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UNITER STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFRESE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TRAM

Pershing County, Sev.

Benjasin E. Sheahan, Mining Engineer U. S. Bureau of Mines

January 29, 1953

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DMEA-2750 (Tungsten)

Hame and address of applicant: William Berger
Tungsten Lead Company
Room 7, Professional Bldg.
Winnemacoa, Nev.

Hame and location of property: Tungeten Lead Company, Pershing Co., Nov.

YN AMMINE

The Tungsten-Lead Company, Inc. property consists of 16 unpatented claims located high on the east slope of the Sugene Mountains,
Pershing County, Nev. The property is reached by following the Pole
Canyon read 8.4 miles northerly from Tungsten, Nev.

The Middle Hill area which was formerly known as the Hed Hawk mine was developed by a shallow 50-foot incline shaft. An adit now caved and filled was examined by a geologist of the U.S. Geological Survey in 1943. The access road was constructed at Government expense in 1944 and a production of 266 tens of tungsten are containing 266 units of WOg was produced. Marrow, lenticular, scheelite bearing tactite lenses coour in metamorphosed sedimentary rock with regional strikes of N. 10° E. to N. 50° N. and dips of 40 to 60 degrees to the northwest.

The North Hill and South Hill areas are developed by short adits, however mear occurrences of small lenticular shaped tactite lenses contain insufficient tungsten mineralization to constitute ore.

The property was incorporated in 1950 and was promoted by J. G. Tomlinson of Winneswoos. An application for access road improvement

was denied following an examination by engineers of the U.S. Bureau of Wines in June 1951.

Mr. J. G. Tomlinson conveyed control in the property to Mr. William Berger, an investment broker of Santa Resa, Calif., who now maintains an office at Winnesucoa.

Mr. Berger claims that the corporation has spent over \$85,000. Since only 140 feet of underground work was done, some road repair work, and the production of 142.5 tens of non-commercial mixed ore, at least a fairly large portion of the money was not spent on the property.

A request for a Government exploration loss was made by Mr.

Berger in October 1952 and the property was examined on December 2
and 3, 1952 by an engineer of the U. S. Bureau of Mines jointly
with geologists of the U. S. Seological Survey.

CONCLUSIONS

The tungsten mineralization is too low grade, and the schoolite bearing lenses are too small to warrant an exploration loan.

The applicant for the exploration loan lacks necessary qualifications to conduct an exploration project competently.

RECOMMENDATIONS

The exploration loss should be denied.

TIME SPENT ON PROPERTY

The engineer and goologists examined the property from 10:00 A.M.,

^{2/} A. J. Matson and B. H. Sheahen.

^{3/} R. J. Roberts and D. C. Arnold.

Dec. 2 to 5:00 P.M., Dec. 5, 1952. The Eugene Mountains in this region were partly covered with snow. Mr. William Berger and Marien E. Price, his supervisor, accompanied the examination team.

MARY AND LOCATION OF PROFERTY

The Tungsten Lead Company, Inc., Red Hawk mine, is located on the east slope of the Eugene Mountains in the Sentral Mining District, Pershing County, Nev., and is about three miles northwest of the Nevada-Massachusetts Tungsten mine.

The property is reached from Winnemucca, the nearest town, by following U. S. Highway 40 southwesterly 27 miles to Will City, turn right and follow paved road toward tungsten S miles to road fork opposite the mill building, turn right and follow an unimproved road northerly S miles to a road fork leading westerly into Pole Canyon, follow the Pole Canyon road S.4 miles to the property. The total distance by road from Winnemucca, Nevada is 48.4 miles to the Middle Hill (Red Nawk shaft).

The sixteen unpatented Tungsten Lead mining claims No. 1 to No.16 are located in sections 16, 17, 20 and 21, T. 34 N., R. 54 E., at elevations from 6200 feet to 7000 feet.

COEDITION AND SEASONAL ACCESSIBILITY OF ROAD TO PROPERTY

The paved roads from Winnemucca to Tungsten are all weather and are seldem closed. The partly improved road from Tungsten to the property in Pole Canyon is open most of the year except during periods of heavy snew or rain. The property was reached by four wheel drive vehicles in December 1952.

COMPETERCY OF APPLICANT AND OPERATING PERSONNEL

The applicant, Mr. William Berger, is an investment broker. He has practically no mining experience. Mr. Berger stated that the corporation had expended over \$85,000. Judging from the small amount of work done by the corporation, which includes only 140 feet of underground exploration work, and a few weeks work on surface trenching and road improvement with a bulldosor, the applicant would be a very poor risk to handle Government funds for exploration work.

The applicant, Mr. William Berger, was in charge of the cooperation work when over 140 tens of mixed ore and waste was hauled to a custom mill at Tuelon, Mev. The material apparently contains insufficient scheelite to pay for milling. It is quite possible that this material was hauled for promotional reasons.

Mr. Merger stated that the company was incorporated in Nevada with a capitalization of 218,000 shares at \$1.00 per value. Some of this stock was said to have been sold to business men at Santa Rosa, Calif., which was Mr. Berger's former residence.

The applicant does not appear to be competent to conduct an exploration project.

The personnel at the property included Mr. Marion E. Price, an engineer exployee, and one workman. Because of stermy weather, no work was being done.

APPLICANT'S PROPERTY RIGHTS

The applicant stated that he and his associates held the sajerity of the stock in the corporation. The sixteen unpatented Tungsten Lead

mining claims are said to be owned by the corporation. The location certificates are said to be filed at the Fershing County recorders office at Lovelock, Nev. Claims No. 1 to No. 3 are recorded in Book 15, pages 7 to 12 and claims No. 9 to No. 16 are recorded in Book 13, pages 489 to page 492.

Mr. Berger claims that the corporation may own some money to Mr. J. G. Tomlinson, a former stockholder.

DESCRIPTION OF PROPERTY

Surface and surface facilities:

Surface facilities at the emp consist of one bunkhouse with a kitchen and one small cabin. Accessodations for six men are available.

Equipment:

| | | Condition |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 1 | 15-horsepower double drum hoist with cable | No. 4 m |
| - | and 1 8-oubic foot heisting buckets | Pair |
| L | Air compressor, 160 c.f.m., portable with | |
| | gasoline engine drive and 60 cubic foot | |
| | air receiver | - 19 |
| L | Jackhamser, Gardner-Denver, Medel 555 com- | |
| | plete with column, shell hoses and water | |
| | pressure tank, and drill steel | 19 |
| 1 | Atlas rock drill with pneumatic leg, drill | |
| | steel, hoses and bits | 18 |
| 1 | Blackswith shop with assorted hand tools | |
| 1 | Acetylene welding outfit, complete | Good |
| 800 | | |
| | ft. 18-inch gage track, 12-pound rail | Pair |
| 2 | Mine cars, 16-ouble foot | |
| 1 | Mine car, 14-cubic foot | |
| 1 | Truck, pickup, 1-ten | - 10 |
| 1 | Truck, pickup, 1/2-ton, 4-wheel drive | |
| 2 | Slectric light plant, 1500-watt | .00 |
| 400 | ft. pips, 3/4-inch to 2-inch air and water | |
| | lines | - 10 |
| 1 | Headframe and shack, at Middle Hill shaft | Poor |
| 1 | Gre bin at shaft, 30-ton capacity | 17 |
| 1 | Ore bin at South Bill adit, 30-ton capacity | Fair |
| _ | The same of the sa | |

Mine workings are shown on maps included with report. (Figures 1, 2, and 3).

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| Sample No. | Width/feet | S.DO3 | %, No | Location and remerks |
|------------|------------|-------|-------|---------------------------------|
| 8-150 | 1.0 | 0.25 | | Sorth Hill outerop - East |
| 8-151 | 5.0 | 0.15 | | 5 H N N |
| 5-152 | 5.0 | 0.16 | | 62 49 66 66 |
| 5-153 | 2.0 | 0.20 | | Middle Hill shaft 25-foot level |
| 8-154 | 4.0 | *0.01 | | " " " 25-foot " |
| 8-155 | 8.0 | *0.01 | | " oast side shaft |
| | | | | 25-foot level |
| 8-186 | 3.0 | 0.56 | 0.07 | Middle Hill west side shaft |
| | | | | 25-foot level |
| 8-157 | 3.0 | 0.74 | | Middle Hill shaft 7 feet be- |
| | | | | low collar |
| 5-158 | 1.8 | *0.01 | | North Hill open cut above adit |
| 5-159 | 3.0 | 0.26 | | 15 17 19 19 19 19 |
| 8-160 | 1.3 | 0.24 | | South Bill adit |
| S-161 | 1.0 | =0.01 | | 叔 祖 舜 |
| 5-162 | 2.5 | *0.01 | | 19 10 10 |
| 8-168 | 1.5 | *0.01 | | 0 H H |
| S-164 | 1.5 | *0.01 | | M (1 12 |
| S-165 | 1.8 | 0.04 | | 25 18 NJ |
| 8-166 | 3.5 | *0.01 | | " " portal |
| 8-167 | 2.0 | *0.01 | | " open cut above adit |

See sketch map figures 1, 2, and 3 for emple locations. *Less them.

PAST OPERATION

The property was examined by engineers from the U. S. Bureau of Mines in June 1951 in regard to an access road application which was denied.

Work at the property since the previous examination consisted of driving the South Bill adit; retimbering the Biddle Bill shaft; and sinking it 15 feet. The North Bill adit was extended less than 15 feet. Some road repair work and tranching with a bulldozer was completed and the access road was extended 0.5 of a mile from the shaft to the North Hill grea.

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PRODUCTION

The operator, Mr. William Berger, produced 142.5 tons of mixed ore and waste. The material was estimated to contain less than 0.15 percent WO₃ and was stockpiled at the Toulon mill located 74 miles by road south of the property. Trucking the material from the property to the mill cost \$5.75 a ton, according to Mr. Berger, and mill charges would be \$10.00 per ton.

Production figures from the Middle Hill section, (Red Hawk mine), are previously quoted.

AVAILABILITY OF MARPOWER, SUPPLIES, WATER, FORER, ETC.

Nine labor was scarce in this region as more stable operations in the vicinity employ the available supply. Wage scale for minors is \$14.00 per day.

Supplies can be obtained at Wincomuces, Nev.

Water for demostic use can be obtained from a spring a few hundred yards from the camp in Fole Canyon.

Secause of the steep road grades, hawlage costs are high.

STATEMENT OF THE APPLICANT'S PROPOSAL

The applicant requests Covernment aid to explore the property.

A DNEA loan totaling \$62,941 has been requested. The exploration work covers surfacing trenching, drifting, crosscutting, and sinking.

The applicant claimed the ore on the North Hill would rum 3.0 percent NO3, which is obviously wrong. The best showings were sampled with the assistance of the operators engineer and the analyses of these samples indicated that the naterial was too low grade to constitute ore.

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TRITED STATES DEPARTMENT OF THE INTERIOR OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION ASSISTSATION

ESPORT OF EXAMINATION BY FIELD TEAM

DMEA-2750. Tungsten Lead Company

Pershing County, Nev.

Ralph J. Reberts and David G. Arnold, Geologists U. S. Geological Survey

January 29, 1953

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The area is underlain largely by slate and interbedded limestone lenses that have been partly metamorphosed to hornfels and tactite. These rocks strike N. 10° - 50° E. and dip 40° - 60° EW. The tactite layers locally contain scheolite erratically distributed along the strike and down dip.

The scheelite-bearing tactite bodies that have been mined are as such as 45 feet long and two to four feet wide. Shipments made from the stope on the Middle Bill include a carload reported to assay 2.5 percent WO₃ and 266 tons that yielded 286 units WO₃ (about 1.08 percent WO₃). Samples cut from exposed tactite layers in the inclined shaft in the Middle Hill workings averaged 0.38 percent WO₃. Samples cut from the North Hill workings and South Hill workings were below shipping grade.

The ore reserves on the Middle Hill total about 2,750 tons of ore averaging 0.40 percent NO₈. Although this ore is of shipping grade, it is worth only about \$15.00 a ton. It is unlikely therefore that ore of this grade can be mined at a profit. There are no ore reserves on the North and South Hills.

GEOLOGY

The area is underlain by interbedded slate, calcareous slate, and limestone of Triassic age that are cut by diorite and aplite dikes. Locally the sedimentary rocks have been metamorphosed to hornfels, and to tactite which in places contains disseminated scheolite.

The sedimentary rocks strike N. 10° E. to No. 50° E. and dip 40° - 60° NW., forming part of a homoslinal sequence that underlies the Eugene Range. Gray to black slate is the principal rock type; it has been setamorphosed to low grade horafels over most of the mine area. Beds of calcarogus slate and limestone are interlayered with the slate; these beds form only a small proportion of the sedimentary sequence, and are generally thin and lenticular. In places they have been metamorphosed to tactite which consists of pyroxene, epidete, actinolite, garnet, quarts, calcite, and pyrite.

ORE DEPOSITS

The schoolite-bearing tactite layers are interwedded with clate, hernfels, and barron tactite. The tactite layers do not crop out well on the smooth slopes in the mine areas and most of the discoveries of schoolite-bearing tactite that have been made are on ridges.

The scheelite-bearing tactite layers that have been explored range from a few inches to four feet thick. They are lanticular, and pinch and swell along the strike and down dip. The scheelite is in I/ Elepper, E. E., January 10, 1843, Memorandum on the Red Eawk Tungsten property.

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part scarsely crystalline where it occurs in veinlets, but most of it is finely crystalline and is erratically disseminated throughout the tactite. The scheelite has a blue-white fluorescent color, except for one place in the Middle Hill shaft where it has a distinct yellowish fluorescent color; a sample (S-156) out at this place contained 0.07 persent Mo.

Only the ore body on Middle Mill has been mined. This bedy was two to three feet wide, and was developed for a length of 45 feet when Mlepper visited the property. It is probable that the ore layer exposed in the inclined shaft is the northeastward extension of this layer, giving a total known length of 110 feet.

According to Klepper , the property yielded a one-ton shipment in 1917 that was reported to contain 2.5 percent NO₃. The source of this are is not known. In 1943-44 shipments totaling 266 tens that contained 286 units of NO₃ (about 1.08 percent NO₃) were purchased by the Netals Reserve Corporation in Salt Lake City. These shipments were mined from the stope on the Middle Hill which is now caved and is inaccessible (fig. 3).

An adit 150 feet long has been driven to intersect the projected scheelite-bearing tactite layers about 75 feet below the pits, but the face of the adit is still about 50 feet short of the objective.

(Fig. 5). Two samples were cut from the showings in the pits reported

^{2/} Elepper, M. R., April 1, 1948, Supplemental Remorandum-Access Road, Red Hawk Yungsten property, Eugene Mountains, Pershing County, Nevada.

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to be most promising with the following results:

| | Width of Cut | Percent WCg |
|-------|--------------|-------------|
| 5-158 | 1.6 feet | 0.01 |
| 5-159 | 3.0 feet | 0.26 |

Three samples were out east of the pits on schoolite-bearing tactite layers. (See fig. 2.) The assays of these samples were as follows:

| | Width | of Cut | Percent WOg |
|-------|-------|--------|-------------|
| S-150 | 1.0 | inet | 0.23 |
| 8-151 | 2.0 | feet | 0.15 |
| 8-152 | 5.0 | feet | 0.16 |

The Middle Hill workings have yielded most of the recorded production of the property. The principal stope is now caved, but the scheelite-bearing layer is exposed in an inclined shaft and workings on the 25-foot level. (See fig. 5.) Hear the top of the incline, the layer is about three feet thick; it narrows downward and is two feet thick where last seen on the level. Samples out in the layer gave the following assays:

| | Width of C | ut P | ercent NOs |
|-------|------------|---------------|------------|
| 5-153 | 3.0 feet | | 0.20 |
| 2-155 | 2.0 feet | | 0.01 |
| 2-156 | 3.0 feet | | 0.56 |
| 8-157 | 3.0 feet | Average grade | 0.74 |

The 25-foot level has other scheelite-bearing tactite showings in higher beds, but the scheelite is erratically distributed through-out the best. One sample was out at the southwest side of the level

adolo

at one of the best showings; it was analyzed with the following re-

| | width of Cut | Percent HOs |
|-------|--------------|-------------|
| 8-184 | 4.0 foot | 0.01 |

shallow surface cuts. (Fig. 4) An ore layer as much as 3.5 feet wide is exposed at the portal of the adit; this layer was followed northeastward for 45 feet where it was cut off by a fault. Fre-sumably the fault is a normal fault, and the layer is probably displaced northwest. Schoolite showings in a surface cut directly above the adit may represent the layer in the adit. If so, the displacement on the fault is about 19 feet. Two samples were cut on the bed in the adit and one was cut in the surface pit. These were analyzed with the following results:

| | Width of | Jut | Percent WOs |
|-------|----------|-----|-------------|
| S-160 | 1.3 fe | et | 0.24 |
| 8-166 | 3.5 fe | es | 0.01 |
| 5-167 | 2.0 fe | ot | 0.01 |

Another narrower tactite layer is exposed in the adit northeast of the fault; this layer appears to be lower in grade than the main layer, but there are two small high grade pockets in the drift. This layer thinned and pinched out about 36 feet from the fault. Five samples were out in this layer and assayed with the following results:

| | Width of Cut | Percent Wos |
|-------|-----------------|-------------|
| 5-161 | 1.0 feet | 0.01 |
| 5-162 | 2.5 feet | 0.01 |
| 8-163 | 1.5 feet | 0.01 |
| 5-164 | 1.5 feet | 0.01 |
| 5-165 | 1.3 feet | 0.04 |
| | AND DESCRIPTION | |

When Klepper visited the property2/ he calculated the following reserves:

| Table 1. (| re Reserves | | |
|----------------------|-------------|-------|--|
| | Tons | Grade | |
| Assured (measured) | 260 | 2.0 | |
| Probable (indicated) | 300 | 2.0 | |
| Possible (inferred) | 750 | 0.75 | |

It is probable that in subsequent mining operations, the measured ere was largely stoped and shipped. Klepper estimated the grade to be 2 percent WCM, but the shipments averaged only about 1.08 percent WGg. This disorepancy is probably due to dilution or a lowering in grade in the ore shoot above or below the level that Eleppor sampled.

There is no way to accurately evaluate the ore reserves remaining in the Middle Mill area. Eleppor's estimated 250 tons of probable are and 750 tons of possible (inferred) are averaging 0.75 percent NOz may be found in the stope area. The tactite layer in the inclined shaft is probably the same bed as the one mined in the



stope, and it is possible that the tactite layer may be found between the shaft and the stope. On the assumption that there was no stoping below the stope level and that the tactite layer averages two
feet in thickness, the block between the south end of the stope and
the north side of the shaft (220 feet long) may contain about 5,500
tens of tactite to a point 100 feet down dip below the surface. As
the scheelite is erratically distributed throughout the tactite, it
seems prudent to consider that about half of this tennage may be waste
rock. As the samples out during this examination (5-183, 5-156,
5-156, 5-157) averaged 0.38 percent NO₅, it seems reasonable to
assume that the material in the block may average about 0.40 percent NO₅. The inferred reserves in the Middle Hill area are therefore estimated to be 2,750 tens of material containing 0.40 percent
WC₅.

As the analyses of tactite layers on the North Hill and South Hill show that the tactite is too low grade to be shipped, no ore reserves were calculated for these areas.

PROPOSED EXPLORATION

The applicant has proposed to explore tungsten showings in three places, North Hill, Middle Hill, and South Hill. Discussion of these projects follows:

North Hill

The showings on North Hill were largely covered by snow at the time of visit and could not be adequately examined. High grade assays have been reported from the shallow pits, but the samples cut



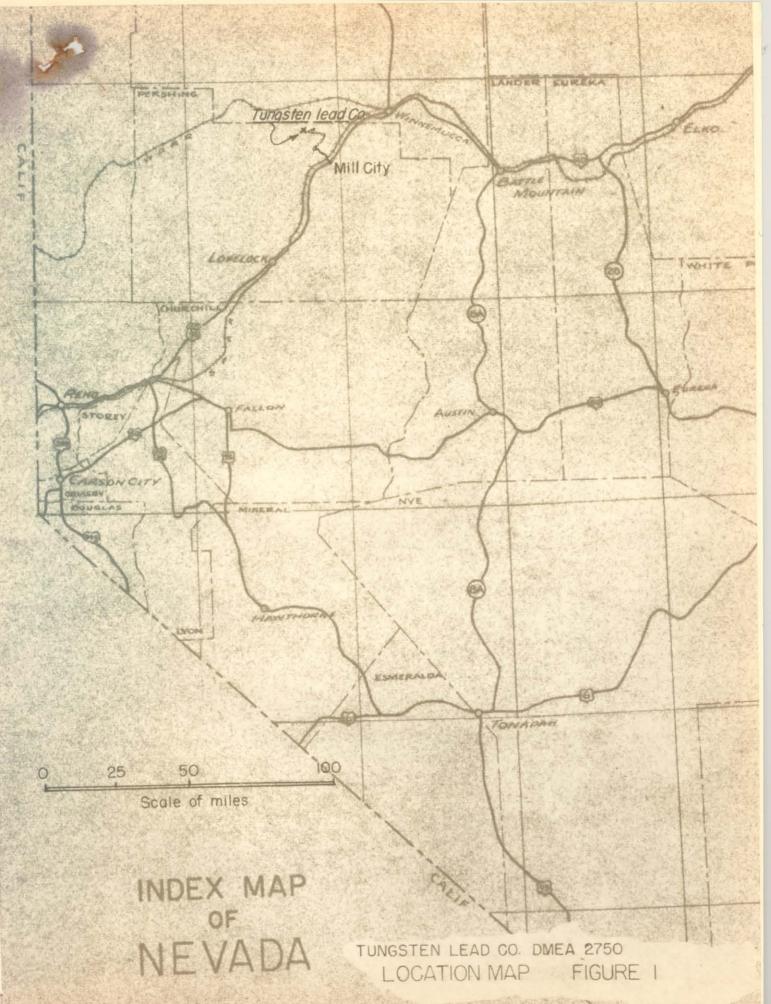
during the examination were all below shipping grade. No further exploratory work is recommended there.

Middle Hill

The applicant has proposed sinking the existing shaft an additional 80 feet to a depth of 125 feet, and to raise 50 feet into the hanging wall at the 110-feet level. As the ore reserves inferred in the Middle Mill area amount to only 2,750 tons averaging 0.40 percent WO2, no additional work is recommended there.

South Hill

The exploratory work proposed in the South Bill workings consists of drifting and crossoutting northeast of the present face. Although a few high-grade schoolite showings were noted in the workings, the overall grade of the tactite layers is very low. As the material is well below shipping grade ore, no further work appears to be justified here, and accordingly none is recommended.



| | | | / | | | | | ten Lead Company exhing County, Nevada |
|------------------|------------|-----------------|--------------|----------|-------|----|-------------------------|----------------------------------------------------------------------|
| | I I | | LEAD | 1015 X | | | Clar To 5. Sample | im Map 5 Ketch how location of les 5-150, 5-151, 5-152 cale 1"= 300" |
| | | | June of En | Lead | 10 NO | | 5-150 5-151 16 | |
| | | Portal North | to hill adit | Tungater | -2-2 | 2 | ENLER | |
| | | *********** | 222422 | | | 10 | / | |
| 70 To | North hill | | ŷ. | | 1 | | | Note Map copied from ome a DOCKET. |
| Made Pill Torder | | LEW LE | 40. | | | | | |
| | | Tunico . | | 403 | | | | Figure 2 |

Map of 25 foot level & Kleppers map (1943) Inclined Shaft, Middle Hill Tungsten Lead Company Pershing County, Nevada Sketch Note: copied from U.S.G. 5. Map to show sample locations and outline of workings. Vertical Section Through Shoft Scale 1"= 20' Small atz veins weak Wog min. 5-155-20 60° Incline shaft Sparse WOg min 624 5-154 inferred projection ? 000 (1+26 Adit level from Cleppers map (1943)
Altitude o'

| | | | | Map | | IN Adit \$ 5 | | |
|---|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|-----------------------------------------------------|-----------------------------------------|-------------------------|--|
| | | 0.1 | | | | Lead Compa | | |
| | | 1 | | | | HOWK Property | | |
| | | 1 | | | Pershing | County, New | rada | |
| | | | | | Note: | Sketch Cohied From | USGS mah | |
| | | | | | 1,070 | Copied from to show sam, and outline of | ble locations workings. | |
| | | | | | | Scale 1"= 2 | o At. | |
| | | | | // | Wall rock gray Siliceous Is sparse pyrite min | | | |
| | | | | // | pyrite min | | | |
| | Fe oxde | streak 5 web | | of starc" | | | | |
| | Line mount | | | 11/11 | | | | |
| | 5/a°C+38 | | 10 | 15164-1.5' | , | | | |
| | Sketch map of surface cut | Ore bes | is with | 5-165 -13' 5-163 -1.5' | | | | |
| | directly over adit. | sparse) | 137 | | | | | |
| | | / | 5.162 | | | | | |
| | | 99 | high grade pod abundant pyrite | Schoolite # gwartz | | | | |
| | | Thin lan st. of 5-160-13 | 5-16/ 1.0" to 12" fault gouge | | | | | |
| | | 2 | | | | | | |
| | 5-166 3. | and the second s | | | | | | |
| | Portal | And I | | | | | | |
| | South | HILL ADIT | | | | | | |
| | | 1 | | | | | | |
| - | | 1 | | | | | Figure 4 | |
| | | | | | | | | |

| Portal North Hill Adit. | Å N | Map of North Hill Workings Tungsten Lead Company (Red Hawk Property) |
|-------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 501 | A | Pershing County, Nevada Scotch Note: Copied from U.S. G. 5. map to show sample Iscations and outline of workings. Scole 1"=40" |
| Surface Cot 301 a 80 | **78 | |
| | | |
| | | |
| | 50/pee apen cut | |
| | | Figure 5 |

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TRITED STATES DEPARTMENT OF THE INTERIOR OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION AUMINISTRATION REPORT OF EXAMINATION BY FIELD TEAM

DMMA-2750, Tungsten Lead Company

Pershing County, Nev.

Halph J. Roberts and David G. Arnold, Geologists U. S. Geological Survey

January 29, 1953

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SUMMARY. CONCLUSIONS AND RECOMMENDATIONS

The area is underlain largely by slate and interbedded limestone lenses that have been partly setamorphosed to horafels and tactite. These rocks strike N. 10^{0} - 50^{0} E. and dip 40^{0} - 60^{0} HW. The tactite layers locally contain scheelite erratically distributed along the strike and down dip.

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Tungeten property.

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34 1°

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An adit 150 feet long has been driven to intersect the projected scheelite-bearing tactite layers about 75 feet below the pits, but the face of the adit is still about 50 feet short of the objective.

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^{2/} Elepper, M. E., April 1, 1965, Supplemental Remorandum-Access
Road, Red Hawk Tungsten property, Eugene Hountains, Pershing
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300

to be most premising with the following results:

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| 5-158 | 1.8 feet | 0.01 |
| 5-159 | 3.0 feet | 0.26 |

Three sumples were out east of the pits on schoolite-bearing tactite layers. (See fig. 2.) The assays of these samples were as follows:

| | Width | of Cut | Percent NO |
|-------|-------|--------|------------|
| S-150 | 1.0 | feet | 0.23 |
| 5-151 | 2.0 | feet | 0.15 |
| 3-152 | 5.0 | feet | 0.16 |

The Middle Hill workings have yielded most of the recorded production of the property. The principal stope is now caved, but the scheelite-bearing layer is exposed in an inclined shaft and workings on the 25-feet level. (See fig. 5.) Hear the top of the incline, the layer is about three feet thick; it narrows downward and is two feet thick where last seen on the level. Samples out in the layer gave the following assays:

| | Width of | lut P | ercent WOs |
|-------|----------|--------------------|------------|
| 8-163 | 2.0 fee | | 0.20 |
| 8-185 | 2.0 feet | | 0.01 |
| 5-156 | 3.0 feet | | 0.56 |
| 8+157 | 3.0 fee | t Average grade | 0.74 |

The 25-foot level has other scheelite-bearing tactite showings in higher beds, but the scheelite is erratically distributed throughout the best. One sample was out at the southwest side of the level

and in

at one of the best showings; it was analyzed with the following re-

| | width of Cut | Percent WOg |
|-------|--------------|-------------|
| 5-154 | 4.0 foot | 0.01 |

The South Bill workings comprise an adit 110 feet long and shallow surface cuts. (Fig. 4) An ore layer as much as 5.5 feet wide is exposed at the portal of the adit; this layer was followed northeastward for 45 feet where it was cut off by a fault. Free sumably the fault is a normal fault, and the layer is probably displaced northwest. Scheelite showings in a surface cut directly above the adit may represent the layer in the adit. If so, the displacement on the fault is about 19 feet. Two samples were out on the bed in the adit and one was out in the surface pit. These were analyzed with the following results:

| | Width of Cut | Percent WOs |
|-------|--------------|-------------|
| 5-160 | 1.5 feet | 0.24 |
| 8-166 | 3.5 feet | 0.01 |
| 5-157 | Z.O feet | 0.01 |

Another nerrower tactite layer is exposed in the adit northeast of the fault; this layer appears to be lower in grade than the nain layer, but there are two small high grade pockets in the drift. This layer thinned and pinched out about 36 feet from the fault. Five samples were out in this layer and assayed with the following results:



| | Width of Cut | Persent WOs |
|-------|--------------|-------------|
| 5-161 | 1.0 feet | 0.01 |
| 5-162 | 2.5 feet | 0.01 |
| 5-163 | 1.5 feet | 0.01 |
| 3-164 | 1.5 feet | 0.01 |
| 3-165 | 1.5 feet | 0.04 |
| | | |

ONE RESERVES

Shen Elepper visited the property2/ he calculated the fol-

| Table 1. Or | Seserves | |
|----------------------|----------|-------|
| | Tons | Grade |
| Assured (measured) | 250 | 2.0 |
| Probable (indicated) | 500 | 2.0 |
| Possible (inferred) | 750 | 0.75 |
| | | |

It is probable that in subsequent mining operations, the measured one was largely stoped and shipped. Elepper estimated the grade to be 2 percent WO3, but the shipments averaged only about 1.08 percent WO3. This discrepancy is probably due to dilution or a lowering in grade in the one shoot above or below the level that Elepper sampled.

There is no way to accurately evaluate the ore reserves remaining in the Middle Mill area. Elepper's estimated 250 tens of probable ore and 750 tens of possible (inferred) ere averaging 0.75 percent MOg may be found in the stope area. The tactite layer in the inclined shaft is probably the same bed as the one mined in the



stope, and it is possible that the tactite layer may be found between the shaft and the stope. On the assumption that there was no stoping below the stope level and that the tactite layer averages two feet in thickness, the block between the south end of the stope and the north side of the shaft (220 feet long) may contain about 5,500 tons of tactite to a point 100 feet down dip below the surface. As the scheelite is erratically distributed throughout the tactite, it seems prudent to consider that about half of this tennage may be waste rock. As the samples out during this examination (S-153, S-156, S-156, S-157) averaged 0.38 percent NO2, it seems reasonable to assume that the material in the block may average about 0.40 percent NO2. The inferred reserves in the Middle Mill area are therefore estimated to be 2,750 tons of material containing 0.40 percent NO2.

As the analyses of tactite layers on the Borth Hill and South Hill show that the tactite is too low grade to be shipped, no ore reserves were calculated for these areas.

PROPOSED EXPLORATION

The applicant has proposed to explore tengsten showings in three places, Sorth Hill, Hiddle Hill, and South Hill. Discussion of these projects follows:

North Hill

The showings on North Hill were largely covered by snee at the time of visit and could not be adequately examined. High grade assays have been reported from the shallow pits, but the samples cut



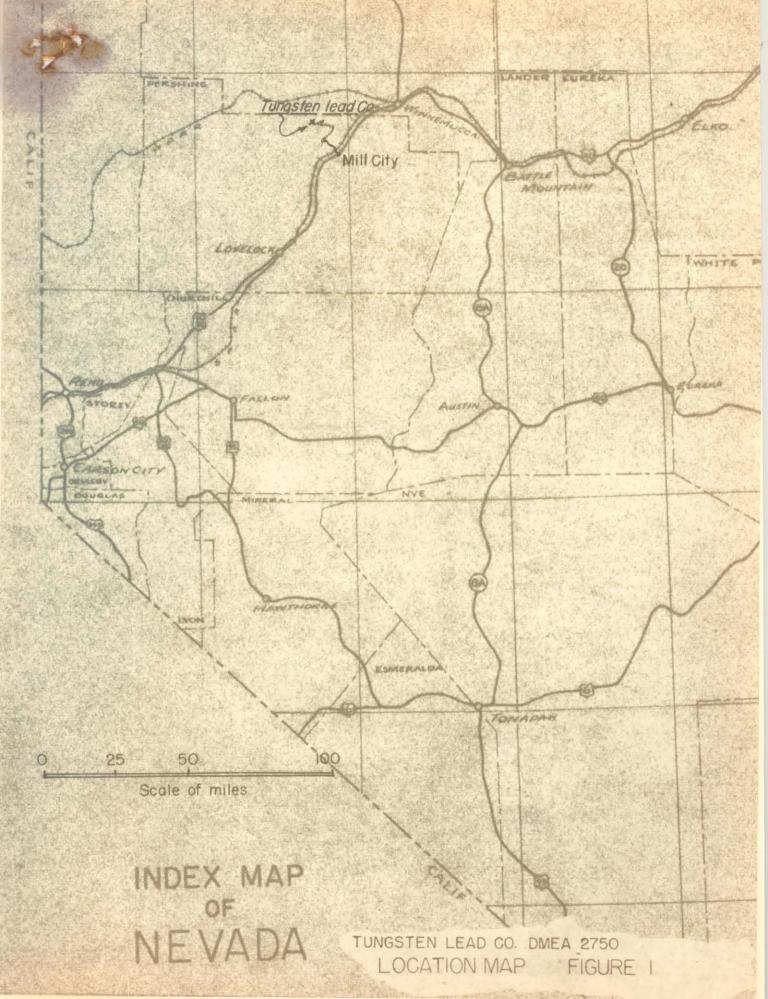
during the examination were all below shipping grade. No further exploratory work is recommended there.

Middle Hill

The applicant has proposed sinking the existing shaft an additional 80 feet to a depth of 125 feet, and to raise 50 feet into the hanging wall at the 110-feet level. As the ere reserves inferred in the Middle Hill area amount to only 2,750 tons averaging 0.40 percent WOg, no additional work is recommended there.

South Hill

The exploratory work proposed in the South Bill workings consists of drifting and crosscutting northeast of the present face. Although a few high-grade scheelite showings were noted in the workings, the overall grade of the tactite layers is very low. As the material is well below shipping grade ore, no further work appears to be justified here, and accordingly none is recommended.



| | | | | / | | | | 1 | ten Lead Compassing County, Neva | |
|----------------|-------------------|------------|---------------------|---------------|---------------|-------|---------|-------------------|------------------------------------------------------------------------|-------|
| | | , A | | LEAD | K015 | | | Jample . | m Map 5ketch how location of es 5-150, 5-151, 5 cale 1"= 300" | 5-152 |
| | | | | Junia Ten | Lead | No. | | 5.150 5.151 16 | | |
| | | | Portal North | h hill adit | Tungler ===== | 3 3 3 | 2 JUNGS | En Ten | | |
| | / | | 4 2 7 7 4 7 7 5 ° 4 | - sandara san | | | Α- | + | | |
| | 10 To | North hill | | v | | * | | | Note Mul copied from omen Docker | 7. |
| | Middle hill Toxer | | Le Ve | 40. | | | 1 | | | |
| and the second | | | Tunkas | | 40,3 | / | | | Figure 2 | |

Map of 25 foot level & Kleppers map (1943) Inclined Shaft, Middle Hill Tungsten Lead Company Pershing County, Nevada 5 Ketch Note: copied from U.S. G. 5 Mush to show sample locations and outline of Workings. Vertical Section Through Shoft Scole 1"= 20' Filled Small atz veins weak was min. 5-155-2.0 5 drop to 60° Incline shaft Sparse WO3 min 624 5-154 -000m inferred projection ? 000 Adit level from Kleppers map (1943) Altitude o'

| | | | | | · · | Mak | of South Hi | Il Adit \$ 50 | urface Gut | |
|----|--------------------------------|---------------------|------------------------------------------|---------------------|-----------------------------------------------------------------|-----------|-----------------------------------------------------|--------------------------------------------|-------------------------|---|
| | | | ٨ | 1 | | | Tungsten . | Lead Compa | ny | |
| | | | , i | y | | | | DWK Property | | |
| | | | 1 | | | | Pershing | County, Nev | ada | |
| | | | | | | 7 | Note: | Copied from to show samp and outline of | ble locations workings. | 2 |
| | | | | | ý. | | | Scale "= 2 | oft. | |
| | | | | | | | Wall rock gray Siliceous Is sparse pyrite min | | | |
| | · Arm | Fe oxide - | streak | | | of starc | | | | |
| | | zo' long 1. | s wae | | / | | ė | | | |
| | - 5161 | 7-2.0' | | | - M | 5-165-13' | | | | |
| 3 | sketch map of directly over | f surface cut adit. | | Ore bea Sparse p | | 5463 -15' | | | | |
| | | | | / | 5-162 | | | - u | | |
| | , | | | 999 | If high grade pad abundant pyrite 5-161 1.0" To 12" facts gouge | of govern | | | | |
| | | | Thin lam sh. of | 5-160-13 | | | | , | | |
| | | 5-166 3. | | | | | | 71 | - | |
| | | THE | A. A | | | 4 | | | | |
| | | Portal South | HILL Add To | 7 | | | | | | |
| 12 | | | | Jane Jane | | | | | Figure 4 | |
| | 3/7 | | | | | | | | | |

| - 4 | 12 | extal North 1. | Hill Adit | | A N | Tungst | North Hill en Lead Con Howk Prope | pany | |
|-----|----|----------------|-----------|------------------|---------------------|------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------|--|
| | | 501 | X2 | | | Pershin Note: to an | County, New Scotch New Copied from U- Show Sample of outline of to Scale 1"=40" | oda 8.4.5 map locations varkings. | |
| | | Surface Con | 304 480 | a ^{7,6} | | | 94 | | |
| | 7- | | | | | | | | |
| | | | | | | | | | |
| | | | | <i>→</i> 7. | 6. A. 5.158 | | | | |
| | | | | Suffai | 5.159 e apen cut | | | | |
| 2 | | | | | | | | Figure 5 | |

Department of the Interior Bureau of Mines

Rure and Precious Metals Superissent Ministers Reuo, Nevada.

Hydrometallurgical & Ore-Dressing Branch Box D. University Station

Region III

January 13, 1953

Memorandum

To:

Mr. A. C. Johnson

From:

Mr. J. B. Zadra

Subject: DMEA 2750 - Sheahan

The repeat assays for tungsten on samples submitted by Mr. Sheahan (DMEA 2750) have been run in duplicate, and the following results obtained:

| Sample No. | | %.WO3 | | |
|------------|------|-------|------|--|
| 161 | less | than | 0.01 | |
| 162 | loss | than | 0.01 | |
| 163 | less | than | 0.01 | |
| 164 | less | than | 0.01 | |
| 165 | | | 0.04 | |

You will note that these assays exactly check the previous reported results.

May I respectfully suggest that you inform the unsatisfied geologist that it is not an accepted practice to check chemical analysis with an ultra-violet lamp because other minerals fluoresce as well as scheelite. Rechecking samples by chemical analysis against an estimated lamp assay is not only absurd but takes up a lot of precious time that can be put to more useful advantage.

Calcite Shu white race Hydrozincite - blue white J. B. ZADRA

J. B. Zadra



UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

P. O. BOX 1551 RENO, NEVADA

December 22, 1952

Mr. Ralph J. Roberts U. S. Geological Survey 320 South Main Street Salt Lake City 1. Utah

Dear Mr. Roberts:

Subject: DMEA-2750 (Tungsten)

Thank you for the rough draft of the report on the Tungsten-Lead Co. property, DMEA-2750, Pershing County, Nevada.

Enclosed are copies of the sample analyses determined by the Metallurgical Division, Hydrometallurgical and Ore Dressing Branch, Reno, Nev. Practically all of the samples contain insufficient tungsten to constitute commercial ore.

Mr. Benjamin H. Sheahan, Mining Engineer from this office, who accompanied you and D. C. Arnold on the joint examination, inquired about the shipments made from the property to the Toulon mill and found that 142.5 tons of mixed ore was stockpiled. The material was hauled to the mill between July 16 and July 28, 1952. Samples taken by the operator and estimates by Sheahan and the mill foreman indicate that the material contains less than 0.2% WO3. A sample taken by the operator's engineer was reported to contain 0.12% WO3. The material was composed of mixed tactite, slate and hornfels which may have been hauled to the mill for promotional reasons.

The venture seems to be of a promotional nature and the samples do not indicate that an exploration loan is justified.

Sincerely yours,

A. C. Johnson, Chief

Mining Division

Region III

Encl.

SAMPLES AND ANALYSES

| Sample No. | Width/feet | %, WO3 | %, Mo | Location & remarks |
|---------------|------------|--------|-------|-----------------------------|
| S-150 | 1.0 | 0.23 | | North Hill outcrop - East |
| S-151 | 2.0 | 0.15 | | North Hill open cut - East |
| S-152 | 5.0 | 0.16 | | North Hill outcrop - East |
| S-153 | 2.0 | 0.20 | | Middle Hill shaft 25' level |
| S-154 | 4.0 | *0.01 | | Middle Hill shaft 25' level |
| S-155 | 2.0 | *0.01 | | Middle Hill east side shaft |
| | | | | 25 ^t level |
| S-156 | 3.0 | 0.56 | 0.07 | Middle Hill west side shaft |
| | | | | 25' level |
| S-157 | 3.0 | 0.74 | | Middle Hill shaft 7' below |
| | | | | collar |
| S-158 | 1.8 | *0.01 | | North Hill open cut above |
| | | | | adit |
| S-159 | 3.0 | 0.26 | | North Hill open cut above |
| | | | | adit |
| S-160 | 1.3 | 0.24 | | South Hill adit |
| S-161 | 1.0 | *0.01 | | South Hill adit |
| S-162 | 2.3 | *0.01 | | South Hill adit |
| S-163 | 1.5 | *0.01 | | South Hill adit |
| S-164 | 1.5 | *0.01 | | South Hill adit |
| S-165 | 1.3 | *0.04 | | South Hill adit |
| S-166 | 3.5 | *0.01 | | South Hill adit portal |
| S-167 | 2.0 | *0.01 | | South Hill open cut above |
| | | | | adit |
| | | | | |

Note: *Less than 0.01%

Itom 67 (opy 2 y 2)

DEPARTMENT OF THE INTERIOR OF AR L. CHAPMAN, SECRETARY

REPORT OF EXAMINATION BY FIRLD TWAN

Pershing County, Ser.

Benjazin H. Sheshan, Mining Engineer U. S. Bureau of Mines

January 20, 1955

DMSA-2750 (Tungsten)

Name and address of applicant: William Berger

William Berger Yungsten Lead Company Room 7, Professional Bldg. Winnemoca, Nev.

Name and location of property: Yungston Load Company, Pershing Co., Nov.

SUMMARY

The Tungsten-Lead Company, Inc. property consists of 16 unpatented claims located high on the east slope of the Sugene Mountains,
Pershing County, Nev. The property is reached by following the Pole
Canyon road 8.4 miles northerly from Tungsten, Nev.

The Middle Mill area which was formerly known as the Med Mask mine was developed by a shallow 30-foot incline shaft. An adit now caved and filled was examined by a goologist of the U. S. Geological Survey in 1943. The access road was constructed at Government expense in 1944 and a production of 206 tens of tungsten are containing 286 units of NO₂ was produced. Marrow, lenticular, scheelite bearing tactite lenses occur in metamorphosed sedimentary rock with regional strikes of N. 10° N. to N. 50° N. and dips of 40 to 60 degrees to the morthwest.

The North Hill and South Hill areas are developed by short adits, however mear occurrences of small lenticular shaped tactite lenses contain insufficient tungsten mineralisation to constitute ore.

The property was incorporated in 1950 and was promoted by J. G. Tomlinson of Winnemucoa. An application for access road improvement 1/ S. R. Klepper.

ago to

was denied following an examination by engineers of the U.S. Bureau of Wines in June 1951.

Mr. J. C. Tomlinson conveyed control in the property to Mr. William Berger, an investment broker of Santa Rosa, Calif., who now maintains an office at Winnessucca.

Fince only 140 feet of underground work was done, some road repair work, and the production of 142.5 tons of non-commercial mixed ore, at least a fairly large portion of the money was not spent on the property.

A request for a Government exploration loan was made by Mr. Berger in October 1952 and the property was examined on December 2 and 3, 1952 by an engineer of the U.S. Bureau of Mines jointly with geologists of the U.S. Geological Survey.

CONCLUSIONS

The tungeten mineralization is too low grade, and the scheelite bearing lenses are too small to warrant an exploration loan.

The applicant for the exploration loan lacks necessary qualifications to conduct an exploration project competently.

RECOMMENDATIONS

The exploration losn should be denied.

TIME SPANT OF PROPERTY

The engineer and goologists examined the property from 10:00 A.M.,

[/] S. J. Matson and S. H. Sheshan.

^{5/} B. H. Sheahan.

^{4/} R. J. Roberts and D. C. Arnold.



Pec. 2 to 5:00 P.M., Dec. 5, 1952. The Eugene Mountains in this region were partly covered with snow. Mr. William Berger and Marion E.

Price, his supervisor, accompanied the examination team.

MARK ARE LOCATION OF PROPERTY

The Tungsten Lead Company, Inc., Red Nawk mine, is located on the east slope of the Eugene Mountains in the Sentral Mining District, Pershing County, Nov., and is about three miles northwest of the Movada-Massachusetts Tungsten mine.

The property is reached from Sinnessucce, the nearest town, by following U. S. Highway 40 southwesterly 27 miles to Mill City, turn right and follow paved road toward tungsten S miles to road fork opposite the mill building, jurn right and follow an unimproved road mortherly 5 miles to a road fork leading westerly into Pole Canyon, follow the Pole Canyon road 5.4 miles to the property. The total distance by road from Winnessucca, Nevada is 48.4 miles to the Middle Hill (Red Hawk shaft).

The sixteen unpatented Tungsten Load mining claims No. 1 to No.16 are located in sections 16, 17, 20 and 21, T. 36 N., R. 34 N., at elevations from 6200 feet to 7000 feet.

CONDITION AND SEASONAL ACCESSIBILITY OF ROAD TO PROPERTY

The paved roads from Winnesucca to Tungsten are all weather and are solden closed. The partly improved road from Tungsten to the property in Pole Campon is open most of the year except during periods of heavy snow or rain. The property was reached by four wheel drive vehicles in December 1952.



COMPETERCY OF APPLICANT AND OPERATING PURSONNEL

The applicant, Mr. William Berger, is an investment broker. He has practically no mining experience. Mr. Berger stated that the corporation had expended over \$85,000. Judging from the small ascunt of work done by the corporation, which includes only 140 feet of underground exploration work, and a few weeks work on surface trenching and read improvement with a bulldoser, the applicant would be a very poor risk to headle Government funds for exploration work.

The applicant, Mr. William Berger, was in charge of the cooperation work when over 140 tons of mixed ore and waste was hauled to a custom mill at Tuelon, Nev. The material apparently contains insufficient schoolite to pay for milling. It is quite possible that this material was hauled for promotional reasons.

Mr. Berger stated that the company was incorporated in Sevada with a capitalisation of \$18,000 shares at \$1.00 par value. Some of this stock was said to have been sold to business men at Santa Rosa, Calif., which was Mr. Berger's former residence.

The applicant does not appear to be competent to conduct an exploration project.

The personnel at the property included Mr. Marion M. Price, an engineer employee, and one workman. Because of storny weather, no work was being done.

APPLICANT'S PROPERTY RIGHTS

The applicant stated that he and his associates held the majority of the stock in the serporation. The sixteen unpatented Tungsten Lead



mining claims are said to be owned by the corporation. The location certificates are said to be filed at the Pershing County recorders office at Lovelock, Nev. Claims No. 1 to No. 8 are recorded in Neck 13, pages 7 to 18 and claims No. 9 to No. 16 are recorded in Neck 13, pages 489 to page 492.

Mr. Borger claims that the corporation may owe some money to Mr. J. O. Tomlinson, a former stockholder.

DESCRIPTION OF PROPERTY

Surface and surface facilities:

Surface facilities at the emp consist of one bunkhouse with a kitchen and one small cabin. Accommodations for six men are available.

Equipment:

| | | Condition |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | A TOTAL MARKET TO THE TOTAL THE TOTAL STREET, TH | |
| | and 1 8-oubic foot helating buckets | Fair |
| 1 | The state of the s | |
| | gasoline engine drive and 60 cubic feet | and the same of th |
| 120. | air receiver | 糠 |
| 1 | | |
| | plete with column, shell heses and water | |
| 200 | pressure tank, and drill steel | 3% |
| 1 | Atlas rock drill with pacusatic leg, drill | |
| | steel, hoses and bits | 费 |
| 1 | Blacksuith shop with assorted hand tools | |
| 1 | Acetylene welding outfit, complete | Cood |
| 300 | ft. 16-inch gage track, 12-pound rail | Fair |
| 2 | Mine care, 16-cubic foot | |
| 1 | Mine car, 14-cubic foot | |
| 1 | Truck, pickup, 1-ton | 58 |
| 1 1 2 | Truck, plokup, 1/2-ton, 4-sheel drive | ** |
| 2 | Electric light plant, 1500-watt | 59 |
| 400 | ft. pipe, 3/4-inch to 2-inch air and water | |
| | lines | 20 |
| 1 | Beadframe and shack, at Middle Mill shaft | Poor |
| 1 | Ore bin at shaft, 30-ton capacity | 99 |
| 1 | Ore bin at South Mill adit, 30-ton capacity | Fair |
| | | The second second |

Nine workings are shown on maps included with report. (Figures 1, 2, and 3).



SAMPLING

| Sample | %idth/feet | MANOS | 2,20 | Location and remerks | |
|--------|------------|-------|------|----------------------------------------------|--|
| 8-150 | 1.0 | 0.23 | | North Hill outerop - Sast | |
| 8-151 | 2.0 | 0.15 | | TR 25 50 68 | |
| 8-152 | 5.0 | 0.16 | | 我 時 時 概 | |
| 5-158 | 2.0 | 0.20 | | Widdle Will shaft 25-foot level | |
| 8-154 | 4.0 | *0.01 | | " " " 25-foot " | |
| 8-185 | 2.0 | *0.01 | | " east side phaft | |
| | | | | 25-foot level | |
| 8-156 | 3.0 | 0.56 | 0.07 | Middle Hill west side shaft 25-foot level | |
| 5-157 | 5.0 | 0.74 | | Middle Mill shaft 7 feet be- | |
| | | | | low collar | |
| 5-158 | 1.8 | *0.01 | | Worth Will open out above adit | |
| 5-159 | 3.0 | 0.26 | | * * * * * | |
| S-160 | 1.5 | 0.24 | 2 | South Bill adit | |
| 5-161 | 1.0 | *0.01 | 5 | 69 98 98 | |
| 5-162 | 2.3 | *0.01 | | 28 19 | |
| 8-163 | 1.5 | *0.01 | | * * | |
| 8-164 | 1.5 | *0.01 | | ** ** | |
| 8-166 | 1.3 | 0.04 | | ** | |
| 8-166 | 3.0 | *0.01 | | " " portal | |
| 8-167 | 2.0 | *0.01 | | " open out above adit | |

See sketch map figures 1, 2, and 5 for sample locations. *Less than.

PAST OPERATION

The property was examined by engineers from the U. S. Bureau of Mines in June 1951 in regard to an access road application which was denied.

Work at the property since the previous examination consisted of driving the South Hill adit; retimbering the Hiddle Hill shaft; and sinking it 15 feet. The North Hill adit was extended less than 15 feet. Sees road repair work and trenching with a bulldozer was completed and the access road was extended 0.5 of a mile from the shaft to the North Hill area.



PRODUCTION

The operator, Mr. William Berger, produced 142.5 tons of mixed ore and waste. The material was estimated to contain less than 0.15 percent WO, and was stockpiled at the Toulon mill located 74 miles by road south of the property. Trucking the material from the property to the mill cost \$5.75 a ton, according to Mr. Berger, and mill charges would be \$10.00 per ton.

Production figures from the Middle Hill section, (Red Hawk mine), are previously quoted.

AVAILABILITY OF MAN POWER, SUPPLIES, WATER, POWER, RTC.

Mine labor was scarce in this region as more stable operations in the vicinity employ the available supply. Wage scale for miners is \$14.00 per day.

Supplies can be obtained at Winnemucca, Wev.

Water for demostic use can be obtained from a spring a few hundred yards from the camp in Pole Campon.

Secause of the steep road grades, haulage costs are high.

STATEMENT OF THE APPLICANT'S PROPOSAL

The applicant requests Sovernment aid to explore the preperty.

A DEEA loan totaling SC2,941 has been requested. The exploration work covers surfacing treaching, drifting, crosscutting, and sinking.

The applicant claimed the ore on the North Hill would run 5.0 percent NO₈, which is obviously wrong. The best showings were sampled with the assistance of the operators engineer and the analyses of these samples indicated that the material was too low grade to constitute ore.