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Document Title: FINAL Progress Report AT Pony Creek Lease, Shoshone County, Idaho Docket No. DMEA-2692 (tungsten) Contract No Idm-E471

Document Author: ALVIN H. Lensa

Original Document Attached: Y (N)

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Type of Privilege:

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Reviewer: C. Paluti

STATUTORY PRIVILEGE OF CONFIDENTIAL BUSINESS & PROPRIETARY INFO

MEMORANDUM

December 31, 1954

To: Albert E. Weissenborn, Regional Geologist
U. S. Geological Survey
South 157 Howard Street
Spokane 8, Washington

From: Alvin H. Lense, Geologist

Subject: Final Progress Report at Pony Creek Lease, Shoshone County, Idaho, Docket No. DMEA-2692 (tungsten); Contract No. Idm-E471

The work authorized for the Pony Creek Lease consisted of 100 feet of shaft and 100 feet of crosscut with a contract to start July 15, 1954. However, work commencing August 1, 1954, and ending November 30, 1954, completed only 68 feet of shaft at a cost of $5,440.00 (@ $80/foot) and 25 feet of crosscut at a cost of $1000.00 (@ $40/foot). The total cost of the project, including $8.00 for assays and $325.00 for geological consultant fees, amounted to $6,773.00.

The objective of exploration was to determine the possible downward increase of scheelite in various quartz veinlets exposed in the Evergreen tunnel. These quartz veinlets occur in close conjunction with a near-vertical shear zone down which the 80-degree inclined shaft was sunk. Despite a minor increase in quartz, amounts of scheelite decreased in depth with apparently no established pattern. Therefore, ore reserve estimates remain as they were; at zero.

Alvin H. Lense

AHL/rc

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File Bates Number: USGSPO 000 1011

File Owner: N. EADES

File Location: DOI - SOL, WASH DC

Document Date: 12/6/89

Document Title: USGS & USBM Property files Spokane Section Research files

Document Author: MIKE POWERS

Original Document Attached: Y (N)

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Type of Privilege:

ACC WP (CBI) DP (PI) Other

Reviewer: C PALUTI

STATUTORY PRIVILEGE OF CONFIDENTIAL BUSINESS & PROPRIETARY INFO

12/6/89

Mike Powers
Sec/Treas
Golden Triangle Corporation
HC01 Box 189
Kingston, Id. 83839

(208) 682 4166

To Whom It May Concern: USGS & USBM Property Files
Spokane Section Research Files

Would you please release to Martin G. Clemets for me any private property files on the Pony Gulch Area, Placer Gulch, or Trail Creek in the Beaver Mining District of Shoshone County, Idaho.

More specifically the area of: Sec. 1, 2, 11, 12, 13, 14, 23, & 24 in T49N, R4E, B.M.
And: Sec. 6, 7, 18, & 19 in T49N, R5E, B.M.

This is an area which includes 150 unpatented lode mining claims owned by our corporation.

In Pony Gulch, operators of the past might have been- Keenan Mining, Chester Keenan, Frank Mc Kinley, Albert Nash, Robert Skeeman, or another unknown.

On Trail Creek, operators might have been Hypotheek Mining & Milling Company, Gold Coin Mining Company, Jenkins Lease, or a possible unknown operator.

Thank You Very Much,

Mike Powers

SCAN COVER SHEET ONLY

U.S. v. ASARCO

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Repository Name USGS

Repository Location SPOKANE, WASHINGTON

File Bates Number: USGSPO 0001011

File Owner: N. EADES

File Location: DOI - SOL, WASH DC

Document Date: 2/55

Document Title: FINAL REPORT CONTRACT Idm-E471 NORTH IDAHO MINES INC.

Document Author: E.G. ERICKSON / V.C. FRYKLUND

Original Document Attached: Y (N)

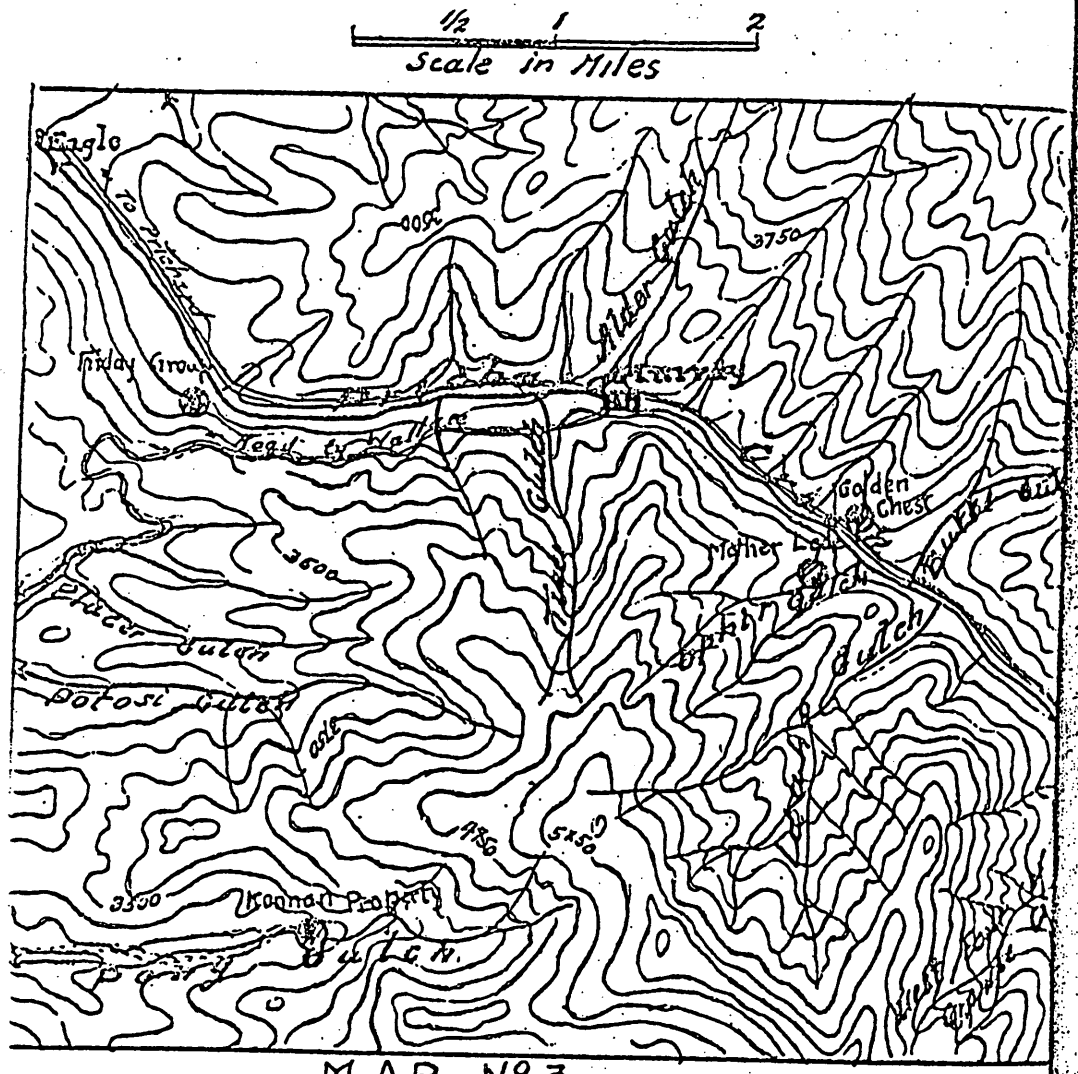
If not attached, Original Document Current Location
(must be segregated from other documents)

Type of Privilege:

ACC WP (CBI) DP (PI) Other

Reviewer: C. PALUT.

STATUTORY PRIVILEGE OF
CONFIDENTIAL BUSINESS &
PROPRIETARY INFO



MAP Nº 3
Showing Tungsten properties near Murray, Idaho.
Scale 1 Inch = 1 Mile. Contour Interval 250 Ft.
Taken from U.S. Geol. Survey. P.P. Nº 62.

continuous in depth nor why other ore-shoots should not b
ered in following the strike, particularly towards the west.
perty is worthy of far more attention than it has had in the p

(b) *Shoshone County.*
Tungsten Deposits Near Murray.

The tungsten-bearing belt of Shoshone County lies ad
the old gold-camp of Murray. The placer deposits of
Creek, which eventually led to the discovery of the rich le
mines of the Coeur d'Alene region in the early eighties, wer
less derived from the gold-bearing quartz veins of this same b

The occurrence of tungsten in the form of scheelite in th
Chest and other veins which were mined for their gold cont
been known for many years. In the Golden Chest, masses o
lite weighing several hundred pounds are reported to have bee
The scheelite was, however, more of a liability at that ti
an asset as there was practically no market for it at any p
undoubtedly many tons of it were wasted.

In the spring of 1916 the price of tungsten rose to an
dented figure, due, undoubtedly, to heavy buying by the Germ
ernment. This resulted in the re-opening of both the Golde
and the Golden Winnie properties and to the mining and s
of several tons of scheelite, obtained almost entirely by hand-

This activity, however, was short lived, for when th
dropped the properties shut down, and although an attempt w
to mill the lower grade material at the Golden Chest, this app
was not commercially feasible as the mill only ran a short whil

The area in which tungsten occurs is approximately fiv
square, with Eagle or Prichard Creek in the northwest corner
square, the southern boundary lying about half a mile south o
Gulch on Beaver Creek. See map No. 3. Almost the whole
underlain by the Prichard slate, the geology being well descri
F. L. Ransome.[1] Although this area embraces the tungsten d
known at the present time, it does not follow that no tungsten
found outside of it.

The Golden Chest

The Golden Chest mine contains several bed or blanket
veins in the Prichard slate and as it has been described in deta
where[2] this description will not be repeated. The mine is si
about one and one-half miles east of the town of Murray in
T. 49 N., R. 5 E., Boise Meridian, and is easily reached from
lace by an excellent automobile road. The nearest railroad p
the present time is Delta on the Beaver Creek branch of the O.-
& N., about eight miles distant. Formerly the railroad, which

within a few hundred feet of the mine, along Prichard Creek was in operation, but due to the heavy floods in the winter of 1917-1918, this railroad was so badly washed out that it had not been repaired at the time the property was visited.

The mine is opened by several adit-tunnels and contains several thousand feet of workings, with many large stopes, most of which are still open and in fairly good condition.

The scheelite occurs in a very irregular manner in the largest of the blanket veins. In 1916, when the price of tungsten was much higher than it is now, the old stopes were worked for scheelite wherever they showd any indication of its presence. The search was so thorough that there is not much to be seen at the present time. A careful examination made in company with a man well acquainted with the property, showed scheelite in only two places in the old stopes, and in very small amounts.

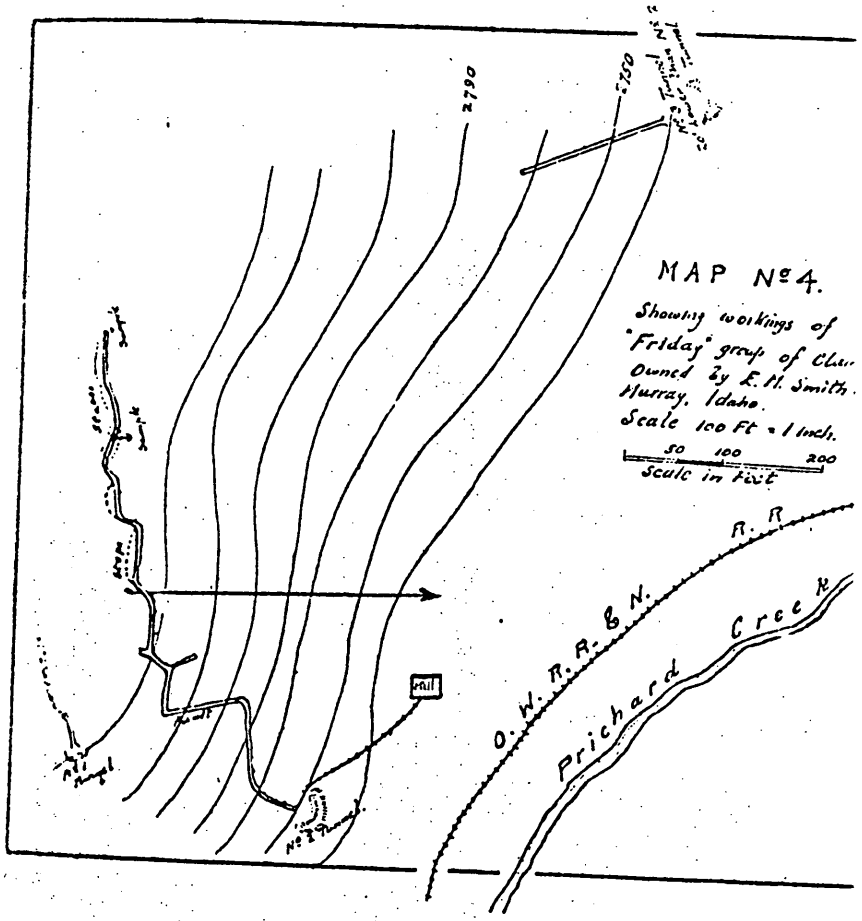
The future of the property as a producer of tungsten is somewhat dubious as the cost of finding a new pocket of scheelite would probably exceed the amount to be obtained from mining it. The best chance of producing tungsten from this property would seem to be by the operation of small leases in those stopes which show any indication of tungsten, but as previously stated the outlook is not particularly encouraging, unless the vein carries sufficient gold to pay at least a portion of the expenses when working in ground barren of tungsten.

The Friday Group Known Formerly as The Golden Winnie.

This property is situated in Sec. 2, T. 21 N., R. 4 E., on the south side of Prichard Creek at the point where the creek bends to the northeast and at an elevation of about 2500 ft. It is between one and one-half and two miles from Murray on an excellent road. The Murray branch of the O.-W. R. & N. passes through the claims or very close to them, but this branch, as previously noted, is not operating at present so the nearest railroad point is now Delta, on Beaver Creek, about eight miles distant.

The scheelite occurs in a quartz vein, which lies between the bedding planes of the Prichard slate and which is of the same general type as the other gold-bearing quartz veins of the Murray district. The footwall is somewhat more quartzose than the hanging and may perhaps be Burke quartzite. The vein has been opened by a tunnel a few feet above the level of Prichard Creek. This tunnel follows the vein as shown on Map No. 4.

Several stopes have been started from this tunnel, both overhand and underhand, the former extend 30 to 40 ft. in height and the latter not over 12 or 15 ft. in depth. The vein has a general strike of almost due east and west, with an average dip of about 65° north. It usually consists of two quartz seams separated by about a foot of country rock, and has an [illegible]



The vein is badly faulted in the vicinity of the creek, b heaved in every case further to the south in going west. At l five faults have been exposed in the tunnel in a distance of al 600 ft. along the strike of the vein. Apparently, there are two of faults; one set running northwest and the other northeast. greatest distance the vein has been heaved is approximately 8(this being the movement of the fault nearest the creek. As tunnel advances the heave of the faults seems to decrease, the movement near the present face, being practically nothing more t a flexure.

The quartz of the vein contains pyrite and scheelite and a s lat insignificant amount of other sulphides. It also carries s gold, evidently associated with the pyrite. The scheelite seem be fairly evenly distributed throughout the vein, and its presenc small amounts can generally be detected by panning. In place occurs in more concentrated form in masses sufficiently large tc hand-sorted. This is true particularly in the western part of tunnel.

Very much the same condition prevails in regard to the wc ings as at the Golden Chest. That is to say, all the most ea available bunches of scheelite were mined in 1916, during the h prices, and good exposures of scheelite ore are difficult to fi From 10 to 15 tons of scheelite were shipped during this time this amount is reported by the owner, Mr. E. M. Smith, of Mur as having been obtained from about 500 tons of ore. If the sma figure is taken this would make the scheelite contents of the v about 2 per cent, which is probably about right, as only the best r terial, where visible scheelite could be found, was mined.

Two samples were taken from the vein, both of which show a small amount of scheelite. These could hardly be considered r resentative of the whole vein, but simply of those portions of vein where scheelite could be seen. One was taken in the face of tunnel from the hanging wall seam, which was 12 in. wide, a this gave a return of 1.06 per cent WO_3. Another sample was tal from a stope about 150 ft. east of the present face. This sam was 2½ ft. wide and gave a return of 1.46 per cent WO_3.

The underhand stopes in the floor were reported to contain best ore but these could not be sampled as they were filled w water.

It is difficult to estimate either the grade of the ore or t tonnage that could be mined. There are evidently considerable p tions of the vein that will run over 1 per cent of WO_3 and fr that up to 2 and 3 per cent, or possibly better, and these undoubte

The tunnel which follows the vein is on about as low a level as can be obtained. There is a cross-cut tunnel No. 3 (see map No. 4) which has been driven 160 ft. This will have to be advanced nearly 400 ft. further, and according to a rough survey, it is not more than 20 ft. lower than the adit-tunnel No. 2, which follows the vein. Whether the expense of driving this tunnel to the vein is justified is questionable as the depth it gains is so insignificant. The amount of scheelite ore occuring between the present tunnel and the surface is probably not great and the future of the property depends upon the ore occurring below the present workings. This can only be developed by sinking a winze or shaft, and it would be far cheaper to straighten out the adit-tunnel and sink from there than to run the new cross-cut and then sink. A shaft would undoubtedly be wet due to the faulted condition of the ground and the vicinity of Prichard Creek, but it is the only method of developing the property below the present level. There are strong possibilities of finding more scheelite by extending the present tunnel along the vein as the face contains ore at the present time.

There is a small concentrating mill on the property equipped to handle 20 to 30 tons of ore daily, which could be put into running shape at a comparatively small expense.

Summary

There is no reason, except lack of proper financing, why this property should be idle, as with proper development and milling facilities it could undoubtedly be made a steady producer of tungsten on a small scale.

Mother Lode

This property, which is owned by Mike Melly and John F. Murphy, of Murray, Idaho, is situated on the south side of Ophir Gulch about 2000 ft. from its mouth on Prichard Creek, and just below the forks of the gulch. It comprises the Mother Lode group of claims, in which are included several blanket quartz veins that outcrop on the top of the ridge west of Ophir Gulch.

These quartz veins were mined for gold several years ago and have been described by Ransome.[1]

Ophir Gulch is a small ravine which debouches into Prichard Creek almost opposite the Golden Chest mine, and the quartz veins mentioned above evidently belong to the same system of mineralization as those in the Golden Chest. They may be a continuation of the same veins or beds. No tungsten was observed in the quartz veins, and so far as the writer is aware none has been reported from this property. A very good showing of scheelite ore, however, occurs about half way between the gulch and the ridge. A diabase dike which contains narrow seams of quartz and bunches of scheelite has

1. Op. cit., p. 146.

been exposed by open cuts for a distance of nearly a hundred The open-cuts have stripped the dike in a northeast and soutl direction, but its strike and dip could not be determined fron present amount of development. The surrounding country ro Prichard slate. Scheelite occurs distributed more or less all thr the dike, but appears to be concentrated in a shoot or chimne the north end of the open-cut. A sample taken across 15 ft. o dike gave a return of 2.84 per cent WO_3. Many specimens o: dump show pieces of scheelite 2 or 3 in. across, but none of were encountered in sampling.

The dike is a rather fine-grained greenish rock, consisting cipally of hornblende and pyroxene and containing considerable pyrite and probably some pyrrhotite. This dike evidently doe: extend very far to the north, as the slate outcrops on the ridge no diabase can be seen in that direction beyond the open-cut. the south the mountain side does not show many rock exposure: the slide-rock is fairly deep, so nothing definite can be said as t extension in that direction. The general appearance leads to th lief, or supposition, that this exposure constitutes the apex rather extensive stock of this intrusive, rather than a dike. word dike being taken to mean a more tabular form of intrusiv one in which length greatly exceeds the width. The quartz scheelite are evidently replacements of the dike, derived undoub: from the same mineralizing solutions as deposited scheelite in Golden Chest and Golden Winnie veins.

The small amount of development gives but little clue to mode of occurrence and origin of the tungsten mineralization. highly probable that it will prove to be a contact metamorphic posit, in which the mineralizing solutions attacked the cooling trusive near its contact with the slate, rather than the slate it but this, of course, is merely a supposition. Whatever its origin showing is remarkably good, considering the small amount of w that has been done. An open-cut driven straight into the hill f the lowest exposure of the dike would give some clue as to its tent in that direction and should also open up some good scheelite A considerable amount of scheelite can be obtained by hand-sor and the waste from the hand-sorted material would undoubt pay to mill. There is plenty of water in Prichard Creek less half a mile from the outcrop and possibly enough water in O Gulch to run a small mill for several months in the year.

This seems to be an exceptionally good surface showing one that certainly should not be idle when tungsten is in dem:

Kennan Property on Pony Gulch

This property is situated on Pony Gulch, a tributary of Be:

Creek branch of the O.-W. R. & N. railroad runs along the creek at the mouth of Pony Gulch, so the property is well situated as regards transportation. It is reached by a rather poor wagon road, but one which can be very easily repaired, and which has no bad grades. The elevation at the camp is about 2800 ft. This property, like the Mother Lode, contains blanket-veins of gold-bearing quartz, which were mined quite extensively in the early days. The country rock is Prichard slate, containing some quartzite beds.

A tungsten-bearing vein was reported to have been found in the bed of Pony Gulch many years ago. The prospector who found it, however, did nothing with it and it became covered with gravel wash and was practically forgotten. In the spring of 1918, A. B. Ward was operating the property for Chester T. Kennan of Spokane, and having heard of this deposit of tungsten, made an attempt to rediscover it by panning the gravel-wash in the creek. He discovered it without very much difficulty and uncovered the vein or lode where it crosses the creek.

The deposit, which is exposed in but one place, consists of a mineralized zone or lode in the Prichard slate with an approximate width of 60 ft. This zone follows the strike of the bedding planes of the slate which is somewhat quartzose at this point. It consists principally of seams of quartz in the shattered quartzitic slate. For about 15 ft. in width this shattered zone contains scheelite. Many individual pieces of scheelite exposed in the creek bed are over 3 in. across and though on the request of the operator no sample was taken, it would be safe to say that the 15 ft. of the lode containing scheelite would assay from 3 to 5 per cent in tungsten oxide.

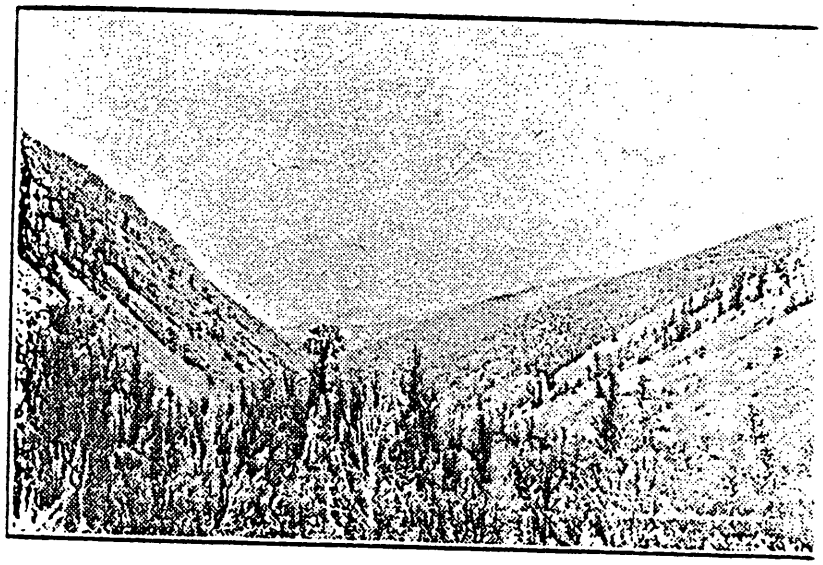
The strike of the lode was roughly determined at S. 40° E., and the dip is probably to the west, but this is uncertain as the length of the exposure was less than 50 ft. at the time it was visited.

From information furnished recently by Mr. Chester T. Kennan, the writer understands that the lode has been uncovered on the hillside 100 ft. to the south and that active development of the property is in progress.

This also is a remarkably good showing and one from which a considerable amount of tungsten could be mined very cheaply if the deposit holds its width and values for any distance. Interesting developments are to be expected in the next year.

Summary of the Murray Tungsten Belt

Until the last year this district had never been systematically prospected for tungsten. Of the four tungsten deposits visited the best and most important showings have only recently been discovered, and no work has been done upon them beyond removing the surface soil.



View up Patterson Creek, Lemhi County.

In both the Mother Lode and Kennan claims the tungsten curs in separate and distinct deposits from the gold-bearing qu veins. The tungsten-bearing lodes, however, in both cases oc within a few hundred feet of these gold quartz veins and so fa can be learned no tungsten has been found in the latter. This should encourage prospecting in other places in the district wl the gold-bearing quartz veins occur. The tungsten-bearing lc do not make conspicuous outcrops as do the quartz veins. Onc those recently discovered occurs in a diabase dike and the ot in a shattered zone of quartzitic slate, and both contain but l quartz and that only in narrow stringers. In a heavily forested soil-covered area, such as the Coeur d'Alene, the discovery of s deposit by chance or accident is unlikely, and systematic panning the gravel in the gulches and of the soil on the hillsides is the c sure way of locating deposits of this kind. If such prospecting carefully done, particularly in the neighborhood of the qu blanket-veins it is highly probable that other deposits of tungs will be found.

Although at present there is virtually no output of tungs from this district, the writer firmly believes that the district ha future, that with systematic prospecting other deposits will be covered, and that if prospecting is supplemented by intelligent de opment and carefully designed mills, the district should add m rially to the tungsten production of the country within the next f or six years.

(c) *Lemhi County.*

Ima Mine, Patterson Creek.

This mine is situated about a mile and a half east of Patters a small settlement on Patterson Creek, one of the tributaries of Pahsimeroi River and about 60 miles from Mackay, the near railroad point. There are eighteen patented claims which are in S 13, 14, 23, and 24, T. 14 N., R. 23 E. The elevation of Patters Creek at the mill is about 6300 ft.

This mine was visited in 1910 by Mr. J. B. Umpleby, of t U. S. Geological Survey[1]

History

The Ima mine was discovered twenty-five or thirty years a and was worked by the Ima Mining Company, of Salt Lake, chie for silver, which is evidently contained in the mineral tetrahedri This company ceased operating about 1902 and since that time t mine has been worked in a desultory manner by leasers for tu sten, which, according to Umpleby, was first recognized here in 19(

Five years ago the mine was leased to J. Nolan, of Salt Lal who sold his interest to Callahan & Duffield. These men work

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION I
Northwest District

FINAL REPORT

Contract Idm-E471

by

Eric G. Erickson
Mining Engineer
U. S. Bureau of Mines

Verne C. Fryklund, Jr.
Geologist
U. S. Geological Survey

NORTH IDAHO MINES, INC.
(ASSIGNEE OF ROBERT D. SKEMAN & HOWARD S. CARTER)
P. O. Box 298
Kellogg, Idaho

Docket No.:	DMEA-2692
Commodity:	Tungsten
Contract date:	January 2, 1953
Completion date:	November 30, 1954

PONY GULCH TUNGSTEN MINE
Beaver Mining District
Shoshone County, Idaho

Spokane, Washington

February 1955

FINAL REPORT

NORTH IDAHO MINES, INC.
(ASSIGNEE OF ROBERT D. SKEMAN & HOWARD S. CARTER)
Pony Gulch Tungsten Mine
Beaver Mining District
Shoshone County, Idaho

Contract Idm-E471

* * * *

INTRODUCTION

This report describes a project conducted by North Idaho Mines, Inc., assignee of Robert D. Skeman and Howard S. Carter of Kellogg, Idaho, to explore for tungsten ores at the Pony Gulch Tungsten mine, Beaver mining district, Shoshone County, Idaho. The work was performed under Defense Minerals Exploration Administration Project Contract Idm-E471.

Summary

Purpose of the project was to explore the downward continuation of a scheelite-bearing shear zone exposed in the Pony Gulch Tungsten mine adit.

The shear zone was to be explored in two stages. Stage I was to sink a 100-foot winze in the shear zone; if scheelite showings in the winze warranted, 100 feet of drift and/or crosscut was to be driven to explore the shear zone. The shaft was sunk 68 feet without finding significant amounts of scheelite. The Operator cut the full width of the shear zone at the 50-foot point with a 25-foot crosscut. No significant amount of scheelite was discovered.

Recommendations

No Certification of Discovery or Development should be made. Further exploration for scheelite at this property is not justified in view of the discouraging results of the exploration.

LOCATION AND ACCESSIBILITY

The Pony Gulch mine is 2 miles up Pony Gulch from its junction with Beaver Creek in the Beaver mining district, Shoshone County, Idaho, near the line between the SW¼ of sec. 13 and the NW¼ of

sec. 24, T. 49 N., R. 4 E., E.B.M. It is reached from Wallace, Idaho, via the road to Delta and Prichard; Pony Gulch is about 11 miles north of Wallace and about 2 miles south of Delta.

The winter snowfalls are heavy and the cost of snow removal to allow travel on the 2 miles of Pony Gulch road is hardly justified for a small project.

PROPERTY

The Operator's property rights as set forth in the contract included the following nine unpatented lode mining claims and four unpatented placer mining claims in secs. 13, 14, 18, and 24, T. 49 N., R. 4 E., E.B.M., recorded in the Recorder's Office, Shoshone County Courthouse, Wallace, Idaho.

Lode Claims	Book	Page
Gold Nugget	15	196
Evergreen	15	193
Signal Shot	17	56
War Eagle	15	195
Blue Grouse	15	194
Never Fail	15	194
Storm King	16	627
Valintine	14	540
September	16	485
Placer Claims		
Tin Cup	M	418
Rambler	M	366
Cinch	M	369
Tungsten	M	406

The claims are leased from a Mr. George A. Preston. His address is not given on the Owner's Consent to Lien form.

Prior to the work performed under the exploration project contract an adit drift had been driven about 375 feet southeast and several short crosscuts, 6 and 8 feet long, had been advanced to explore both walls of the shear. A 68-foot winze and a 25-foot southwest crosscut off the winze were excavated under the DMEA contract. A 5-ton shipment of scheelite ore from the drifting performed prior to the DMEA contract was reported, but details regarding grade, etc., were not submitted.

All openings are in argillaceous quartzites of the Prichard formation. The only supported openings are the winze station and the winze. All openings are open except the winze which is filled with water. The winze can be dewatered with a conventional sump pump in about 4 hours. A mechanical blower is used for ventilation.

On the property there are a small storage and work shop building and a frame cabin that will accommodate about 4 men.

Power equipment is portable and is removed during winter months. The Operator has set up a jig table in an attempt to work the stream-bed gravels.

GEOLOGY

S. W. Hobbs, geologist, Geological Survey, and H. T. Reno, mining engineer, Bureau of Mines, in a memorandum dated October 29, 1952, describe the geology of this property as follows:

> "The Pony Gulch mine is a few miles south of the Murray district, which has been described in detail by Shenon (Geology and Ore Deposits near Murray, Idaho; Idaho Bureau of Mines and Geology, Pamphlet No. 47, 1938) and the rock types and veins are similar to those in the Murray district.
>
> "The country rock in the vicinity of the mine is Prichard slate. Poor surface exposures make the determination of the general structure difficult, and in the mine the shearing along the vein zone has nearly obliterated the attitude of the beds.
>
> "The tungsten mineral, scheelite, occurs in narrow quartz veins distributed in a nearly vertical shear zone in the Prichard slate. The shear zone strikes in a general northwest-southeast direction, crossing Pony Gulch at an angle of about 60 degrees, and is said to extend for several thousand feet. The zone dips very steeply to the northeast. Surface exposures on the vein are limited to the creek bed and several outcrops on the north slope. A little scheelite is reported from the creek bed where the shear zone crosses it. Narrow quartz stringers carrying scattered scheelite crystals occur in slates exposed in the creek bed 100 or more feet west of the shear zone. None of these occurrences approach commercial grade material. The 375 foot adit has been driven at creek level into the south wall of the gulch along the hanging wall of the vein zone. From 200 to 260 feet from the portal, the drift is widened to approximately 15 feet by slabbing of the west or footwall of the shear zone. This cut opens a vein or vein zone composed of 5 to 6 feet of sheared slate containing a number of narrow quartz veins. These veins are quite irregular in distribution and vary in width from a fraction of an inch to several inches, but they are prominent in the opening and are exposed for a strike length of about 60 feet. Small amounts of scheelite occur in short crosscuts into the west wall at 280 and 310 feet from the portal.
>
> "The veins consist of quartz, carbonates including siderite and ankerite, some sulfides, and scheelite. The scheelite occurs in all the veinlets as scattered coarse crystals or bunches which in places fill the whole width of a 2 inch vein. On the face exposed at the south end of the widened drift, the

ore is estimated to contain several percent WO_3; at the north end the grade is estimated at about 1 percent WO_3. Apparently richer bunches may be expected since it is reported by previous operators that five tons of ore was removed from a shallow underhand stope at this locality and was rich enough to ship without concentration. The wide part of the drift and the cross-cuts in the adit are the only exposures of the vein in the mine that contain showings of scheelite.

"The grade of minable material is very difficult to determine because or the somewhat erratic distribution of the scheelite and the inevitable contamination of the wall rock. The estimates given above are based on a visual examination with an ultra-violet lamp and are believed relatively as accurate as cut samples for the purpose of over-all evaluation. They do, however, represent but two faces and can in no way give a clear-cut picture of the average expectable grade for the block of scheelite-bearing ground. The lessee, Mr. Skeman, has set up a small mill to test the dump material that presumably came from this area. His results are not yet available, but may give a better idea of what can be considered a minimum grade."

Test work showed that no appreciable scheelite could be recovered from rock extracted from mine workings. An attempt is being made to recover some values from the stream-bed gravel.

THE PROJECT

Geologic justification for the project is the quoted material under "Geology" as taken from the memorandum of Hobbs and Reno.

The exploration project work was set up in two stages: Stage I specified sinking a maximum of 100 feet of winze; Stage II, dependent upon significant results from Stage I work, was to drift and/or crosscut a maximum of 100 feet from the winze. The sinking of a 68-foot winze and 25 feet of crosscutting off its 50-foot level failed to disclose significant amounts of scheelite mineralization. The objectives of the contract having been attained, work was stopped.

An attempt was made to start work by May 15, 1953. Due to financial difficulties the work was not started by that date, and Amendment No. 1, dated December 2, 1953, postponed the starting date to April 15, 1954. Amendment No. 2, dated July 7, 1954, again changed the starting date, this time deferring it to July 15, 1954. Preparation work started early in July 1954 and winze sinking began in the first week of August. Final inspection was made November 22, 1954, and because the results were discouraging the contract work was stopped. The zone explored by the winze and crosscut was found to be essentially barren of scheelite.

The only visible scheelite on the adit level and in the winze was in 1- to 2-inch wide quartz veins. Scheelite was very spotty and composed only an insignificant part of these veins. When the field examination was made, blasting had splattered specks of scheelite onto the country rock of the shear zone, thus making a slightly more impressive showing when exposed to a mineral light.

Assays of samples indicate there are no reserves.

Summary of Factual Data

Following is a tabulation of work items and costs:

Work item	Units	Agreed unit cost	Total cost
Winze	68 feet	$80/ft.	$5,440.00
Crosscutting	25 feet	40/ft.	1,000.00
Assaying	2 samples	4/ea. 1/	8.00
Consulting fees	6½ days	50/day	325.00
Total approved costs			$6,773.00
Government's share - 75%			5,079.75
Total amount of contract			13,200.00
Amount not spent			6,427.00

1/ Operator claimed cost of only two samples; other samples were determined free of cost to the project.

No equipment was purchased under the contract.

There was no production from the exploration project work.

Discussion of Conclusions

Once work started, performance was good. The contract work demonstrated that the values decreased rather than increased in depth penetrated and that the possibility of finding ore of commercial grade is quite remote.

Narrow quartz veins crop out in Pony Gulch Creek near the mine, but only a few contain scheelite. Present data indicate there is no justification for further exploration for tungsten at this property.

Enclosures

Distribution:
DMEA (4)
USBM (5)
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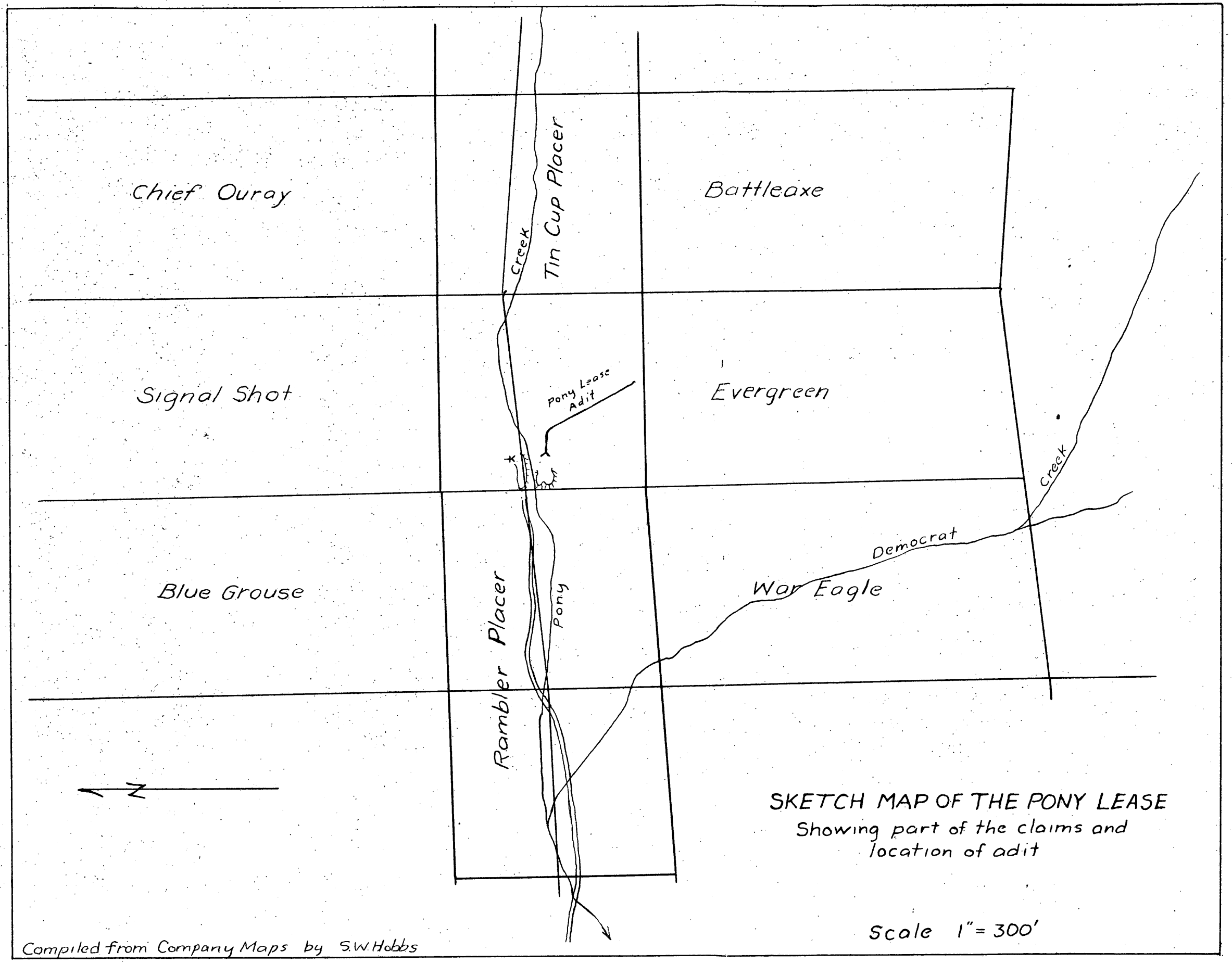
DMEA Docket No.-2692



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Document Author: R. J. Handhauser

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Reviewer: C. PACUT

STATUTORY PRIVILEGE OF
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6-998

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Report Nos. 443, 6

REVIEW OF EXAMINATION REPORT

State Idaho County Shoshone Mineral products Tungsten-gold

Name of property Pony Gulch Tungsten (Formerly the Kennan)

Owner Address

Lessee or Operator Robert D. Skeman & Howard S. Carter Address P. O. Box 591 Kellogg, Idaho

Location On line between S.W. 1/4 of Sec. 13 and the N.W. 1/4 of Sec. 24, T. 49 N., R. 4E. Two miles up Pony Gulch from its junction with Beaver Creek--1.75 miles S. of Delta.

Examined by H. T. Reno, USBM, & S. W. Hobbs, USGS Date Not stated

Apparent quality of examination and report Brief general data supporting recommendations for a modest exploration program to determine the downward extension of the tungsten oreshoot.

Discussion and review: The scheelite tungsten is in narrow quartz veins occupying a nearly vertical shear zone or lode in Prichard slate. The lode strikes N.W.—S.E. and dips steeply northeast. The lode exposed in a 375 foot adit contains an oreshoot 5 or 6 feet in width and 60 feet in length. The south end of the oreshoot is estimated to contain several percent WO_3, the north end is estimated at 1 percent WO_3. The project proposes to explore the downward extension of the oreshoot by sinking a vertical shaft to a depth of 100 feet and to drift on the ore for a distance of 100 feet from the bottom of the shaft. Obviously the grade of ore should have been determined by sampling instead of estimation.

DATE	ACTION	BY

Reviewed by R. J. Wundhauser

Date December 3, 1952

16—53871-1 U. S. GOVERNMENT PRINTING OFFICE

6-993

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Report Nos. 443.6

REVIEW OF EXAMINATION REPORT

State Idaho County Shoshone Mineral products Tungsten-gold

Name of property Pony Gulch Tungsten (Formerly the Kennan)

Owner ..... Address .....

Lessee or Operator Robert D. Skeman & Howard S. Carter Address P. O. Box 591 Kellogg, Idaho

Location On line between S.W. 1/4 of Sec. 13 and the N.W. 1/4 of Sec. 24, T. 49 N., R. 4E.

Two miles up Pony Gulch from its junction with Beaver Creek--1.75 miles S. of Delta.

Examined by H. T. Reno, USBM, & S. W. Hobbs, USGS Date Not stated

Apparent quality of examination and report Brief general data supporting recommendations for a modest exploration program to determine the downward extension of the tungsten oreshoot.

Discussion and review: The scheelite tungsten is in narrow quartz veins occupying a nearly vertical shear zone or lode in Prichard slate. The lode strikes N.W.—S.E. and dips steeply northeast. The lode exposed in a 375 foot adit contains an oreshoot 5 or 6 feet in width and 60 feet in length. The south end of the oreshoot is estimated to contain several percent WO_3, the north end is estimated at 1 percent WO_3. The project proposes to explore the downward extension of the oreshoot by sinking a vertical shaft to a depth of 100 feet and to drift on the ore for a distance of 100 feet from the bottom of the shaft. Obviously the grade of ore should have been determined by sampling instead of estimation.

DATE	ACTION	BY

Reviewed by R. J. Hundhausen

Date December 3, 1952

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Document Title: Pony Lease, Robert D. Skeman and Howard S. Carter Dom EA 2692 (tungsten)

Document Author: C. PALUT.

Original Document Attached: Y (N)

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(must be segregated from other documents)

Type of Privilege:

ACC WP (CBI) DP (PI) Other

Reviewer:

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

December 1, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA

From: Field Team, Region II

Subject: Pony Lease, Robert D. Skeman and Howard S. Carter, Shoshone County, Idaho, Docket No. DMEA 2692 (tungsten)

Enclosed are four copies of a joint memorandum report on the subject property by S. W. Hobbs, geologist, U. S. Geological Survey and H. T. Reno, mining engineer, U. S. Bureau of Mines. Also enclosed are three copies each of addenda to forms MF-103 and MF-203 submitted by the applicant.

While the exploration target is not large, the Field Team considers that a modest program to test the downward extension of the ore shoot exposed in the adit is warranted. It is recommended, therefore, that a contract for a project along the lines indicated by the examining team and agreed to by the applicant, be negotiated.

Two copies of a specimen contract are attached.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)
South 157 Howard Street

M. E. Volin, Member
(U. S. Bureau of Mines)
1201 North Division Street

Enclosures

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Document Title: Field Examination - DMEA 2692

Document Author: S. W. Hobbs

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Type of Privilege:

ACC WP (CBI) DP (PI) Other

Reviewer: C PALUT.

STATUTORY PRIVILEGE OF
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division St.
Spokane 2, Washington

October 29, 1952

MEMORANDUM

To: DMA Field Team, Region II

From: S. W. Hobbs, Geologist, U. S. Geological Survey and
N. T. Reno, Mining Engineer, Bureau of Mines

Subject: Field examination - Application for exploration assistance on the Pony Lease property, Shoshone County, Idaho, Docket No. 2692 (tungsten)

INTRODUCTION

The Pony Gulch tungsten property, formerly known as the Kennan property, is held under lease by Robert D. Sikeman and Howard S. Carter, partners, P. O. Box 591, Kellogg, Idaho.

The property, which consists of 25 lode claims and 4 placer claims, was formerly worked for gold. One adit on the Evergreen claim discloses a zone approximately 60 feet long by 15 feet wide. The zone consists of a series of ramifying quartz stringers bearing scheelite in quantities that would appear to make mining of the entire block of ground feasible. The structural conditions, volume of material, and scheelite content warrant a modest exploration program in order to determine the downward extent of the ore shoot. Any program of exploration should be carefully watched to see that the work follows the ore and that the work be stopped if the structural conditions become unfavorable.

The Pony Gulch mine is 2 miles up Pony Gulch from its junction with Beaver Creek in the Beaver Mining District, Shoshone County, Idaho. The exact location is on the line between the SW 1/4 of Sec. 13, and the NW 1/4 of Sec. 24, T. 49 N., R. 4 E. The mine is reached from Wallace, Idaho by means of the road to Delta and Prichard, Pony Gulch being 11.25 miles north of Wallace and 1.75 miles south of Delta. Although the property is easily accessible most of the year, bad snow conditions would necessitate the plowing of 2 miles of road and could hinder winter operations. It is recommended that the exploration work be confined to spring, summer, and fall months.

The Pony lease was visited by S. W. Hobbs of the Geological Survey in company with the lessee, Mr. R. D. Skeman. The better part of one day was devoted to an examination of the geological relations on the surface and underground. H. T. Reno of the Bureau of Mines accompanied Hobbs on a second visit to evaluate the proposal and work out a feasible program. Later Reno conferred with Skeman to work out the details of costs and programming.

CONTRACTS OF APPLICANT

Robert D. Skeman, at present employed at the Sunset Minerals mill, apparently is a competent miner. However, he will need some technical help to direct an exploration program.

The partnership is not an operating mining organization and some doubt exists as to its capacity to finance and carry on an exploration project efficiently. Therefore, a contract, if approved, should be on the short form so as to provide Government participation on the basis of the estimated unit costs.

DESCRIPTION OF PROPERTY

The property, in the bottom of Pony Gulch, was the site of much activity when gold was mined from the placers and from a flat-dipping quartz vein that crops out on both banks of the stream. No useable facilities remain. Recently, however, Skeman has set up a small crushing plant and a set of jigs in the gulch to test the scheelite content of dump material. Numerous short adits and open cuts explored the gold vein. All of these are caved. The only accessible working is an adit, 375 feet long, driven on the shear zone in which the tungsten has been found. (See accompanying map.)

GEOLOGY

The Pony Gulch mine is a few miles south of the Murray district, which has been described in detail by Sherwin (Geology and Ore Deposits near Murray, Idaho; Idaho Bureau of Mines and Geology, Pamphlet No. 47, 1938) and the rock types and veins are similar to those in the Murray district.

The country rock in the vicinity of the mine is Prichard slate. Poor surface exposures make the determination of the general structure difficult, and in the mine the shearing along the vein zone has nearly obliterated the attitude of the beds.

The tungsten mineral, scheelite, occurs in narrow quartz veins distributed in a nearly vertical shear zone in the Prichard slate. The shear zone strikes in a general northwest-southeast direction, crossing Pony Gulch at an angle of about 60 degrees, and is said to extend for several thousand feet. The zone dips very steeply to the northeast.

Surface exposures on the vein are limited to the creek bed and several outcrops on the north slope. A little scheelite is reported from the creek bed where the shear zone crosses it. Narrow quartz stringers carrying scattered scheelite crystals occur in slates exposed in the creek bed 100 or more feet west of the shear zone. Some of these occurrences approach commercial grade material. The 375 foot adit has been driven at creek level into the south wall of the gulch along the hanging wall of the vein zone. From 200 to 260 feet from the portal, the drift is widened to approximately 15 feet by slabbing of the west or footwall of the shear zone. This cut opens a vein or vein zone composed of 5 to 6 feet of sheared slate containing a number of narrow quartz veins. These veins are quite irregular in distribution and vary in width from a fraction of an inch to several inches, but they are prominent in the opening and are exposed for a strike length of about 60 feet. Small amounts of scheelite occur in short crosscuts into the west wall at 270 and 310 feet from the portal.

The veins consist of quartz, carbonates including siderite and ankerite, some sulfides, and scheelite. The scheelite occurs in all the veinlets as scattered coarse crystals or bunches which in places fill the whole width of a 2 inch vein. On the face exposed at the south end of the widened drift, the ore is estimated to contain several percent WO_3; at the north end the grade is estimated at about 1 percent WO_3. Apparently richer bunches may be expected since it is reported by previous operators that five tons of ore was removed from a shallow underhand stope at this locality and was rich enough to ship without concentration. The wide part of the drift and the cross-cuts in the adit are the only exposures of the vein in the mine that contain showings of scheelite.

The grade of minable material is very difficult to determine because of the somewhat erratic distribution of the scheelite and the inevitable contamination with the wall rock. The estimates given above are based on a visual examination with an ultra-violet lamp and are believed relatively as accurate as cut samples for the purpose of overall evaluation. They do, however, represent but two faces and can in no way give a clear-cut picture of the average expectable grade for the block of scheelite-bearing ground. The lessee, Mr. Sherman, has set up a small mill to test the dump material that presumably came from this area. His results are not yet available, but may give a better idea of what can be considered a minimum grade.

PROSPECTIVE PROJECT

The project proposes to explore the downward extension of the scheelite ore shoot by sinking a vertical shaft so far as possible on the ore for a distance of not more than 100 feet and to do a maximum of 100 feet of cross-cutting and drifting on the mineralized structure or structures from the shaft. Partial exploration of the ore shoot could

be done by raising, but the beds are less than 50 feet and the delineation of a possible ore body of any significant size could best be accomplished by proving extension to depth.

This project, scaled down from the proposal, has been approved by Skoman. During the remainder of this operating season the partners will continue part-time work in the adit. Facilities will be installed and all preparatory sinking work finished. Therefore, the project, if approved, will consist only of the actual work of sinking and drifting.

A detailed estimate of the cost of sinking and drifting is attached. It should be noted that allowance has been made for the part-time services of a geologist and for WO_3 analyses at 5-foot intervals. These items and overtime and insurance were not included in the applicant's estimate.

S. W. Hobbs, Geologist
U. S. Geological Survey

N. J. Lane, Mining Engineer
U. S. Bureau of Mines

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Document Date: 10/23/42

Document Title: Brief Report on Tungsten Deposit at the Pony Gulch mine

Document Author: J. Warren Hobbs

Original Document Attached: Y (N)

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Type of Privilege:

ACC WP (CBI) DP (PI) Other

Reviewer: C Palati

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443.6

Brief Report on
Tungsten Deposit at the Pony Gulch Mine
Shoshone County, Idaho

Location, ownership and equipment

The Pony Gulch mine is located about 1.75 miles up Pony Gulch from its junction with Beaver Creek in the Beaver Mining District, Shoshone County, Idaho. The exact location is about on the line between the SW¼ of Sec. 13, and the NW¼ of Sec. 24, T. 49 N., R. 4 E. The mine is reached from Wallace, Idaho by means of the road to Delta and Prichard, Pony Gulch being located about 11.25 miles north of Wallace and about 1.75 miles south of Delta.

The property is owned by Mr. J. D. Chapin who lives on the main road at the mouth of Pony Gulch. Mr. Chapin recently leased the mine to the Canyon Gold Mining Company of Deadwood, South Dakota.

A gold-bearing vein on the property was worked for some years, but the tungsten, which occurs in a vein separate from the one carrying the gold, has been worked very little. The tungsten vein is located several hundred yards up the gulch from the gold mill. Mr. Chapin recently shipped 5 tons of ore from one pocket in the vein to New York, and the returns on this material more than paid for the cost of mining and shipping. No milling tests have been made, but the ore could very likely be successfully concentrated by jigging.

A 50 ton gold mill on the property has been partly dismantled. No other equipment is left at the mine.

Geology

The Pony Gulch mine is a few miles south of the Murray district, which has been described in detail by Shenon*, and the rock types and veins are similar to types in the Murray district.

The country rock in the vicinity of the mine is Prichard slate. Poor surface exposures make the determination of the general structure difficult, and in the mine the shearing along the vein zone has obliterated the attitude of the slates.

The tungsten mineral scheelite occurs in narrow quartz veins distributed in a nearly vertical shear zone in the Prichard slate. The shear zone strikes in a general northwest-southeast direction, crossing Pony Gulch at an angle of about 60 degrees, and is said to extend for several thousand feet. The zone dips very steeply to the northeast. Surface exposures on the vein are limited to the creek bed and several outcrops on the north valley slope, but no scheelite is reported from any of these places.

A 260 foot adit has been driven at creek level into the south wall of the gulch along side the hanging wall of the vein zone. At about 200 feet from the portal, two very short cross-cuts (6 to 8 feet long) have been made in the south wall of the adit. These cuts open a vein or vein zone composed of 5 to 6 feet of sheared slate containing a number of narrow quartz veins.

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*Shenon, Philip J., Geology and Ore Deposits Near Murray, Idaho; Idaho Bureau of Mines and Geology, Pamphlet No. 47, 1938.

These veins are quite irregular in distribution and vary in width between a fraction of an inch and several inches, but they are prominent in the two cuts which explore the vein and are exposed for a strike length of about 20 or 30 feet.

The veins consist of quartz, carbonates including siderite and ankerite, some sulfides, and scheelite. The scheelite occurs in all the veinlets as scattered coarse crystals or bunches which in places fill the whole width of a 2 inch vein. On the face exposed in the first cross-cut from the portal of the adit, the ore is estimated to contain several percent WO_3. In the second cross-cut the grade is estimated at about 1 percent WO_3. Apparently richer bunches may be expected since it is reported by Mr. Chapin that the five tons of ore which he removed from a shallow underhand stope at this locality was rich enough to ship without concentration. The cross-cuts in the adit are the only exposures of the vein in the mine and are the only showings of scheelite. Since the main adit has been driven parallel to the vein only a few feet within the hanging wall, it would be a relatively simple matter to explore the extent of the scheelite zone by means of several additional short cross-cuts into the south wall of the drift.

Outlook

The mine as now exposed is a promising prospect. The fact that the vein occurs in one of the northwest trending shear zones is in its favor since these are generally more persistent than

other types of veins in the district. However, known occurrences of scheelite in the Murray District are very pockety and discontinuous, and this feature could well apply to the Pony Gulch vein.

Recommendations

For the U. S. Geological Survey: No further work on this deposit is recommended at the present time.

For the U. S. Bureau of Mines: The property is little more than a prospect at the present stage of development. However, the showing of scheelite is sufficiently good to warrant some preliminary investigation by the Bureau of Mines to determine the extent of the ore pocket now partially exposed, and to determine the distribution of ore in that part of the vein which is easily accessible from the main adit but is as yet unopened.

Respectfully submitted,

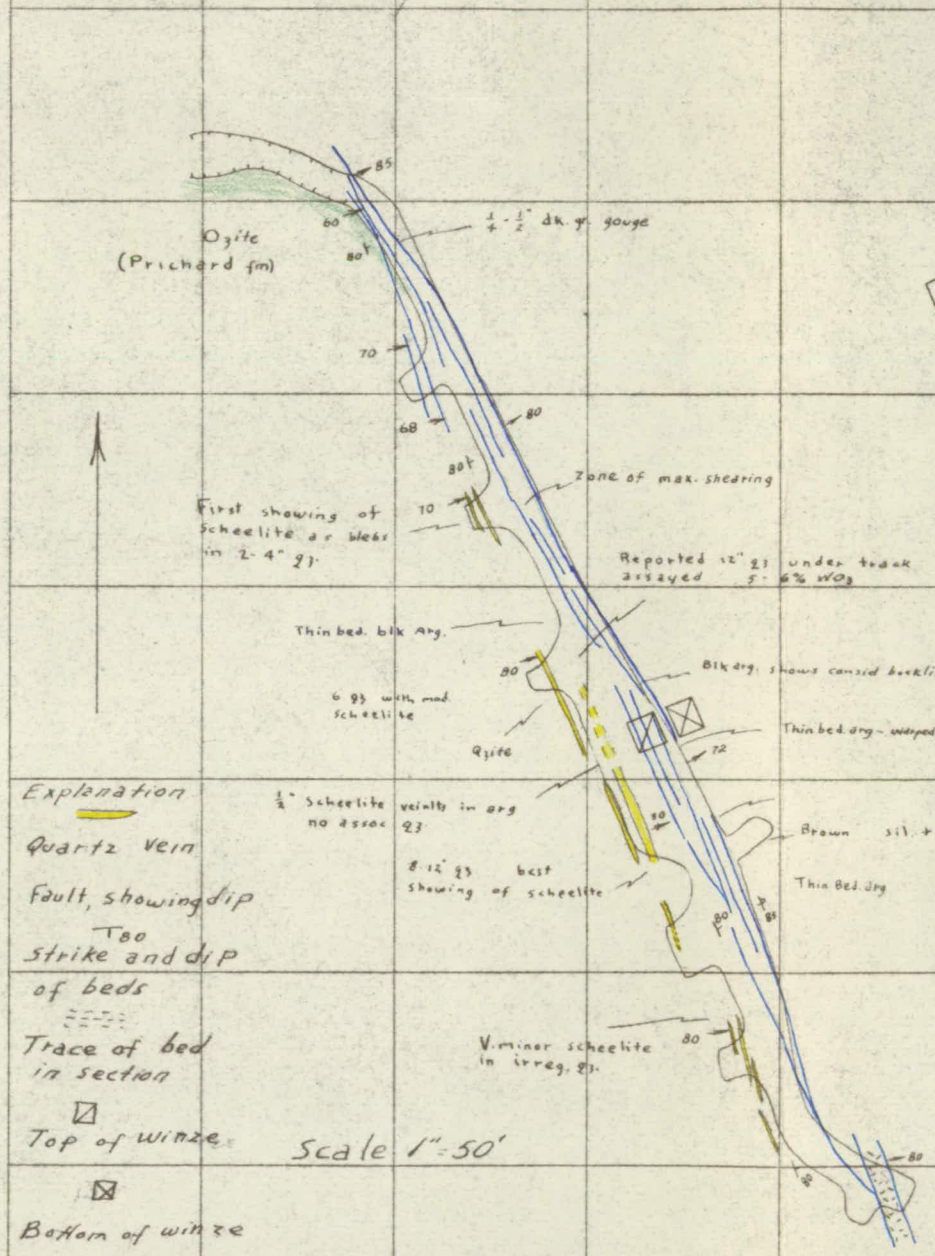
S. Warren Hobbs
U. S. Geological Survey

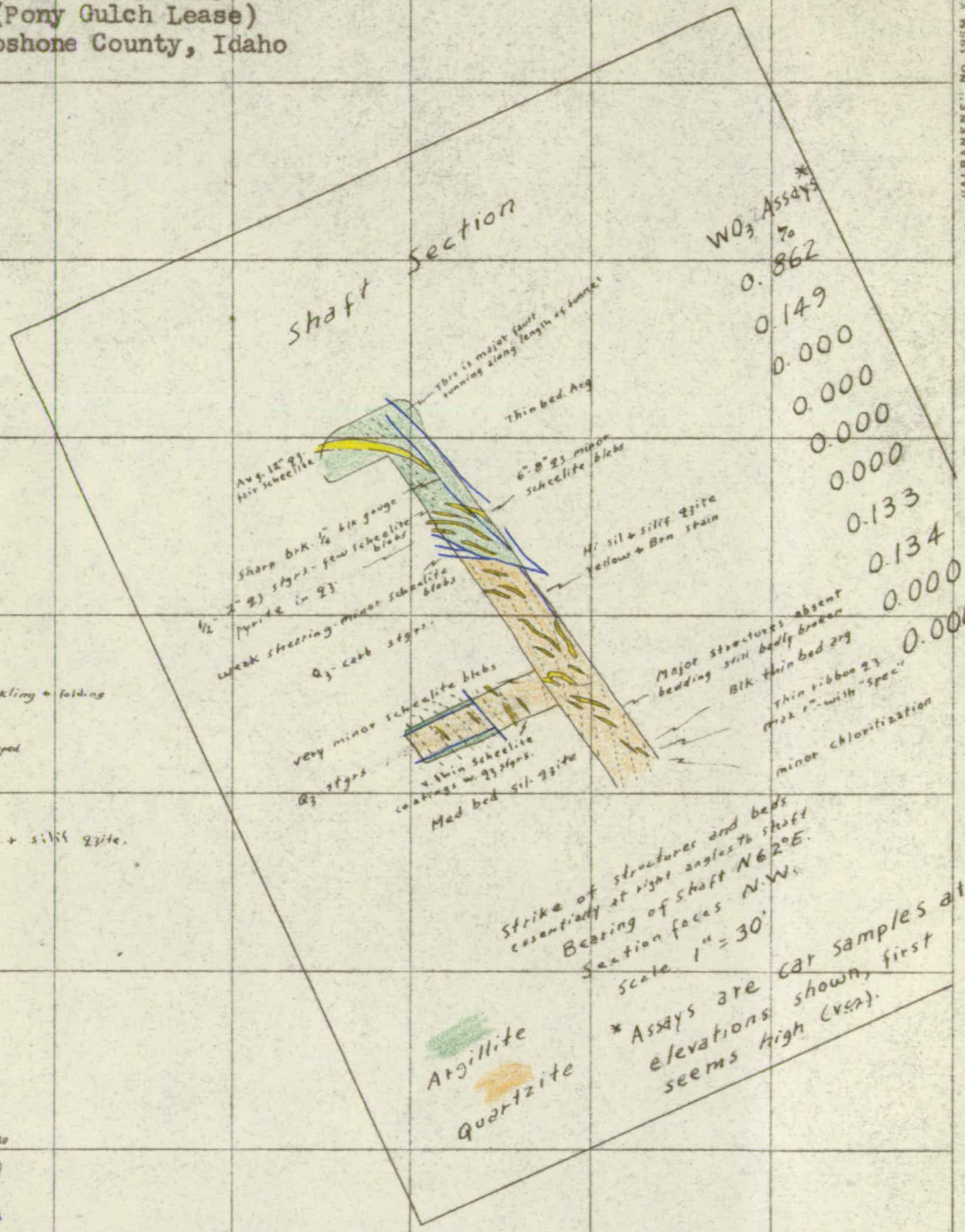
Spokane, Washington
October 23, 1942

Docket No. DMEA-2692

GEOLOGIC MAP

North Idaho Mines, Inc.
(Pony Gulch Lease)
Shoshone County, Idaho





WO3 Assays* %
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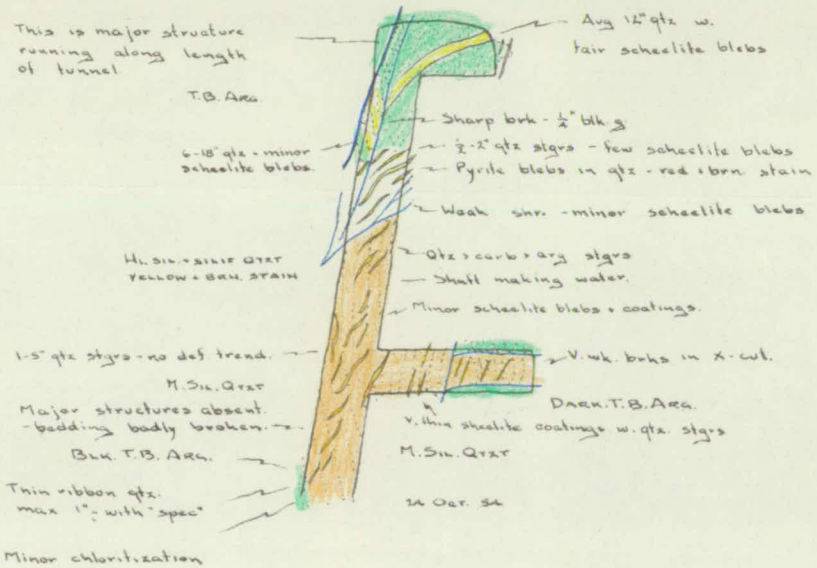
Geology by
A. H. Lerise, BHSSM&EC

BEARING OF SHAFT N 62°00'E

— Strike of structures and bedding essentially at right angles to shaft —



WO_3 Assays
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0.000
0.000
0.133
0.134
0.000
0.000

SE VIEWING SECTION OF SHAFT

1" = 30' .... A.H.L. 54

Workings superimposed on old company map ... 1" = 300'