifts near its face, both ways along the vein, and two intermediate X-cut adits with some lateral development work.

The Pony Tungsten Enterprise, Inc. opened up the Lower and Upper Adits, in both of which presence of scheelite was disclosed. In addition to this an open trench about 90 feet long and a number of test pits and short cuts were dug.

The difference in vertical elevation between the Lower and the Upper Adits is 415 feet, and between the Upper Adit and the surface it ranges from 45 to 60 feet, with the dip of 60° - 65° it provides 450 to 480 of backs between the Lower and Upper Adits, and from 50 to 70 feet between the Upper Adit and the surface.

Systematic sampling of all openings where "lamping" disclosed scheelite was made by channel cuts (With exception of the Lower Adit where only one sample was taken). Location of sampling channels, the width and WO_3 content are shown on the assay map.

Scheelite seems to follow the schistosity planes of gneiss. It is of a granular character and easily responds to panning. Under the fluorescent light it displays a typical bright blue color indicating freedom from molybdenum.

Development work on other three groups consists of discovery bulldozer cuts and pits where "lamping" proved preseence of scheelite, no systematic sampling, however, was done.

Recommendations:

1. Strawberry-Keystone group: Attempts should be made to discover extension of scheelite eastward from the present known boundaries, using the hornblende gneiss bed as a "key" bed.

This may be accomplished by few open trenches dug at right angle to the strike of the gneisses.

Further exploration-development program is outlined in the attached Development Schedule, with estimated cost of each stage and the amount of ore that may be expected to be extracted during development and prepared for exploitation.

Due to present uncertainties I scaled down both the tonnage per foot and the value of extracted ore as development work is progressing downward. However, I believe that the great part of development cost will be defrayed by the value of extracted ore.

The cost of the second stage of development does not include the cost of rehabilitating the Lower Adit which would include the cost of cleaning the water ditch, replacing tracks with heavier rails and laying 2" air line.

This program of exploration-development should be started as soon as ore storage facilities are provided.

In order to conserve the finances of the Corporation, work on other three groups should be limited to assessment work until the Strawberry-Keystone group is ready to go into production. However, accurate records of all sampling must be kept together with pertaining mapping in order to plan future development work more intelligently.

Inasmuch as the old mill building is in a fairly sound condition and some of milling machinery is on hand, the expenditure of comparatively small amount of money to put the mill into operating shape is justified by the amount of ore that may be considered as positive above the Upper Adit.

/s/ George S. Gluck, E. M.

George S. Gluck, E. M.

MJF

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 19 1953

Oct. 16, 1953

Subject: DMEA 3135
Re: Exploration Assistance
Strawberry Mine

C. O. Mittendorf
U.S. Dept. of Interior
D.M.E.A.
Washington 25, D.C.

Dear Mr. Mittendorf:

Enclosed please find 1 copy of Mr. L. S. Gluck geological report and maps.

Thank you,

Emmett J. Clary Pres.
Pony Triangle Enterprise
Pony, Montana

gb/

"Mr Gluck, the consulting engineer, is being retained on a stock payment basis, and no fees will be included in the contract."

H. B. Nicholson to FT, July 30, 1953

FILE COPY
SURNAME: 93

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

400

Chapman
McLaughlin
Guhan
Hedberg
Thayer
Selfridge

OCT 1 4 1953

Mr. Emmett J. Clary, President
Pony Tungsten Enterprises
Pony, Montana

Re: Docket No. DM A 3135 - Tungsten
Pony Tungsten Enterprises
Strawberry mine
Madison County, Montana

Dear Mr. Clary:

Your application for exploration assistance and other data pertaining to the subject property available to us in Washington have been carefully 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 position for the National Defense Program.

Careful study of all our information, although noting small scattered showing of scheelite in contact zones, indicates to us that the probability of disclosing minable ore reserves by your proposed program of exploration is not sufficiently promising to justify Government participation. Under these circumstances we regret to inform you that your application for exploration assistance 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 (fw)

ACTING Administrator

TLChapman:foc
10-8-53
cc: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 2
R. W. Geehan - USBM
T. P. Thayer - USGS

DENIED

10-14-53

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

400

October 8, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of exploration project by Field Team, Region II
Docket No. DMEA 3135 - Tungsten
Pony Tungsten Enterprise, Strawberry mine
Madison County, Montana

The denial of the subject application by Region II is based on the following information:

1. The applicant applied for a loan of $27,362.40 to explore for tungsten on the subject property. The Strawberry vein along a schist-gneiss zone has been cut by crosscut tunnels with some drifting on the vein, in search for gold ores. Scheelite has been noted in scattered zones in the hanging wall.

2. A report by Howard B. Nicholson, U. S. Geological Survey recommended the granting of a contract for exploration along the Strawberry vein in the lower tunnel. The Field Team does not agree with Mr. Nicholson and recommends denial.

3. Numerous reports have been written on the District and generally agree that tungsten mineralization is of a low grade and occurs in small scattered bunches. The following reports are the more specific on the area:

a Potosi Tungsten District - U.S.B.M. 709, 1941 by S. H. Lorain.

b A Mineral Resource Survey by the Montana School of Mines conducted in 1942.

4. The production of tungsten has been negligible and there is little reason to believe that any amount would be produced from the new work.

5. The Commodity Division of the U. S. Geological Survey recommends denial.

6. The Commodity Division of the U. S. Bureau of Mines concurs with the denial.

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

FILE COPY
SURNAME:

400

Johnson
Martin
Gerhan

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

October 8, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of exploration project by Field Team, Region II
Docket No. DMEA 3135 - Tungsten
Pony Tungsten Enterprise, Strawberry mine
Madison County, Montana

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5. The Commodity Division of the U. S. Geological Survey recommends denial.

6. The Commodity Division of the U. S. Bureau of Mines concurs with the denial.

W. S. Martin

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

TLChapman:fec
10-8-53
cc: Docket
Code 400
Adm. Reading File

HHM
10-14-53

DOCKET

IN REPLY REFER TO:

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

September 17, 1953

W509

Memorandum

To: W. S. Martin, DMEA

From: T. P. Thayer, USGS

Subject: DMEA-3135, Tungsten
Pony Tungsten Enterprises
Madison County, Montana

Although the examiner recommended approval of an exploration project, the data presented do not, in my opinion, justify his conclusions. The exposures of scheelite are discontinuous and too narrow to be minable when the grade (about 0.75 percent WO_3) is considered.

I agree with the recommendations of the Field Team that the application be denied.

T. P. Thayer

T. P. Thayer

Copy retained 400

Docket

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 8 1953

So. 157 Howard Street
Spokane 4, Washington

WSM

September 4, 1953

10/19/53

Mr. Ernest W. Ellis
Acting Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-~~3155~~ 3135 (Tungsten)
Pony Tungsten Enterprises
Madison County, Montana

Dear Mr. Ellis:

Enclosed are four copies of a field report on the subject application, by Howard B. Nickelson, geologist, U. S. Geological Survey, recommending the granting of a DMEA contract. but FT recommending denial

We have examined Mr. Nickelson's report and also other data available on the Pony district. We find the Pony and nearby districts to have been thoroughly studied and sampled by a number of other writers. We specifically wish to direct attention to the following reports:

1. Potosi tungsten district - U.S.B.M. Project 709, 1941 by S. H. Lorrain.

2. A Mineral Resource Survey by the Montana School of Mines conducted in 1942.

These reports call attention to the spotty tungsten mineralization in the quartz veins. It is also noted that while many of the veins have been fairly well explored, production of tungsten has been negligible and that there is little reason to expect any amount of tungsten production from these old workings.

In the case of the applicant, we find that they do not have much mining equipment and that they intend to raise their share of the finances for the project by the sale of corporation stock. This financial arrangement is hazardous, to say the least, and would very probably cause trouble in administering the contract. There is also the fact that it may cost more to do the proposed work than could be expected from the sale of tungsten that might be found by the project.

Another factor to be considered is that some of the proposed rehabilitation work is to be done on ground not covered in the application. It is assumed this ground is held by the applicant, but the question would have to be clarified and confirmed.

Consideration of the foregoing factors make it difficult to concur with the recommendations in Mr. Nickelson's report. We recommend, instead, denial of the application, our recommendation being based on improbability of making a worthwhile discovery and on the assumed financial instability of the applicant.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosure

cc: USBM (2)
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

Memorandum July 30, 1953

To: DMEA Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Field Examination, Docket No. DMEA-3135 (Tungsten), Pony Tungsten Enterprises, Emmett J. and Emmett Clary, and Fred Box, Pony, Madison County, Montana

INTRODUCTION

The applicants applied for MF-103 application forms for exploration assistance at a date earlier than the subject examination and, therefore, the writer contacted the applicants while in the Pony area to find out if they still desired to apply for exploration assistance. The applicants were in the process of filling out the forms, and were given assistance in completing the application by the writer.

The property was examined July 10, 11, and 12, 1953, by the writer, assisted by the applicants and Mr. Gluck, consulting engineer.

RECOMMENDATIONS

It is recommended that the application for exploration assistance be approved for the exploration of tungsten on the Strawberry Vein from the lower adit.

LOCATION AND ACCESSIBILITY OF PROPERTY

The property is in Madison County, Montana, 2 miles west of Pony in the N½ of sec. 14, T. 2 S., R. 3 W., Montana Principal Meridian, in the Pony mining district.

The 8-mile road from Pony to Harrison is an improved gravel road which joins the main oiled highway at Harrison. The 2 miles of road to the mine from Pony is a one-way dirt road which would require a minimum amount of snow removal during the winter months.

COMPETENCY OF THE APPLICANTS

The applicants are reported to be experienced miners who intend to raise their financial share of the exploration by selling corporation stock. The applicants plan to do the largest share of the work themselves.

APPLICANTS' PROPERTY RIGHTS

Fred Box, vice-president of Pony Enterprises, controls the property by a lease and option agreement as shown by the attached lease agreements. Before this agreement can be considered by DMEA, it will be necessary for Mr. Box to sign an instrument of lease assignments to Pony Enterprise. The claims included in the agreements are as follows and are almost all located in sec. 14, T. 2 S., R. 3 W.

Policy Lode Mining Claim, M.E. No. 2865
Rustler Mode Mining Claim, M.E. No. 2078
Strawberry Lode West, M.E. No. 842
Strawberry Lode East, M.E. No. 1735
Strawberry Extension Lode Mining Claim, M.E. No. 727
Edison Lode Mining Claim, M.E. No. 3675
Keystone Lode Mining Claim, M.E. No. 728
Clipper Millsite, M.E. No. 2077; Rustler Millsite, and the Charity Millsite, M.E. No. 5865

The applicants were advised to secure the signed Consent to Lien forms on the property in question.

DESCRIPTION OF THE PROPERTY

The only surface facilities are an old mill building located in the vicinity of the lower adit that is in very bad condition, but which contains several stamps and a good jaw crusher.

The mine workings consist of a lower and upper crosscut adit, both having short drifts on the Strawberry vein. About 600 feet of twelve-pound rail is laid in the lower adit to the Keystone vein but its condition is doubtful. For this reason the applicant applied for new rail in the application. The lower adit was dewatered this spring, but considerable slime covers the tracks and floor making the rails difficult to examine. This slime will have to be removed, the old track torn up and relaid or replaced, and additional track laid to the Strawberry vein.

The applicants' map shows the claims in reference to the underground workings.

GEOLOGY

The country rock in the area is dark- and light-colored gneiss and schists of sedimentary and igneous origin considered to be Pony Series of Archeozoic Age. The Pony district is described in Montana Bureau of Mines and Geology Memoir No. 9, "A geological reconnaissance of the Tobacco Root mountains, Madison County, Montana" by Wilfred Tonsley, Paul A. Schafer, and Lyman H. Hart.

The authors of this publication describe the rock of the Pony Series as follows:

> "These rocks are light gray quartz-feldspar gneisses with subordinate hornblende and mica; hornblendic gneisses with minor amounts of feldspar and quartz; black amphibolite schists composed almost entirely of hornblende; white quartz-feldspar gneiss having the appearance of metamorphosed pegmatite; several narrow bands of dark hornblendic-garnet schist, and a few thin bands of mica schist. The reddish brown, gray and light gray gneisses of granitic composition are the most abundant.
>
> "This gneiss and schist complex is literally crisscrossed by igneous injections of both pre-Cambrian and later age."

The Pony Series have been intruded by quartz monzonite a few hundred feet south of the lower tunnel. A quartz-monzonite body occurs about 1/4 mile to the north of the mapped area leaving a block of the Pony Series between these igneous bodies.

The vein system consists essentially of two major veins, the Strawberry vein and the Keystone vein. The Strawberry vein contains tungsten values, as shown on the enclosed map. The vein strikes almost east-west and dips 55 to 60 degrees to the north. The Keystone vein roughly parallels the Strawberry vein but dips 50 degrees to the south. The Keystone vein was mined quite extensively for gold. The Strawberry vein was also explored for gold, but very little gold ore was ever mined from this vein.

The gross production from the two veins has been reported to be in excess of $150,000.

During the late fall of 1952, a dozer operator exposed scheelite in the hanging wall of the Strawberry vein on the road in the general vicinity of Station 9. As a result of this exposure, several pits and trenches were dug along the outcrop and the upper and lower adits were rehabilitated.

The Strawberry vein roughly parallels the schistosity of the Pony Series and consists of blue fault gouge whose width ranges between 1/2 to 4 feet. The overlying quartz or quartz-rich vein rock was reported to average $2.00 to $4.00 in gold value. Scheelite, as veinlets and disseminated grains, occurs in the hanging wall schist adjacent to the quartz vein. The scheelite veinlets range up to 1/2 inch in thickness. The observed scheelite zone never exceeded 1½ feet in width, and usually consisted of one or more veinlets with scattered disseminated grains of scheelite for an aggregate width of less than 1 foot.

At the time of the visit, a pit was being dug in the vicinity of Sta. 1 (see attached map) which showed a few minor specks of scheelite under the dark lamp.

Sample No. 429 was taken in a small hole at the bottom and north end of pit No. 2 on the Strawberry vein. The sample was taken across three veinlets, across an aggregate width of 0.9 foot, and assayed 1.14 percent WO_3. The true width of the scheelite-bearing zone was not exposed.

The small trench at Sta. 4 showed a few specks of scheelite under the dark lamp.

The dozer trench missed the vein outcrop entirely.

No scheelite could be found in the upper tunnel east of the crosscut, but a scheelite zone in the west drift, ranging up to 1 foot in width, occurs in the schist in the hanging wall of the vein.

Sample No. 433 averaging 1 foot in width and assaying 0.04 percent WO_3 was chipped across several vein exposures in the west drift.

A 60-foot trench on the road between Stas. 9 and 10 lamps scheelite all along the bottom as small veinlets and disseminated grains. A combined sample No. 430, cut across the vein at intervals of 8 feet along the trench, averaged 1.4 feet in width and assayed 0.14 percent WO_3. The applicants screened the material from the trench and sample No. 432 of the coarse material assayed 0.12 percent WO_3. The fine material, sample No. 431, assayed 0.18 percent WO_3.

Scheelite was observed by use of the black lamp in the fill on the road from Sta. 10 to the point marked on the map. No scheelite was observed east of this point on any of the numerous dumps.

The lower adit located in the creek valley explored at depth the Keystone and Strawberry veins by a 925-foot crosscut. The Keystone vein was intersected at about 600 feet from the portal; the Strawberry vein was intersected at the end of the crosscut. A considerable amount of drifting and stoping to the east and west was done on the Keystone vein.

The Strawberry vein on this level consists of 2 to 4 feet of blue gouge and about 4 feet of quartz with a narrow scheelite zone in the schist hanging wall ranging from 1/2 to 1 foot in thickness. Sample No. 434 was cut from several exposures averaging 0.8 feet in width; it assayed 0.74 percent WO_3.

The east drift is essentially a wide fault consisting of light-colored fault gouge and breccia but no scheelite. The wall rock in the east drift is a very hard basic diorite or contact metamorphic

hornblende-rich schist, extending west to the west drift fault, shown on the map as a water course. West of the fault the wall rock is schist containing scheelite.

The crosscut is composed of very hard basic diorite and schists which have been contact metamorphosed by the adjoining igneous dike shown on the map to the east of the portal.

The scheelite on the Strawberry vein gives a good blue-white fluorescence under the ultraviolet light. Mr. Gluck tested the scheelite for molybdenum and found none.

A scheelite occurrence was examined about half a mile northwest of the Strawberry vein outcrop. The scheelite is in an inclusion or roof pendant, rich in garnet and contact minerals, about 75 feet in diameter. The distribution of scheelite was rather spotty with aggregates of scheelite crystals. This deposit does not warrant DMEA exploration because of its small size.

The contact between the quartz monzonite and the Pony Series just south of the lower adit carried some scheelite and copper minerals.

The applicants informed me they have staked placer claims in the creek bottoms, and these claims also contain scheelite in the sands and gravels. Some work has been done but more exploration is required to determine their value. Scheelite in an area below the mine has been recently placer mined by jigging methods, and some concentrates were recovered.

POSSIBLE ORE RESERVES

Pits, trenches, and upper adit on the outcrop show fairly continuous occurrences of scheelite for 1 foot or less in width along a strike distance of 600 feet, varying in grade from 0.04 to 1.14 percent WO_3 as shown on the enclosed map. Scheelite in the lower adit, 475 feet below the outcrop, assays 0.74 percent WO_3, and there is the possibility of more or less continuous scheelite mineralization between these two points.

To repay the Government's share of exploration costs would require a stope 500 feet long and 175 feet up dip on the vein, assuming a width of 0.8 foot at 0.75 percent WO_3. Three to four tons of waste would probably be mined for every ton of ore.

AVAILABILITY OF MANPOWER, MATERIALS, SUPPLIES EQUIPMENT, WATER AND POWER

The applicants plan to do most of the work themselves, but local manpower is available in the area.

Materials, supplies, and equipment can be secured in the local area or at Butte, Montana.

Water for drilling is available in the mine.

Single phase power is available at Pony, but would be unsuitable for heavy equipment.

Gasoline and diesel power will be necessary for compressor or other power needs.

The current wage scale is equivalent to the Butte scale of wages.

STATEMENT OF THE APPLICANTS' PROPOSAL

The writer estimates about 35 days for cleaning up and relaying the track in the lower adit, but 42 days is proposed to insure completion of the work.

Several sets of timber will be required in the Keystone vein area, and a set or so will probably be required in the east Strawberry drift, which will be used for car storage.

The drainage ditch is in the middle of the track which will require cleaning and installing a board walk between the rails.

PROPERTY RIGHTS

The property to be subject to royalty payments to the Government is the Rustler Claim, M.E. 2078; the Strawberry, M.E. 842; and the Strawberry, M.E. 1735. These three claims are all along the Strawberry vein as shown on the applicant's map. It is not known whether the applicant owns the claim on which the lower adit portals, but this claim or claims, should be included in the contract as part of the rehabilitation work which will be done in this area.

EXPLORATION PROJECT

The expected starting date will be within 30 days after the contract is signed, and the work will be finished within one year from the starting date. One year should be adequate to do the work.

DESCRIPTION OF THE PROJECT

The project will consist of relaying 600 feet of track already present to the Keystone vein or relaying this amount by new track if the old track is not usable; laying additional track from the Keystone vein to the drifting point, including about 30 feet for car storage in the east Strawberry drift. Seventy-five feet of track will be required for

waste dump. The old air line laid on the floor to the Keystone vein may not be any good and likely will have to be replaced. Air line will have to be installed from the Keystone vein to the drifting point. This work will be done on wage-material cost basis within seven 6-day weeks.

The drift will begin at the offset in the west drift, as shown on the enclosed map, and will be driven westerly on the hanging wall of the Strawberry vein.

Any raising done on the project should have the approval of the Field Team.

Only a limited amount of timbering is anticipated.

To recover the scheelite the drift will be run in the footwall of the scheelite zone, and the ore sideswiped after the heading has been advanced.

Sufficient lumber can be salvaged from an old building on the property to construct the compressor house, dry house, and the powder house, although some new material will no doubt be necessary.

Assaying seems to be rather scanty for 500 feet of drifting so it is advised to increase the money for assaying to $150.00.

The black lights will be a needed and necessary mining aid.

The air at the face of the west drift is good, as fresh air currents come from the old Keystone workings, but a fan will no doubt be necessary after the completion of several hundred feet of drift.

Mr. Gluck, the consulting engineer, is being retained on a stock payment basis, and no fees will be included in the contract.

COSTS OF THE PROJECT

Rehabilitation of the Lower Adit

Labor - 126 man shifts (3 men for 7 six-day weeks)

105 straight-time shifts at $13.25 =	$1,391.25	
21 overtime shifts at 19.88 =	417.48	
Total		$1,808.73

Material and Supplies

Rails, 12,400 lbs. (1,116 feet of track) (Note: This amount will relay the adit crosscut; 600 ft. of old rail may not be usable so the total amount was included in the application.)	1,283.40	
Splice plates, 80 pair	40.00	
Spikes, 100 lbs. 336 #/1000'	34.80	
Bolts, 150 lbs.	30.45	
Lumber, 6,000 board feet	360.00	
2" pipe, 1,150 feet	428.95	
1" pipe, 100 feet	17.85	
Small hand tools	25.00	
Gas and oil	75.00	
Total		2,315.45

16 #

(Note: Don't know where they will use gas and oil unless they use a mucking machine to clean the adit or gas and oil for hauling supplies.)

Operating Equipment

Air locomotive with two couplings	1,945.50	
2 mine cars	150.00	
1 blower with air ducts	450.00	
		2,545.50

New Buildings

14' x 16' compressor and dry house	250.00	
10' x 10' powder house	75.00	
Total		325.00

Miscellaneous

Assaying (increased from applicant's estimate of $90.00)	150.00	
2 black lights w/spare batteries	200.00	
Freight for samples	100.00	
Insurance and taxes	126.60	
Total		$ 576.60

Contingencies

10 percent on applicants b, c, d, f, g	751.12

Drifting and Raising

(All labor, equipment, and supplies to be furnished by the applicant.)

500 feet of drift at $31.00 ft.	15,500.00
150 feet of raise at $24.00 ft.	3,600.00
TOTAL COST OF PROJECT	$27,422.40

The Government's share of the exploration costs will be 75 percent of $27,422.40, which is $20,566.80. The applicants' share of the exploration cost will be 25 percent of $27,422.40, which is $6,855.60.

Enclosure 1

Distribution:
DMEA (Orig. & 3)
USBM (2)
USGS (SRO)
Docket
Nickelson

A Geological Report on the
PONY TUNGSTEN ENTERPRISES GROUP
Pony, Montana

by Winston M. Sahinen

Butte, Montana

July, 1953

A Geological Report on the

PONY TUNGSTEN ENTERPRISES GROUP

Pony, Montana

by Winston M. Sahinen

Introduction

The property described in this report consists of four unpatented claims, the Multimetals, Epi, Rarus, and Blonde Edna, which are claimed by Pony Tungsten Enterprises, and the Strawberry-Keystone Group of patented claims that are leased by the company. These claims lie in sections 10, 11, 14, and 15, T.2S., R.3W., and are in the Pony (Mineral Hill) mining district. The area described is about two miles west of Pony, Montana, and about eight miles west of Harrison, the nearest shipping point.

The Strawberry-Keystone workings are easily accessible via a county road from Pony, and the Multimetals and Epi claims are reached by a bulldozer road. At present, the Rarus and Blonde Edna claims are not accessible by road. Because of the elevation of the property, 8000 to 8500 feet, winter snows would probably hamper motor travel, but not to such an extent so as to cause the cessation of mining operations.

Adequate water and timber are found on the property to supply mining operations. Although no electric power is available at present, a cleared right-of-way remains from a former powerline to the Strawberry Mine from Pony.

Development is limited to bulldozer cuts and shallow pits on the four unpatented claims, while the Strawberry-Keystone group has been developed underground for about 2500 feet as a result of

previous gold-mining activity. In addition, a five-stamp gravity mill remains on the Strawberry-Keystone property.

The Strawberry-Keystone group has been worked intermittantly for gold, the total production of which is said to be about $175,000. Although scheelite, a tungsten ore mineral is found in the Strawberry-Keystone workings, it has never been developed.

General Areal Geology

The properties of the Pony Tungsten Enterprises Company lie in a contact zone between the pre-Cambrian Pony series of gneisses and schists, and the late Cretaceous or early Tertiary Tobacco Root Batholith, of quartz monzonitic or granodioritic composition. In this area the Pony series consists of what appears to be a metamorphosed basic igneous rock, and the rock of the batholith is more nearly a granodiorite. Several outliers or "islands" of granodiorite outcrop in the area, as do at least two granodiorite dikes. No other major rock types are apparent in the area.

The metallizing solutions were obviously derived from the batholith, and were channelled by pre-existing fractures in the gneiss, which were probably formed by stresses attendent to the emplacement of the batholith. The mineralization of the area apparently occurred in two separate stages, a high-temperature epidote-garnet-amphibole-quartz-scheelite stage, and a medium-temperature quartz-pyrite-chalcopyrite-gold stage. These stages do not appear to overlap.

The general structure of the area appears to be a pre-mineral zone of weakness that localized the tungsten deposits. This zone

appears to trend about N 25 W. Toward the North, the zone swings away from a large outlier and assumes a more westerly course. The gold-bearing veins occupy fissures that trend nearly East-West, and dip 50-55 degrees to the north and south. The south-dipping veins are by far the most important in size and gold content, but are devoid of tungsten. The north-dipping veins are very persistent but are poorly mineralized, and are commonly only alteration zones. However, tungsten has been found associated with the north-dipping veins. Several small quartz stringers were observed to be striking about N 45 E and dipping nearly vertical.

In addition, scheelite has been found in several of the stream placers in the vicinity in appreciable amounts.

The detailed report of the geology of the holdings of the Pony Tungsten Enterprises Company is best divided into three units: Multimetals-Epi, Strawberry-Keystone, and Rarus-Blonde Edna. This division will allow discussion of several unique features of each claim.

Multimetals-Epi

The most outstanding feature of this area is a cupola-like mass of highly altered and silicified wallrock containing irregular masses of coarsly crystalline epidote, tremolite-actinolite, garnet, and quartz, with minor amounts of scheelite and sphene (titanite). This feature is observed in cut A on the Multimetals claim. An altered granodiorite appears to sheathe this zone, and fresh granodiorite outcrops nearby. This feature appears to be a "blowout" that allowed the channelling of the mineralizing solut-

ions through a small area. The scheelite content of the crystalline masses is variable, as is the size of the individual scheelite crystals, but it appears that the scheelite is distributed throughout the crystalline masses and to a small extent in the haloes.

A small granodiorite dike is exposed in a pit in cut B. Small amounts of metamorphic talc are found on its borders.

Cut D shows some dissemenated scheelite surrounded by altered granodiorite.

Strawberry-Keystone

Tungsten occurs in the Strawberry-Keystone area in veinlets of scheelite, which range from 1/16 to 1/2 inch in width, in a portion of the hanging wall of the Strawberry vein. This occurence is noted from the surface in cut E and in a small prospect pit west of the cut, in the upper Strawberry adit, and in the lower Strawberry adit. In the lower adit, no scheelite mineralization has been noted east of a flat-dipping fracture striking at almost right angles to the strawberry vein. On the surface, no scheelite is noted east of the projected intersection of the Strawberry and Keystone veins. The westward extension of the scheelite mineralization has not, as yet, been determined. The thickness of the scheelite bearing zone has not been accurately defined, but appears to be between one and ten feet, probably averaging less than five feet.

The gold content of the ore was not considered in this examination, but it appears that the Strawberry vein, where exposed,

is generally unmineable. Whereas considerable work has been done o on the Keystone vein. A south-dipping reverse fault is indicated by the relative positions of the Strawberry vein on the surface and in the lower adit, which may be the one observed between the two veins in the lower adit.

Harus-Blonde Edna

Cut F on the Harus claim again shows an east-striking, north-dipping structure, similar, and probably related to the Strawberry vein. Mineralization is less intense, but contact metamorphic effects appear to be more pronounced. In addition to the usual mineral assemblage, magnetite was observed to be much more plentiful. The scheelite content here was lower than at the other exposures. The wallrock in this deposit is an altered gneiss similar to that found at the Strawberry.

Cut G shows both altered gneiss and granodiorite, with a quartz vein striking about N 45 E. Another aplitic quartz ledge outcrops farther to the east, striking N 65 E and dipping N 24, which is said to show some scheelite. Considerable quartz float with a limonite stain is found on the surface of these two claims.

Summary and Conclusions

The tungsten mineralization was apparently localized in a series of cross-fractures in a zone of weakness that trends northwest, which was caused by the emplacement of the batholith. Gold mineralization followed in similar cross-fractures, roughly paralleling the mineralized tungsten fractures. Some evidence of

post-mineral movement was observed.

Because of a lack of development and of systematic sampling results, no estimate of the size or grade of the tungsten deposits can be made, but observation of scheelite in the prospects and in nearby placers with the aid of ultra-violet radiation indicates that considerable tungsten is in the area, whether or not it is mineable can only be determined by additional development. I believe that this area shows considerable promise, and that additional development is feasible.

Recommendations

Additional development of all the various exposures of tungsten is, of course, to be recommended, but the most satisfactory and workable program is, I believe, as outlined below.

1. Additional exploration into the hanging wall of the Strawberry vein in order to delimit the size and grade of this deposit. This could easily be accomplished by driving regularly-spaced dogholes into the hanging wall, and with some additional drifting to the west in the lower adit, and to both east and west in the upper adit. More emphasis should be placed on the lower adit.

2. A prospect shaft should be sunk near the discovery pit on the Multimetals claim, and perhaps some drifting should be done, if the showing in the shaft warrents. As before, this work should be conducted to define both the size and grade of the deposit.

3. A small prospect shaft should later be sunk near the discovery cut on the ridge on the Rarus claim.

Of these projects, number one is by far the most important. As development progresses, systematic samples should be cut across the mining width of any ore encountered.

Winston L. Sahinen

Winston L. Sahinen, Geologist

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 26 1953

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS:

That I, Fred Box, of the Town of Pony, County of Madison, State of Montana, for and in consideration of the sum of One ($1.00) Dollar, lawful money of the United States of America, to me in hand paid by Pony Tungsten Enterprise, a Montana corporation, with its principal place of business in the said town of Pony, County of Madison, State of Montana, do by these presents, sell, convey, assign, transfer and set over to the said Pony Tungsten Enterprise, a Montana corporation, that certain lease and option dated the 30th day of June, 1953, made by Leah Morris Mendenhall, to me, the said Fred Box, of the following described property, to-wit:

An undivided 1/6th interest in and to the following described mining and millsite property, situated in Madison County, Montana to-wit:

The Policy Lode Mining Claim, M.E. No. 2865;

The Rustler Lode Mining Claim, M.E. No. 2078;

The Strawberry Lode West, M.E. No. 842;

The Strawberry Lode East, M.E. No. 1735;

The Strawberry Extension Lode Mining Claim, M. E. No. 727;

The Edison Lode Mining Claim, M.E. No. 3675;

The Keystone Lode Mining Claim, M.E. No. 728;

The Clipper Millsite, M. E. No. 2077;

The Rustler Millsite, and The Charity Millsite, M. E. No. 5865;

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the said Pony Tungsten Enterprise, a Montana corporation, its successors and assigns, from the date hereof, for and during all the remainder yet to come of the term of the said lease and option, said term being three years from the 30th day of June, 1953.

Dated this 1st day of August, 1953.

Fred Box

STATE OF MONTANA)
County of Madison) ss.

On this 12th day of August, 1953, before me, James A. Rice, a Notary Public for the State of Montana, personally appeared Fred Box, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the day and year in this certificate above written.

James A. Rice
Notary Public for the State of Montana
Residing at Pony Montana
My commission expires Dec 12, 1955

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS:

That I, Fred Box, of the town of Pony, County of Madison, State of Montana, for and in consideration of the sum of One($1.00) Dollar, lawful money of the United States of America, to me in hand paid by Pony Tungsten Enterprise, a Montana corporation, with its principal place of business in the town of Pony, County of Madison, State of Montana, do by these presents, sell, convey, assign, transfer and set over to the said Pony Tungsten Enterprise, a Montana corporation, that certain lease and option dated the 13th day of July, 1953, made by Elling Estates Company, a corporation, to me, the said Fred Box, of the following described property, to-wit:

An undivided 5/6th interest in and to the following described mining and millsite property, situated in Madison County, Montana to-wit:

The Policy Lode Mining Claim, M.E. No. 2865;

The Rustler Lode Mining Claim, M.E. No. 2078;

The Strawberry Lode West, M. E. No. 842;

The Strawberry Lode East, M. E. No. 1735;

The Strawberry Extension Lode Mining Claim, M. E. No. 727;

The Edison Lode Mining Claim, M. E. No. 3675;

The Keystone Lode Mining Claim, M. E. No. 728;

The Clipper Millsite, M. E. No. 2077;

The Rustler Millsite, and The Charity Millsite, M.E. No. 5865;

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the said Pony Tungsten Enterprise, a Montana corporation, its successors and assigns, from the date hereof, for and during all the remainder yet to come of the term of the said lease and option, said term being three years from the 13th day of July, 1953.

Dated this 1st day of August, 1953.

Fred Box

STATE OF MONTANA)
County of Madison.) ss.

On this 4th day of August, 1953, before me, James A. Glass a Notary Public for the State of Montana, personally appeared Fred Box, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the day and year in this certificate above written.

James A. Glass
Notary Public for the State of Montana
Residing at Ennis, Montana
My commission expires Dec 12, 1955

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS:

That I, Fred Box, of the Town of Pony, County of Madison, State of Montana, for and in consideration of the sum of One ($1.00) Dollar, lawful money of the United States of America, to me in hand paid by Pony Tungsten Enterprise, a Montana corporation, with its principal place of business in the said town of Pony, County of Madison, State of Montana, do by these presents, sell, convey, assign, transfer and set over to the said Pony Tungsten Enterprise, a Montana corporation, that certain lease and option dated the 30th day of June, 1953, made by Leah Morris Mendenhall, to me, the said Fred Box, of the following described property, to-wit:

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The Keystone Lode Mining Claim, M.E. No. 728;

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The Rustler Millsite, and The Charity Millsite, M. E. No. 5865;

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the said Pony Tungsten Enterprise, a Montana corporation, its successors and assigns, from the date hereof, for and during all the remainder yet to come of the term of the said lease and option, said term being three years from the 13th day of July, 1953.

Dated this 1st day of August, 1953.

Fred Box

STATE OF MONTANA)
County of Madison) ss.

On this 4th day of August, 1953, before me, James W. Fair, a Notary Public for the State of Montana, personally appeared Fred Box, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the day and year in this certificate above written.

James W. Fair
Notary Public for the State of Montana
Residing at Ennis, Montana
My commission expires Dec. 12, 1955

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS:

That I, Fred Box, of the Town of Pony, County of Madison, State of Montana, for and in consideration of the sum of One ($1.00) Dollar, lawful money of the United States of America, to me in hand paid by Pony Tungsten Enterprise, a Montana corporation, with its principal place of business in the said town of Pony, County of Madison, State of Montana, do by these presents, sell, convey, assign, transfer and set over to the said Pony Tungsten Enterprise, a Montana corporation, that certain lease and option dated the 30th day of June, 1953, made by Leah Morris Mendenhall, to me, the said Fred Box, of the following described property, to-wit:

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The Keystone Lode Mining Claim, M.E. No. 728;

The Clipper Millsite, M. E. No. 2077;

The Rustler Millsite, and The Charity Millsite, M. E. No. 5865;

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the said Pony Tungsten Enterprise, a Montana corporation, its successors and assigns, from the date hereof, for and during all the remainder yet to come of the term of the said lease and option, said term being three years from the 13th day of July, 1953.

Dated this 1st day of August, 1953.

Fred Box

STATE OF MONTANA)
County of Madison) ss.

On this 4th day of August, 1953, before me, James N. Felix, a Notary Public for the State of Montana, personally appeared Fred Box, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the day and year in this certificate above written.

James N. Felix
Notary Public for the State of Montana
Residing at Ennis, Montana
My Commission expires Dec. 2, 1958

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS:

That I, Fred Box, of the town of Pony, County of Madison, State of Montana, for and in consideration of the sum of One($1.00) Dollar, lawful money of the United States of America, to me in hand paid by Pony Tungsten Enterprise, a Montana corporation, with its principal place of business in the town of Pony, County of Madison, State of Montana, do by these presents, sell, convey, assign, transfer and set over to the said Pony Tungsten Enterprise, a Montana corporation, that certain lease and option dated the 13th day of July, 1953, made by Elling Estates Company, a corporation, to me, the said Fred Box, of the following described property, to-wit:

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The Strawberry Extension Lode Mining Claim, M. E. No. 727;

The Edison Lode Mining Claim, M. E. No. 3675;

The Keystone Lode Mining Claim, M. E. No. 728;

The Clipper Millsite, M. E. No. 2077;

The Rustler Millsite, and The Charity Millsite, M.E. No. 5865;

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the said Pony Tungsten Enterprise, a Montana corporation, its successors and assigns, from the date hereof, for and during all the remainder yet to come of the term of the said lease and option, said term being three years from the 30th day of June, 1953.

Dated this 1st day of August, 1953.

Fred Box

STATE OF MONTANA)
County of Madison) ss.

On this 14th day of August, 1953, before me, [illegible], a Notary Public for the State of Montana, personally appeared Fred Box, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the day and year in this certificate above written.

[illegible]
Notary Public for the State of Montana
Residing at Ennis, Montana
My commission expires Dec. 12, 1955

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS:

That I, Fred Box, of the town of Pony, County of Madison, State of Montana, for and in consideration of the sum of One($1.00) Dollar, lawful money of the United States of America, to me in hand paid by Pony Tungsten Enterprise, a Montana corporation, with its principal place of business in the town of Pony, County of Madison, State of Montana, do by these presents, sell, convey, assign, transfer and set over to the said Pony Tungsten Enterprise, a Montana corporation, that certain lease and option dated the 13th day of July, 1953, made by Elling Estates Company, a corporation, to me, the said Fred Box, of the following described property, to-wit:

An undivided 5/6th interest in and to the following described mining and millsite property, situated in Madison County, Montana to-wit:

The Policy Lode Mining Claim, M.E. No. 2865;

The Rustler Lode Mining Claim, M.E. No. 2078;

The Strawberry Lode West, M. E. No. 842;

The Strawberry Lode East, M. E. No. 1735;

The Strawberry Extension Lode Mining Claim, M. E. No. 727;

The Edison Lode Mining Claim, M. E. No. 3675;

The Keystone Lode Mining Claim, M. E. No. 728;

The Clipper Millsite, M. E. No. 2077;

The Rustler Millsite, and The Charity Millsite, M.E. No. 5865;

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the said Pony Tungsten Enterprise, a Montana corporation, its successors and assigns, from the date hereof, for and during all the remainder yet to come of the term of the said lease and option, said term being three years from the 30th day of June, 1953.

Dated this 1st day of August, 1953.

Fred Box

STATE OF MONTANA
County of Madison) ss.

On this 4th day of August, 1953, before me, [illegible], a Notary Public for the State of Montana, personally appeared Fred Box, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the day and year in this certificate above written.

[illegible]
Notary Public for the State of Montana
Residing at Ennis, Montana
My commission expires Dec. 12, 1955

FILE COPY
SURNAME:

400
Rutledge

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

AUG 28 1953

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. 3135 - Tungsten
Strawberry Mine
Madison County, Montana

Dear Mr. Clary:

This will acknowledge receipt of your letter of August 24, 1953, transmitting the following:

1. Geological report on the Pony Tungsten Enterprises Group, Pony, Montana, by Winston M. Sahinen
2. Assignment of leases to Pony Tungsten Enterprise
3. Assay map

It was also stated that a geological map and report were being prepared and would be forwarded as soon as completed. We will, therefore, hold your application in abeyance until the geological map and report are received.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FARutledge:foc
8-27-53
cc: Docket
Code 400
FT. Reg. 2
Adm. Reading File
R. W. Geehan, USBM
Mary Miller, USGS

R.C.G.
8-28-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 26 1953

PONY TUNGSTEN ENTERPRISES
PONY, MONTANA

August 24, 1953

Unoted States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D.C.

Re: Docket No.3135-Tungsten
Pony Tungsten Enterprise
Strawberry Mine
Madison County, Mont.

Dear Sirs:

Reply to your letter requesting further data and information on the above-docketed application for exploration assistance is enclosed with this letter.

We are enclosing one copy of the report made by Winston M. Sahinen on the 19th of June, 1953. One copy of this report is all that is available at this date. This is a comprehensive geological report on the area that we now control. There was not a geological map contained in this report, however, George S. Gluck, consulting engineer, is in the process of making a geological map and report. This map and report will be forwarded to your office as soon as it is completed.

There are also enclosed with this letter two copies of the assay maps which were requested, and you will find four copies of the assignment of the leases from Fred Box to the Corporation.

The Owner's Consent to Lien were forwarded to your Regional Office at Spokane the 10th of August.

Sincerely yours,
Emmett J. Clary
Emmett J. Clary
President

Enclosures:
(1) one report
(2) four assignments of leases
(3) two assay maps

FILE COPY
SURNAME:

400

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

AUG 1 0 1953

Rutledge
Martin
Hedges
Kindel
Seffridge
Fitzpatrick

Mr. Emmett J. Clary, President
Pony Tungsten Enterprise
Pony, Montana

Re: Docket No. 3135 - Tungsten
Pony Tungsten Enterprise
Strawberry mine
Madison County, Montana

Dear Mr. Clary:

Reference is made to the above-docketed application for exploration assistance which has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration.

We are enclosing two sets of "Owner's Consent to Lien" forms for execution by Leah Morris Mendenhall for an undivided one-sixth interest and Elling Estates Company for an undivided five-sixths interest in the property. It also will be necessary for you to furnish us with four copies of an assignment covering the transfer from Fred Box to the corporation of the lease between Fred Box and Leah Morris Mendenhall and the lease between Fred Box and the Elling Estates Company.

There were no assays or other data contained in your application to support the occurrence of tungsten at the Strawberry mine. It may be that these and other pertinent data are available as a result of the recent examination (1953) by Winston M. Sahinen, geologist, and George S. Gluck, consulting mining engineer, of the Strawberry mine. These data should be furnished this Administration in order that we may consider fully your application. Assay and geologic data should be indicated on copies of the map submitted with the referenced application.

We will, therefore, hold your application in abeyance until the above-requested data are received.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

8-10-53

Enclosures

FARutledge:foc 8-7-53
cc: Docket R. W. Geehan, USBM
Code 400 Ft. Reg. 2
Adm. Reading File
Oper. Comm. D. M. Lemmon, USBM

FILE COPY
SURNAME:

400

Rutledge
Martin
Selfridge
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

AUG 1 0 1953

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. 3135 - Tungsten
Pony Tungsten Enterprise
Strawberry mine
Madison County, Montana

Dear Mr. Weissenborn:

Reference is made to the subject docket and your letter of July 30, 1953, which states that a field examination has been made.

We will, therefore, hold this application in abeyance until the report and recommendations by the Field Team are received.

Sincerely yours,

George C. Selfridge
ESJ
Chairman, Operating Committee

APPROVED:

J. H. Hedges
ESJ
Member, Bureau of Mines

A. R. Kinkel, Jr.
ESJ
Member, Geological Survey

FARutledge:foc
8-7-53

MAD 8-10-53

cc: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 2
R.W. Geehan, USBM
D. M. Lemmon, USGS

Pony Tungsten Enterprise
c/o Emmett J. Clary - President
Pony, Montana

August 3, 1953

Subject: DMEA-3135
Re: Exploration Assistance
Strawberry Mine

My Dear Mr. Clary:

The receipt of your application dated August 3, 1953, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3135 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-3135 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS
Robert E. Adams, Chief
Operations Control and
Statistics Division

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

August 3, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number DMEA-3135

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

DMEA - 3135 - Pony Tungsten Enterprise

ROBERT E. ADAMS

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG - 3 1953

July 30, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Application for Exploration Assistance, Pony Tungsten Enterprise, Strawberry Mine, Madison County, Montana

Dear Mr. Selfridge:

Enclosed are three copies of an application for aid in an exploration project submitted by the Pony Tungsten Enterprise, Pony, Montana. The application concerns a tungsten property in Madison County, Montana. One copy of the application has been retained by this office.

The property has already been examined by Howard Nickelson, Geologist, U. S. Geological Survey, since he was in the area in connection with another examination. His report with the Field Team recommendations will follow in a short time.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM(2)

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JUL 28 1953
U. S. G. S.
SPOKANE, WASH.

THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG - 3 1953

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

Not to be filled in by applicant

Docket No. DMEA-3135
Metal or Mineral
Date Received 8/3/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

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

EMMETT J. CLARY PRES. PONY, MONTANA
EMMETT CLARY SEC.&TREAS. PONY, MONTANA
FRED D. BOX VICE PRES. PONY, MONTANA

(*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 ATTACHED TO THIS FORM

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

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

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

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

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

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

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

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

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

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

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

TUNGSTEN (SCHEELITE)

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

(*c*) The work will start within 30 days and be completed within 12 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)? YES

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

Delete

☒ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated 27 July, 1953

PONY TUNGSTEN ENTERPRISES
(Applicant)

By Emmett J. Clary Pres
Fred R Box Vice Pres.

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

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

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

1. Pony Tungsten Enterprise, a corporation organized under the laws of the State of Montana; Pony, Montana.

Emmett J. Clary ------President
Emmett Clary ------Secretary & Treasurer
Fred D. Box ------Vice President

All of Pony, Montana.

3.(a) The mining property upon whichthe exploration shall be preformed and which may be benefited by the exploration consists of six patented claims:

Rustler	M.S. 2078
Strawberry	M.S. 842
Strawberry	M.S. 1735
Strawberry Ext.	M.S. 727
Edison	M.S. 3675
Keystone	M.S. 728

and is situated in the northern half of Section 14, T2S, R3W, Principal Meridan of Montana.

(b). This property has been known as the Strawberry Mine.
(c). The applicant is the lessee and purchaser under contract.
(d). A copy of the lease and contract is attached herewith.
(e). Not applicable.
(f). Not applicable.

4.(a).
The existing mine workings consists of the Lower X-cut Adit which cuts the Strawberry vein at 925 feet from the portal, East & West Drifts, each 100 feet long, along the vein; the upper X-cut Adit, 215 feet long, with short drifts both east and west along the vein. This X-cu is 435 feet above the Lower Adit.

The Applicant opened up and retimbered the caved in portal of the Lower Adit, made accessible for examination the West and East Drifts on this level. Similar work has been preformed on the Upper adit.

4(a). (Con't)

In addition a long open trench was dug and a number of test pits were sunk to explore the deposit near the surface. Road of approach was extended to the upper workings.

(b). Past exploration was confined to the search for gold. Presence of scheelite was apparently unknown to past operators. All tungsten ore reserves are probable.

(c). The property and the surrounding country has been examined and described by a number of mining engineers and geologists.

First reference to the Strawberry Mine was made by A.C. Peale in 1896 (U.S.G.S. Geol. Atlas, Three Forks Folio#24). Later A.N. Winchell (1914) described the property in U.S.G.S. Bull. 574.

In 1933, Bureau of Mines and Geology, State of Montana, made a geological reconnaissance of the district and published its findings in Memoir No. 9.

In addition, J.H. Warner, E.M. in 1909 and E.P. Scallon, E.M. in 1936 examined the property for eastern financial interests, and recently (1953) Winston M. Sahinen, geologist and George S. Gluck, consulting mining engineer ~~EXAMINE~~ examined the mine and adjacent ground for the applicant.

The major geological features of the area are relatively simple in that the surface is occupied by only two important rock types, pre-Beltian metamorphic rocks of the Pony seriesm, gneisses and schists, and quartz-monzonite (granodiorite) intrusion.

Pegmatites and dikes of aplite are common.

The contact between these two major types of rocks generally

extends east-west. The principal fissures are closely parallel to the contact and in general they conform to the banding of the gneiss. It seems the deposits of the region are closely associated with pegmatite dikes.

The Strawberry vein strikes about East-West and dips 60-70 North. On the upper level it is about 4 feet wide, with one to three feet of fault gouge alongthe footwall. The fault gouge, with some quartz and very little sulphides is also present on the lower level.

The presence of tungsten was first discovered by Emmett J. Clary, of Pony, Montana and Lloyd E. Frizzell of Three Hills, Alta., Canada, both students of Montana School of Mines, whose attention was attracted by large epidote crystals in association with a light colored mineral which on investigation proved to be scheelite.

Subsequently the workingsof the surrounding Strawberry Mine were opened up and examined with the ultra-violet lamp.

Scheelite seems to occur in the hanging wall of the Strawberry vein as irregular veinlets and disseminated grains for the width of 12 to 18 inches, in association with quartz and calcite.

The presence of scheelite was thus proven in the open trench, as well as in both upper and lower workings of the mine.

4. (d). The property is located about 2 miles west of Pony and is easily accessible via a county road. Nearest shipping point is Harrison, about 8 miles, on the spur of the Northern Pacific R.R. Nearest supply point is Butte, about 60 miles away, although lumber and some minor supplies may be obtained at Harrison and at local

saw-mills. Pony has sufficent accommodations for men required for exploration and for initial stages of mining.

(e). There 10-12 men in Pony available for mining.

Adequate water and timber are found on the property to supply mining operations.

It is proposed to use gasoline engines to supply power required in exploration work.

No electric power is available at present, although a cleared right-of-way is available from Pony to the portal of the Lower Adit.

5.(a) Tungsten (Scheelite).

(b). 1. Clean up the slime along the Lower/Adit from the portal to the face, the distance of 925 feet. Clean up the East Drift on this level for a distance of 40 feet, for switching cars. Clean up the West Drift on the same level to the face, 100 feet.

Enlarge the intersection of this adit with the drifts to facilitate switching and turn-outs.

Clean up the water ditch and cover with 2x12 walk boards.

Replace the existing track (for a distance of about 600feet) with 16# rails (to accomodate motor haulage) and extend the new track to the face of the West-Drift and along ~~xxxxxxxxx~~ the dump.

Lay 2"air lin from the compressor house by the portal of the X-cut to the face of the West Drift.

5.(b). 2. Extend the West Drift for a distance of 500feet. In order to save ore, it is proposed in exploration work to drive the drift alongside the vein and strip the vein, 2-3 rounds at a time.

5.(c). 3. Drive 3 raises 50 feet each to explore the ground above

the sill of the extended West Drift.

All proposed work is indicated on the map attached hereto.

5.(c). 30 days 12 months

5.(d). The rehabilitation and exploration will be done by Emmett Clary and Fred Box, both mine operators with long experience in exploitation of narrowvein deposits, with the assitance of local miners.

George S. Gluck, graduate mining engineer with over 20 years experience is retained by the applicant as a consulting engineer.

6.(a). No work to be let to an outside contractor, however the extension of the West Drift and driving 3-50foot raises shall be done by the applicannt on the unit cost basis.

	Length	Cost/foot	Total Cost
Drift	500	$ 31.00	$15,500
Raises	150	$ 24.00	3,600
			$19,100

The above cost to include all labor, materials, supplies and operating equipment, and the estimate is based on:

Miners Wages------$14.11 straight
$21.17 overtime

Rentals of Equipment (Compressor, drill, mucking machine)	$475.00	per month
7/8drill steel	$61.75	per set
carbide bits	$11.05	each
Dynamite	$22.45	per 100#
Caps	$22.90	per 1000
Fuse	$12.30	per 1000ft.
Rails	$10.35	per 100#
Splice plates	$ .50	per pair
Spikes	$13.70	per 100#
Bolts	$20.30	per 100#
Carbide	$ 8.75	per 100#
2"pipe	$37.50	per 100ft.
1"pipe	$17.85	per 100ft.
Lumber	$60.00	per 1000ft.
Gas consumption	$ 3.5	gal. per hour
Insurance and Taxes	7%	of the payroll

Drift------5 x 7	advance-75 feet per month
Raise------4 x 7	advance-100 feet per month

6. (b). Rehabilitation of the Lower Adit shall be done by the applicant on day pay basis, with materials, supplies and equipment to be furnished by both the applicant and DMEA, as per contract.

Labor----$13.25 straight
$19.88 overtime

3 men for 7-6day weeks $1808.73

No supervision would be required and fees of the consulting engineer are not to be included into the contract.

(c). Operating materials and supplies:

16# Rails--12,400 lbs.	$1283.40
Splice plates--80 pair	40.00
Spikes--------400lbs.	54.80
Bolts---------150 lbs.	30.45
Lumber--------6000 board feet	360.00
2" pipe-------1150 feet	428.95
1"pipe--------100 feet	17.85
Small hand tools	25.00
Gas & Oil	75.00
	$2315.45

(d). Operating Equipment:

One(1) air locomotive with 2 extra charge couplings	$ 1945.50
2 mine cars	150.00
1-blower with air ducts	450.00
	$2545.50

(f). New Buildings:

14 x16 Compressor & Dry House	$250.00
10 x10 Powderr House	75.00
	$325.00

(g). Miscellaneous:

Assaying	$ 90.00
2-Black lights with spare batteries	200.00
Freight	100.00

(g). (con't)

Insurance & Taxes----------	$126.60
	$516.60

(h). Contingencies:

10% contingencies on items b,c,d,f,g, ------	$751.12
TOTAL	$27,362.40

7. (a) Yes

7. (b) The applicants share of costs will be furnished incash. The cash for the applicants share of the loan will be furnished by sale of corporate stocks.

[illegible], made and entered into this 20th day of June, 1922, by and between [illegible] McDonald, first party, and Fred Cox, second party, [illegible]:

That the first party, for and in consideration of the rents, royalties and agreements herein reserved and by the second party to be paid, kept and performed, does hereby lease and let unto the second party an undivided one-sixth (1/6) interest [illegible] to the following described mining and millsite property situate in [illegible] Mason County, Montana, to-wit:

The Policy Lode Mining Claim, M. E. No. 2865;

The Rustler Lode Mining Claim, M. E. No. 2078;

The Strawberry Lode Mining Claim, M. E. No. 842;

The Strawberry Lode Mining Claim, M. E. No. 1735;

The Strawberry Extension Lode Mining Claim, M. E. No. 727;

The Edison Lode Mining Claim, M. E. No. 3675;

The Keystone Lode Mining Claim, M. E. No. 728;

The Clipper Millsite, M. E. No. 2077; The Rustler Millsite, and

The Charity Millsite, M. E. No. 5865;

together with all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining;

TO HAVE AND TO HOLD unto second party for the term of three years from date hereof, unless sooner terminated in the manner herein after provided;

And in consideration of said demise, the second party agrees that he will immediately enter into and upon said mining and millsite property and will mine and care for said property in good miner like manner so as to produce the greatest amount of valuable mineral possible with due regard to the development and preservation of said property as a valuable mining property, work being not less than thirty man shifts of eight hours per shift performed every month during the term of this lease in actual mining or developing upon said

property, [illegible] will render to the first party [illegible] the use of said property a royalty amounting to one and two-thirds per cent (1 2/3%) of the net amount paid by the smelter, mint or other purchaser for any valuable minerals produced from said property after deduction of actual treatment charges [illegible] by said purchaser and the further deduction of reasonable transportation charges for the transportation of said minerals to said smelter, mint or other purchaser, it being understood and agreed that the second party will instruct each purchaser of any such values to remit said royalty direct to the first party and to furnish to first party with each such remittance, a full, true and correct copy of the smelter, mint or other return showing the details of each such purchase of mineral.

Second party further agrees that he will well and sufficiently timber all openings on said property in accordance with the best mining practices and will keep said property thoroughly drained and free of debris, this provision to apply to all tunnels, drifts, haulage ways and other workings upon said property.

Second party further agrees that he will comply with all laws of the United States of America and of the State of Montana with reference to any operations conducted hereunder, and will indemnify the first party and save her harmless of and from liability of every kind and character for or on account of any activities of the second party hereunder.

Second party further agrees that he will occupy and hold all cross and parallel lodes discovered in working hereunder, for the benefit of owners of said claims hereinabove mentioned and described, said claims so occupied and held to be deemed subject to the terms of this agreement and any interest of first party therein acquired to be conveyed in the event her interest in the above described claims are conveyed to second party by virtue of the terms of this agreement.

And in consideration of the performance [illegible] have

and foregoing lease, and in further consideration of the sum of $1.00 now paid, the first party does hereby grant unto the second party the sole and exclusive option at any time during the life of the above and foregoing lease to purchase the undivided one sixth interest of the first party in and to the above described mining and millsite property for the full sum of $30,000.00, it being expressly understood and agreed that any and all rentals, and/or royalties paid to first party by virtue of the foregoing lease shall be applied upon said purchase price in the event of the exercise by the second party of this option, and it being further expressly provided that upon the exercise of this option and the full payment of said purchase price at any time during the life of this agreement, the first party, her heirs, executors, administrators and assigns, will execute and deliver to the second party, his heirs and assigns, a good and sufficient deed of grant conveying said one-sixth interest in and to said property, free and clear of incumbrances.

It is expressly understood and agreed that in case of default by second party in the performance of any clause, covenant or condition of this agreement on his part to be performed, the first party may at her option give to second party a written notice specifying such default, and unless within thirty days after delivery of such written notice to second party, the second party has fully cured and rectified the default or defaults specified in said notice, then at the expiration of said thirty day period, this lease and option and all rights of second party hereunder shall cease and terminate and be of no further force or effect, and the first party shall be thereupon entitled to the immediate possession of all said property, with or without process of law, and all sums theretofore paid hereunder shall be retained by first party as rent for the use of said property and as liquidated damages for the breach hereof.

Time is of the essence of this agreement and of each and every clause, covenant and condition hereof, and each clause, covenant and condition of this agreement shall be deemed dependent one upon the other and continuing, so that waiver by first party as to any breach of this contract shall not be deemed a waiver of any subsequent breach, either of the same or of a different character.

This agreement shall inure to and be binding upon the heirs, executors, administrators and assigns of the parties hereto as fully to all intents and purposes as though they were specifically named as parties hereto.

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

Bob Morris Neuenschwander
First Party

Fred D Bu
Second Party

THIS AGREEMENT, made and entered into this 13th day of July, 1953, by and between Billing Estates Company, a corporation, and Fred Box, second party, WITNESSETH:

That the first party, for and in consideration of the rents, royalties and agreements herein reserved and by the second party to be paid, kept and performed, does hereby lease and let unto the second party an undivided five-sixths (5/6) interest in and to the following described mining and millsite property situate in Madison County, Montana, to-wit:

The Policy Lode Mining Claim, M. E. No. 2865;

The Rustler Lode Mining Claim, M. E. No. 2072;

The Strawberry Lode West, M. E. No. 842;

The Strawberry Lode East, M. E. No. 1735;

The Strawberry Extension Lode Mining Claim, M. E. No. 727;

The Edison Lode Mining Claim, M. E. No. 3675;

The Keystone Lode Mining Claim, M. E. No. 728;

The Clipper Millsite, M. E. No. 2077; The Rustler Millsite, and The Charity Millsite, M. E. No. 5865;

together with all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining;

TO HAVE AND TO HOLD unto second party for the term of three years from date hereof, unless sooner terminated in the manner herein after provided;

And in consideration of said demise, the second party agrees that he will immediately enter into and upon said mining and millsite property and will mine and care for said property in good miner like manner so as to produce the greatest amount of valuable mineral possible with due regard to the development and preservation of said property as workable mining property, performing not less than sixty man shifts of labor of eight hours per shift during each and every month that he shall hold the

term of this lease in actual mining and development upon said property, and will render to the first party as rental for the use of said property a royalty amounting to eight and one-third per cent (8 1/3%) of the net amount paid by the smelter, mint or other purchaser for any valuable minerals produced from said property after deduction of actual treatment charges imposed by said purchaser and the further deduction of reasonable transportation charges for the transportation of said minerals to said smelter, mint or other purchaser, it being understood and agreed that the second party will instruct each purchaser of any such values to remit said royalty direct to the first party and to furnish to first party with each such remittance, a full, true and correct copy of the smelter, mint or other return showing the details of each such purchase of mineral.

Second party further agrees that he will well and sufficiently timber all openings on said property in accordance with the best mining practices and will keep said property thoroughly drained and free of debris, this provision to apply to all tunnels, drifts, haulage ways and other workings upon said property.

Second party further agrees that he will comply with all laws of the United States of America and of the State of Montana with reference to any operations conducted hereunder, and will indemnify the first party and save it harmless of and from liability of every kind and character for or on account of any activities of the second party hereunder.

Second party further agrees that he will occupy and hold all cross and parallel lodes discovered in working hereunder, for the benefit of owners of said claims hereinabove mentioned and described, said claims so occupied and held to be deemed subject to the terms of this agreement and any interest of first party therein acquired to be conveyed in the event its interest in the above described claims are conveyed to second party by virtue of

the terms of this agreement.

First party by its agents or servants may at all reasonable times enter into and upon the leased premises and make free use of all workings thereon for the purpose of inspection, and may inspect all records of second party affecting the interests of first party hereunder at any reasonable time.

And in consideration of the due performance of the above and foregoing lease, and in further consideration of the sum of $1.00 now paid, the first party does hereby grant unto the second party the sole and exclusive option at any time during the life of the above and foregoing lease to purchase the undivided five sixths interest of the first party in and to the above described mining and millsite property for the full sum of $75,000.00, it being expressly understood and agreed that any and all rentals, and/or royalties paid to first party by virtue of the foregoing lease shall be applied upon said purchase price in the event of the exercise by the second party of this option, and it being further expressly provided that upon the exercise of this option and the full payment of said purchase price at any time during the life of this agreement, the first party, its successors and assigns, will execute and deliver to the second party, his heirs and assigns, a good and sufficient deed of grant conveying said five-sixths interest in and to said property, free and clear of incumbrances.

It is expressly understood and agreed that in case of default by second party in the performance of any clause, covenant or condition of this agreement on his part to be performed, the first party may at its option give to second party a written notice specifying such default, and unless within thirty days after delivery of such written notice to second party, the second party has fully cured and rectified the default or defaults specified in said notice, then at the expiration of said thirty day period, this lease and option and all rights of second party hereunder

shall cease and terminate and be of no further force or effect, and the first party shall be thereupon entitled to the immediate possession of all said property, with or without process of law, and all sums theretofore paid hereunder shall be retained by first party as rent for the use of said property and as liquidated damages for the breach hereof.

Time is of the essence of this agreement and of each and every clause, covenant and condition hereof, and each clause, covenant and condition of this agreement shall be deemed dependent one upon the other and continuing, so that waiver by first party as to any breach of this contract shall not be deemed a waiver of any subsequent breach, either of the same or of a different character.

This agreement shall inure to and be binding upon the heirs, executors, administrators, successors, and assigns of the parties hereto as fully to all intents and purposes as though they were specifically named as parties hereto.

IN WITNESS WHEREOF, the first party has caused its corporate name to be subscribed and its corporate seal to be affixed hereto, and second party has hereunto set his hand, the day and year first above written.

ELLING ESTATES COMPANY

By Harrison C. Elling
Its President

ATTEST:

Virginia Sohs
Its Secretary

First Party

Fred Box
Second Party

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

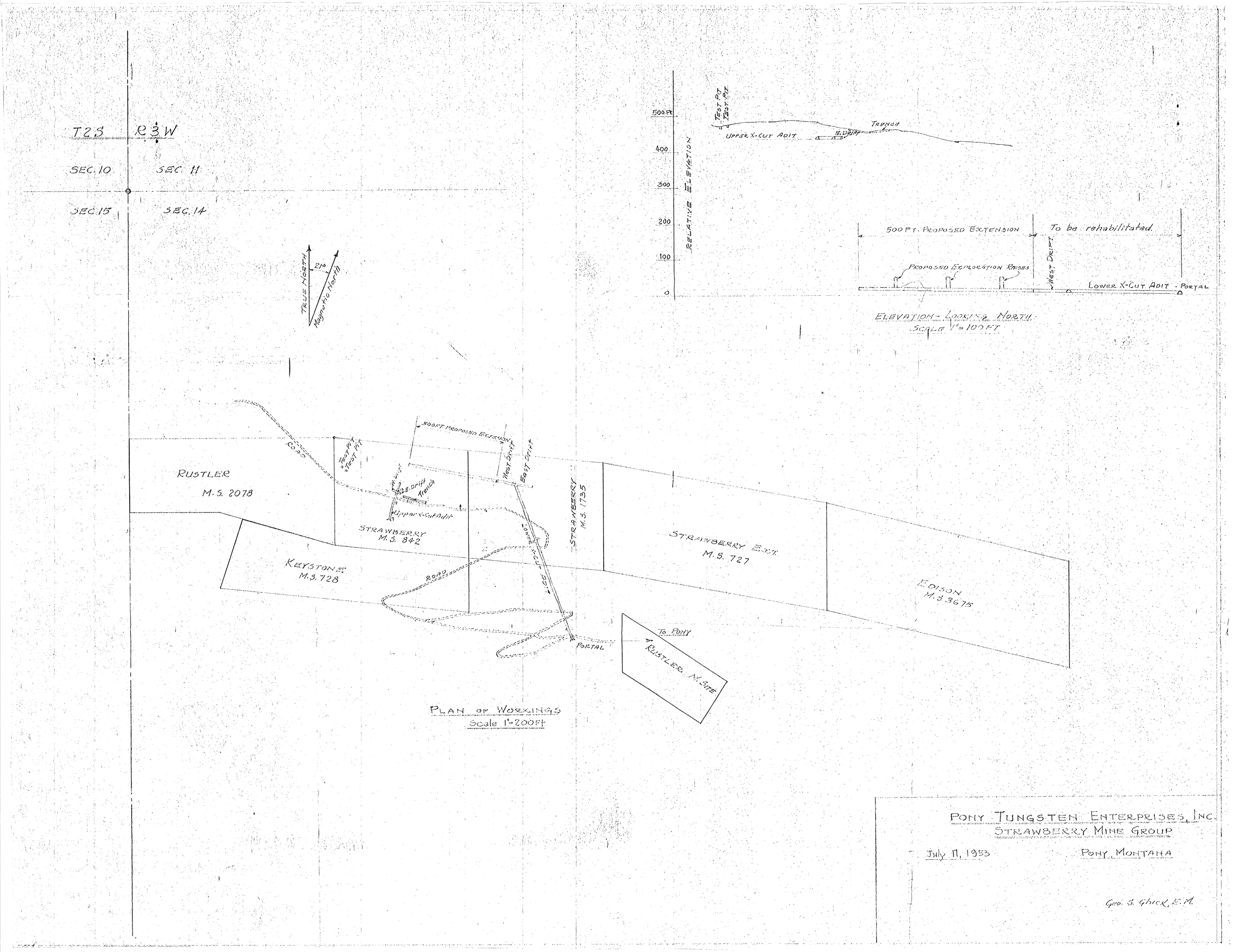
OFFICIAL BUSINESS

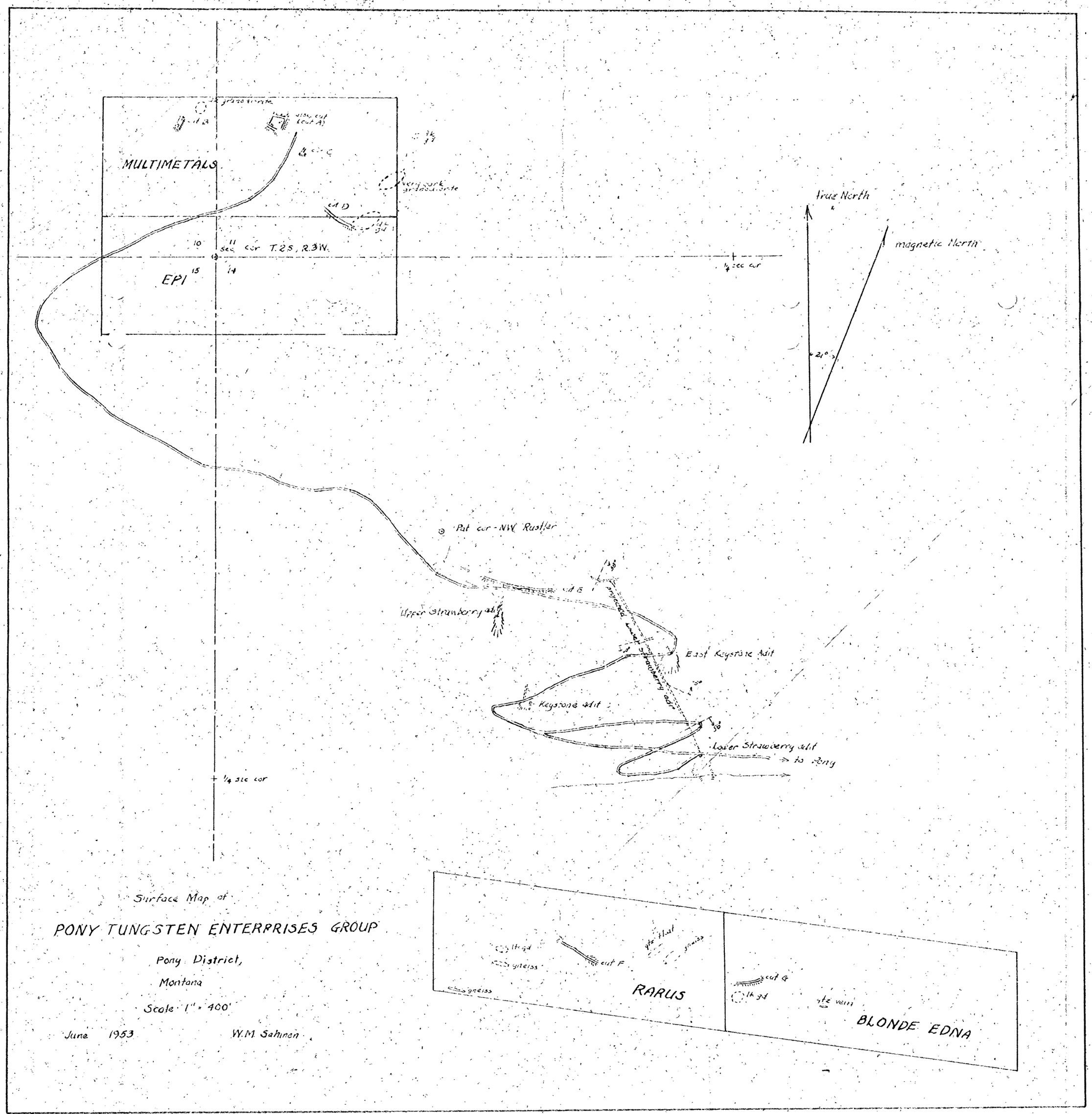
[illegible] Cedar Ave. S.
Minneapolis, Minn.

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300
(PMGC)

Operating Committee
Defense Minerals Exploration Administration
Interior Building
WASHINGTON 25, D. C.

FIRST CLASS MAIL


T2S R3W
SEC. 10
SEC. 11
SEC. 15
SEC. 14
TRUE NORTH
21°
Magnetic North
500 FT. PROPOSED EXTENSION
ROAD
TEST PIT
TEST PIT
WEST DRIFT
EAST DRIFT
E. DRIFT
TRENCH
UPPER X-CUT ADIT
LONG X-CUT ADIT
PORTAL
RUSTLER
M.S. 2078
STRAWBERRY
M.S. 842
KEYSTONE
M.S. 728
STRAWBERRY
M.S. 1735
STRAWBERRY EXT.
M.S. 727
EDISON
M.S. 3675
TO PONY
RUSTLER M. SITE
PLAN OF WORKINGS
Scale 1"=200 FT
RELATIVE ELEVATION
500 FT
400
300
200
100
0
TEST PIT
TEST PIT
TRENCH
UPPER X-CUT ADIT
E. DRIFT
500 FT. PROPOSED EXTENSION
To be rehabilitated.
PROPOSED EXPLORATION RAISES
WEST DRIFT
LOWER X-CUT ADIT · PORTAL
ELEVATION - LOOKING NORTH
SCALE 1"=100 FT
PONY TUNGSTEN ENTERPRISES, INC.
STRAWBERRY MINE GROUP
July 11, 1953
PONY, MONTANA
Geo. S. Glick, E.M.



Surface Map of

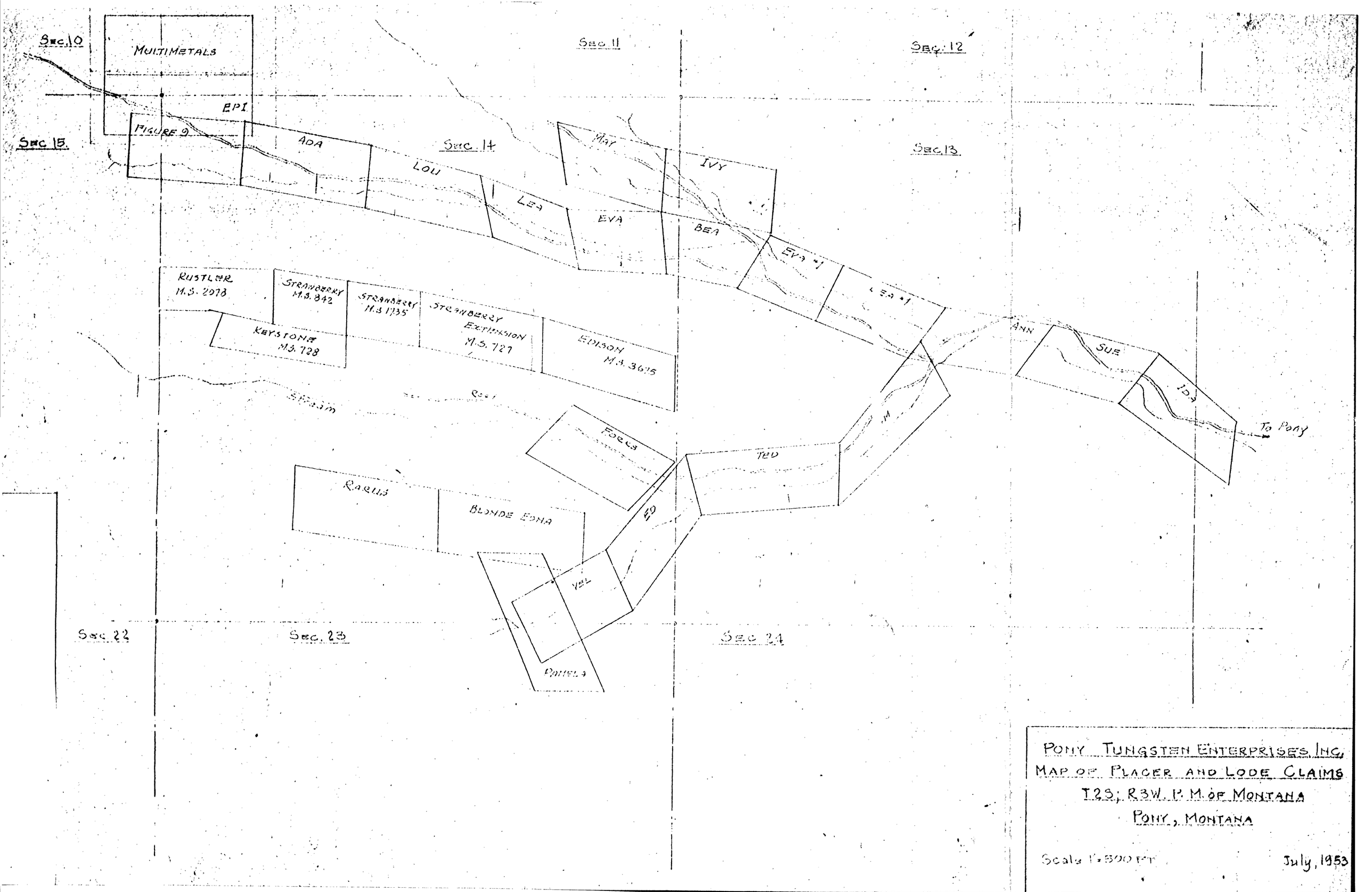
PONY TUNGSTEN ENTERPRISES GROUP

Pony District,

Montana

Scale 1" = 400'

June 1953 W.M. Sahinen



PONY TUNGSTEN ENTERPRISES INC.
MAP OF PLACER AND LODE CLAIMS
T2S; R3W. P. M. OF MONTANA
PONY, MONTANA

Scale 1"=300 ft.

July, 1953

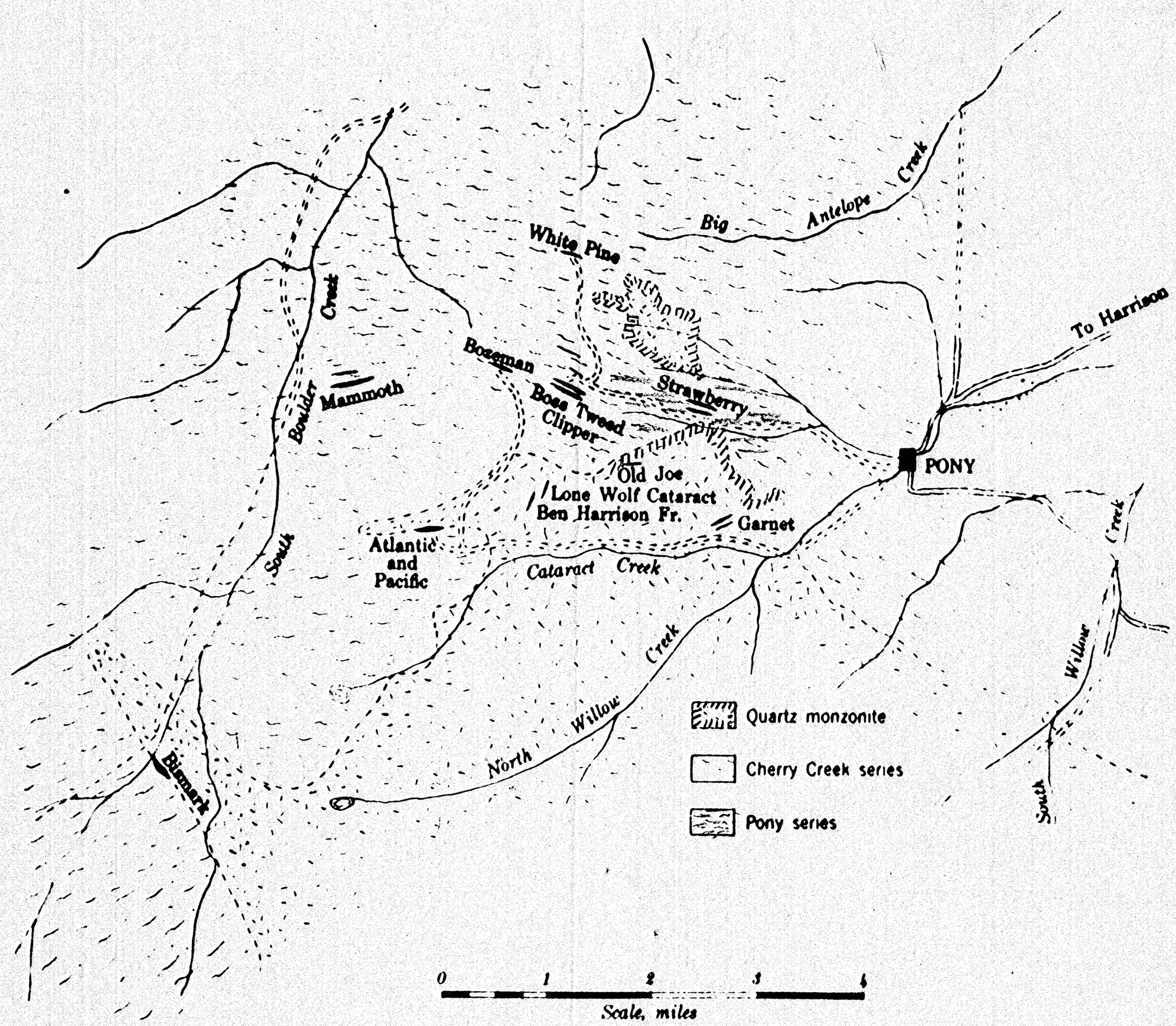
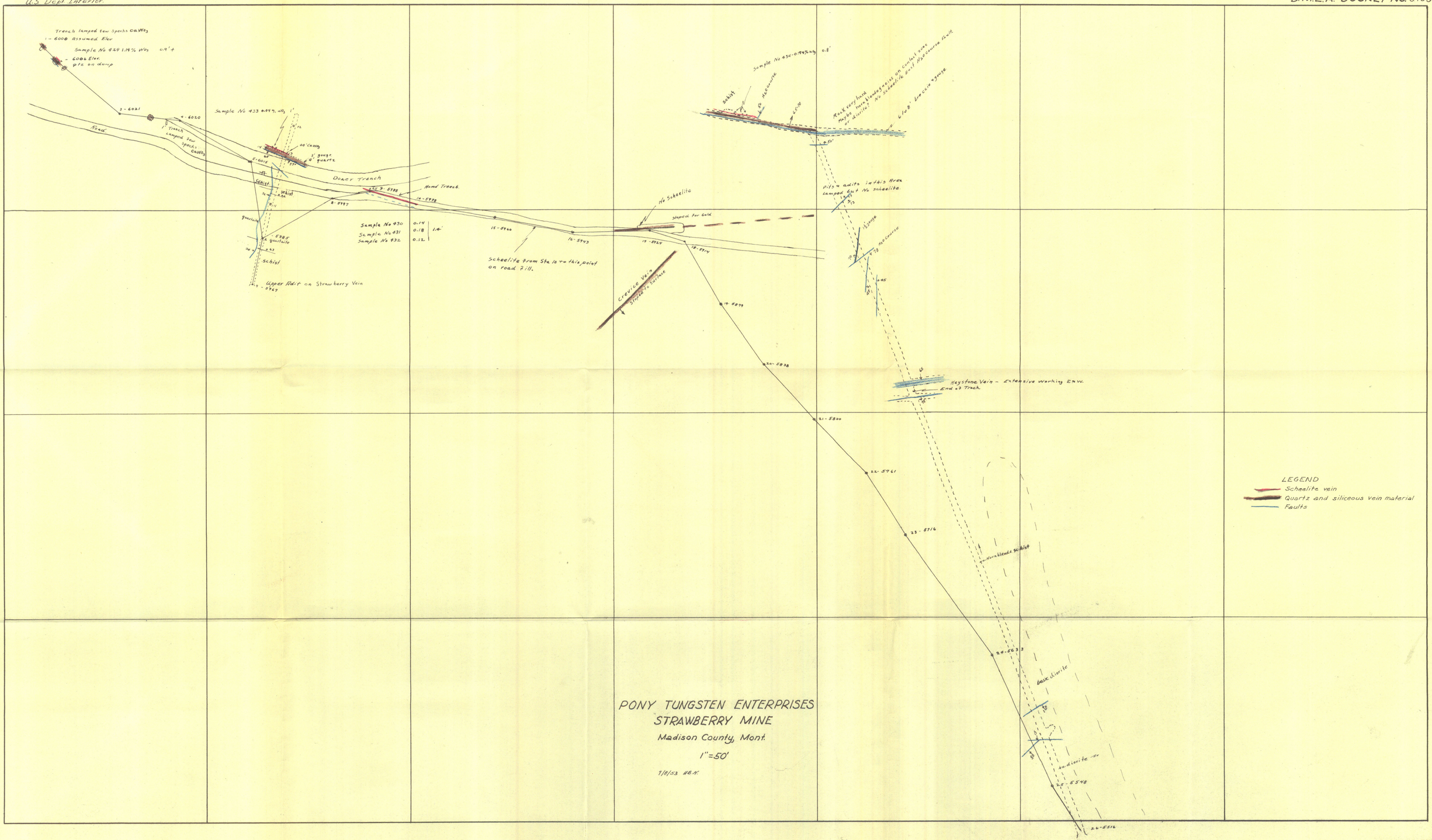
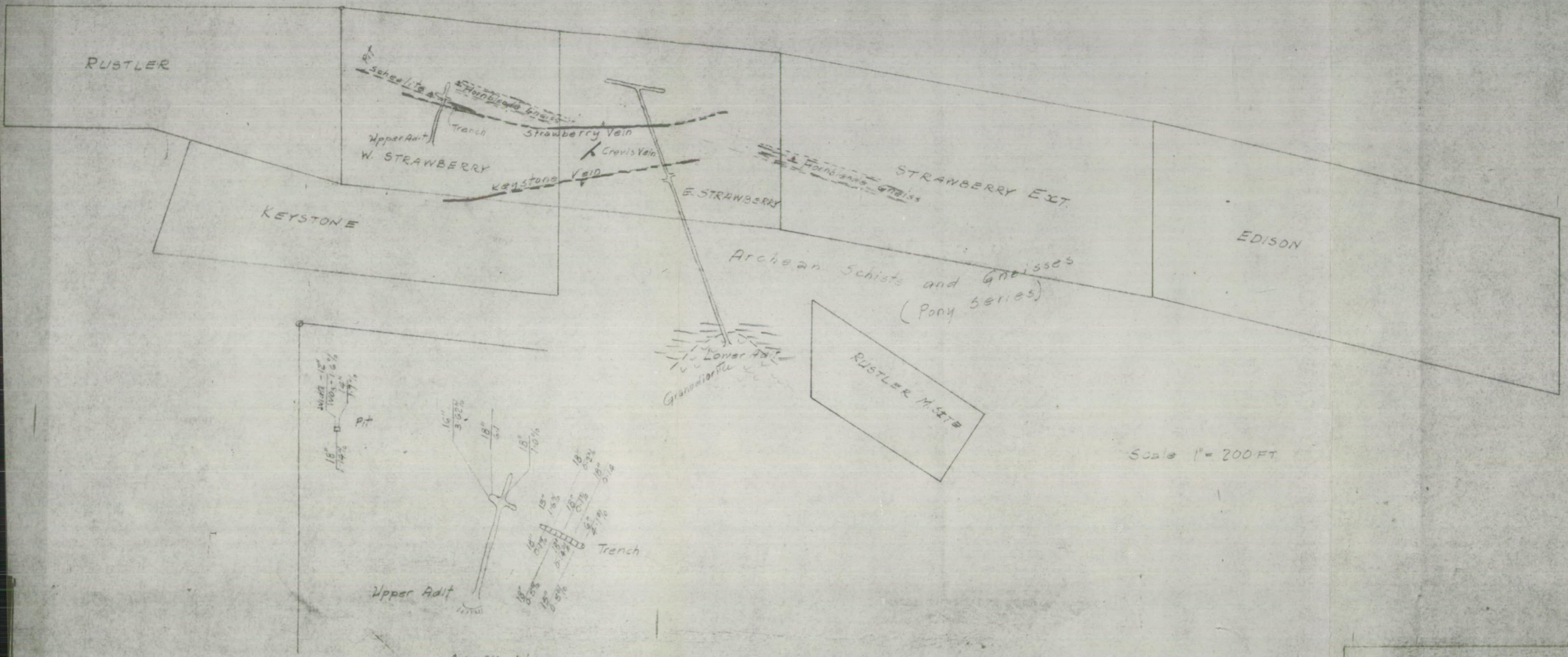


Figure 4.—Geological sketch, Pony district (after Tansley, Schafer, and Hart).


Trench lamped few specks CaWo3
1 - 6008 Assumed Elev
Sample No 429 1.19% WO3 0.9' +
- 6006 Elev.
gtz on dump
3 - 6021
4 - 6020
Road
Trench lamped few specks CaWo3
Sample No 433 0.049% WO3
1'
12
Qtz Cavity
3' gouge
6' quartz
5 - 6015
Schist
Schist
Dower Trench
Hand Trench
25 3 - 5988
16 - 5978
8 - 5997
Quartzite
9.11
5985 quartzite
63
Schist
Upper Adit on Strawberry Vein
- 5967
Sample No 430 0.14
Sample No 431 0.18 1.4'
Sample No 432 0.12
15 - 5960
No Schoelite
Stoped for Gold
14 - 5943
17 - 5924
18 - 5914
Schoelite from Sta 16 to this point on road hill.
Crevice Vein
Stoped to surface
19 - 5899
20 - 5838
Sample No 434 0.049% WO3 0.8'
Schist
Qtz
Hornblende
Rock very fine
Maybe metamorphosed sediments on contact zone
or diorite? No scheelite but hornblende skarn
Diorite
Pits & adits in this area
lamped but No scheelite.
Stope
Hornblende
Keystone Vein - Extensive Working E&W.
End of Track
21 - 5800
22 - 5761
23 - 5716
Hornblende schist
24 - 5633
basic diorite
Hornblende
25 - 5548
26 - 5516
LEGEND
Scheelite vein
Quartz and siliceous vein material
Faults
PONY TUNGSTEN ENTERPRISES
STRAWBERRY MINE
Madison County, Mont.
1" = 50'
7/8/53 H.B.N.

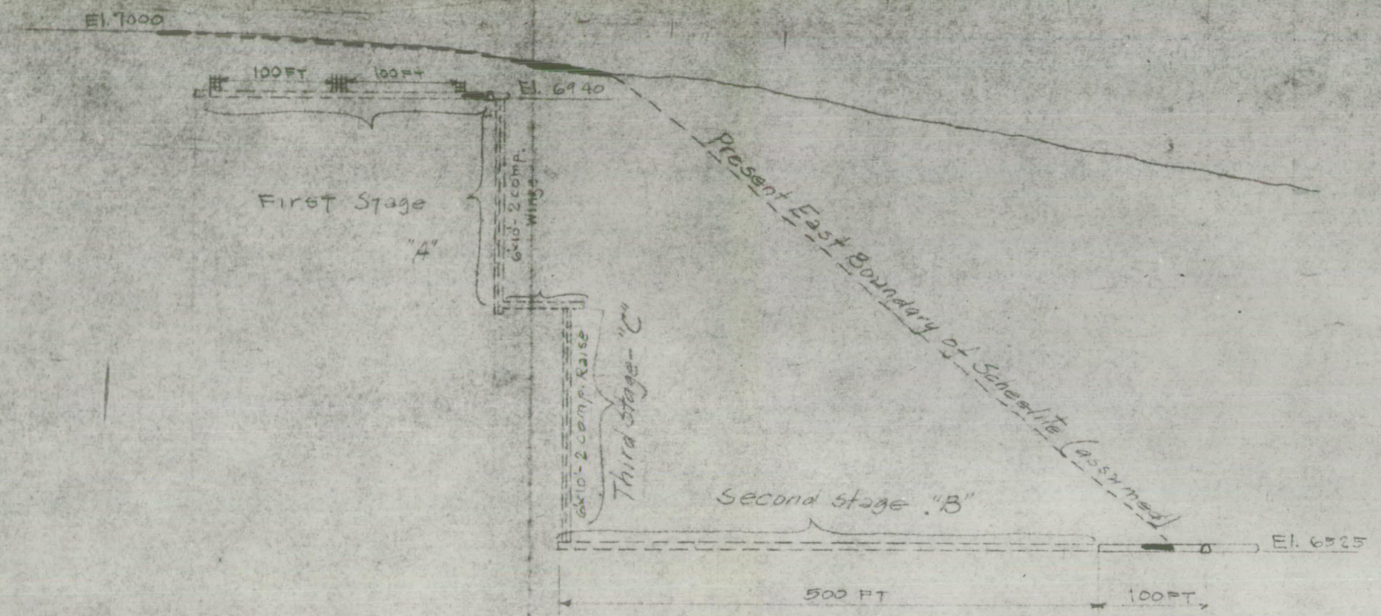


ASSAY MAP
W. STRAWBERRY
Scale 1" = 100 FT.

PONY TUNGSTEN ENTERPRISE, INC.
KEYSTONE-STRAWBERRY GROUP
GEOLOGY AND ASSAY MAP

October 1958 Pony, Montana

George A. Gwin

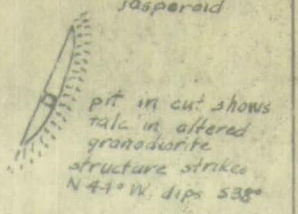


DEVELOPMENT SCHEDULE.

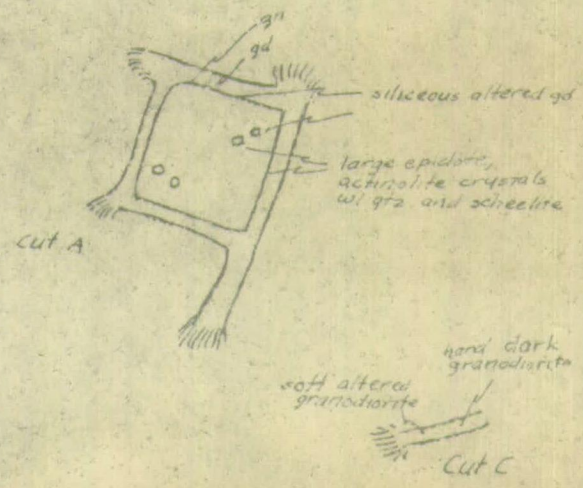
Description	Time Req'd	Men Req'd	Cost		Ore from development Tonnage	Ore from development Value	Remarks
A. Upper Adit: Drifting westward 250 ft, preparing for stoping (first cut, timbering, installing chutes).	3½ mos	2	$9000		300	$15000	Drifting @ $31/ft
Sinking winze -200ft and drifting eastward 75 ft.		5	10800		260	9000	@ $54/ft
		3	2700				@ $36/ft
				$22,500			
B. Lower Adit: Drifting westward 500 ft	5 months	2		$15,500	380	8000	@ $31/ft
C. Lower Adit: Raise to connect Lower and Intermediate Levels	3 mos	3	$8300		270	7000	@ $33/ft

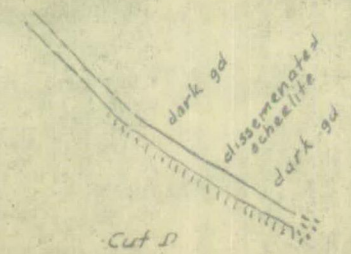
Result — Ore developed :

Above Upper Adit ... 2200 tons
Between Adits 20,000 tons.

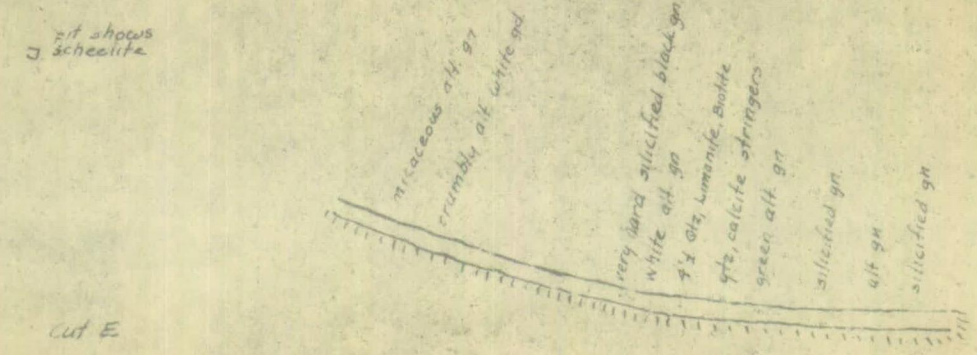
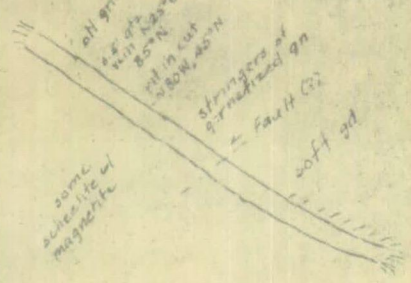
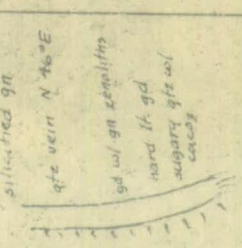


Pit in cut B





PLAN MAPS OF
BULLDOZER CUTS

Scale: 1 inch = 100 feet

true North