

# State Department of Geology and Mineral Industries

702 Woodlark Building  
Portland, Oregon

## ROWLEY MINE (Copper)

Douglas County  
Tiller-Drew area

### Owner:

Location: Approximately 5 miles south of Drew Creek in sec. 4, T. 32 S.,

R. 2 W. The property is reached from Drew by the way of the Devils Flat CCC road and a short, rough road to the north about half a mile long which leaves the Devils Flat road about 5 miles from the Tiller-Trail Highway.

### Area:

History: The property was acquired many years ago by Dr. Reddy and associates of Medford. There has been no production but considerable underground development work was done. According to location notices posted on the ground, the property was relocated in 1942 by Jack DeVore and Lois DeVore.

Topography: The region is mountainous and covered by generally large second-growth timber. Tunnels which comprise the development work are driven from the bottom of the gulch of upper Drew Creek. Trails to the tunnels are on relatively moderate slopes.

Development: Northerly from the Rowley cabin an old road leads down the east fork of Drew Creek. Near the head of the creek canyon and a few hundred feet north of the cabin, a tunnel, 380 feet long, has been driven in a general northerly direction in schist. In addition crosscuts total 80 feet. In a few places the schist has been replaced by pyrite and chalcopyrite together with quartz. At a point 47 feet in from the portal, an east crosscut cuts several feet of this low-grade material. Farther in at approximately 105 feet from the portal a breast 7 feet high and 9 feet wide has been opened on this class of ore.

A sample across this breast returned gold, 0.01 oz.; silver, trace; and copper, 1.8 percent.

No copper minerals were seen in the tunnel beyond this breast.

Approximately 500 feet farther down and in the bottom of the gulch, two tunnels have been driven north 42 feet and south 58 feet respectively on a vein containing a high percentage of pyrite.

In the face of the north tunnel this vein is 5 feet wide, strikes N. 7° W., and dips 55 degrees E. There are distinct walls and the footwall has from half an inch to an inch of soft gouge. The material in the vein is mainly pyrite crystals in a quartz matrix. The pyrite is approximately 75 percent of the vein by weight and is principally in the form of small pyrite cubes about  $\sqrt{\text{mm}}$  square. Some of the country rock near the vein is heavily copper-stained and the water draining from the tunnel is saturated with iron salts.

The vein in the south tunnel, as exposed beyond the timber sets, is smaller than in the north tunnel, and appears to finger out in the schist, disappearing near the face. The water from the south tunnel contains a much less quantity of iron salts.

A sample across 5 feet of vein in the face of the north tunnel returned: gold 0.01 oz., silver 1.3 oz., copper 1.10 percent, zinc 7.3 percent.

Geology: According to (Wilkinson, 41) the country rock of the immediate area is May Creek schist; and the same authority maps greenstone half a mile northeast of the Rowley mine, and lower Tertiary agglomerate half a mile southeast of the mine.

(Wells, 40) has shown that the greenstone is of metavolcanic and metasedimentary origin and lies stratigraphically below the Galice formation (Jurassic). (Wells and Hotz, 41) believe that the age of the May Creek schist is Triassic.

The metavolcanic rocks of the Grants Pass quadrangle grade imperceptibly into Diller's May Creek schist; therefore this rock is a metamorphosed phase of the volcanic rocks. (Diller, 24) surmised this relationship, judging from his statement that the May Creek is very similar to the contact aureole rocks of the Grants Pass quadrangle. The schist may properly be called a gneiss.

At the Rowley mine the May Creek schist is a quartz-hornblende-mica gneissic rock that has been widely bleached by hydrothermal action. This altered zone contains stringers and sparse disseminations of chalcopyrite and pyrite. Orebodies sampled are described under "Development".

Parks and Swartley 16:224 describe the property as follows:

"The ore bodies are found in a zone where shearing and compression have produced schist many hundreds of feet wide. Small sulphide lens-shaped masses of chalcopyrite and pyrite are found rather widely but irregularly distributed throughout the schist. These occurrences of sulphide which range in size from wheat grains to lenses an inch or more in thickness, together with a small amount of quartz associated with them are squeezed and drawn out in the planes or laminations of the schist, showing that they were formed either previous to, or during the movement which produced the schist. In the better looking areas which are 100 feet or more wide, they are found a few inches to a foot apart, with nearly barren material between. Under these conditions the principal problem in the development of the property will be to determine the volume of this schist which is sufficiently mineralized to make low-grade copper ore bodies.

"It seems probable that the property could be prospected to advantage by sinking a large number of drill holes over the more promising areas.

"Considerable development work by tunnels and open cuts has been done. In some of these cuts and tunnels which are usually driven nearly at right angles to the general strike of the schist, samples have been taken which give some promise of rather large low-grade copper deposits.

"Near the footwall side of this wide schist zone is found a massive sulphide vein which is traced by iron-stained capping for several hundred feet, and opened by 2 short tunnels near the bed of the creek. This vein is parallel to the schist and consists of nearly pure pyrite as much as 15 feet wide which is said to carry sufficient values in copper and gold to make it a low-grade ore."

References:

Parks and Swartley 16:224 (quoted).

Oregon State Dept. Geol. & Mineral Industries,  
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Diller 24; Diller, J. S., & Kay, G. F.; U. S. Geological  
Survey geologic atlas, Riddle folio (No. 218) 1924.

Wells 40; Wells, F. G.; Preliminary geologic map of the  
Grants Pass quadrangle, Oregon; State Dept. Geol. &  
Mineral Industries, map series 5, 1940.

Wells 41; Wells, F. G., & Hotz, P. E.; Mesozoic Volcanic series  
in southwestern Oregon (abst); Geol. Soc. Am., Bull.  
Vol. 52, No. 12, pt. 2, pp. 1937-1938, Dec. 1941.

Wilkinson 40; Wilkinson, W. D.; Reconnaissance geologic map of  
the Butte Falls quadrangle, Oregon, State Dept. of  
Geol. & Mineral Industries, map series No. 4, 1941.



Rowley Copper. 10/8/43-

location

Upper tunnel

Jumping Jack No. 1 - 1/1/43

Sample # 5 - X breast of 2<sup>nd</sup> Rt. Hand X cut

at 110 ft from portal - 9-ft x breast

disseminated chalcocite and pyrite

in silicified schist. seams of

enphide run with schistosity.

Au. 01 to Tr Cu 1.8

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1<sup>st</sup> Rt. X cut shows some of  
same ore but not as wide

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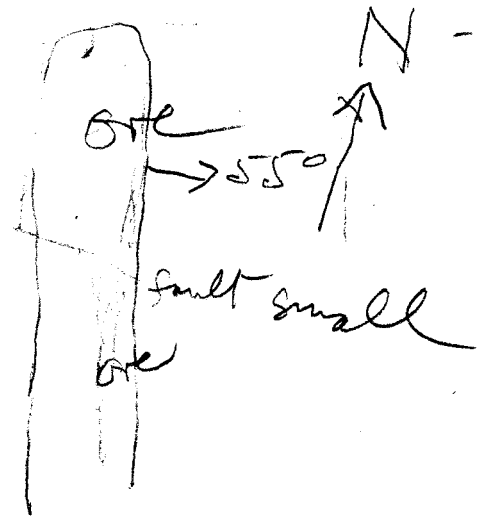
Beyond 2<sup>nd</sup> X cut tunnel  
is barren or nearly barren

Location Jack DeVore & Bois DeVore  
Jumping Jack No 2 ad joins to south

Rowles

2 - Sulphide tunnels lower down  
quartz -

#1 - N 7° W 43 ft long contains fairly  
solid pyrite some Cu stain little  
qtz - pyrite coarse cubes - whitish  
vein has definite walls  
Gouge 1" on F.W.

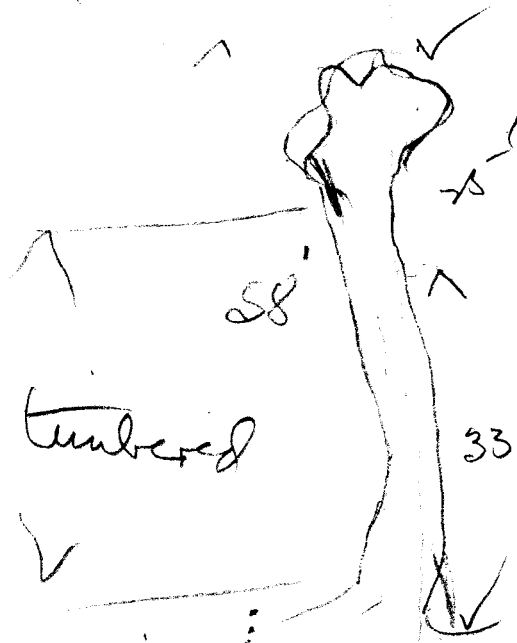


#6 - Sample x 5-ft  
free -

As .01 Ag 1.3 Cu 1.1% Zn 7.3%

#2 - S 06° E

Pyrite solid only about 1' wide  
on left side and one seam 4"  
fingerout in schist



Douglas

Rowley

ROWLEY MINE

Is a deeded, title-insured property of eight claims, in S/E Douglas County, Oregon, about 52 miles N.E. of the Medford commercial airport, all but 6-1/2 miles, which is rocked all-year Forest Service road, being paved.

Nearest railhead Riddle (Hanna Nickel smelter) about 35 miles, or White City (near Medford), 47 miles, both S. P. Co.

This is an old property first developed during the World War 1914-18. A copy of Engineer Gunnell's report of the extensive underground (some 400') tunnels is enclosed with this report.

In 1954 Consolidated Copper Mines, Ely, Nevada, had their geologist, J. McLaren Forbes, recently with Cerro de Pasco, do some bulldozer trenching and sunk one core drill hole on Rowley. According to Mr. Forbes, he was in favor of further exploration at the time, but Consolidated had urgent need for him elsewhere so they dropped the project.

Both Mr. Forbes and his junior assistant, David Hand, told us Rowley, in their opinion, was a very promising property and suggested it might be well worth purchase. We acquired it in 1955, and since then have done some new work on the property and in 1959 blasted into and opened up an entirely new surface area from which area in base rock the Herr Assay of 120.20 per ton was obtained.

There is an exposed ore body of some 200' width by 750' length facing westerly on the side hill shown in the pictures shown in this report.

The representative samples taken in 1959 (see Abbot Hanks assay showing reports from five levels), and others, we so obtained, but merely with hand pick over the wide face. This was only an inch or two into the leached surface rock, which seems to account for the much lower assays, compared with the State of Oregon and Herr assays enclosed.

There is also a massive sulphide vein which holds promise of a heavy tonnage of nearly pure iron sulphides--see Herr assay.

This may well be an open pit, all-year operation, now accessible, which needs additional exploration to accurately define the extent and average content of the ore bodies.

The owners are able to deal direct with qualified, equipped parties who would seek an exploratory lease, with option for actual operation should their findings so warrant. The owners will expect a complete progress and final report of the exploration being furnished them, with royalty operative lease being negotiated between the parties.

## MINERAL RESOURCES OF SOUTHWESTERN OREGON.

## COPPER MINES AND PROSPECTS.

## COPPER PRODUCTION.

In 1905 Oregon became a considerable producer of copper. The reported output for succeeding years is as follows:

*Production of blister copper in Oregon from 1905 to 1910.*

	Pounds.		Pounds.
1905.....	846,815	1909.....	235,000
1906.....	415,803	1910.....	13,861
1907.....	554,104	1911.....	93,136
1908.....	291,377	1912.....	260,429

Except in 1909 and 1910 the greater part of the production came from Josephine County.

## MINERAL RESOURCES OF SOUTHWESTERN OREGON.

## COPPER DEPOSITS.

## DISTRIBUTION.

The copper deposits of southwest Oregon have long attracted attention and a number of attempts have been made to mine them in a broad belt that extends northeast and southwest from Curry and Josephine counties into Coos and Douglas counties. The earliest attempt was made on Illinois River near the mouth of Rancherie Creek, and later in the same district on Fall Creek, where small furnaces were erected and operated for a short time on the ores of that vicinity. Shipments of ore are reported to have been made from Collier Creek and Rogue River in Curry County by the late Col. I. N. Munsey. At Drew, and on Green Mountain east of Glendale, and the west fork of Cow Creek, near Mount Bolivar in Douglas County, as well as at several points on Chetco River in Josephine County, openings have been made and ores of copper taken out, but all these points are reached by trail only. Extensive developments have been made at Almeda, near Galice, and at Takilma, near Waldo, where smelters have been operated at intervals for a number of years. Both points are easily accessible by wagon road and are now apparently the most active mining centers of the region. For a list of the copper mines and prospects of the Galice-Kerby-Waldo region, see Plate VI, page 46.

## GENERAL CHARACTER.

Only a few localities have been examined, and these not in detail, but enough has been seen to indicate that they are essentially contact deposits and that there are two distinct modes of occurrence. In the one class the ore bodies, chiefly pyrite with subordinate chalcopryrite and bornite, occur in quartz porphyry near its contact with slates. In the other class the ore bodies, chiefly chalcopryrite and pyrrhotite, prevail in greenstone or serpentine near their contact.

Of the occurrence in quartz porphyry the deposit at Almeda is the best known and almost the only example in the district; of the occurrence in greenstone or serpentine near their contact the mine at Takilma, generally known as the Queen of Bronze, has been most fully developed and described,<sup>1</sup> but the deposit on Fall Creek is quite as characteristic.

(Sept. 6, 1911) the irregular incline, about 40 feet in length, exposed a body of ore  $2\frac{1}{2}$  to 3 feet in thickness, where it disappears beneath the incline. A tunnel is now being run in the hope of finding this ore body at a depth of 200 feet below its outcrop in the incline. The tunnel is already 40 feet in and several hundred feet have yet to be driven. The Pacific Outlook, of December 28, 1911, reported that the tunnel was in 140 feet and that a 2-stamp mill had just been completed.

#### COPPER PROSPECTS OF THE RIDDLES QUADRANGLE

The copper prospects of the Riddles quadrangle have attracted attention for a number of years. In 1907 Prof. G. F. Kay examined the prospects known as the Joseph Ball mine and the Oak mine. He describes them as follows:<sup>1</sup>

The Joseph Ball mine is situated in the NW.  $\frac{1}{4}$  sec. 36, T. 32 S., R. 4 W., which is on the southwest slope of Cedar Springs Mountain. The elevation at the mine is about 4,250 feet. Some ore has been carried by pack train to Glendale, on the Southern Pacific Railroad, a distance of more than 20 miles. The country rock is serpentine, which has been greatly fractured and sheared, and locally, where it has been decomposed, magnesite with some strontianite is present. The ores consist of native copper, copper glance, cuprite, and the copper carbonates. They are in a faulted zone in the serpentine, which shows numerous slickensided surfaces on which are vertical striae. Within the workings the faulted zone varies in direction and the plane of shearing is very irregular. On this plane have been found flat pieces of native copper as large as the hand; the copper glance and cuprite have also been found on this plane as nodular masses and as scattered fragments. The workings consist of an upper tunnel of 150 feet along the fault zone and a lower tunnel of 145 feet from which there is an upraise of 60 feet to the upper tunnel. At the time the mine was examined the company was preparing to sink, from the lower tunnel, a shaft on the fault plane.

The Oak mine, in the SW.  $\frac{1}{4}$  sec. 4, T. 35 S., R. 5 W., was located in 1905. It is owned by the Oak Consolidated Mining & Milling Co. Copper was found on this property while a gold-quartz vein was being developed. A tunnel was being run to crosscut some quartz stringers in a fractured zone, when copper pyrites were found. The mineral occurs as small irregular masses in a fractured and chloritized greenstone. During the summer of 1907 the company was installing an air compressor, hoists, and machine drills, and plans were being made to prospect the property thoroughly.

Some prospects of copper occur in greenstone near Glendale, and A. D. Leroy, of Merlin, has done some work on a quartz vein carrying copper in the N.  $\frac{1}{4}$  sec. 8, T. 35 S., R. 6 W.

The Rowley copper prospect is situated about 10 miles northeast of Green Mountain, in essentially the same belt, on Drew Creek, 8 miles from Drew and 15 miles by wagon road to Trail. The property consists of 10 claims, covering, it is said, two veins about 500 feet apart. The country rock is reported to be slates and diorite, but the ore samples show traces of mica schist, such as results in many places from the contact metamorphism adjoining the borders of

granodiorite, and suggests the presence of such a contact in that region, for along the eastern border of the Riddles quadrangle, a few miles west of the Rowley prospect, there are large masses of greenstone and granodiorite which extend to the northeast.

The ore is chiefly pyrrhotite, chalcopyrite, and chrysocolla, with some malachite and a larger proportion of gangue quartz. The ore is said to occur in streaks 10 to 30 feet wide, running 3 to 4 per cent copper and \$2 to \$3 in gold, with as much silver. There are a number of open cuts and shallow shafts and about 180 feet of tunnels.

In 1912 the mine production of copper in Oregon was 260,429 pounds, valued at \$42,971, an increase over the production of 1911 of 167,293 pounds in quantity and of \$31,329 in value. Of the copper produced in Oregon in 1912, that from Josephine County was valued at \$41,973 and that from Lane County at \$841.

No lead was produced in Oregon in 1911, but in 1912 two mines, one in Jackson County and one in Lane County, yielded 39,317 pounds, valued at \$1,766.

SUMMARY OF FILE ON ROWLEY MINE

ROWLEY MINE

- 1916 Letter from L.A. Levansaler to J. F. Reddy - Lev. & Mr. Lighthall examined in 1915 and sampled - turned down - location of property poor - would like to see ore body prospected at depth - did not want to take on the job with no assurance of transportation or power line in area - 27 samples average 1.0% Cu. Maps enclosed. Also called Banfield Property. (NOT ASSAYED)
- 1925 Letter Frank Tate to Julius Kruttschnitt, Jr. - referred to L.A. Levansaler - Independant Mine in Oregon.
- 1925 Letter to Mr. Lev. from Chas. Banfield - owner of Banfield Mine, asking opinion on mine.
- 1926 Further inquiry from Mr. Tate to Mr. Lev.
- 1926 Letter - Levansaler to Tate - answer to above - Reviewed notes and decided property contained sufficient merit to justify making trip to mine.
- 1926 Letter - Tate to Levansaler.
- 1926 Sample from Chas. Banfield ran 12.7% Cu, 0.44 oz. Ag. Ore very desirable - Barker to Levansaler.
- 1926 Letter - A. H. Richards (Tacoma Smelter) to Levansaler - have one car of ore from Banfield Mine - Cu 9.8%, Ag 0.38 oz., Au 0.01 oz.
- 1929 Letter - Charles Van Barneveld (consultant) to Levansaler asking for sample results on Rowley Mine.
- 1929 Answer with results - stated that samples were not very encouraging but would probably have done some work had property been more accessible, as zone of mineralization was very ~~nice~~. WIDE
- Levansaler appears not to have made second trip to mine.
- 1958 Letter from Edward Peer to S.K. Garrett concerning Rowley and other properties.
- 1958 Answer from R.L.A. - numerous letters back and forth in 58-59.
- 8 deeded claims in S.E. Douglas County near Red Cloud and Banfield Properties. Sample sent to Spokane not assayed - "good looking chalco - + 2% Cu" SKG Assay from sample by Peer 2.21 oz. Au, 2.10 oz. Ag, 6.4 % Cu.
- 1961 Letter Peer to Garrett - still working - answer by RLA - negative.
- 1963 Letter Peer to Anderson - still working - enclosed optomistic report by consultants (1914)
- 1963 Peer to Sunshine -
- 1964 Peer to Anderson asking if Sunshine will look

April 16/64 Letter - Leaf to Peer - Negative

April 18/64 Letter - Peer to Leaf - Note of additional blasting at property - Spectrographic analysis enclosed.

Feb. 17/65 Letter - Peer to George Day - Submitting complete brochure on Rowley Mine (Report by Gunnell & Edwards, already in Sunshines file). Misc. assay data. Letter from Hanna Mining Co. Geologist stating results satisfactory and that he would visit prop. (Dated Dec. 4/62). Peer says they offered him a lease in Aug./62 but he did not accept. Material forwarded to Spokane by Day.

Feb. 25/65 Letter - Peer to Sunshine - encloses some information on Mammoth Lode and Banfield Mines in same general area as the Rowley.



U.S.G.S. Bulletin 546 - 1914 Mineral Resources of S.W. Oregon - Copper Prospects of Riddles Quadrangle.

Rowley copper prospect about 10 miles N.E. of Green Mountain on Drew Creek, about 8 miles from Drew. Ten claims covering two veins 500' apart. Country rock slates and diorite but ore samples show traces of mica schist.

Ore chiefly pyrrhotite, chal copyrite and chrysocolla with some malachite and much gangue quartz.

Ore is said to occur in streaks 10'-30' wide running 3-4% Cu and \$2-\$3 gold with some silver.

PEER HAS LETTER OF AUTHORITY FROM OWNERS OF BARTFIELD MINE TO EXAMINE  
PART OF SAME RICHTER MOUNTAIN AREA.

GL/sb

**R E P O R T**  
**On The**  
**ROWLEY GROUP OF MINING CLAIMS**  
**Property of**  
**THE UMPQUA COPPER COMPANY**  
**Douglas County, Oregon**

**By**  
**ALVA H. GUNNELL, Mining Engineer**  
**And**  
**S. B. EDWARDS, Geologist.**

**June, 1914**

From Page 127 of Bulletin 14-C Oregon Metallurgical Mines Handbook  
Coos, Curry and Douglas Counties 1940

Howley Group (Copper)

Tiller-Drew Area

Parks & Swartley 16 - 224-5 report:

This property consists of 14 claims known as Rowley Group in Sec. 4 T. 32 S. R. 2 W. 20 mi. west by north of Trail, 30 miles airline distance NW of Medford.

Ore bodies found in a zone where shearing and compression have produced schist many hundreds of feet wide. Small sulphide lens shaped masses of chalcopyrite and pyrite are found rather widely but irregularly distributed throughout the schist. These occurrences of sulphide which range in size from wheat grains to lenses an inch or more in thickness, together with a small amount of quartz associated with them are squeezed and drawn out into the planes or lamination of the schist. Showing that they were formed either previous to or during the movement which produced the schist. In the better looking are which are 100 feet or more wide they are found a few inches to a foot apart with nearly barren material between. Under these conditions the principal problem in the development of the property will be to determine the volume of the schist which is sufficiently mineralized to make low-grade copper bodies.

It seems probable the property could be prospected to advantage by sinking a large number of drill holes over the more promising areas.

Considerable development work by tunnels and open cuts has been done. In some of these cuts and tunnels which are usually driven at right angles to the general strike of the schist, samples have been taken which give some promise of rather large low-grade copper deposit.

Near the footwall side of the wide schist zone is found a massive sulphide vein which is traced by iron stained capping for several hundred feet, and opened by two short tunnels near the bed of the creek. This vein is parallel to the schist and consists of nearly pure pyrite, as much as 15 feet wide, which is said to carry sufficient value in copper and gold to make it a low grade ore.

GEOGRAPHY

**LOCATION** The property is located in Sec. 4. T. 32. S. R. 2. W. Willamette Meridian, Douglas County, Oregon; it is near center of said section. The house and main tunnel are probably in the S. W. 1/4 of N. W. 1/4 of S. E. 1/4 of said section, and at an altitude of about 3100 feet near the head of Rowley Creek, a small tributary to Drew Creek, itself a tributary to Elk Creek, a branch of the South Umpqua River.

**ELEVATION**

**ROADS  
DISTANCE  
FROM  
RAILROAD** Mine is reached from Riddle, a station of the Southern Pacific Railroad, by wagon road, via Tiller and Drew to Cantile's ranch, 38 miles, thence by trail 2 miles to the mine, in all, 40 miles. From Medford or Gold Hill on the Southern Pacific, wagon road extends to the property via Trail, about 35 miles. From the nearest point on Pacific & Eastern railroad, a branch road running out of Medford about 20 miles by wagon road.

**TOPOGRAPHY** There is rolling, no abrupt hills, few sharp slopes, and it is an easy country for road building; roads can be held below 60/c grade, if required. However, some 10 o/c grades are found on present roads.

**CLIMATIC** The climate is equable, open and mild. No heavy snows, rarely over a foot, and of short duration. Winter usually rainy, no cold weather at all.

**CONDITIONS** Open for mining the year round. Summers are exceedingly moderate. At this altitude, in this section of the country, thermometer rarely falls below 25 degrees in winter, and above 85 degrees in summer.

GENERAL DESCRIPTION

**OWNERSHIP** The property is owned by the Umpqua Copper Company, an Oregon corporation. Capital stock, 1,500,000 shares, having a par value of 25 cents per share, or a total capitalization of \$375,000.

Property consists of ten claims 600 X 1500 ft. each, as shown by owner's plat (see next page), embracing about 200 acres. The title to this ground is by location, no ground being patented. Annual assessments seem to have been performed with proper regularity. Dr. J. F. Reddy, one of the owners, assures that this is true.

**SURFACE  
IMPROVE-  
MENTS**

Enough work has been done on the property to patent the entire group. There are a cookhouse, bunk house, stable, and blacksmith shop on the grounds, with little repairs ten or twelve men could be comfortably accommodated. There are no tools in evidence, no mill or reduction works.

**LOCUS OF  
WORKINGS**

Most of the work has been done on three of the claims, viz. The San Pedro, Yellow King No. 1 and Yellow King No. 2, and these are the only claims specifically examined. There is an abundance of timber on the ground

**TIMBER**

for domestic, fuel and mining purposes; this consists of Yellow Pine, Fir and Cedar. A small stream, Rowley

**DOMESTIC  
WATER**

Creek, flows westerly across the center of the group. This will furnish sufficient water for domestic purposes the year round, but not for milling. By a proper conservation this water will be sufficient for domestic purposes for some hundreds of men.

**MILLING  
WATER**

Sufficient water for a concentrating mill of two or three hundred tons daily capacity can be furnished by Drew Creek, about a mile distant, and about 800 feet below, and abundant water for milling and power is to be found at Elk Creek, about 6 miles distant, although for power the South Umpqua River offers greater attraction. The property lies in the Cascade National Forest, a feature to be borne in mind, if a smelter is contemplated.

**POWER****NATIONAL  
FOREST****T H E M A P S A N D P H O T O G R A P H S**

Owner's plat of claims precedes this page. Three other maps accompany this report. These were compiled from surveys made by us on surface and underground, and are reasonably correct. One is a plat of the workings, surface and underground, showing accurately the places from which all samples were taken and the length thereof, also outline geology. One shows a cross section elevation, and the third a geological cross section of the mineral deposits and an idealized cross section of eastern 35.5 feet of schist ore zone. A full set of photographs having been previously supplied, no duplicates will be included in this report.

**HISTORY**

According to owner's statement the property lines adjoin the Banfield Group on the north. This latter mine lies in

ADJOINING  
PROPERTIES  
NORTH

the same geological horizon and is developed by upwards of 3,000 feet of underground workings, and while it does not lie in the same zone yet it is in the same mineral belt. It is well spoken of, has produced some good ore (chalcopyrite) of a similar character to the Rowley ore. It has never shipped, its working are about 1-1/4 miles distant from the Rowley, in a straight line a little east of north.

ADJACENT  
PROPERTIES  
SOUTH

About three-fourths miles south of Rowley workings, on main Drew Creek, small developments on Kirkpatrick property prove the ore belt to be continuous in that direction. We found some good grade ore there, similar to the best ore (chalcopyrite) at the Rowley. Still further south, about two miles, is the Red Cloud Mine. This property has produced some Cinnabar (quicksilver) ore. It is reputed to show copper ores similar in character and quality to the Rowley schist ore. It is also in the same geological horizon.

## DISCOVERY

The Rowley property has been discovered and worked about 15 years, but has never shipped or milled any ore.

The remoteness of this district has militated against development of this or any other property, and the shipment of low grade ore from this section has been, and will be, impossible without nearby transportation on account of prohibitive expense in freighting to the railroad.

GEOLOGYCOUNTRY  
FOCK

The general geology of the district in which the Rowley property is situated is peculiarly local. The Cascade Basalt area lies to the east and northeast, the Peridotites, Serpentine and great Diorite belt of southwestern Oregon, lie to the northwest, west and southwest; and this particular horizon appears to be geologically an "island". It consists, so far as observed on the eastern side, of eruptive-Andesite and Porphyritic rocks. The particular belt in which the property lies is Gneiss, Gabbro, Gneiss Schists, Mica-Schists, Chlorite-Schists and Hornblende-Schists, more or less alternated, with here and there ribs of Hornblende, and graduated as we go west into Dioritic Schists and Quartz-Diorite or Greenstone.

MINERAL  
ZONE

The mineral zone lies about 2,000 feet west from the Andesites, which were observed on the second hill to the east. For about 1600 feet from the eastern boundary of the ore zone examined, the country consists of Gabbro Gneiss and Gneissic rocks, the latter two more or less marked in their schistosity and showing Hornblende and Olivine. This 1600 feet shows more or less mineralization, Pyrite and Chalcopyrite (iron sulphide and copper sulphide). One small tunnel driven on a hill slope about 1500 feet east from the main workings shows Chalcopyrite ore similar to that of the principal Schist ore zone next described.

ECONOMIC  
GEOLOGY  
EAST ORE  
BODY

In the main deposit under consideration, which is about 700 feet in width (see "B" - "C" on plat), the first belt or reef of ores, on the east side, consists essentially of light-colored Schists highly oxidized for a few feet below the surface, and replaced with iron carbonate (Siderite). These are largely micaceous and impregnated with small lenses and narrow stringers of Pyrite and Chalcopyrite, also lenses and masses of Quartz, more or less enclosed in a coating of Chalcopyrite and containing Arsenopyrite (arsenical iron sulphide) and a little copper. This reef is about 200 feet wide, and has been explored for about 900 feet in length, north from Rowley Creek (see "A" and "B" on plat).

EAST ORE  
ZONE

Within this 200 feet reef an ore zone has been opened by pits and trenches. This is of two grades, as clearly indicated on plat, and further reference is made to it under the title "Sampling", the difference in grade is due to the fact that a portion of the ore is softer and more altered near the surface, while a smaller portion is harder and carries a larger proportion of sulphides.

## MAIN TUNNEL

## CROSS ZONE

## STRIKE

## DIP

On the south end of this explored reef the main tunnel workings disclose what appears to be a cross zone, or great lens of mineralized material (see "K" - "L" on Plat). This is on the western side of 200 foot zone, and strikes apparently at an angle of about 45 degrees from the trend of said zone, which latter appears to strike nearly north and south, horizontally, having a dip of 58 degrees to the east, and crops due to hill slope about north 58 degrees west. The main tunnel ore body is exposed for about 100 feet in length, and about 50 feet in width, although an average of samples taken would indicate only 15.7 feet in width, this being all which could be properly sampled. On surface, north from the tunnel workings,

SURFACE  
EXPOSURES

numerous open cuts and pits show the mineral zone for about 700 feet in length and croppings permit view of it for about 200 feet more, to apex of hill where the reef still continues on the northwest slope, which was not specifically examined. Then occurs a belt, about 500 feet in width, lying to the west, of unexplored ground of similar character; this is mineralized, as shown by surface croppings, and in the curved tunnel (see Plat), but to what extent cannot be determined as no work has been done except in the one last-mentioned place.

UNDEVELOPED  
ZONE

On the west side of this 700 foot reef, or about 500 feet from the east ore zone, a Gossan may be traced from the creek for upwards of 800 feet north, 20 degrees west.

## SULPHIDE VEIN

This is the apex of a sulphide vein (Pyrite and Arsenopyrite) showing a little copper. This vein strikes north and is from 5 to 15 feet in width. The Gossan is almost entirely leached and shows from its structure that its former contents consisted almost entirely of Pyrite.

## EROSION

On the Schistose reef erosion has almost kept pace with oxidation and, therefore, save for a foot or so of soil and a few feet of iron carbonate ore, the sulphides are found comparatively undisturbed and within four or five feet from actual surface of the ground.

## OXIDATION

## GOSSAN

On the sulphide vein the Gossan is quite shallow, from 5 to 15 feet in depth only being noted, and solid basic ore being found within 20 feet of the surface.

GENESIS  
OF ORE  
DEPOSIT

Specifically the Schist ore body is a metasomatic deposit, the ore being compact and in small lenses and stringers, and evidently deposited by a process of substitution or replacement it fills the once open spaces, fracture and bedding planes of the Schist matrix, having been carried there by circulating waters. Very little mineral is found contained within the Quartz. Reference to Geological Cross section herewith may aid in the interpretation of this topic.

VALUES WITH  
DEPTH

A study of the croppings and of the ore character at the surface here and in surrounding country and a comparison of the underground workings with the croppings lead us to conclude that as moderate depth is gained all surface influence will disappear and, therefore, the value will be base only. Evidence is also abundant to indicate that with such depth Copper sulphides will to a great extent replace the iron pyrites found at or near surface, thereby increasing quite materially the Copper content of the ore, even



with the same proportion of mineralization.

PROFOUND  
DEPTH

The geological conditions are such that it is safe to predict the continuity and mineralization of both the Schist ore and of the sulphide vein to profound depth.

DEVELOPMENT

TOTAL  
DEVELOPMENT

The development may be readily understood by reference to the Plat and Cross Section Elevation. In all, about 1098.5 feet of exposure have been made. By the main working tunnel, consisting of 428 feet, the two sulphide tunnels, 75 feet, and surface cuts, pits, trenches and shafts, 567 feet. There are 531.5 feet of actual underground work.

TOTAL

SAMPLING--ASSAYS

<u>SAMPLE NUMBER</u>	<u>DESCRIPTION</u>	<u>GOLD OUNCES</u>	<u>SILVER OUNCES</u>	<u>COPPER PERCENT</u>
1.	From cut No. 1, being the surface opening furthest north on the Schist ore zone and highest up on a hill. Scarf sample across 53 feet at right angles with dip of strata. Average depth 4 ft. One-third of this ore zone at surface as exposed shows some sulphides while two-thirds is entirely oxidized, with no Copper carbonates or secondary enrichment of copper.	0.01	trace	0.76
2.	Graband ship sample of dump, cut No. 1. Taken from pieces of filling; show no sulphide mineral. Taken to ascertain if gangue carried any copper value not visible to the eye.	0.01	tr.	tr.
3.	From cut No. 2. Chip and scarf sample across 19 feet at right angles to dip. Average depth from surface 3 ft. About one-half shows sulphide and 1/2 oxidized, with no copper enrichment evident in oxidized ore.	0.01	tr.	3.80
4.	Combined sample from cuts 3 and 4, 9.5 feet across cut 3 and 7.5 feet across cut 4 at right angles to dip. Total width sampled, 17 ft. Average depth 3.5 ft. Same ore body as exposed in cut No. 2.	0.01	tr.	1.20
5.	From cut No. 7, Scarf sample across 70 ft. at right angles to dip. Ave. depth 3 ft. Of this width sampled, 3/7 or 30 ft. is entirely oxidized and barren 4/7 or 40 ft. is mineralized, and of this about half is oxidized, and half shows sulphides. Practically all the mineral contained in this sample came from east 20 ft. thereof, where sulphides appear at the surface, this being the same ore body represented in samples 3 and 4, cuts 2, 3 and 4.	0.01	tr.	1.13

SAMPLING--ASSAYS

<u>SAMPLE NUMBER</u>	<u>DESCRIPTION</u>	<u>GOLD OUNCES</u>	<u>SILVER OUNCES</u>	<u>COPPER PERCENT</u>
6.	From eastern extension of cut 7, where depth of 6 to 8 ft. is reached. This sample begins at eastern end of sample No. 5, and extends across strata. This face shows more silica and pyrite in the unoxidized ore.	0.01	Trace	1.20
7.	From face of cut No. 9, Scarf at right angles to dip. Width 5.5 ft., depth 5 ft. Same ore body as samples 3, 4 and east 20 feet of 5.	0.12	Tr.	1.28
8.	From cut No. 10. Scarf 26 ft. across strata at right angles to dip, average depth 3.5 feet, this is continuation of same ore body exposed and sampled in cuts 2, 3, 4, east end of 7 and 9.	0.01	Tr.	1.47
	End of surface sampling, Schist ore.			
9.	Scarf sample across strata at right angles. From main tunnel. One-half taken in 2nd set, 8 ft. from portal of tunnel, other taken beyond 3rd set, 16 ft. from portal. Total width 10 ft. Sulphides show in first half, but not in second half. No visible enrichment in second half.	0.005	Tr.	1.28
10.	From main tunnel, 26 feet, Scarf across strike at right angles to dip. From face of first west cross cut No. 1 on N.E. side, midway between floor and back of tunnel and across back of main drive.	0.005	Tr.	1.88
11.	From main tunnel, Scarf across strikes at right angles to dip on N. side of first E. cross cut, No. 2. About 1/2 showing sulphides.	0.005	Tr.	1.10
12.	From main tunnel, Scarf 13 ft. across strike at right angles to dip. From end of sample 11 to face of cross cut. Gangue Gneiss and silver Schist. Showing iron pyrite, very little copper. Outside of main tunnel ore body, sample taken to ascertain if visible pyrite.	0.005	Tr.	0.34

SAMPLING--ASSAYS

<u>SAMPLE NUMBER</u>	<u>DESCRIPTION</u>	<u>GOLD OUNCES</u>	<u>SILVER OUNCES</u>	<u>COPPER PERCENT</u>
13.	From main tunnel, 11.5 ft. Scarf across face of tunnel, 103 ft. from portal, taken midway between floor and back, across strike at right angles.	0.005	Tr.	1.88
14.	From main tunnel. Scarf 22 ft. long on N. side of "Curved tunnel". Beginning at left side of main tunnel and proceeding northwesterly. Taken across strike at right angles to dip. One-third shows Chalcopyrite, two-thirds, Pyrite.	0.005	Tr.	0.94
15.	From sulphide vein, north tunnel, 6 ft. across face. Almost solid sulphides, arsenical iron predominating.	0.08	0.40	2.26
16.	From sulphide vein, north tunnel. Sample from streak of ore showing Melanconite (black oxide of copper). About 20 ft. from portal, near floor on hanging wall side. Same character of ore shows in south tunnel.	0.057	0.70	5.17
17.	From sulphide vein, south tunnel. General sample from both walls and floor, 25 to 40 ft. from portal. Width sampled, 14 ft., contains a little gossan or oxidized ore but is chiefly sulphides partly decomposed.	0.07	1.10	1.55
18.	Pan concentrates from selected specimens of Chalcopyrite bearing Schist taken from ore dump at cut No. 7.	0.01	Tr.	19.90
19.	Selected average of iron carbonate (Siderite) barren of visible sulphide from surface cut No. 7. Tested for Copper only.			0.00

EXPLANATORY OF SAMPLES AND ASSAYS

Samples 9 to 14 inclusive taken from main tunnel on Schist ore. Remainder of tunnel workings too low grade to consider as ore, or entirely out of ore zone.

Samples No. 2, 12, 18 and 19 were specimen samples taken to determine certain facts, as follows: They are not included in tabulated calculations for reasons manifest. No. 2 was taken to determine whether oxidized material and gangue carried any Copper value not visible to the eye. It does not at this place.

Sample No. 12 was taken to ascertain if visible Pyrite (iron) contains copper. It does not appear to do so at this place, for the small amount of Chalcopyrite showing would account for values shown.

Sample No. 18 was taken to ascertain if the pure Chalcopyrite is or is not of high grade. It is very good grade, but probably not up to theoretical standard. Sample No. 19 was taken to ascertain if this carbonate carried values in copper. It does not, or the barest trace.

SAMPLING--ASSAYING CON.

All values given in this report, either in the following tabulation, or estimates of any character are based upon a net price of 12 cents per pound for copper, quotations being 14 cents. Gold is figured at \$20.00 per troy ounce and Silver at 55 cents. The customary losses and expense of marketing copper metal being allowed for by the price used in calculation, namely 2 cents per pound below market quotation.

A TABULATION OF RESULTS: SURFACE ORES

<u>Sample Number</u>	<u>Width Sampled</u>	<u>Value Per Ton</u>	<u>Foot-Ton Value</u>
1	53 ft.	\$ 2.024	\$ 107.27
3	19	9.32	177.08
4	17	3.08	52.36
5	70	2.912	203.84
6	18	3.08	55.44
7	5.5	5.472	30.086
8	26	3.728	96.93
7 samples	208.5		\$ 723.006
Average width,	29.8 ft.	Average Value,	\$ 3.47
(Average gold value, \$00.258 - Average copper 1.34%)			

TABULATION OF RESULTS FROM PAY ORE BODY  
SEGREGATED FROM ABOVE GENERAL AVERAGE (See Plat)

3	19	\$9.32	\$ 177.08
4	17	3.08	52.36
5	20 (Cu. 2.26%)	5.62	112.48
7	5.5	5.472	30.08
8	26	3.728	96.93
5 samples	87.5		\$ 468.93
Average width,	17.5	Average Value,	\$ 5.35
(Average value gold, \$00.34 - Average copper, 2.1%)			

These are samples and portions of samples which came from the harder and less oxidized portion of east ore zone. Representing that portion of the Schist ore body exposed by surface cuts, which shows sulphides.

## TABULATION OF RESULTS--MAIN TUNNEL, SCHIST ZONE SAMPLING

<u>Sample Number</u>	<u>Width Sampled</u>	<u>Value Per Ton</u>	<u>Foot-Ton Value</u>
9	10	\$ 3.17	\$ 31.70
10	26	4.61	119.86
11	9	2.74	24.66
13	11.5	4.61	53.01
14	22	2.36	51.92
<hr/>			
5 samples	78.5		\$281.15
Average Width,	15.7	Average Value,	\$3.58

(Average gold value, \$00.10 - Average copper, 1.45%)

TABULATION OF RESULTS, SULPHIDE VEIN

15	6	\$7.25	\$ 43.50
17	14	5.70	79.80
<hr/>			
2 samples	20		\$123.30
Average Width,	10 Ft.	Average Value,	\$6.15

(Average gold value \$1.46 - Average silver value \$0.49 - Average copper value \$1.76%)

It will be noted that sample No. 16 is not taken into aliquation of sulphide averages as it is in reality a selected sample and shows larger copper values. This is due to the leaching of copper from the ore at higher level and the secondary enrichment at point where this sample was taken. It is fair to assume that samples 15 and 17 are partly leached and their values therefore lower than they would be if this were not the case and, when such depth is gained as will be below the influence of oxidation, that copper values will increase.

The sulphide ore from this vein at present value is commercial, and a profit of about \$2.00 per ton can be made from it alone, should it prove continuous in size and value, by pyritic smelting, on a scale of not less than 300 tons per 24 hours.

RECOMMENDATIONSINVESTMENT  
WARRANTED

From the returns above given, from the surface showings and from the evidence deduced from a careful comparative study of the Geology, the Genesis of the ore deposits and mineral characteristics, will say that you are fully warranted in taking over this property at the price and terms named in expending sufficient money to prove this great zone of ore at depth; following the successive steps outlined below: First, drive a cross out tunnel from a point to be selected, about 110 feet vertically below the level of the present sulphide vein workings. This will be about 1000 feet in length and will show not only the deeper reaches of the sulphide vein and of the exposed 200 foot Schist ore zone, about 340 feet below the surface, but also some 200 feet of the formation west of the sulphide vein, which is very apt to show mineralization. Likewise the intervening 500 feet between sulphide vein and Schist ore zone, more or less mineralized at the surface, and which promises to show additional bodies of ore. This work, together with a small amount of drifting on the best showings encountered in its drive and a small preliminary equipment outlay as well as patenting the ground can be accomplished for about \$15,000.

IMMEDIATE  
DEVELOP-  
MENTIMMEDIATE  
OUTLAYFUTURE  
DEVELOP-  
MENT

If the property is thus proved to be worth further development, then the systematic opening of the deposit and blocking of ore reserves will be the next step. This you will understand is in order to put the property in such shape that large amounts of ore may be economically mined and tonnage maintained in such amount as will permit continuous operation.

FUTURE  
DEVELOP-  
MENT  
OUTLAY

For large operations, and this property if worked at all must be operated on a somewhat extensive scale, considerable further development work will be required. It is premature at this time to endeavor to outline this work for the cross out, as it progresses, will show what is to be done; but it may be safely estimated that the second step will probably amount to four or five times as much outlay for necessary development or perhaps more than that amount before any reduction plant should be erected. When that time comes, however, perhaps the diamond drill will aid economically in the solution.

Then, the property being in shape for economic mining, a treatment plant will be in order; the size and exact character of which can only be determined by a proper metallurgical examination of the ore found upon development.



FUTURE OUTLOOKSURFACE  
SHOWING

The surface showings are very attractive but the East or Schist zone, as exposed in surface cuts, has not been penetrated by underground development. The Copper of this zone is largely leached at the surface in the shallow trenches and promises to increase to about double average assay values given in tabulation I, so that the outlook for successful future operation is good.

TRANS-  
PORTATION  
NECESSARY

It must of course be clearly understood that without rail transportation very near at hand the future of this property cannot even be considered for even if concentrating and smelting the concentrates combined with the sulphide ore, and shipping the matte be contemplated, too great an expense would have to be met in the way of obtaining supplies, fuel and fluxes, for any such values as this property contains, to even approach profit earning.

WIDTH OF  
MINERAL  
ZONE

To estimate or even hazard a guess at quantity of ore in this deposit is entirely impossible for there is no real development which permits the measurement of ore, that is to say, there is no literal "blocked ore." The apparently mineralized zone is about 700 feet in width; on the east side 200 feet of low grade ore is partially demonstrated, and within the lines of this belt is a body of commercial ore, proven 17.5 feet at surface, and presumably wider and of better value with small depth. This assumes transportation facilities and large treatment plant assured. On the west side thereof is a strong almost solid sulphide vein of about 10 feet average width where exposed, this is of commercial value where sampled and will almost certainly improve with depth, and from surface croppings it is fair to presume that more enrichments will be found in the Schist to the west of this sulphide vein.

COMMERCIAL  
OREDEPTH  
IMPROVEMENTOUTLOOK  
FAVORABLE

The property has therefore every indication of the making of an exceedingly large, low grade Copper Mine and unless every well recognized and established Geological principle shall fail, will make a great tonnage producer.

GENERAL COMMENTSPRODUCTION  
AND  
TREATMENT  
PLANT

The property being developed to such an extent as to warrant a treatment plant, probably a concentrating mill of 500 or more tons daily capacity and a small smelter, or matting furnace, to treat the concentrates produced from the Schist ore plus, say, 50 tons per day of the sulphide ore will be in order. Such a plant with such added equipment as will be necessary, will cost in the neighborhood of \$150,000.00.

**COSTS OF  
MINING  
DEVELOP-  
MENT  
TREATMENT**

With this plant installed and running, and a mining plant being properly operated, the Schist ore should be mined and development kept ahead of stoping, for about \$1.25 per ton; in all, about \$1.75 per ton. While the sulphide ore can be mined and development kept up for about \$1.50 per ton. Then the crude sulphide and briquetted concentrates combined can be smelted for from \$2.00 to \$2.50 per ton, according to fuel and flux conditions.

**POSSIBLE  
LEACHING  
SCHIST  
ORES**

Perhaps a leaching plant may be considered for the Schist ore; this is to be either treated direct or after roasting, and the Copper precipitated on iron or made into electrolytic copper. The perfecting of this already much advanced process is in sight in the near future. Ore treatment however is a phase which need not be considered in detail at this time. That will come in its proper place after development has proven its necessity and metallurgical research its characters.

**POSSIBLE  
OPERATING  
PROFITS**

Based upon a production as above indicated, an average value as sampling shows and a cost of mining and treatment give, the ultimate net profits upon Schist ore would be about \$1.00 per ton, and that of the sulphide ore about \$2.25 per ton. If values increase with depth as anticipated these profits would be correspondingly greater.

**CONCLUSION**

Contemporaneously with the first development recommended the property should be immediately patented. This is most important.

In conclusion, we are of the opinion that this is a property of decided merit, and though in the prospective stage, one which promises well to make a great mine.

Grants Pass, Oregon  
June 20, 1914

(Signed)

Alva H. Gunnell  
Mining Engineer

(Signed)

S. B. Edwardes, B.Sc.  
Mining Engineer and Geologist

# HERR LABORATORY

ASSAYERS AND CHEMISTS

5176 Hollywood Blvd. ♦ Hollywood 27, California

Sept. 14, 1949

Submitted by **E.S. Peor**  
Los Angeles, Calif.

Received **Sept. 8, 1959**

Number	Marked	Ozs. per ton		Value per ton	Percentage		
		Gold	Silver		Copper	Lead	Zinc
902406	Rowley Mine Upper Blasting	2.21	2.10	\$ 79.24	6.40	Nil	Nil
					Copper 128 pounds per ton Value of Copper \$ 40.96 per ton		
					Total Value per ton \$120.20		

\$ 5.00 Pd.

Charges

*E.S. Peor*  
Assayer

Our liability for error or negligence related to the work covered by this certificate is limited to the fees charged.

# HERR LABORATORY

ASSAYERS AND CHEMISTS

5176 Hollywood Blvd. ♦ Hollywood 27, California

Sept. 7, 1957

WE-4-6135

Received August 28, 1957

Submitted by Mr. E.S. Peer  
117 S. Windsor  
Los Angeles, Calif.

Number	Marked	Ozs. per ton		Value per ton	Percentage		
		Gold	Silver		Copper	Lead	Zinc
3381	Pyrite	X	X		Nil	X	X
							Silica 6.45 %
							Iron 43.30
							Sulphur 49.70
							Selenium Trace

FROM 7/8" CORE  
NEXT LOWER  
SHORT  
TUNNEL  
RUNS 5.07 CU.

# HERR LABORATORY

ASSAYERS AND CHEMISTS

5176 Hollywood Blvd. ♦ Hollywood 27, California

Nov. 8, 1957

Received Oct. 25, 1957

Submitted by Mr. E.S. Peer  
Los Angeles, Calif.

Number	Marked	Ozs. per ton		Value per ton	Percentage		
		Gold	Silver		Copper	Lead	Zinc
11657	Pyrite Core						Iron 41.25
							Silica 11.70
							Iron Sulphide 88.15

ND

2033 First Street  
Baker, Oregon

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
1069 State Office Building  
Portland 1, Oregon

239 S.E. "H" Street  
Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein fully and submit this blank filled out along with the samples.

Your name in full Edward S. Peor

Street or P.O. Box P.O. Box 228 City & State Burbank, Calif.

Are you a citizen of Oregon? No Date on which sample is sent: 5/15/61

Name (or names) of owners of the property same

Are you hiring labor? No Are you milling or shipping ore? No

Name of claim sample obtained from Rowley Mine

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Douglas Mining District Wilton-Drew

Township 32 S Range 2 W Section 1 Quarter section

How far from passable road?  Name of road Diamond Rock Rd.

On Mine Rd.

Channel (length)  Grab  Assay for  Description

Sample no. 1  Au, Ag, Cu & any nonalloy minerals

Sample no. 2   
(Samples for assay should be at least 1 pound in weight)

(Signed) Mrs. Edward S. Peor

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description Quartz sericite schist with mixed chalcocite and limonite streaks.

No nonalloy minerals visible.

Sample number	GOLD		SILVER		COPPER			
	oz./T.	Value	oz./T.	Value	Cu			
2-26453	0.16	\$5.60	Trace	--	3.60%	---	---	---

Report issued  Card filed  Report mailed 5-25-61 Called for

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
 2033 First Street  
 Baker, Oregon

1069 State Office Building  
 Portland 1, Oregon

239 S.E. "H" Street  
 Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein fully and submit this blank filled out along with the sample.

Your name in full E. S. Poor

Street or P.O. Box P.O. Box 572 City & State Medford, Oregon

Are you a citizen of Oregon? No Date on which sample is sent 9/1/59

Name (or names) of owners of the property Sama

Are you hiring labor? No Are you milling or shipping ore? No

Name of claim sample obtained from Rowley Copper

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Douglas Mining District Tiller-Drew

Township 32 S Range 2 W Section 4 Quarter section SW

How far from passable road? 1/4 mile Name of road Diamond Rock Road

	Channel (length)	Grab	Assay for	Description
Sample no. 1		<u>x</u>	<u>Au, Ag</u>	<u>"brown slabs"</u>
Sample no. 2		<u>x</u>	<u>Au, Ag, Cu</u>	<u>disseminated sulphides in Qtz.</u>

(Samples for assay should be at least 1 pound in weight)

(Signed) E. S. Poor

By: I.R.

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description #1 - Iron-stained quartz lenses in brown weathered schist with limonite after pyrite. #2 - Iron and copper-stained quartz with disseminated chalcopryite.

Sample number	GOLD		SILVER		COPPER			
	oz./T.	Value	oz./T.	Value	Cu			
P-24526 TG-214	Nil	--	Nil	--	--	--	--	--
P-24527 TG-215	Nil	--	Nil	--	4.80%	--	--	--

Report issued \_\_\_\_\_ Card filed \_\_\_\_\_ Report mailed 9-18-59 Called for \_\_\_\_\_

LOG OF DIAMOND DRILL HOLE NO. 1, ROWLEY MINE

<u>From</u>	<u>To</u>	<u>Drilled</u>	<u>Recovered</u>	<u>Percent Recovery</u>	<u>Description</u>	<u>Sample No.</u>	<u>% Cu</u>
0	11.9	11.9	0.95	8%	H. W. Schist - Greenish- Chloritic	4002	.03
11.9	17.0	5.1	2.70	53%	{	4003	.04
17.0	22.0	5.0	1.70	34%	{ Chloritic Schistose Metadiorite	4004	.03
22.0	27.0	5.0	0.00	0%	{ (No core recovery		
27.0	32.0	5.0	4.5	90%	Contact of oxidized schist of 29.0	4005	.07
32.0	37.0	5.0	0.9	18%	13 $\frac{1}{2}$ " Frag. 32.0-36.8	4006	.08
37.0	40.0	3.0	2.3	77%	11 $\frac{1}{2}$ " frag. 37.0-37.3 qtz. with CuFeS <sub>2</sub> to Cu pitch	4007	.07
40.0	45.0	5.0	3.5	70%	Yell. -brn alt. sch. w/sil. bands & lenses, no visible sulf. -change to more silicie schist, blue-gray, w py & chalco, lenses & stringers. (sp)	4008	.10
45.0	50.0	5.0	4.9	98%	Gray-green alt. qtz. -(feldspar)? schist, sulfides in lenses & stringers (sp to m)	4009	.10
50.0	55.0	5.0	4.7	94%	Gray-green alt. schist - some strong sulfide bands	4010	1.68



<u>From</u>	<u>To</u>	<u>Drilled</u>	<u>Recovered</u>	<u>Percent Recovery</u>	<u>Description</u>	<u>Sample No.</u>	<u>% Cu</u>
55.0	60.0	5.0	4.9	98%	Same as 50.0 - 55.0 more intense alt. (may be bleached zone)	4011	.52
60.0	65.0	5.0	3.4	68%	(63.4-65.0 sludge only) more intensely altered schist, mod. sulfides	4012	.63
65.0	70.0	5.0	4.8	96%	Siliceous gray-green schist, altered, lenses, stringers and disseminated sulfides - mod.	4013	.30
70.0	75.0	5.0	4.8	96%	Fresher siliceous schist - small qtz. filled shear w/drag folds sulfide predom. pyrite - Mod.	4014	.25
75.0	80.0	5.0	5.0	100%	Siliceous schist - grey - Sp Chalco, Mod. Py.	4015	.20
80.0	85.0	5.0	4.1	82%	Same description as 75'-80'	4016	.08
85.0	90.0	5.0	4.5	90%	Sil. schist - maroon color coming in at 89' V. sp. sulfides, predom. pyrite	4017	.03
90.0	95.0	5.0	4.9	98%	Intermittent bands of maroon, gray-green siliceous schist V. Sp. sulfides, predom. pyrite	4018	Tr
95.0	100.0	5.0	4.5	90%	Highly siliceous sheared rock - bands of maroon colored material V Sp Sulfides - all pyrite	4019	Tr



<u>From</u>	<u>To</u>	<u>Drilled</u>	<u>Recovered</u>	<u>Percent Recovery</u>	<u>Description</u>	<u>Sample No.</u>	<u>% Cu</u>
145.0	150.0	5.0	4.9	98%	Same as 140.0-145.0	4029	Tr
150.0	155.0	5.0	5.0	100%	Grey siliceous rock with a few qtz bands w/pyrite to 153.5-155.0 tough "talcy" material. V Sp pyrite (none in "talc")	4030	.02
155.0	160.0	5.0	4.9	98%	Alternating gray siliceous rock and dk green contorted chloritic mater- ial probably beginning of FW shear zone - V Sp pyrite in qtz. bands.	4031	.09
160.0	165.0	5.0	5.0	100%	Many frag. of sheared chloritic rx 160.0-160.3 Highly contorted dk green chloritic rock-some hard fine- grained bands, but mostly med. grained soft chlorite. Contorted stringers of pectolite(?) - no visible sulfide.	4032	.04
165.0	170.0	5.0	3.9	78%	Grey & green schistose chloritic rock alternating with lt. green dense fine-grained chloritic rock. No visible sulfide.	4033	.03
170.0	177.0	7.0	4.0	57%	35 / 1" frag. 171.8-173.5 Dolo- mite-lined /crystalline pyrite. Cavities 170.0-171.0-mostly grey to green sheared chloritic rock, some zones of coarse soft chlorite. No visible sulfide.	4034	.05
177.0	180.0	3.0	2.8	93%	Dk green chloritic rock-some pods of coarse soft chlorite-VVSp pyrite	4035	.05

KEEP

Core from Hole CLR #7 Rooley Mine

689' to 698'

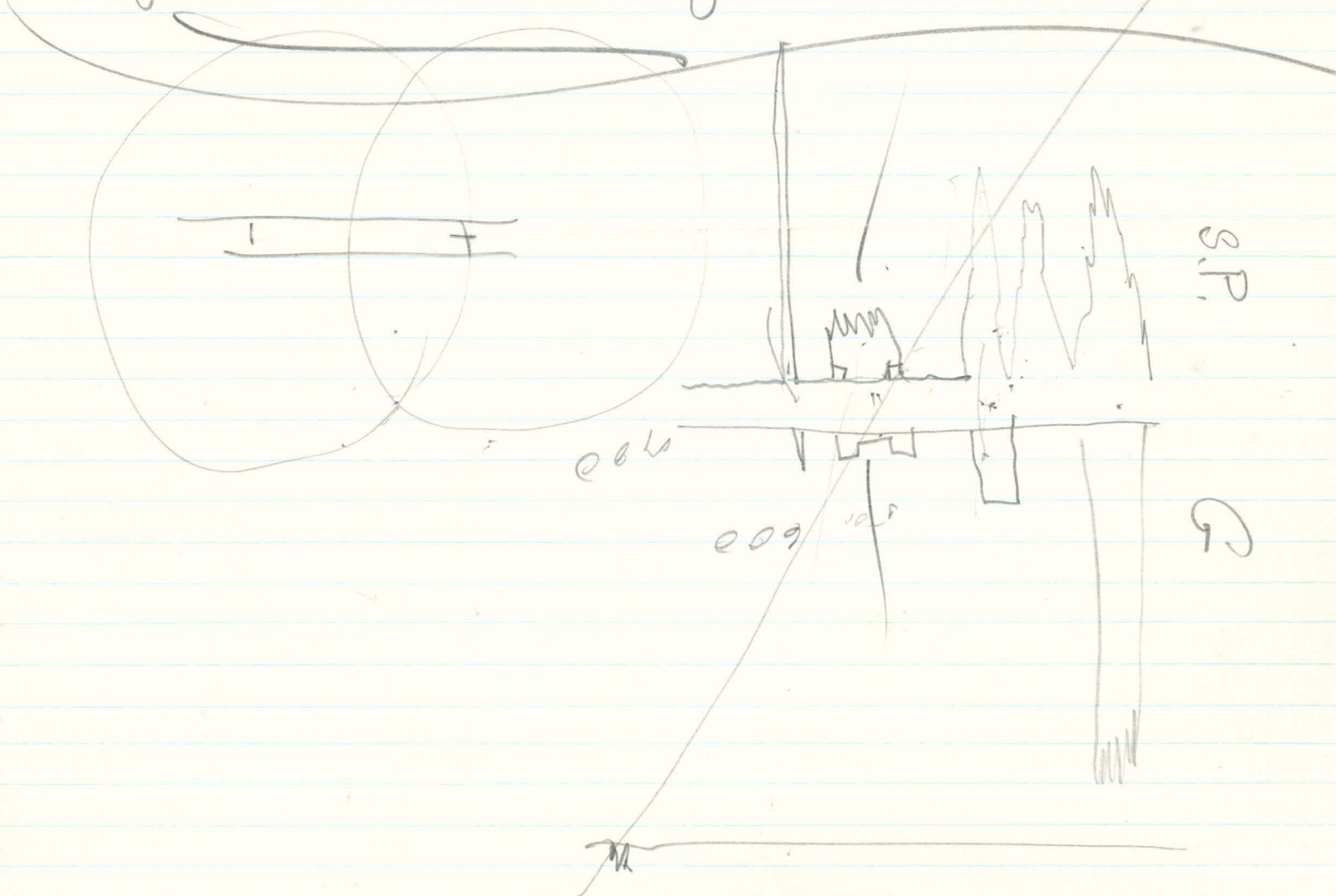
689 crumbly talc, <sup>very fine grain of</sup> sericite schist, minor disseminated pyrite, light gray to white veinlets of carbonate (calcite-dolomite(?))

695 grade downward into more foliate slightly darker gray talc, sericite schist, finely disseminated pyrite present, calcite veinlets + blobs also present.

698 - same as above, some thin veinlets of pyrite.

700 - " " " "

5" of core @ 691' sent in for assay.





Hole # 8

~~Schist~~

Depth -

334 - 343 chlorite schist with sericite, plagioclase feldspar(?) minor  
~~quartz~~ extremely contorted texture, splotchy, green + white appearance.  
336 Magnetite, hematite, pyrite, chalcopyrite - mostly disseminated.  
338 - sulfides decreasing to 343 then some increase.

343 - 353 chlorite schist as above with sulfides plus magnetite + hematite.  
Pyrite more abundant than chalcopyrite, but some chalcopyrite present.  
Magnetite not so abundant in the interval  
~~350 - quartz veinlet~~

353 - 363 rock type generally the same - chlorite schist with  
sericite - plagioclase feldspar(?) some quartz. very minor  
sulfides (loss of circulation at 360').

363 - 372 first two feet same rock appears to get lighter color,  
then about 6 feet of maroon tinted lighter colored, banded  
schist with minor pyrite and grey mineral (unknown) hematite  
then back into darker chlorite schist. (maroon <sup>color</sup> due to hematite, and  
rock has more quartz.)

372 - 382 at top of ~~box~~ probably chlorite schist with some pyrite  
, very minor chalcopyrite, then good core with  
about 5% pyrite and chalcopyrite combined, a few  
qtz seams; then 375 - 380 brown - stained <sup>due to Fe</sup> sericite  
Rock is a talc-chlorite sch with about 1% sulfides or less  
mostly pyrite. (occasional thin calcite seams)

382 - 389. Same with qtz veinlets + minor calcite  
seam, very sparse pyrite.

Rowley Mine File

November 1970

Principals in the Banfield Corporation are reported to be:

W. Lawrence Wilson, Attorney at Law, Suite B, 115 Fourth Ave. South,  
Edmonds, Washington 98020

Mr. Arnold Moore, 658 Daley Street, Edmonds, Washington 98020.

We have also learned that the Rowley Mine was drilled this summer by  
J.M. Jackson, 3610 Long Beach Blvd., Long Beach, California 90807.

At least three core holes were drilled, possibly more. Jackson has  
reportedly leased from owner Ed Peer and hopes to interest a mining  
company in the property.

Douglas Miller Drew

File with  
Rowley mine

R E P O R T  
On the  
ROWLEY GROUP OF MINING CLAIMS  
Property of  
THE UMPQUA COPPER COMPANY,  
Douglas County, Oregon

By

ALVA H. GUNNELL, Mining Engineer  
GUNNELL,  
and  
S. B. EDWARDS, Geologist

June, 1914



REPORT ON ROWLEY MINE

Page 1

GEOGRAPHY

LOCATION

The property is located in Sec. 4 T. 32. S. R. 2, W Willamette Meridian, Douglas County, Oregon: It is near center of said section. The house and main tunnel are probably in the SW $\frac{1}{4}$  of N.W. $\frac{1}{4}$  of said section and at an altitude of about 3100 feet near the head of Rowley Creek, a small tributary to Drew Creek, itself a tributary to Elk Creek, a branch of the South Umpqua River.

ELEVATION

Mine is reached from Riddle, a station of the Southern Pacific railroad, by wagon road, via Tiller and Drew to Cantile's ranch, 38 miles, thence by trail 2 miles to the mine, in all 40 miles. From the nearest point on Pacific & Eastern railroad, a branch road running out of Medford about 20 miles by wagon road.

ROAD DISTANCE FROM RAILROAD

TOPOGRAPHY

The rolling, no abrupt hills, few sharp slopes and is an easy country for road building; Roads can be held below 60/o grade if required. However some 10 o/o grades are found on present roads.

CLIMATIC CONDITIONS

The climate is equable open and mild. No heavy snows, rarely over a foot and of short duration. Winter usually rainy, no cold weather at all. Open for mining for mining the year round. Summers are exceedingly moderate. At this altitude, in this section of the country, thermometer rarely falls below 25 degrees in winter and above 85 degrees in summer.

GENERAL DESCRIPTION

OWNERSHIP

The property is owned by the Umpqua Copper Company, an Oregon Corporation. Capital stock, 1,500,000 shares having a Par value of 25 cents per share or a total capitalization of \$375,000.

Property consists of ten claims 600 x 1500 feet each as shown by owner's plat (see next page) embracing about 2000 acres. The title to this ground is by location no ground being patented. Annual assessments seem to have been performed with proper regularity. Dr. J. F. Reddy, one of the owners, assures that this is true

МУНУСЕР  
НОУАВД ЛНОУБРОИ

P. O. BOX 318

СОКОИУ' САГІОБИИ

БІІГІІІІІ СІІСІАЛІІІІІ

РАVСО РRОDUCТS DІSTRIBUТORS  
LUMBER AND FOREST РRОDUCТS

EDWARD S. BEEK — WHOLESALE LUMBER

41 24114 LE TRUCKS  
324 NORTH MAIN STREET  
OFFICE AND WAREHOUSE

ТЕЛЕГРАФ  
ТЕЛЕФОНЕ: СОКОИУ 1848



REPORT ON ROWLEY MINE

SURFACE IMPROVEMENT

Enough work has been done on the property to patent the entire group. There are a cook house, bunk house, stable, and blacksmith shop on the ground, with little repairs ten or twelve men could be comfortably accommodated. There are no tools in evidence, no mill or reduction works.

LOCUS OF WORKINGS

Most of the work has been done on three of the claims viz. The San Pedro, Yellow King No. 1 and Yellow King No. 2 and these are the only claims specifically examined. There is abundance of timber on the ground for domestic,

TIMBER

fuel and mining purposes, this consists of Yellow Pine, Fir and Cedar. A small stream, Rowley Creek, flows westerly across the center of the group. This will furnish sufficient water for domestic purposes the year round but none for milling. By a proper conservation this water will be sufficient for domestic purposes for some hundreds of men.

DOMESTIC WATER

MILLING WATER

Sufficient water for a concentrating mill of two or three hundred tons daily capacity can be furnished by Drew Creek, about a mile distance and about 800 feet below, an abundant water for milling and power is to be found at Elk Creek, about 6 miles distant, altho for power, the South Umpqua River offers greater attraction. The property lies in the Cascade National Forest, a feature to be borne in mind if a smelter is contemplated.

POWER

NATIONAL FOREST

MAPS AND PHOTOGRAPHS

Owner's plat of claims precedes this page. Three other maps accompany this report. These were compiled from surveys made by us on surface and underground, and are ~~surface~~ reasonably correct. One is a plat of the workings, surface and underground, showing accurately the places from which all samples were taken and the length thereof, also outline geology. One showing across section elevation and the third a geological cross section of the mineral deposits and an idealized cross section of easter 35.5 feet of schist ore zone. A full set of photographs having been previously supplied, no duplicates will be included in this report.

HISTORY

According to owner's statement the property lines adjoin the Banfield Group on the north. This latter mine lies in the same geological horizon and is developed by upwards of 3000 feet of underground workings and while it does not lie in the same zone, yet it is in the same mineral belt. It is well spoken of, has produced some good ore (chalcopryrite) of a similar character to the Rowley ore. It ~~is~~ has never shipped, its workings are about 1 1/2 miles distant from the Rowley in a straight line a little east of north

ADJOINING PROPERTIES NORTH

МУНУОЕН НОВАРД ЛНОИЪРОИ

СОВОИУ' СЪТИЛОИИУ

ВЛИДИНГ СПЕЦИАЛИЕС  
РАВСО ПРОДУКТС ДИСТРИБУТОРС  
ТУМБЕР АИД ФОРЕСТ ПРОДУКТС

EDWARD S. BEEK - WHOLESALER LUMBER



## REPORT ON ROWLEY MINE

Page 3

ADJACENT  
PROPERTIES  
SOUTH

About three fourths miles south of Rowley workings on main Drew Creek, small developments on Kirpatrick property prove the ore belt to be continuous in that direction. We found some good grade ore there similar to the best ore (chalcopyrite) at the Rowley. Still further south about 2 miles, is the Red Cloud Mine. This property has produced some cinnabar (quicksilver) ore. It is reputed to show copper ore similar in character and quality to the Rowley schist ore. It is also in the same geological horizon.

## DISCOVERY

The Rowley property has been discovered and worked about 15 years but has never shipped or milled any ore.

The remoteness of this district has militated against development of this or any other property, and the shipment of low grade ore from this section has been and will be impossible, without nearby transportation, on account of prohibitive expense in freighting to the railroad.

## GEOLOGY

The general geology of the district in which the Rowley property is situated is peculiarly local. The Cascade Basalt area lies to the east and northeast, the Peridotites, Serpentine and great Diorite belt of southwestern Oregon, lie to the northwest, west and southwest, and this particular horizon appears to be geologically, and "island". It consists so far as observed on the eastern side of eruptive-Andesite and Porphyritic rocks--The particular belt in which the property lies is Gneiss, Gabbro, Gneiss Schists, Micaschists, Chlorite-Schists and Hornblende-Schists--More or less alternated with here and there ribs of Hornblend, and graduated as we go west into Dioritic Schists and Quartz-Diorite or Greenstone.

The mineral zone lies about 2000 feet west from the Andesites, which were observed on the second hill to the east. For about 1000 feet from the eastern boundary of the ore zone examined, the country consists of Gabbro Gneiss and Gneissic rocks, the latter two more or less marked in their schistosity and showing Hornblende and Olivine. This 1600 feet show more or less mineralization, Pyrite and Chalcopyrite (iron sulphide and copper sulphide). One small tunnel driven on a hill slope about 1500 feet east from the main workings shows Chalcopyrite ore similar to that of the principal Schist ore zone next described

MINERAL  
ZONE

MANAGER  
HOWARD THOMPSON

P. O. BOX 318

СОВОНА' СЪПЛОНИВ

БЛИДИНГ СПЕЦИАЛИТЕ

РАССО ПРОДУКТС ДИСТРИБУТОРС

ЛУМБЕР АНД ФОРЕСТ ПРОДУКТС

EDWARD S. BEEK — WHOLESALE LUMBER

41 25114 EE TRUCKS  
554 NORTH MAIN STREET  
OFFICE AND WAREHOUSE

ТЕЛЕГРАФ  
ТЕЛЕФОНЕ: СОВОНА 1848



ECONOMIC  
GEOLOGY  
EAST ORE  
BODY

In the main deposit under consideration, which is about 700 feet in width, (see "B" \* "C" in plat) the first belt or reef of ores, on the east side consists essentially of light colored schists highly oxidized for a few feet below the surface and replaced with iron carbonate (Siderite). These are largely micaceous and impregnated with small lenses and narrow stringers of Pyrite and Chalcopyrite, also lenses and masses of Quartz more or less enclosed in a coating of Chalcopyrite and containing arsenopyrite (arsenical iron sulphide) and a little copper. This reef is about 200 feet wide and has been explored for about 900 feet in length north from Rowley Creek (see "A" and "B" on plat).

Within this 200 feet reef an ore zone has been opened by pits and trenches, this is of two grades as clearly indicated on plat and further reference is made to it under title "Sample," the difference in grade is due to the fact that a portion of the ore is softer and more altered near the surface while a smaller portion is harder and carries a larger proportion of sulphides.

On the south end of this explored reef the main tunnel workings disclose what appears to be a cross zone or great lens of mineralized material (see "K" & "L" on Plat). This is on the western side of 200 foot zone and strikes apparently at an angle of about 45 degrees from the trend of said zone, which latter appears to strike nearly north and south horizontally, having a dip of 58 degrees to the east and crops due to hill slope about north 58 degrees west. The main tunnel ore body is exposed for about 100 feet in length and about 50 feet in width, altho an average of samples taken would only indicate 15.7 feet in width, this being all which could be properly sampled.

On surface, north from the tunnel workings, numerous open cuts and pits show the mineral zone for about 700 feet in length and croppings permit view of it for about 200 feet more to apex of hill where the reef still continues on the northwest slope which was not specifically examined. Then occurs a belt about 500 feet in width, lying to the west, of unexplored ground of similar character, this is mineralized as shown by surface croppings and in the curved tunnel (see Plat), but to what extent cannot be determined as no work has been done except in the one last mentioned place.

On the west side of this 700 foot reef or about 500 feet from the east ore zone, a Gossan may be traced from the creek for upwards of 800 feet north 20 degrees west.

СОВОИВ' СЪТІОБИИВ

BUILDING SPECIALTIES  
PAPCO PRODUCTS DISTRIBUTORS  
LUMBER AND FOREST PRODUCTS

EDWARD S. BEEK — WHOLESALE LUMBER

EAST  
ORE  
ZONE

MAIN TUNNEL

CROSS ZONE

STRIKE

DIP

SURFACE  
EXPOSURES

SURFACE EXPOSURES

UNDEVELOPED  
ZONE

MINNESOTA

HOWARD THOMPSON



REPORT ON ROWLEY MINE

SULPHIDE VEIN

This is the apex of a sulphide vein (pyrite and arsenopyrite) showing a little copper. This vein strikes northward is from 5 to 15 feet in width. The Gossan is almost entirely leached and shows from its structure that its former contents consisted almost entirely of Pyrite.

EROSION

On the Schistose reef erosion has almost kept pace with oxidation and therefore, save for a foot or so of soil and a few feet of iron carbonate ore the sulphides are found comparatively undisturbed and within four or five feet from actual surface of the ground.

OXIDATION

GOSSAN

On the sulphide vein the Gossan is quite shallow, from to 5 to 15 feet in depth only being noted and a solid basic ore being found within 20 feet of the surface.

GENESIS OF ORE DEPOSIT

Specifically the Schist ore body is a metasomatic deposit, the ore being compact and in small lenses and stringers and evidently deposited by a process of substitution or replacement, it fills the once open spaces, fracture and bedding planes of the Schist matrix, having been carried there by circulating waters. Very little mineral is found contained within the Quartz. Reference to Geological Cross section herewith may aid in the interpretation of this topic.

VALUES WITH DEPTH

A study of the croppings and of the ore character at the surface here and in surrounding country and a comparison of the underground workings with the croppings lead us to conclude that as moderate depth is gained all surface influence will disappear and therefore the value will be base only. Evidence is also abundant to indicate that with such depth Copper sulphides will to a great extent replace the iron pyrites found at or near surface, thereby increasing quite materially the Copper content of the ore, even with the same proportion of mineralization.

PROFOUND DEPTH

The geological conditions are such that it is safe to predict the continuity and mineralization of both the Schist ore and of the sulphide vein to profound depth.

DEVELOPMENT

The development may be readily understood by reference to the plat and Cross Section Elevation. In all about 1098.5 feet of exposure have been made. By the main working tunnel consisting of 428 feet, the two sulphide tunnels 75 feet and surface cuts, pits, trenches and shafts 507 feet. There are 531.5 feet of actual underground work.

TOTAL DEVELOPMENT 1098 FEET

TOTAL UNDERGROUND DEVELOPMENT 531.5 FEET

P. O. BOX 210

СОВОНА САНТОНИИ

BUILDING SPECIALTIES

PABCO PRODUCTS DISTRIBUTORS  
LUMBER AND FOREST PRODUCTS

EDWARD S. BEEB - WHOLESALE LUMBER



REPORT ON ROWLEY MINE

Page 6

SAMPLING—ASSAYS

SAMPLE NUMBER	DESCRIPTION	GOLD OUNCES	SILVER OUNCES	COPPER PERCENT
1.	From cut No. 1, being the surface opening furthest north on the Schist ore zone and highest up on a hill. Scarf sample across 53 feet at right angles with dip of strata. Average depth 4 ft. One third of this ore zone at surface as exposed shows some sulphides while two thirds is entirely oxidized with no Copper carbonates or secondary enrichment of copper.	0.01	trace	0.76
2.	Grab & chip sample of dump, cut No. 1 Taken from pieces of filling, show no sulphide mineral. Taken to ascertain if gangue carried any copper value not visible to the eye.	0.01	tr.	tr.
3.	From cut No. 2. Chip and scarf sample across 19 feet at right angles to dip. Average depth from surface 3 feet. About one half show sulphide and oxidized with no copper enrichment evident in oxidized ore.	0.01	tr.	3.80
4.	Combined sample from cuts 3 and 4 9.5 feet across cut 3 and 7.5 feet across cut 4 at right angles to dip, Total width sampled 17 feet. Average depth 3.5 feet. Same ore body as exposed in cut No. 2.	0.01	tr.	1.20
5.	From cut No. 7. Scarf sample across 70 feet at right angles to dip. Ave. depth 3 feet. Of this width sampled 3/7 or 30 feet is entirely oxidized and barren 4/7 or 40 feet is mineralized and of this about 1/2 is oxidized and 1/2 shows Sulphides. Practically all the mineral contained in this sample came from east 20 feet thereof, where sulphides appear at the surface, this being the same ore body represented in samples 3 and 4, cuts 2, 3 and 4.	0.01	tr.	1.13
6.	From eastern extension of cut 7 where depth of 6 to 8 feet is reached. This sample begins at eastern end of sample No. 5 and extends across strata. This face shows more silica and pyrite in the unoxidized ore.	0.01	tr.	1.20

HOWARD THOMPSON

P. O. BOX 318

SOBONY' CALIFORNIA

BUILDING SPECIALTIES

PABCO PRODUCTS DISTRIBUTORS

LUMBER AND FOREST PRODUCTS

EDWARD S. BEEK—WHOLESALE LUMBER

(COPY)

REPORT ON ROWLEY MINE

Page 7

SAMPLING--ASSAYS CONT.

SAMPLE NUMBER	DESCRIPTION	GOLD OUNCES	SILVER OUNCES	COPPER PERCENT
7.	From face of cut No. 9. Scarf at right angles to dip. Width 5.5 feet, depth 5 feet. Same ore body as samples 3, 4 and east 20 feet of 5.	0.12	Tr	1.28
8.	From cut No. 10. Scarf 26 feet across strata at right angles to dip, average depth 3.5 feet, this is continuation of same ore body exposed and sampled in cuts 2, 3, 4, east end of 7 and 9.	0.01	Tr	1.47
End of surface sampling, Schist ore.				
9.	Scarf sample across strata at right angles--from main tunnel. One half taken in 2nd set, 8 feet from portal of tunnel, other taken beyond 3rd set, 16 feet from portal. Total width 10 ft. Sulphides show in first half, but not in second half. No visible enrichment in second half.	0.005	Tr	1.28
10.	From main tunnel. 26 feet. Scarf across strike at right angles to dip. From face of first west cross cut No. 1 on NE side, midway between floor and back of tunnel and across back of main drive.	0.005	Tr	1.88
11.	From main tunnel, scarf across strikes at right angles to dip on N. side of first E. cross cut, No. 2 about $\frac{1}{2}$ showing sulphides.	0.005	Tr	1.10
12.	From main tunnel, Scarf across 13 feet of strike at right angles to dip. From end of sample 11 to face of cross cut. Gangue gneiss and silver schist. Showing iron pyrite, very little copper. Outside of main tunnel ore body, sample taken to ascertain if visible pyrite	0.005	Tr	0.34
13.	From main tunnel 11.5 feet, scarf, across face of tunnel, 103 feet from portal, taken midway between floor and back, across strike at right angles.	0.005	Tr	1.68
14.	From Main tunnel. Scarf 22 feet long on N. side of "Curved tunnel". Beginning at left side of main tunnel and proceeding northwesterly. Taken across strike at right angles to dip. One third shows chalcopyrite, two-thirds pyrite.	0.005	Tr	0.94



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REPORT ON ROWLEY MINE

Page 8

## SAMPLING--ASSAYS CONT.

SAMPLE NUMBER	DESCRIPTION	GOLD OUNCES	SILVER OUNCES	COPPER PERCENT
15.	From sulphide vein, north tunnel 16 ft. across face. Almost solid sulphides, arsenical iron predominating	0.03	0.40	2.26
16.	From sulphide vein, north tunnel. Sample from streak of ore showing melanite (black oxide of copper) about 20 feet from portal, near floor on hanging wall side. Same character of ore shows in south tunnel.	0.05	0.70	5.17
17.	From sulphide vein, south tunnel. General sample from both walls and floor, 25 to 40 ft. from portal. Width sampled, 14 feet, contains a little gossan or oxidized ore but is chiefly sulphides partly decomposed.	0.07	1.10	1.55
18.	Pan concentrates from selected specimens of chalcopyrite bearing schist taken from ore dump at cut No. 7.	0.01	Tr	19.90
19.	Selected average of iron carbonate (siderite) barren of visible sulphide from surface cut No. 7. Tested for copper only.			0.00

## EXPLANATION OF SAMPLES AND ASSAYS

Samples 9 to 14 inclusive taken from main tunnel on schist ore. Remainder of tunnel workings too low grade to consider as ore, or entirely out of ore zone.

Samples No. 2, 12, 18 and 19 were specimen samples taken to determine certain facts as follows: They are not included in tabulated calculations for reason manifest. No. 2 was taken to determine whether oxidized material and gangue carried any copper value not visible to the eye. It does not at this place.

Sample No. 12 was taken to ascertain if visible pyrite (iron) contains copper. It does not appear to do so at this place, for the small amount of chalcopyrite showing would account for values shown.

Sample No. 18 was taken to ascertain if the pure chalcopyrite is or is not of high grade. It is very good grade, but probably not up to theoretical standard. Sample No. 19 was taken to ascertain if this carbonate carried values in copper. It does not, or the barest trace.

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## SAMPLING--ASSAYING CON.

All values given in this report, either in the following tabulation, or estimates of any character are based upon a net price of 12 cents per pound for copper, quotations being 14 cents. Gold is figured at \$20.00 per troy ounce and silver at 55 cents. The customary losses and expense of marketing copper metal being allowed for by the price used in calculation, namely 2 cents per pound below market quotation.

## TABULATION OF RESULTS: SURFACE ORES.

SAMPLE NUMBER	WIDTH SAMPLED	VALUE PER TON	FOOT-TON VALUE
1	53 Ft.	\$2.024	\$107.27
3	19	9.32	177.06
4	17	3.08	52.36
5	70	2.912	203.94
6	18	3.08	55.36
7	5.5	5.472	30.086
8	<u>26</u>	<u>3.728</u>	<u>96.93</u>
7 samples	208.5		723.006
Average width	29.8'	Average value	\$3.47
	(Average gold value, \$00.258	Average copper 1.34%)	

TABULATION OF RESULTS FROM PAY ORE BODY SEGREGATED  
FROM ABOVE GENERAL AVERAGE (see plat).

3	19	9.32	177.08
4	17	3.08	52.36
5	20 (Cu 2.26%)	5.62	112.48
7	5.5	5.47 2	30.08
8	<u>26</u>	<u>3.7 28</u>	<u>96.93</u>
5 samples	87.5		468.93
Average width	17.5 ft.	Average value	\$5.35

(Average gold value \$00.34 Average copper 2.1%)

These are samples and portions of samples which came from the harder and less oxidized portion of East Ore Zone. Representing that portion of the Schist ore body exposed by surface cuts, which show sulphides.

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REPORT ON ROWLEY MINE

Page 10.

## TABULATION OF RESULTS -- MAIN TUNNEL, SCHIST ZONE SAMPLING.

SAMPLE NUMBER	WIDTH SAMPLED	VALUE PER TON	FOOT-TON VALUE
9	10	\$3.17	\$ 31.70
10	26	4.61	119.86
11	9	2.74	24.66
13	11.5	4.61	53.01
14	22	2.36	51.92
<hr/>			
5 samples	78.5		281.15
Average width	15.7	Average value	3.58

(Average gold value \$00.10 - Average copper 1.45%)

## TABULATION OF RESULTS - sulphide vein

15	6	7.25	43.50
17	14	5.70	79.80
<hr/>			
2 samples	20		123.30
Average width	10 ft.	Average value	6.15

(Average gold value \$1.45 - Average silver value \$0.49,  
Average copper 1.76%)

It will be noted that sample #16 is not taken into a liquidation of sulphide averages, as it is in reality a selected sample and shows larger copper values. This is due to the leaching of copper from the ore at higher level and the secondary enrichment at point where this sample was taken. It is fair to assume that samples 15 and 17 are partly leached and their values therefore lower than they would be if this were not the case and, when such depth is gained as will be below the influence of oxidation, that copper values will increase.

The sulphide ore from this vein at present value, is commercial, and a profit of about \$2.00 per ton can be made from it alone, should it prove continuous in size and value, by Pyritic Smelting, on a scale of not less than 300 tons per 24 hours.



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## RECOMMENDATIONS

From the returns above given, from the surface showings and from the evidence deduced from a careful comparative study of the Geology, the Genesis of the ore deposits and mineral characteristics, will say that you are fully warranted in taking over this property at the price and terms named in expending sufficient money to prove this great zone of ore at depth; following the successive steps outlined below; First, drive a cross tunnel from a point to be selected, about 110 feet vertically below the level of the present sulphide vein workings. This will be about 1000 feet in 1000 feet in length and will show not only the deeper reaches of the sulphide vein and of the exposed 200 foot schist ore zone, about 340 feet below the surface, but also some 200 feet of the formation west of the sulphide vein, which is very apt to show mineralization. Likewise the intervening 500 feet between sulphide vein and schist ore zone, more or less mineralized at the surface and which promises to show additional bodies of ore. This work, together with a small amount of drifting on the best showings encountered in its drive and a small preliminary equipment outlay as well as patenting the ground, can be accomplished for about \$15,000.00.

INVESTMENT  
WARRANTED

IMMEDIATE  
DEVELOPMENT

IMMEDIATE  
OUTLAY

FUTURE  
DEVELOPMENT  
order to put the

If the property is thus proved to be worth further development, then the systematic opening of the deposit and blocking of ore reserves will be the next step. This you will understand, is in order to put the property in such shape that large amounts of ore may be economically mined and tonnage maintained in such amount as will permit continuous operation.

FUTURE  
DEVELOPMENT  
OUTLAY

For large operations, and this property if worked at all must be operated on a somewhat extensive scale, considerable further development work will be required. It is premature at this time to endeavor to outline this work, for the cross cut as it progresses will show what is to be done, but it may be safely estimated that THE SECOND STEP WILL PROBABLY AMOUNT TO FOUR OR FIVE TIMES AS MUCH OUTLAY FOR NECESSARY DEVELOPMENT OR PERHAPS MORE THAN THAT AMOUNT, BEFORE ANY REDUCTION PLANT SHOULD BE ERECTED. When that time comes however, perhaps the DIAMOND DRILL WILL AID economically in this solution.

Then, the property being in shape for economic mining a treatment plant will be in order; the size and exact character of which can only be determined by a proper metallurgical examination of the ore found upon development.



# COPY

## FUTURE OUTLOOK

### SURFACE SHOW- ING

The surface showings are very attractive, but the East or schist zone as exposed in surface cuts has not been penetrated by underground development. The copper of this zone is largely leached at the surface in the shallow trenches and promises to increase to about double average assay values given in tabulation I, so that the outlook for successful future operation is good.

### TRANSPORTATION NECESSARY

It must of course be clearly understood that without rail transportation very near at hand, the future of this property cannot even be considered, for, even if concentrating and smelting the concentrates combined with the sulphide ore, and shipping the matte be contemplated, too great an expense would have to be met in the way of obtaining supplies, fuel and fluxes, for any such values as this property contains, to even approach profit earning.

### WIDTH OF MINERAL ZONE

To estimate ore even hazard a guess at quantity of ore in this deposit is entirely impossible, for there is no real development which permits the measurement of ore, that is to say, there is no literal "blocked ore". The apparently mineralized zone is about 700 feet in width; on the east side 200 feet of low grade ore is partially demonstrated and within the lines of this belt is a body of commercial ore, proven 17.5 feet at surface, and presumably wider and of better value with small depth. This assumes transportation facilities and large treatment plant assured. On the west side thereof is a strong almost solid sulphide vein of about 10 feet average width where exposed, this is of commercial value where sampled and will almost certainly improve with depth, and from surface croppings it is fair to presume that more enrichments will be found in the schist to the west of this sulphide vein.

### COMMERCIAL ORE

### DEPTH IMPROVEMENT

### OUTLOOK FAVORABLE

The property has therefore every indication of the making of an exceedingly large, low grade Copper Mine and unless every well recognized and established Geological principle shall fail, will make a great tonnage producer.

## GENERAL COMMENTS

### PRODUCTION AND TREATMENT PLANT

The property being developed to such an extent as to warrant a treatment plant, probably a concentrating mill of 500 or more tons daily capacity and a small smelter, or matting furnace to, treat the concentrates produced from the schist ore plus say 50 tons per day of the sulphide ore will be in order. Such a plant with such added equipment as will be necessary, will cost in the neighborhood of \$150,000.00.

# COPY

COST OF  
MINING  
DEVELOPMENT  
TREATMENT

With this plant installed and running and a mining plant being properly operated the schist ore should be mined and development kept ahead of stoping, for about \$1.25 a ton and concentrating performed for about 50 cents per ton, in all about \$1.75 per ton. While the sulphide ore can be mined and development kept for about \$1.50 per ton. Then the crude sulphide and briquetted concentrates combined can be smelted for from \$2.00 to \$2.50 per ton, according to fuel and flux conditions.

POSSIBLE  
LEACHING  
SCHIST  
ORES

Perhaps a leaching plant may be considered for the schist ore, this to either treated direct or after roasting and the copper precipitated on iron or made into electrolytic copper. The perfecting of this already much advanced process is in sight in the near future. Ore treatment however, is a phase which need not be considered in detail, at this time. That will come in its proper place after development has proved its necessity and metallurgical research its character.

POSSIBLE  
OPERATING  
PROFITS

Based upon a production as above indicated, and average values as sampling shows and a cost of mining and treatment give the ultimate net profits upon schist ore would be about \$1.00 per ton, and that of the sulphide ore about \$2.25 per ton. If values increase with depth as anticipated, these profits would be correspondingly greater.

## CONCLUSION

Contemporaneously with the first development recommended the property should be immediately patented. This is most important.

In conclusion we are of the opinion that this is a property of decided merit, and tho in the prospective stage, one which promises will make a great mine.

(Signed) Alva H. Gunnell  
Mining Engineer

(Signed) S. B. Edwards, B. Sc.  
Mining Engineer & Geologist

Grants Pass, Oregon  
June 20, 1914.



# State Department of Geology and Mineral Industries

1069 State Office Building  
Portland 1, Oregon

## ROWLEY MINE (copper)

Douglas County  
Tiller-Drew area

Owner: E. S. Peer, P.O. Box 228 Burbank, Calif.

Location: Approximately 5 miles south of Drew Creek in sec. 4, T. 32 S., R. 2 W. The property is reached from Drew by the way of the Devils Flat CCC road and a short, rough road to the north about half a mile long which leaves the Devils Flat road about 5 miles from the Tiller-Trail Highway.

Area: 14 claims known as "Rowley Group" in 1916. 160 A. patented in secs. 4 & 9.

History: The property was acquired many years ago by Dr. Reddy and associates of Medford. There has been no production but considerable underground development work was done. According to location notices posted on the ground, the property was relocated in 1942 by Jack DeVore and Lois DeVore.

Topography: The region is mountainous and covered by generally large second-growth timber. Tunnels which comprise the development work are driven from the bottom of the gulch of upper Drew Creek. Trails to the tunnels are on relatively moderate slopes.

Geology: The country rock is May Creek schist. As exposed in tunnels, the schist is considerably altered and silicified. In a few places the schist has been replaced by chalcopyrite and pyrite, forming low-grade ore. In the upper tunnel this ore is exposed in the east crosscut about 50 feet from the portal and also in a breast opened up approximately 105 feet from the portal. Here a sample across the breast 9 feet wide across the

apparent strike returned the following:

Gold . . .	0.01 oz.
Silver . . .	Trace
Copper . . .	1.8%



- 2 -

Approximately 500 feet farther down and in the bottom of the gulch, two tunnels have been driven north 42 feet and south 58 feet respectively on a vein containing a high percentage of pyrite. In the face of the north tunnel this vein is approximately 5 feet thick, strikes N. 7° W. and dips 55° E. There are distinct walls and the footwall has from half an inch to an inch of soft gouge.

The vein is made up of small pyrite crystals in a quartz matrix with the pyrite about 90 percent by weight. Some of the country rock near the vein is heavily copper-stained and the water draining from this tunnel is saturated with iron salts.

The vein in the south tunnel, where ~~not covered by timber~~ <sup>not obscured by lagging</sup> is smaller than in the north tunnel, and appears to finger out in the schist, disappearing near the face.

A sample across 5 feet in the face of the north tunnel returned:

Gold	. . .	0.01 oz.
Silver	. . .	1.03 oz.
Copper	. . .	1.1%
Zinc	. . .	7.3%

Development: The largest amount of underground work is in the upper tunnel which is approximately 380 feet long and contains also 4 cross-cuts totalling 80 feet. The two lower tunnels on the pyrite vein total 100 feet.

There is no equipment on the property.

The Rowley cabin in the clearing above the upper tunnel is in fair condition.

Report by: F.W.L. and R.C.T.

10/8/43.



ROWLEY GROUP (Copper)  
(Umpqua Copper Company)

Tiller-Drew Area

Owner: Edith Miller, Medford, Oregon

Parks and Swartley 16:224-225 Give the following description:

"Property consists of 14 claims known as the "Rowley Group" in sec. 4, T. 32 S., R. 2 W., 20 miles northwest of Trail, in southern Douglas County, and 30 miles in an airline north of Medford.

"The ore bodies are found in a zone where shearing and compression have produced schist many hundreds of feet wide. Small sulphide lens-shaped masses of chalcopyrite and pyrite are found rather widely but irregularly distributed throughout the schist. These occurrences of sulphides which range in size from wheat grains to lenses an inch or more in thickness, together with a small amount of quartz associated with them are squeezed and drawn out in the planes or laminations of the schist, showing that they were formed either previous to, or during the movement which produced the schist. In the better looking areas which are 100 feet or more wide, they are found a few inches to a foot apart, with nearly barren material between. Under these conditions the principal problem in the development of the property will be to determine the volume of this schist which is sufficiently mineralized to make low-grade copper ore bodies.

"It seems probable that the property could be prospected to advantage by sinking a large number of drill holes over the more promising areas.

"Considerable development work by tunnels and open cuts has been done. In some of these cuts and tunnels which are usually driven nearly at right angles to the general strike of the schist, samples have been taken which give some promise of rather large low-grade copper deposits.

"Near the footwall side of this wide schist zone is found a massive sulphide vein which is traced by iron-stained capping for several hundred feet, and opened by 2 short tunnels near the bed of the creek. This vein is parallel to the schist and consists of nearly pure pyrite as much as 15 feet wide which is said to carry sufficient values in copper and gold to make it a low-grade ore."

Reference: Parks and Swartley 16:224-225 quoted.

RECORD IDENTIFICATION

RECORD NO..... M061198  
RECORD TYPE..... X1M  
COUNTRY/ORGANIZATION. USGS  
MAP CODE NO. OF REC..

REPORTER

NAME..... JOHNSON, MAUREEN G.  
UPDATED..... 81 04  
BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... ROWLEY MINE  
SYNONYM NAME..... JUMPQUA COPPER GROUP

COUNTRY CODE..... US  
COUNTRY NAME: UNITED STATES

STATE CODE..... OR  
STATE NAME: OREGON

COUNTY..... DOUGLAS  
DRAINAGE AREA..... 17100302 PACIFIC NORTHWEST  
PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS  
LAND CLASSIFICATION..... 01

QUAD SCALE            QUAD NO OR NAME  
1: 62500            TILLER

LATITUDE            LONGITUDE  
42-48-57N            122-56-34W

UTM NORTHING        UTM EASTING        UTM ZONE NO  
4740163.8            504673.2            +10

TWP..... 32S  
RANGE..... 02W  
SECTION.. 04  
MERIDIAN. W.M.

ALTITUDE.. 3000

LOCATION COMMENTS: S 1/2

COMMODITY INFORMATION

COMMODITIES PRESENT..... CU    ZN    AU    AG



POTENTIAL.....  
OCCURRENCE..... AU

ORE MATERIALS (MINERALS, ROCKS, ETC.):  
CHALCOPYRITE, SPHALERITE, PYRITE

ANALYTICAL DATA (GENERAL)

SURFACE SAMPLES FROM # 1 ZONE AVERAGED 0.5 % CU. FIVE FOOT SAMPLE ACROSS THE # 2 ZONE ASSAYED 0.01 OZ/TON AU;  
1.03 OZ/TON AG; 1.1 % CU; 7.3% ZN

EXPLORATION AND DEVELOPMENT

STATUS OF EXPLOR. OR DEV. 2

PROPERTY IS INACTIVE

PRESENT/LAST OWNER..... EDWARD S. PEER, BURBANK CALIFORNIA (1976)

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:

MASSIVE SULFIDE; DISSEMINATED

FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA

SIZE OF DEPOSIT..... SMALL

MAX LENGTH..... #1=1000 FT; #2 = 150 FT

MAX WIDTH..... #1 = 150 FT.; #2 = 12 FT.

STRIKE OF OREBODY.... #1 -N; #2 -N20W

DIP OF OREBODY..... #1 -60E; #2 -NE

COMMENTS (DESCRIPTION OF DEPOSIT):

SHEARED AND METAMORPHOSED

DESCRIPTION OF WORKINGS

SURFACE AND UNDERGROUND

LENGTH OF WORKINGS..... 500 FEET

OVERALL LENGTH OF MINED AREA.... 1500 FEET

COMMENTS (DESCRIP. OF WORKINGS):

TRENCHES 1500, 3 ADITS, WKGS 500

PRODUCTION

NO PRODUCTION

ANNUAL PRODUCTION (ORE, COMMOD., CONC., OVERBURD.) NO

23 ORE, SML

SAMPLES

PRE 1954

7 ZN, 0.5-1.1 CU

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... PERM-TRI?

HOST ROCK TYPES

SULFIDE CONTENT AND/OR PLATE

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
PROJECT SAMPLE RECORD

SAMPLES SUBMITTED BY: LEN RAMP ADDRESS: P.O. BOX 417 GRANTS PASS, ORE DATE: 10-27-72  
97528

<u>Sample No.</u>	<u>Mine or Prospect</u>	<u>Type</u>	<u>District</u>	<u>S.</u>	<u>T.</u>	<u>R.</u>	<u>Assay For</u>
AGG-48	ROWLEY	CORE	TILLER DREW	52 4	32 S	2 W	Cu, Ni
AGG-49	"	CUTTINGS	" "	" "	" "	" "	Au
AGG-50	"	"	" "	" "	" "	" "	Au, Ag, Cu, Ni
AGG-54	"	Core	" "	" "	" "	" "	Cu, Ni.

Descriptions:

AGG-48	Chlorite amphibole schist with pyrrhotite, minor pyrite and chalcocopyrite, from CLR #8 drill hole at 298, 300 & 305.5'
AGG-49	Cuttings CLR #8 70-80' (tan)
AGG-50	Cuttings CLR #8 150-194' (green)
AGG-54	Broken Core at 353 feet Chlorite schist

Results:

<u>SAMPLE</u>	<u>AU</u>	<u>AG</u>	<u>Cu</u>	<u>Ni</u>
38281 AGG-48	-----		0.75	.01
38282 AGG-49	.005	nil		
38283 AGG-50	nil	nil	.05	.01
38284 AGG-54	-----		.78	.01



STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
PROJECT SAMPLE RECORD

SAMPLES SUBMITTED BY: LEN RAMP

ADDRESS: P.O. BOX 417 GRANTS PASS, ORE. DATE: 10-27-72  
67526

<u>Sample No.</u>	<u>Mine or Prospect</u>	<u>Type</u>	<u>District</u>	<u>S.</u>	<u>T.</u>	<u>R.</u>	<u>Assay For</u>
AGG-48	ROWLEY	CORE	TILLER DREW	S $\frac{1}{2}$ 4	32 S	2 W	Cu, Ni
AGG-49	"	CUTTINGS	" "	" "	"	"	Au
AGG-50	"	"	" "	" "	"	"	Au, Ag, Cu, Ni
AGG-54	"	Core	" "	" "	"	"	Cu, Ni.

Descriptions:

AGG-48	Chlorite amphibole schist with pyrrhotite, minor pyrite and chalcopyrite, from CLR #8 drill hole at 298, 300 & 305.5'
AGG-49	Cuttings CLR #8 70-80' (tan)
AGG-50	Cuttings CLR #8 150-194' (green)
AGG-54	Broken Core at 353 feet Chlorite schist

Results:

SAMPLE	AU	AG	Cu	Ni
38281 AGG-48	-----	-----	0.75	.01
38282 AGG-49	.005	nil		
38283 AGG-50	nil	nil	.05	.01
38284 AGG-54	-----	-----	.78	.01

Copy made from  
results from Portland  
1 copy to Jackson } 12-26-72  
" " Forbes }

18, 4950

Nov 1970

We have also learned that the Rowley Mine was drilled this summer by

J. M. Jackson, 3610 Long Beach Blvd., Long Beach, California 90807.

At least three core holes were drilled, possibly more. Jackson has a

lease-option from the owner Ed Beer and hopes to interest mining companies

in the property.

CORE FROM HOLE CLR # 7  
ROWLEY MINE  
689' to 698'

- 689' Crumbly talc, sericite schist, minor very fine grains of disseminated pyrite, light gray to white veinlets of carbonate (calcite - dolomite(?))
- 695' Grades downward into more foliate slightly darker gray talc, sericite schist, finely disseminated pyrite present. Calcite veinlets & blobs also present.
- 698 Same as above, some thin veinlets of pyrite.
- 700 Same as above.

5" of core @ 691' sent in for assay.

CORE FROM HOLE CLR # 8  
ROWLEY MINE

<u>DEPTH</u>	<u>DESCRIPTION</u>
334-343'	Chlorite schist with sericite, plagioclase feldspar (?), minor quartz. Extremely contorted texture, splotchy green and white appearance.
336'	Magnetite, hematite, pyrite, chalcopyrite - moderately disseminated.
338'	Sulfides decreasing to 342' then some increase.
343-353'	Chlorite schist as above with sulfides plus magnetite & hematite. Pyrite more abundant than chalcopyrite but some chalco present. Magnetite not so abundant in this interval.
353 - 363'	Rock type generally the same - chlorite schist with sericite - plagioclase feldspar (?), some quartz. Very minor sulfides. (Loss of circulation at 360').
363-372'	First two feet same rock and appears to get lighter color, then about 6 feet of maroon-tinted lighter-colored, banded schist with minor pyrite and gray mineral (unknown) + hematite. Then back into darker chlorite schist. (Maroon color due to hematite, and rock has more quartz.)
372 - 382'	At top of box crumbly chlorite schist with some pyrite, very minor chalcopyrite, then good core with about 5% pyrite and chalcopyrite combined, a few quartz seams; then 375' - 380' brown-stained rock due to Fe and sericite. Rock is a talc-chlorite schist with about 1% sulfides or less, mostly pyrite. (Occasional thin calcite seam).
382 - 389'	Same with quartz veinlets and minor calcite seam, very sparse pyrite.



Customer: J.M. Jackson, Inc.  
Well No. Hole No. CLR-7  
Field Jackson County, Oregon

## MAGNETIC MULTISHOT

Sheet No. 1 of 1  
Survey Job No. Christensen  
Diamond  
Survey Date September 28, 1972

Course	Measured	Course	Vertical	Angle of	Direction of			Measured Course		Total Displacement	
	Depth		Depth		Inclination	Observed	Corr.	Corrected	North	West	North
	Total		Total								
40	40	39.98	39.98	2°	N 80 W	19½E	N 60½ W	.69	1.22	.69	1.22
20	60	19.98	59.96	2 3/4	N 70 W	"	N 50½ W	.61	.74	1.30	1.96
20	80	19.98	79.94	2 3/4	N 67 W	"	N 47½ W	.65	.71	1.95	2.67
20	100	19.98	99.92	2 3/4	N 62 W	"	N 42½ W	.71	.65	2.66	3.32
20	120	19.96	119.88	3 1/2	N 60 W	"	N 40½ W	.93	.79	3.59	4.11
20	140	19.95	139.83	4 1/4	N 63 W	"	N 43½ W	1.08	1.02	4.67	5.13
20	160	19.94	159.77	4 1/2	N 60 W	"	N 40½ W	1.19	1.02	5.86	6.15
20	180	19.92	179.69	5	N 58 W	"	N 38½ W	1.36	1.09	7.22	7.24
20	200	19.92	199.61	5 1/4	N 62 W	"	N 42½ W	1.35	1.24	8.57	8.48
20	220	19.91	219.52	5 1/2	N 60 W	"	N 40½ W	1.46	1.24	10.03	9.72
20	240	19.87	239.39	6 1/2	N 64 W	"	N 44½ W	1.61	1.57	11.64	11.29
20	260	19.81	259.20	8	N 62 W	"	N 42½ W	2.05	1.88	13.69	13.17
20	280	19.75	278.95	9	N 65 W	"	N 45½ W	2.19	2.23	15.88	15.40
20	300	19.75	298.70	9	N 65 W	"	N 45½ W	2.19	2.23	18.07	17.63
20	320	19.73	318.43	9 1/2	N 65 W	"	N 45½ W	2.31	2.35	20.38	19.98
20	340	19.73	338.16	9 1/2	N 61 W	"	N 41½ W	2.47	2.19	22.85	22.17
20	360	19.70	357.86	10	N 65 W	"	N 45½ W	2.43	2.48	25.28	24.65
20	380	19.65	377.51	10 3/4	N 67 W	"	N 47½ W	2.52	2.75	27.80	27.40
20	400	19.65	397.16	10 3/4	N 67 W	"	N 47½ W	2.52	2.75	30.32	30.15
20	420	19.62	416.78	11 1/4	N 68 W	"	N 48½ W	2.59	2.92	32.91	33.07
20	440	19.56	436.34	12	N 72 W	"	N 52½ W	2.53	3.30	35.44	36.37
20	460	19.45	455.79	13 1/2	N 71 W	"	N 51½ W	2.91	3.65	38.35	40.02
20	480	19.27	475.06	15 1/2	N 70 W	"	N 50½ W	3.40	4.12	41.75	44.14
20	500	19.27	494.33	15 1/2	N 70 W	"	N 50½ W	3.40	4.12	45.15	48.26
20	520	19.23	513.56	16	N 70 W	"	N 50½ W	3.51	4.25	48.66	52.51
20	540	19.20	532.76	16 1/4	N 69 W	"	N 49½ W	3.63	4.26	52.29	56.77
20	560	19.18	551.94	16 1/2	N 70 W	"	N 50½ W	3.61	4.38	55.90	61.15

HORIZONTAL DISPLACEMENT = 82.85 FEET AT NORTH 47° 34' WEST

orig. Copy of this Copy  
S.P. + [unclear] [unclear] 10/2/72





*incomplete*

REPORT ON ROWLEY MINE

SAMPLING—ASSAYS CONT.

SAMPLE NUMBER	DESCRIPTION	GOLD OUNCES	SILVER OUNCES	COPPER PER CENT
7.	From face of cut No. 9, Scarf at right angles to dip. Width 5.5 feet, depth 5 feet. Same ore body as samples 3, 4 and east 20 feet of 5.	0.12	Tr.	1.28
8.	From cut No. 10. Scarf 26 feet across strata at right angles to dip, average depth 3.5 feet, this is continuation of same ore body exposed and sampled in cuts 2, 3, 4, east end of 7 and 9	0.01	tr.	1.47
	End of surface sampling, Schist ore.			
9.	Scarf sample across strata at right angles, From main tunnel. One half taken in 2nd set, 8 feet from portal of tunnel, other taken beyond 3rd set, 16 feet, from portal. Total width 16 ft. Sulphides show in first half, but not in second half. No visible enright-cut in second half.	0.005	tr.	1.28
10.	From main tunnel. 26 feet. Scarf across strike at right angles to dip. From face of first west cross cut No. 1 on N. E. Side, midway between floor and back of tunnel and across back of main drive.	0.005	tr.	1.88
11.	From main tunnel, scarf across strikes at right angles to dip on N. side of first E. cross cut, no. 2 about 3/4 showing sulphides	0.005	tr.	1.10
12.	From main tunnel, Scarf across 13 feet of strike at right angles to dip. From end of sample 11 to face of cross cut. Gange Gneiss and silver Schist. Showing iron pyrite, very little copper. Outside of main tunnel ore body, sample taken to ascertain if visible pyrite	0.005	tr.	0.34
13.	From main tunnel 11.5 feet, scarf, across face of tunnel, 103 feet from portal, taken midway between floor and back, across strike at right angles.	0.005	tr.	1.88
14.	From Main tunnel. Scarf 22 feet on on N. side of "Curved tunnel". Beginning at left side of main tunnel and proceeding northwesterly. Taken across strike at right angles to dip. One third shows Chalcopyrite, two-thirds Pyrite	0.005	tr.	0.94

HOWARD THOMPSON

P. O. BOX 318

SOBONY' CALIFORNIA

BUILDING SPECIALTIES  
 PLYWOOD PRODUCTS DISTRIBUTORS  
 LUMBER AND FOREST PRODUCTS

EDWARD S. BEEK — WHOLESALE LUMBER

REPORT ON ROWLEY MINE

SAMPLE NUMBER	DESCRIPTION	SAMPLING--ASSAYS CON.		
		GOLD OUNCES	SILVER OUNCES	COPPER PERCENT
15.	From sulphide vein, north tunnel 16 feet, across face. Almost solid sulphides, arsenical iron predominating	0.08	0.40	2.26
16.	From sulphide vein, north tunnel. Sample from streak of ore showing Melanite (black oxide of copper) about 20 feet from portal, near floor on hanging wall side. Same character of ore shows in South tunnel.	0.05	0.70	5.17
17.	From sulphide vein, South tunnel. General sample from both walls and floor, 25 to 40 ft. from portal. Width sampled, 14 feet, contains a little goossin or oxidized ore but is chiefly sulphides partly decomposed.	0.07	1.10	1.55
18.	Pan concentrates from selected specimens of Chalcopyrite bearing Schist taken from ore dump at out No. 7.	0.01	tr.	19.90
19.	Selected average of iron carbonate (siderite) barren of visible sulphide from surface cut No. 7. Tested for copper only.			0.00

EXPLANATORY OF SAMPLES AND ASSAYS

Samples 9 to 14 inclusive taken from main tunnel on schist ore. Remainder of tunnel workings too low grade to consider as ore, or entirely out of ore zone.

Samples No. 2, 12, 18 and 19 were specimen samples taken to determine certain facts as follows: They are not included in tabulated calculations for reason manifest. No 2 was taken to determine whether oxidized material and gangue carried any Copper value not visible to the eye. It does not at this place.

Sample No. 12 was taken to ascertain if visible Pyrite (iron) contains copper. It does not appear to do so at this place, for the small amount of Chalcopyrite showing would account for values shown.

Sample No. 18 was taken to ascertain if the pure Chalcopyrite is or is not of high grade. It is very good grade, but probably not up to theoretical standard. Sample No. 19 was taken to ascertain if this carbonate carried values in copper. It does not, or the barest trace

MINNESOTA  
HOWARD L. THOMPSON

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EDWARD S. BEEB - WHOLESALE LUMBER



SAMPLING--ASSAYING CON.

All values given in this report, either in the following tabulation, or estimates of any character are based upon a net price of 12 cents per pound for copper, quotations being 14 cents. Gold is figured at \$20.00 per troy ounce and Silver at 55 cents. The customary losses and expense of marketing copper metal being allowed for by the price used in calculation, namely 2 cents per pound below market quotation.

TABULATION OF RESULTS; SURFACE CRDS.

SAMPLE NUMBER	WIDTH SAMPLED	VALUE PER TON	FOOT-TON VALUE
2	53 Ft.	32.021	1707.27
3	19	9.32	177.06
4	17	3.08	52.36
5	70	2.912	203.94
6	18	3.08	55.36
7	5.5	5.472	30.086
8	26	3.728	96.93
7 samples	<u>208.5</u>		<u>723.006</u>
Average width	29.8'	Average value	\$3.47

(Average gold value, \$00.258 Average copper 1.34%)

TABULATION OF RESULTS FROM PAY CRE BODY SEGREGATED FROM ABOVE GENERAL AVERAGE (See plat).

3	19	9.32	177.08
4	17	3.08	52.36
5	20 (Cu .2.26%)	5.62	112.48
7	5.5	5.47 2	30.08
8	<u>26</u>	<u>3.7 28</u>	<u>96.93</u>
5 samples	87.5		468.93
Average width	17.5 ft.	Average value	\$5.35

(Average gold value \$00.31, Average copper 2.15)

These are samples and portions of ore pits which came from the harder and less oxidized portion of East Ore Zone. Representing that portion of the schist ore body exposed by surface cuts, which show sulphides.

EDWARD S. LEEB - WHOLESALE GUMBER

Handwritten calculations:  
3.08  
17  
-----  
52.36  
203.94  
55.36  
30.086  
96.93  
-----  
723.006

REPORT ON ROWLEY MINE

TABULATION OF RESULTS -- MAIN TUNNEL, SCHIST ZONE SAMPLING.

SAMPLE NUMBER	WIDTH SAMPLED	VALUE PER TON	FOOT-TON VALUE
9	10	33.17	\$ 331.70
10	26	4.61	119.86
11	9	2.74	24.66
13	11.5	4.61	53.01
14	22	2.36	51.92
<hr/>			
5 samp lcs	70.5		281.15
Average width	15.7	Average value	3.58

(Average gold value \$90.10 -- Average copper 1.45%)

TABULATION OF RESULTS -- sulphide vein

15	6	7.25	43.50
17	11	5.70	79.80
<hr/>			
2 samples	20		123.30
Average width	10 ft.	Average value	6.15

(Average gold value \$1.15 -- Average silver value \$0.19, Average copper 1.76%)

It will be noted that sample #16 is not taken into alculation of sulphide averages, as it is in reality a selected sample and shows larger copper values. This is due to the leaching of copper from the ore at higher level and the secondary enrichment at point where this sample was taken. It is fair to assume that samples 15 and 17 are partly leached and their values therefore lower than they would be if this were not the case and, when such depth is gained as will be below the influence of oxidation, that copper values will increase.

The sulphide ore from this vein at present value, is commercial, and a profit of about \$2.00 per ton can be made from it alone, should it prove continuous in size and value, by Pyritic Smelting, on a scale of not less than 300 tons per 24 hours.

HOWARD THOMPSON

P. O. BOX 238  
 SOBOVA' CALIFORNIA  
 BUILDING SPECIALTIES  
 PACIFIC PRODUCTS DISTRIBUTORS  
 LUMBER AND FOREST PRODUCTS

EDWARD S. BEEB -- WHOLESALE LUMBER



## REPORT ON ROWLEY MINE

Page 11.

## RECOMMENDATIONS

From the returns above given, from the surface showings and from the evidence deduced from a careful comparative study of the Geology, the Genesis of the ore deposits and mineral characteristics, will say that you are fully warranted in taking over this property at the price and terms named in expending sufficient money to prove this great zone of ore at depth; following the successive steps outlined below; First, drive a cross tunnel from a point to be selected, about 110 feet <sup>of</sup> vertically below the level of the present sulphide vein workings. This will be about 1000 feet in 1000 feet in length and will show not only the deeper reaches of the sulphide vein and of the exposed 200 foot Schist ore zone, about 250 feet below the surface, but also some 200 feet of the formation west of the sulphide vein, which is very apt to show mineralization. Likewise the intervening 500 feet between sulphide vein and Schist ore zone, more or less mineralized at the surface and which promises to show additional bodies of ore. This work, together with a small amount of drifting on the best showings encountered in its drive and a small preliminary equipment outlay as well as patenting the ground, can be accomplished for about \$15,000.00.

If the property is thus proved to be worth further development, then the systematic opening of the deposit and blocking of ore reserves will be the next step. This you will understand, is in order to put the property in such shape that large amounts of ore may be economically mined and tonnage maintained in such amount as will permit continuous operation.

For large operations, and this property if worked at all must be operated on a somewhat extensive scale, considerable further development work will be required. It is premature at this time to endeavor to outline this work, for the cross cut as it progresses will show what is to be done, but it may be safely estimated that THE SECOND STEP WILL PROBABLY AMOUNT TO FOUR OR FIVE TIMES AS MUCH OUTLAY FOR NECESSARY DEVELOPMENT OR PERHAPS MORE THAN THAT AMOUNT, BEFORE ANY REDUCTION PLANT SHOULD BE ERRECTED. When that time comes however, perhaps the DIAMOND DRILL WILL AID economically in this solution.

Then, the property being in shape for economic <sup>mining</sup> a treatment plant will be in order; the size and exact character of which can only be determined by a proper metallurgical examination of the ore found upon development.

MANAGER

HOWARD THOMPSON

P. O. BOX 310

CORONA CALIFORNIA

BUILDING SPECIALTIES

FABCO PRODUCTS DISTRIBUTORS

LUMBER AND FOREST PRODUCTS

EDWARD S. BEEB - WHOLESALE LUMBER

AT SALES RE TRUCKS  
224 NORTH MAIN STREET  
OFFICE AND WAREHOUSE

TELETYPE  
TELEPHONE: CORONA 1888

FUTURE OUTLOOK

35 SURFACE SHOWING

The surface showings are very attractive, but the East or Schist zone as exposed in surface cuts has not been penetrated by underground development. The copper of this zone is largely leached at the surface in the shallow trenches and promises to increase to about double average assay values given in tabulation I, so that the outlook for successful future operation is good.

TRANSPORTATION NECESSARY

It must of course be clearly understood that without rail transportation very near at hand, the future of this property cannot even be considered, for, even if concentrating and smelting the concentrates combined with the sulphide ore, and shipping the matte ~~same~~ be contemplated, too great an expense would have to be met in the way of obtaining supplies, fuel and fluxes, for any such values as this property contains, to even approach profit earning.

WIDTH OF MINERAL ZONE

To estimate ore even hazard a guess at quantity of ore in this deposit is entirely impossible, for there is no real development which permits the measurement of ore, that is to say, there is no literal "blocked ore." The apparently mineralized zone is about 700 feet in width; on the east side 200 feet of low grade ore is partially demonstrated and within the lines of this belt is a body of commercial ore, proven 17.5 feet at surface, and presumably wider and of better value with small depth. This assumes transportation facilities and large treatment plant assured. On the west side thereof is a strong almost solid sulphide veining of about 10 feet average width where exposed, this is of commercial value where sampled and will almost certainly improve with depth, and from surface croppings it is fair to presume that more enrichments will be found in the Schist to the west of this sulphide vein.

COMMERCIAL ORE

DEPTH IMPROVEMENT

OUTLOOK FAVORABLE

The property has therefore every indication of the making of an exceedingly large, low grade Copper Mine and unless every well recognized and established Geological principle shall fail, will make a great tonnage producer.

GENERAL COMMENTS

PRODUCTION AND TREATMENT PLANT

HOWARD L. DOWNS

The property being developed to such an extent as to warrant a treatment plant, probably a concentrating mill of 500 or more tons daily capacity and a small smelter, or matting furnace to, treat the concentrates produced from the Schist ore plus say 50 tons per day of the sulphide ore will be in order. Such a plant with such added equipment as will be necessary, will cost in the neighborhood of \$150,000.00.

СОВОНЪ СЪПРОВОДНЪ

ВЪПРЪСЪ СПЕЦИАЛНЪ

БАВСО ПРОДУКТС ДИСТРИБУТОРС

ЛУМБЕР АНД РОБЕРТ ПРОДУКТС

EDWARD S. BEEK - WHOLESALE LUMBER



REPORT ON SCHIST MINE

COST OF  
MINING  
DEVELOPMENT  
TREATMENT

With this plant installed and running and a mining plant being properly operated the Schist ore should be mined and development kept ahead of stoping, for about \$1.25 a ton and concentrating performed for about 50 cents per ton, in all about \$1.75 per ton. While the sulphide ore can be mined and development kept for about \$1.50 per ton. Then the crude sulphide and briquetted concentrates combined can be smelted for from \$2.00 to \$2.50 per ton, according to fuel and flux conditions.

POSSIBLE  
LEACHING  
SCHIST  
ORES

Perhaps a leaching plant may be considered for the Schist ore, this to either treated direct or after roasting and the Copper precipitated on iron or made into electrolytic copper. The perfecting of this already much advanced process is in sight in the near future. Ore treatment however, is a phase which need not be considered in detail, at this time. That will come in its proper place after development has proved its necessity and metallurgical research its character.

POSSIBLE  
OPERATING  
PROFITS

Based upon a production as above indicated, an average value as sampling shows and a cost of mining and treatment give the ultimate net profits upon Schist ore would be about \$1.00 per ton, and that of the sulphide ore about \$2.25 per ton. If values increase with depth as anticipated, these profits would be correspondingly greater.

CONCLUSION

Contemporaneously with the first development recommended the property should be immediately patented. This is most important.

In conclusion we offer the opinion that this is a property of decided merit, and that in the prospective stage, one which promises will make a great mine.

(Signed) Alva H. Gussell

Mining Engineer

(Signed) S. B. Edwards, B.Sc.

Mining Engineer and Geologist

Grants Pass, Oregon

June 20, 1911  
HOWARD L. THORNTON

P. O. BOX 318

СОВОНА' СЪПІРОВІІА

БІІІДІІІІГ СЪСІАГІІІІІ

РАВСО РРОДУСТІ ДІІТРІВІІТОРС  
ЛІІІВЕР АІІД FOREST РРОДУСТІ

EDWARD S. BEEK — WHOLESALE LUMBER

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

2033 First Street  
Baker, Oregon

1069 State Office Building  
Portland 1, Oregon

239 S.E. "H" Street  
Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein as fully as possible and submit this blank filled out along with the sample.

Your name in full John Baldwin

Post office address PO 624, Grants Pass, Oregon

Are you a citizen of Oregon \_\_\_\_\_ Date on which sample is sent 9-29-42

Name (or names) of owners of the property \_\_\_\_\_

Are you hiring labor? \_\_\_\_\_

Name of claim sample obtained from Rowley Mine

Are you milling or shipping ore? \_\_\_\_\_

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Douglas Mining district Tiller-Drew

Township 32 S Range 2 W Section 4 Quarter section \_\_\_\_\_

How far from passable road and name of road \_\_\_\_\_

	<u>Channel (length)</u>	<u>Grab</u>	<u>Assay for</u>	<u>Description</u>
Sample no. 1	_____	<u>x</u>	<u>Cu</u>	_____

Sample no. 2 \_\_\_\_\_  
(Samples for assay should be at least 1 pound in weight.)

(Signed) \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description \_\_\_\_\_

Sample number	GOLD		SILVER		Copper			
	oz./T.	Value	oz./T.	Value				
CG-693					0.8 %			

Report issued \_\_\_\_\_ Card filed \_\_\_\_\_ Report mailed \_\_\_\_\_ Called for \_\_\_\_\_



STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

2033 First Street  
Baker, Oregon

1069 State Office Building  
Portland 1, Oregon

239 S.E. "H" Street  
Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein as fully as possible and submit this blank filled out along with the sample.

Your name in full Gordon D. Brown

Post office address Myrtle Creek, Oregon

Are you a citizen of Oregon \_\_\_\_\_ Date on which sample is sent 6-15-53

Name (or names) of owners of the property \_\_\_\_\_

Are you hiring labor? \_\_\_\_\_

Name of claim sample obtained from Rowley Mine

Are you milling or shipping ore? \_\_\_\_\_

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Douglas Mining district Tiller - Drew

Township 32S Range 2W Section 4 Quarter section E $\frac{1}{2}$

How far from passable road and name of road 1 mile from Diamond Pk. road

Channel (length) Grab Assay for Description

Sample no. 1 \_\_\_\_\_ X Cu \_\_\_\_\_

Sample no. 2 \_\_\_\_\_

(Samples for assay should be at least 1 pound in weight.)

(Signed) Gordon D. Brown

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description Quartz stringers and chalcopryite in chlorite schist

Sample number	GOLD		SILVER		Copper		
	oz./T.	Value	oz./T.	Value			
P-14522	---	---	---	---			
NG-184					4.40%		

Report issued \_\_\_\_\_ Card filed \_\_\_\_\_ Report mailed \_\_\_\_\_ Called for \_\_\_\_\_

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

2033 First Street  
Baker, Oregon

1069 State Office Building  
Portland 1, Oregon

239 S.E. "H" St  
Grants Pass, Or

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein as fully as possible and submit this blank filled out along with the sample.

Your name in full H. D. Wolfe

Post office address Box 417, Grants Pass

Are you a citizen of Oregon \_\_\_\_\_ Date on which sample is sent 9-14-49

Name (or names) of owners of the property \_\_\_\_\_

Are you hiring labor? \_\_\_\_\_

Name of claim sample obtained from Rowley Mine

Are you milling or shipping ore? \_\_\_\_\_

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Douglas Mining district Tiller-Drew

Township 32 S Range 2 W Section 4 Quarter section SE

How far from passable road and name of road 1/2 mile west from Diamond Rock - Drew road

Channel (length)      Grab      Assay for      Description

Sample no. 1 \_\_\_\_\_ Cu, Au, Ag \_\_\_\_\_

Sample no. 2 \_\_\_\_\_

(Samples for assay should be at least 1 pound in weight.)

(Signed) H. D. Wolfe

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description Schist containing large percentage of quartz with irregularly distributed grains or lenses of chalcopyrite and pyrite

Sample number	GOLD		SILVER		Copper		
	oz./T.	Value	oz./T.	Value			
P-9185							
JG-307	Nil		Nil		3.30%		

Report issued \_\_\_\_\_ Card filed \_\_\_\_\_ Report mailed \_\_\_\_\_ Called for \_\_\_\_\_



STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
1069 State Office Building - Portland, Oregon 97201

REQUEST FOR SAMPLE INFORMATION

The State law governing free analysis of samples sent to State Assay Laboratories requires that certain information be furnished the laboratory regarding samples sent for assay or identification. A copy of the law will be found on the back of this blank. Please fill in the information requested completely, and submit it along with your sample. Keep a copy of the information on each sample for your own reference.

Please print your name and address in space above

Date sample is sent:

10-31-69

Name of claim sampled:

Banfield

Name of property owners \_\_\_\_\_

Are you hiring labor? \_\_\_\_\_

Are you milling or shipping ore? \_\_\_\_\_

Location of property or source of sample. (If legal description is not known, give location with reference to known geographical point.)

County Douglas

Mining district Tiller-Drew

Township 31 S

Range 2 W

Section 34

Quarter section SE of SW

How far from passable road and name of road 1/2 mile Banfield Mine Road

Channel (length)	Grab	Assay for	Description
------------------	------	-----------	-------------

Sample No. 1	<u>X</u>	<u>Au, Ag</u>	<u>float</u>
--------------	----------	---------------	--------------

Sample No. 2			
--------------	--	--	--

(Samples for assay should be at least 1 lb. in weight; clay samples for ceramic testing at least 5 lbs.) IMPORTANT: A vein sample should be taken in an even channel across the vein from wall to wall. Location of sample in the workings, together with the width measured, should be recorded.

(Signed) Len Ramp

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description Iron-stained coarse granular massive soapstone.

Sample Number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
P-34286 ADG-231	Nil	- -	Nil	- -	- -	- -	- -	- -



TG - 247  
Au, Ag, Cu, Hg

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
2033 First Street Baker, Oregon  
1069 State Office Building Portland 1, Oregon  
239 S.E. "H" Street Grants Pass, Oregon

TG - 248  
Au, Ag

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein fully and submit this blank filled out along with the sample.

Your name in full Len Ramp (DOGAMI)

Street or P.O. Box P.O. Box 417 City & State Grants Pass, Oregon

Are you a citizen of Oregon? Yes Date on which sample is sent 10/7/59

Name (or names) of owners of the property Mr. & Mrs. E. S. Peer

Are you hiring labor?                      Are you milling or shipping ore?                     

Name of claim sample obtained from Rowley Mine

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Douglas Mining District Tiller-Drew

Township 32 S Range 2 W Section 4 Quarter section                     

How far from passable road? 1/2 mile Name of road Drew to Peavine Camp Rd.

*Diamond Rk*

Channel (length)                      Grab                      Assay for                      Description                     

Sample no. 1 8' chip                      Au, Ag, Cu, Hg schist

Sample no. 2 7' chip vertical                      Au, Ag gossan

(Samples for assay should be at least 1 pound in weight)

(Signed) Len Ramp

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description #1 - Chlorite schist with disseminated pyrite, chalcopryrite & lenses of quartz. #2 - Limonite gossan.

Sample number	GOLD		SILVER		COPPER	MERCURY		
	oz./T.	Value	oz./T.	Value	Cu	Hg		
P-24636 TG-247	Nil	--	Nil	--	1.10%	Nil	---	---
P-24637 TG-248	0.04	\$1.20	1.20	\$1.08	---	---	---	---

Report issued                      Card filed                      Report mailed 10-20-59 Called for                     

*(send copy of results to Peers)*  
*sent 10/22/59*  
*P.O. Box 572 Medford, Ore*



ROWLEY MINE (copper)

Douglas County  
Tiller-Drew area

Owner: E. S. Peer, P. O. Box 228 Burbank, Calif.

Location: Approximately 5 miles south of Drew Creek in sec. 4, T. 32 S., R. 2 W. The property is reached from Drew by the way of the Devils Flat CCC road and a short, rough road to the north about half a mile long which leaves the Devils Flat road about 5 miles from the Tiller-Trail Highway.

Area: 14 claims known as "Rowley Group" in 1916. 160 A. patented in secs. 4 & 9.

History: The property was acquired many years ago by Dr. Reddy and associates of Medford. There has been no production but considerable underground development work was done. According to location notices posted on the ground, the property was relocated in 1942 by Jack DeVore and Lois DeVore.

Topography: The region is mountainous and covered by generally large second-growth timber. Tunnels which comprise the development work are driven from the bottom of the gulch of upper Drew Creek. Trails to the tunnels are on relatively moderate slopes.

Geology: The country rock is May Creek schist. As exposed in tunnels, the schist is considerably altered and silicified. In a few places the schist has been replaced by chalcopyrite and pyrite, forming low-grade ore. In the upper tunnel this ore is exposed in the east crosscut about 50 feet from the portal and also in a breast opened up approximately 105 feet from the portal. Here a sample across the breast 9 feet wide across the apparent strike returned the following: Gold; 0.01 oz.; Silver; Trace; Copper; 1.8%.

Approximately 500 feet farther down and in the bottom of the gulch, two tunnels have been driven north 42 feet and south 58 feet respectively on a vein containing a high percentage of pyrite. In the face of the north tunnel this vein is approximately 5 feet thick, strikes N. 7°W. and dips 55° E. There are distinct walls and the foot-wall has from half an inch to an inch of soft gouge.

The vein is made up of small pyrite crystals in a quartz matrix with the pyrite about 90 percent by weight. Some of the country rock near the vein is heavily copper-stained and the water draining from this tunnel is saturated with iron salts.

The vein in the south tunnel, where not obscured by lagging is smaller than in the north tunnel, and appears to finger out in the schist, disappearing near the face.

A sample across 5 feet in the face of the north tunnel returned:

Gold.....	0.01 oz.
Silver.....	1.03 oz.
Copper.....	1.1%
Zinc.....	7.3%

Development: The largest amount of underground work is in the upper tunnel which is approximately 380 feet long and contains also 4 cross-cuts totalling 80 feet. The two lower tunnels on the pyrite vein total 100 feet.

There is no equipment on the property.

The Rowley cabin in the clearing above the upper tunnel is in fair condition.

Report by: F.W.L. and R.C.T. 10/8/43.

## Supplemental comments Rowley Mine Report

There are two north-striking mineralized zones at the Rowley property which are about 500 feet apart. The eastern zone is the larger. It has been fairly well exposed by surface trenching. It may be described as an altered-bleached zone in a quartz chlorite schist which contains some disseminated chalcopyrite. This eastern zone varies from about 50 feet to a maximum of 150 feet wide and has an exposed strike length of about 1200 feet. The average grade will probably be about 0.5% copper. This eastern zone strikes about north and dips about  $45^{\circ}$  E. It has a potential of better grade at depths.

The western zone is a nearly massive granular body of pyrite varying from 5 to 15 feet thick. It strikes about N  $20^{\circ}$  W and dips  $50^{\circ}$  E. This western vein carries about 1 percent copper, some gold and silver and zinc.

There is no record of production.



UMPQUA COPPER COMPANY (copper)

DOUGLAS COUNTY

Local name, Rowley Group.

Office: Grants Pass, Oregon. J. F. Reddy, Pres., Grants Pass, Oregon; Alva H. Gunnell, Sec.-Treas., Grants Pass, Oregon. Amount of capital stock, \$375,000; par value, 25 cents; \$362,884.50 issued. (1916 report.)

Property consists of 14 claims known as the "Rowley Group" in sec. 4, T. 32 S., R. 2 W., 20 miles northwest of Trail in southern Douglas county and 30 miles in an air line north of Medford.

The ore bodies are found in a zone where shearing and compression has produced schist many hundreds of feet wide. Small sulphide lens-shaped masses of chalcopyrite and pyrite are found rather widely but irregularly distributed throughout the schist. These occurrences of sulphide which range in size from wheat grains to lenses an inch or more in thickness, together with a small amount of quartz associated with them are squeezed and drawn out in the planes or laminations of the schist, showing that they were formed either previous to, or during the movement which produced the schist. In the better looking areas which are 100 feet or more wide, they are found a few inches to a foot apart, with nearly barren material between. Under these conditions the principal problem in the development of the property will be to determine the volume of this schist which is sufficiently mineralized to make low grade copper ore bodies.

It seems probable that the property could be prospected to advantage by sinking a large number of drill holes over the more promising areas.

Considerable development work by tunnels and open cuts has been done. In some of these cuts and tunnels which are usually driven nearly at right angles to the general strike of the schist, samples have been taken which give some promise of rather large low grade copper deposits.

Near the footwall side of this wide schist zone is found a massive sulphide vein which is traced by iron stained capping for several hundred feet, and opened by 2 short tunnels near the bed of the creek. This vein is parallel to the schist and consists of nearly pure pyrite as much as 15 feet wide which is said to carry sufficient values in copper and gold to make it a low grade ore.

Taken from The Mineral Resources of Oregon, Dec. 1916, vol. 2, no. 4,  
p. 224-225.

8/14/58

I visited this mine today in company with W.L. Rice. The mine is shown on the Tiller topographic map and is reached by a marked road from the main forest road. The road from the main forest road is only barely passable by truck.

The mine is as described in the attached report by Messrs. Libbey and Treasher. Ore is confined to small replacement lenses in the May Creek (now Applegate) schist. There also appears to be more silicification here than at the Mammoth and Shamrock - mines, but other than that ~~there is~~ the three mines are similar.

The Rowley tunnel is open entirely. The ore zone, which appears to fill a zone of more than average shearing in the shale, appears to strike about north and to be mainly exposed where the sample was taken by Messrs. Libbey and Treasher. Then the zone appears to narrow to where it is cut farther to the north in the tunnel that extends first northwestward and then northeastward from the sample location.

The other tunnels were not looked for.

In summary this prospect may be of some interest as one of a group in the Applegate formation. Development has been so slight, so far as we saw, and so poorly planned that it has not given the deposit a trial.

GSK.



1972(7)

DRILL HOLE - ROWLEY MINE  
 Sec. 4, T. 32 S., R. 2 W. Douglas County  
 Jackson & Forbes

<u>Depth</u> (feet)	<u>Thickness</u> (feet)	<u>Description</u>
205.5 - 214.5	9	Dark gray-green chlorite schist, minor pyrite & chalco--pyrite. Sheared (may have been a submarine basalt). This is an extremely contorted schist.
214.5 - 227.7	13.2	Same as above. Some quartz stringers and seams. Slightly more sulfides present. Blebs of chalcopyrite sheared and streaked out.
227.7 - 236	8.3	Same as above, more brecciated, less chalco, more pyrite. The original rock appears to have been a basalt breccia, it is now highly contorted.
236 - 245.5	9.5	Generally the same but grading into a gneiss like rock, coarse grained, more banded, less foliated. Still some sulfides.
245.5 - 254.5	9	Generally the same-quartz-chlorite-epidote-some pyrite. Pyrite occurs as granular blobs and lenses.
254.5 - 264.5	10	Generally the same. Schist to gneiss and few quartz seams and veinlets. Pyrite present as above; epidote increasing.
264.5 - 273	8.5	Same as above. Some intervals are fine to medium grained. May have been basalt dikes.
273 - 283	10	Generally the same as above. Tending more to contorted schist, more chlorite. Pyrite in coarse blobs.
283 - 292.5	9.5	Same as above. Contorted chlorite schist. Pyrite minor.
292.5 - 301.7	9.2	Generally the same; dark gray to greenish chlorite schist. Sulfides scarce.
301.7 - 311.5	9.8	Chlorite schist - slightly more sheared. Thin pyrite zone at 302'.
311.5 - 321	9.5	Chlorite schist - with a relict breccia texture. No conspicuous sulfides.
321 - 330.8	9.8	Same as above becoming more sheared and schistose at 323'. Slight increase in sulfides. Some chalcopyrite and calcite.
330.8 - 340.5	9.7	Grades to finer more gneiss like rock - still chlorite - quartz - talc - sericite - schist. Sulfides present as grainy blobs that are mainly pyrite. Broken and sheared.
340.5 - 350.5	10	Grades back to more foliated schist like rocks. Sulfides in scattered blobs. One stringer of pyrite and chalco at 348'.
350.5 - 360.5	10	Varies from foliated to contorted to massive. Feldspar and quartz becoming more prominent in irregular veinlets and masses.
360.5 - 370	9.5	Dark gray-green quartz chlorite schist. Massive to contorted and moderately sheared and slickensided. Sulfides present as broken grains and granular blobs.



<u>Depth</u> (feet)	<u>Thickness</u> (feet)	<u>Description</u>
370 - 379.5	9.5	More contorted with a relict breccia texture. Sulfide mainly pyrite more abundant in clots and masses. Some hematite on slickenside surfaces.
379.5 - 390.4	10.9	Generally the same grading into highly sheared zone at about 380'. Gouge zone at 385' then grades into gneiss-like rock.
390.4 - 401	10.6	Generally the same - more chloritic, relict breccia texture. More light colored quartz, feldspar blobs and zones - possibly some amphibole.
401 - 421	20	Foliated chlorite schist. Lower percentage of sulfide. Core missing (407 - 416). Highly contorted and sheared at 416. Gouge at 420'.
421 - 436	15	Extremely contorted and sheared zone to 433, gouge at 433. Minor vugs lined with crystals of zeolite (?)
436 - 447	11	More massive gneissic rock. Moderately to highly contorted. Finer grained. Sulfides minor.
447 - 455.5	8.5	Same as above, has the appearance of amphibolite. A few sulfides, mainly pyrite. Possibly some epidote.
455.5 - 465.3	9.8	Chlorite-amphibole-quartz-schist-gneiss, slightly contorted. Minor pyrite.
465.3 - 475	9.7	Slight rock change. Finer grained-gneissic-schist. Appears lighter color. Becoming talcy with quartz.
475 - 485	10	Talc - chlorite-quartz schist with fine grained sulfides. Fine grained black sulfide probably pyrite. Could be hematite, after pyrite (?).
485 - 493.5	8.5	Talc schist to 488', then change to contorted chlorite schist. One 3/4" interval near 492' finer grained. Contains chalcopyrite.
493.5 - 502	8.5	Contorted to breccia texture chlorite schist - some talc - minor sulfides with pyrite.
502 - 512.5	10.5	Highly contorted chlorite schist - dark gray to greenish black. Some zones have considerable pyrite. Moderately sheared.
512.5 - 521	8.5	Same as above. Clay gouge at 514' to 515'. Rock then becomes lighter, more talcy, micaceous, sericite. Less Sulfides.
521 - 530	9	Gray to greenish talc sericite (?) chlorite quartz schist. Lighter colored, more pyrite, highly contorted.
530 - 540.5	9.5	Laminated-highly contorted chlorite schist with blebs of pyrite. Some limey coatings at 536'.
540.5 - 549.5	9	Same as above. Chlorite-sericite-quartz schist-almost a gneiss. Finer grained schist at T.D. Minor sulfides.



"The ore bodies are found in a zone where shearing and compression have produced schist many hundreds of feet wide. Small sulphide lens-shaped masses of chalcopyrite and pyrite are found rather widely but irregularly distributed throughout the schist. These occurrences of sulphide which range in size from wheat grains to lenses an inch or more in thickness, together with a small amount of quartz associated with them are squeezed and drawn out in the planes or laminations of the schist, showing that they were formed either previous to, or during the movement which produced the schist. In the better looking areas which are 100 feet or more wide, they are found a few inches to a foot apart, with nearly barren material between. Under these conditions the principal problem in the development of the property will be to determine the volume of this schist which is sufficiently mineralized to make low-grade copper ore bodies.

"It seems probable that the property could be prospected to advantage by sinking a large number of drill holes over the more promising areas.

"Considerable development work by tunnels and open cuts has been done. In some of these cuts and tunnels which are usually driven nearly at right angles to the general strike of the schist, samples have been taken which give some promise of rather large low-grade copper deposits.

"Near the footwall side of this wide schist zone is found a massive sulphide vein which is traced by iron-stained capping for several hundred feet, and opened by 2 short tunnels near the bed of the creek. This vein is parallel to the schist and consists of nearly pure pyrite as much as 15 feet wide which is said to carry sufficient values in copper and gold to make it a low-grade ore."

Reference: Parks and Swartley 16:224-225 quoted.

SOUTH UMPQUA MINING CO. (Copper, quicksilver)  
(Banfield Mine)

Tiller-Drew Area

Owner: Oregon corporation; Dr. J. Allen Gilbert, president, Portland, Oregon; W. S. Long, secretary-treasurer, 3618 NE Couch St., Portland, Oregon.

Location and Area: Property consists of 9 claims, located in southern Douglas County, about 35 miles southeast of Riddle and 4 miles south of Drew postoffice, at the head of Drew Creek, one of the branches of the south fork of the Umpqua River, in sec. 34, T. 31 S., R. 2 W. There is a good wagon road to the mine up the South Umpqua by way of Drew. The elevation is 2400 feet.

History: H. Banfield located the ground in 1900. Up to the time of his death in 1920, he had completed about 3000 feet of development work and built several camp buildings. In 1928, the property was leased and a small concentrating mill built. Gravity concentration methods employed were inefficient and the enterprise was unsuccessful. In 1931, the property was deeded to the South Umpqua Mining Co.

Development: Occurrences of both copper ore and cinnabar are reported. The greatest amount of work has been done in developing copper ore. Five adits with total lineal underground development of over 3500 feet have been driven at different elevations in the ore zone, and these are reported to have partially developed two ore shoots although neither widths nor lengths have been defined. In 1935 some systematic sampling was done with results reported as follows:



Recd from USBM  
9 OCT 1959

NAME Rowley Group DATE EXAMINATION Sept. 1953

LOCATION Sec. 4, T. 32 S., R. 2 W., Douglas County, Oregon  
8.5 miles south of Drew, Oregon

OPERATOR OR OWNER E. S. Pear - P. O. Box 572, Medford, Oregon

NO. CLAIMS - NAMES - STATUS 10 patented lode claims

DEVELOPMENT WORK 4 adits and 2 trenches. Two adits caved, one

flooded and one 42-foot adit accessible.

TYPE OF MINERALS Chalcorsyrite and copper stain in quartz and pyrite gangue.

HOST ROCK Mica schist

PRODUCTION, IF ANY Possibly a small tonnage

VEIN WIDTH AND EXPOSED LENGTH Disseminated ore zone 750 ft. long, 75 ft. wide.  
Depth unknown. Fissure vein 144 ft. long 12 ft.  
wide, 30 ft. depth. Strike N. 15° E. to N. 16° W. Dip varies between  
45° and 80° E.

REMARKS: Sketch maps attached.



NAME Ramp  
 ADDRESS \_\_\_\_\_  
 ATTN.: \_\_\_\_\_  
 DOGAMI \_\_\_\_\_  BAKER  GRANTS PASS

LABORATORY REQUEST NO. 38281-38284

DATE RECEIVED \_\_\_\_\_  
 FEE \$ \_\_\_\_\_  
 PAID  Cash  Check \_\_\_\_\_  BILL  
 REFERENCE or P.O. No. \_\_\_\_\_  
 DOGAMI INVOICE NO. \_\_\_\_\_

SAMPLE IDENTITY	SAMPLE DESCRIPTION
1 <u>38281</u>	<u>AGG-48</u>
2 <u>38282</u>	<u>AGG-49 (not arced)</u>
3 <u>38283</u>	<u>AGG-50</u>
4 <u>38284</u>	<u>AGG-54</u>
5 _____	_____

SAMPLE IDENTITY	SAMPLE DESCRIPTION
6 _____	_____
7 _____	_____
8 _____	_____
9 _____	_____
10 _____	_____

WORK REQUESTED

- SPECTROGRAPHIC ANALYSIS:  Qualitative  Semi-quantitative  Bead for precious metals  
 Special Interest \_\_\_\_\_
- ASH & WEIGH  MERCURY TEST  RADIOACTIVITY
- FIRE ASSAY:  Gold  Silver  Platinum Metals  Bead for Precious Metals
- CHEMICAL ANALYSIS:  
 Elements requested \_\_\_\_\_  
 Elements indicated by spectrograph \_\_\_\_\_

OTHER: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ANALYTICAL RESULTS

**FOR YOUR INFORMATION:**

SPECTROGRAPHIC ANALYSIS						
No.	Over 10%	10 to 1%	1 to .1%	.1 to .01%	.01 to .001%	Under .001%
1	Fe-Al-Si	Mg	Mn	Na Cu Cr Ti Co Ni	V B	—
2		not arced				
3	Fe-Al-Si	Mg Na	Mn	Cu Pb Ti Cr Ni	V B	—
4	Fe-Al-Si	Mg	Cu Mn Ti	Zn Co Ni	Cr V B	—
5						
6						
7						
8						
9						
10						

No.	% ASH	MERCURY		R'ACTIVITY mr/hr	FIRE ASSAY			CHEMICAL ANALYSIS
		+	-		Au oz/ton	Ag oz/ton	Pt oz/ton	
①								Copper (wet method) 0.05, 0.10 average 0.075%
2								
3								
④								0.80, 0.75 average 0.78%
5								
6								
7								
8								
9								
10								

OTHER \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
PROJECT SAMPLE RECORD

SAMPLES SUBMITTED BY: Len ADDRESS: \_\_\_\_\_ DATE: \_\_\_\_\_

Sample No.	Mine or Prospect	Type	District	S.	T.	R.	Assay For
AGG-48	Rowley	core	Tiller Draw st 2	4	325	2W	Cu Ni
49	"	cuttings	"	"	"	"	Au,
50	"	cuttings	"	"	"	"	Au, Cu Ni
54	"	core	"	"	"	"	Cu Ni

Descriptions:

48- gtz-chlorite amphibole schist with pyroxite minor pyrite and chalcopyrite.  
from CLR #8 Drill hole at 298, 300 & 305.5  
49- cuttings CLR #8 70-80' (B.T.A.N.)  
50 cuttings CLR #8 150-194' (Green)  
54 broken core at 353 feet chlorite schist

Results:



<u>FROM-TO</u>	<u>REC.</u>	<u>% REC.</u>	<u>DESCRIPTION</u>
197° - 205°	8°	100	
Split 198° - 205°			



<u>FROM- TO</u>	<u>REC.</u>	<u>% REC.</u>	<u>DESCRIPTION</u>
228 <sup>5</sup> - 231 <sup>0</sup>	2 <sup>5</sup>	100	
Split 228 <sup>8</sup> - 230 <sup>4</sup>			
230 <sup>4</sup> - 230 <sup>7</sup>			
231 <sup>0</sup> - <del>230</del> 240 <sup>0</sup>	9 <sup>0</sup>	100	
Split 230 <sup>7</sup> - 233 <sup>0</sup>			
233 <sup>0</sup> - 234 <sup>1</sup>			
234 <sup>1</sup> - 235 <sup>6</sup>			



<u>FROM - TO</u>	<u>REL.</u>	<u>% REL.</u>	<u>DESCRIPTION</u>
76 <sup>5</sup> - 80 <sup>2</sup> Split <del>██████</del> 77 <sup>1</sup> - 77 <sup>7</sup>	3 <sup>1</sup>	88%	
80 <sup>0</sup> - 90 <sup>3</sup>	10 <sup>3</sup>	100%	
90 <sup>3</sup> - 94 <sup>5</sup>	4 <sup>2</sup>	100%	
94 <sup>5</sup> - 101 <sup>0</sup>	4 <sup>3</sup> + 15 <sup>5</sup> VOID <u>58</u>	89%	Driller reports a 15 ft. void @ 98 ft.
101 <sup>0</sup> - 105 <sup>0</sup> Split <del>██████</del> 104 <sup>0</sup> (?) - 105 <sup>0</sup> 105 <sup>0</sup> - 106 <sup>2</sup> 106 <sup>2</sup> - 108 <sup>3</sup>	1 <sup>7</sup>	42%	



DDH	Diff Elev	S.D.	VERT L	H.D.	V.O.	BRC
1-2-		104.3	05° 00'	103.9 ✓	+9.1 ①	N 55° W
①		87.5	04° 00'	87.3 ✓	+6.1 ②	N 48° W
②		91.7	04° 00'	<del>91.3</del> 91.5 ✓	+6.4 ③	N 22° ✓
③		173.1	21° 00'	161.6 ✓	+62.0 ④	N 10° E
④		64.4	00° 00'	64.4 ✓	+0.0 D.H. ⑤	N 36° W ✓
⑤		90.4	29° 00'	79.1 ✓	+43.8 ⑥	N 48° E ✓
⑥		135.3	27° 00'	120.6 ✓	+61.4 ⑦	N 60° E ✓
⑦		22.4	00° 00'	23.4 ✓	+0.0 D.H. ⑧	N 38° 30' W
⑧		143.5	26° 00'	129.0 ✓	+62.9 ⑨	N 47° E
⑨		141.9	00° 00'	141.9 ✓	+0.0 D.H. ⑩	N 41° W

DDH-3 = El. 0  
 DDH-3 - Sta.4      -0-  
 Sta.4 - Sta.5      +43.8  
 Sta.5 - Sta.6      +61.4  
 Sta.6 - DDH 4      -0-  
                          +105.2

DDH-1,2 = 0  
 DDH-3 = +83.6  
 DDH-4 = +188.8  
 DDH-5 = +251.7



SKYLINE LABS, INC.

SPECIALISTS IN EXPLORATION GEOCHEMISTRY

12090 WEST 50TH PLACE • WHEAT RIDGE, COLORADO 80033 • TEL.: (303) 424-7718

REPORT OF ANALYSIS

JOB NO. DST 085  
November 10, 1983

Standard Metals Corporation  
Attn: Paul Taylor  
7355 East Orchard Rd., Suite 100  
Englewood, Colorado 80111

Analysis of 10 Rock Samples

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ITEM	SAMPLE NO.	FIRE ASSAY				
		Au (oz/T)	Ag (oz/T)	Cu (%)	Pb (%)	Zn (%)
1	14401	.005	.75	3.900	.015	5.850
2	14402	.055	.25	1.250	.015	.405
3	14403	.015	.23	.160	.069	.800
4	14404	.040	1.00	.650	.039	2.150
5	14405	.005	.30	.305	.020	.078
6	14406	.006	.13	.135	.005	3.900
7	14407	<.005	<.01	.025	.010	.020
8	14408	<.005	<.01	.050	.010	2.100
9	14409	.017	.09	.205	.005	2.950
10	14410	.080	1.14	.695	.100	5.150

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Gordon H. VanSickle  
Manager

cc: Ronald C. Parker, Cave Junction



DRILL HOLE - ROWLEY MINE  
 Sec. 4, T. 32 S., R. 2 W. Douglas County  
 Jackson & Forbes

<u>Depth</u> <u>(feet)</u>	<u>Thickness</u> <u>(feet)</u>	<u>Description</u>
205.5 - 214.5	9	Dark gray-green chlorite schist, minor pyrite & chalco--pyrite. Sheared (may have been a submarine basalt). This is an extremely contorted schist.
214.5 - 227.7	13.2	Same as above. Some quartz stringers and seams. Slightly more sulfides present. Blebs of chalcopyrite sheared and streaked out.
227.7 - 236	8.3	Same as above, more brecciated, less chalco, more pyrite. The original rock appears to have been a basalt breccia, it is now highly contorted.
236 - 245.5	9.5	Generally the same but grading into a gneiss like rock, coarse grained, more banded, less foliated. Still some sulfides.
245.5 - 254.5	9	Generally the same-quartz-chlorite-epidote-some pyrite. Pyrite occurs as granular blobs and lenses.
254.5 - 264.5	10	Generally the same. Schist to gneiss and few quartz seams and veinlets. Pyrite present as above; epidote increasing.
264.5 - 273	8.5	Same as above. Some intervals are fine to medium grained. May have been basalt dikes.
273 - 283	10	Generally the same as above. Tending more to contorted schist, more chlorite. Pyrite in coarse blobs.
283 - 292.5	9.5	Same as above. Contorted chlorite schist. Pyrite minor.
292.5 - 301.7	9.2	Generally the same; dark gray to greenish chlorite schist. Sulfides scarce.
301.7 - 311.5	9.8	Chlorite schist - slightly more sheared. Thin pyrite zone at 302'.
311.5 - 321	9.5	Chlorite schist - with a relict breccia texture. No conspicuous sulfides.
321 - 330.8	9.8	Same as above becoming more sheared and schistose at 323'. Slight increase in sulfides. Some chalcopyrite and calcite.
330.8 - 340.5	9.7	Grades to finer more gneiss like rock - still chlorite - quartz - talc - sericite - schist. Sulfides present as grainy blobs that are mainly pyrite. Broken and sheared.
340.5 - 350.5	10	Grades back to more foliated schist like rocks. Sulfides in scattered blobs. One stringer of pyrite and chalco at 348'.
350.5 - 360.5	10	Varies from foliated to contorted to massive. Feldspar and quartz becoming more prominent in irregular veinlets and masses.
360.5 - 370	9.5	Dark gray-green quartz chlorite schist. Massive to contorted and moderately sheared and slickensided. Sulfides present as broken grains and granular blobs.



<u>Depth</u> (feet)	<u>Thickness</u> (feet)	<u>Description</u>
370 - 379.5	9.5	More contorted with a relict breccia texture. Sulfide mainly pyrite more abundant in clots and masses. Some hematite on slickenside surfaces.
379.5 - 390.4	10.9	Generally the same grading into highly sheared zone at about 380'. Gouge zone at 385' then grades into gneiss-like rock.
390.4 - 401	10.6	Generally the same - more chloritic, relict breccia texture. More light colored quartz, feldspar blobs and zones - possibly some amphibole.
401 - 421	20	Foliated chlorite schist. Lower percentage of sulfide. Core missing (407 - 416). Highly contorted and sheared at 416. Gouge at 420'.
421 - 436	15	Extremely contorted and sheared zone to 433, gouge at 433. Minor vugs lined with crystals of zeolite (?)
436 - 447	11	More massive gneissic rock. Moderately to highly contorted. Finer grained. Sulfides minor.
447 - 455.5	8.5	Same as above, has the appearance of amphibolite. A few sulfides, mainly pyrite. Possibly some epidote.
455.5 - 465.3	9.8	Chlorite-amphibole-quartz-schist-gneiss, slightly contorted. Minor pyrite.
465.3 - 475	9.7	Slight rock change. Finer grained-gneissic-schist. Appears lighter color. Becoming talcy with quartz.
475 - 485	10	Talc - chlorite-quartz schist with fine grained sulfides. Fine grained black sulfide probably pyrite. Could be hematite, after pyrite (?).
485 - 493.5	8.5	Talc schist to 488', then change to contorted chlorite schist. One 3/4" interval near 492' finer grained. Contains chalcopyrite.
493.5 - 502	8.5	Contorted to breccia texture chlorite schist - some talc - minor sulfides with pyrite.
502 - 512.5	10.5	Highly contorted chlorite schist - dark gray to greenish black. Some zones have considerable pyrite. Moderately sheared.
512.5 - 521	8.5	Same as above. Clay gouge at 514' to 515'. Rock then becomes lighter, more talcy, micaceous, sericite. Less Sulfides.
521 - 530	9	Gray to greenish talc sericite (?) chlorite quartz schist. Lighter colored, more pyrite, highly contorted.
530 - 540.5	9.5	Laminated-highly contorted chlorite schist with blebs of pyrite. Some limy coatings at 536'.
540.5 - 549.5	9	Same as above. Chlorite-sericite-quartz schist-almost a gneiss. Finer grained schist at T.D. Minor sulfides.

Descriptions by N.V. Peterson & L. Ramp  
 September 28, 1972

# McPHAR GEOPHYSICS LIMITED

## REPORT ON THE ROWLEY AND BANFIELD COPPER PROPERTIES IN DOUGLAS COUNTY, OREGON FOR WISCONSIN MINING COMPANY LIMITED

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### 1. INTRODUCTION

In March of this year the writer came into possession of several old reports and maps describing two nearby copper deposits in southern Oregon, known as the "Rowley Mine" and the "Banfield Mine". This information was made available to Wisconsin Mining Company Limited and arrangements were made to examine both properties in April. Following this examination Wisconsin Mining negotiated a lease-royalty agreement for both properties.

The copper deposits were discovered in the early 20th Century and were actively prospected during and after World War One. Work on the Rowley was confined mainly to stripping and trenching which has exposed copper mineralization over a width of up to 200 feet and a length of 800 feet, still open along strike and at depth. The Banfield was more intensively developed with over 3,000 feet of underground development carried out during the 1910's and 1920's. This work disclosed the presence of shoots containing pyrite and chalcopyrite with some values in gold and silver.

Wisconsin Mining is presently carrying out a thorough investigation of the two properties. Initial work on the Rowley consists of surface drilling. On the Banfield the underground workings have been rehabilitated in order to determine the size and grade of the known shoots and to carry out exploration to search for additional shoots.

## 2. LOCATION AND ACCESS

The properties are located in the Umpqua National Forest in Douglas County, southwestern Oregon, approximately midway between San Francisco and Portland, and 35 miles north of the city of Medford. Access is via highways 62 and 227 from Medford to the village of Drew, a distance of 44 miles, thence via all-weather U. S. Forest Service gravel road for about 7 miles. From here bush roads lead directly onto both properties, but some repairs were required to permit passage of vehicles the remaining half mile.

Medford is serviced by three airlines with several flights daily to San Francisco and Portland-Seattle. The nearest railheads are at Riddle (Hanna Nickel operation) 35 miles to the northwest and White City near Medford, 47 miles to the south, both on the Southern Pacific. Power is available at Drew and there are several streams and rivers on the properties and in the immediate vicinity. The Rowley has been timbered in recent years, but the Banfield claims are in virgin forest with Douglas Fir up to four feet in diameter. Timber may be used for mining purposes, but may not be cut for sale.

The area of interest is in the Western Cascade Range with



elevations ranging from 2,000 to 4,000 feet. Topography varies from rolling hills on the uplands to steeply incised valleys with local relief of 800 feet. Outcrop is sparse except on the steeper slopes, but the overburden and talus cover are generally light, from a few feet to a few tens of feet. Summer temperatures are 75 - 90 degrees and winter temperatures 20 - 40 degrees with only light snow. The combination of warm climate and abundant rainfall leads to fairly deep weathering and oxidation of the sulphide minerals except on steep slopes where erosion can keep pace.

### 3. DESCRIPTION OF PROPERTIES

The Rowley property consists of eight contiguous patented claims situated in Sections 4 and 9 of Township 32 South, Range 2 West in Douglas County, Oregon. The claims are about 600 feet wide in an east-west direction and 1,500 feet long in a north-south direction and contain approximately 20 acres each. The names and areas of each claim are listed below.

<u>Claim</u>	<u>Area</u>
Tom Boy	19.350 acres
May Queen #1	19.868 acres
San Pedro	20.638 acres
Mountain Top #1	20.638 acres
Mountain Top #2	19.350 acres
Yellow King #1	18.857 acres
Yellow King #2	20.263 acres

<u>Claim</u>	<u>Area</u>
Belle S.	19.385 acres
<hr/>	
Total	158.349 acres

(Data from report by C. Frank Rhodes, U. S. Mineral Surveyor.)

The Banfield property consists of ten contiguous unpatented 20-acre claims and two mill site locations, situated in Section 34 of Township 31S, Range 2W and Sections 3 and 4 of Township 32S, Range 2W. The claims are known as the Banfield Nos. 1-10 and Mill Sites Nos. 1 and 2 and have a combined area of 205 acres.

#### 4. REGIONAL GEOLOGY

The area of interest lies in the Western Cascade Range and is underlain primarily by a complex of extrusive and intrusive igneous rocks with associated pyroclastics and minor clastic sediments ranging in age from Triassic to Tertiary.

The oldest rocks in the area are the Applegate Group of upper Triassic age. These consist of andesites and basalts with associated tuffs and flow breccias. They are fine to coarse grained, greenish-grey to pale green and are generally porphyritic, vesicular or amygdaloidal. All of the rocks are weakly metamorphosed.

Locally these formations grade into middle to high rank metamorphics consisting of phyllites, schists and gneisses. Evidently these were derived by contact metamorphism related to the major Cretaceous intrusives rather than by regional metamorphism. Most of the

rock types encountered on the Rowley and Banfield properties belong to this group.

To the west the Applegate Group is overlain by a thick section of Jurassic sediments and volcanics known as the Galice formation, consisting of grey to black shales and greywacke interbedded with andesite flows and pyroclastics. To the east the Applegate is overlain by several thousand feet of Tertiary pyroclastics with minor marine sediments and massive dark grey basalts and andesites.

Two types of intrusive are present. The oldest type consist of peridotites and serpentines and is of probable upper Jurassic age. They occur as small irregular stocks, dikes and sills usually related to major thrust faults. One such stock occurs just to the north of the Banfield property. The second type consists of fine to coarse grained granitoid rocks of lower Cretaceous age in the form of batholiths, stocks and dikes. They range in composition from granite to diorite, with diorite and quartz diorite predominating. There is a prominent stock just southwest of the Rowley claims and a major batholith about two miles to the west of both properties. These intrusives are considered to be responsible for development of the extensive zone of metamorphic rocks and are probably also the source of the copper mineralization in this area.

The structural geology is exceedingly complex as the area lies in a major fold belt trending NNE. This has been complicated by regional thrust faulting, cross faulting, igneous intrusion and metamorphism. Consequently, the detailed local geology is not well known.



## 5. HISTORY AND DESCRIPTION OF ROWLEY PROPERTY

The Rowley copper prospect was discovered about the turn of the century and was first investigated during World War One. Attention was centered on a wide zone of disseminated chalcopyrite which outcropped on the north side of a branch of Drew Creek. Initial work consisted of stripping and trenching the zone over a length of 800 feet and a width of 200 feet. Subsequently an adit was driven in a northeasterly direction (along strike) from just above the creek bed.

Only minor work has been carried on since 1920. From time to time some of the trenches have been resampled and limited prospecting has been carried out on other parts of the property. As far as the writer could determine there has been no serious attempt to determine the potential of the main mineralized zone.

The copper occurs principally as chalcopyrite in stringers, blebs and disseminations, together with several per cent pyrite, in a mica-quartz-feldspar schist. The original character of the rock is difficult to determine because of oxidation which imparts a dark red colour to the mineralized zone at the surface. Fresher samples from one of the trenches suggest a sheared and altered quartz-feldspar porphyry. The schistosity has a northeasterly strike and  $40^{\circ}$  -  $60^{\circ}$  southeast dip conformable with the country rocks which are greenstones.

The mineralized zone varies in outcrop width from about 100 feet to over 200 feet. It can be followed along strike for 800 feet and is still open in both directions. The vertical extent is not known, but there

is over 350 feet of relief from the southern end of the zone near the stream to the northern end where it disappears under overburden on the uplands.

In April of this year the writer took a chip sample across 200 feet near the center of the known zone and obtained a value of 0.9% Cu and a trace of gold and silver. However, this sample may not be representative because of surface oxidation and leaching. Some outcrops within the main zone are completely leached for at least a few feet and contain no visible sulphide minerals whereas fresher material in the trenched area on the east side of the zone contains pyrite and chalcopyrite. It is not clear whether the higher concentration of sulphides in the eastern section is more representative of the entire zone because it is fresh and unleached, or if there is a higher grade section along the hanging wall.

At the time of the writer's initial visit the adit was partially flooded and a thorough examination was impractical. However, for the first 30 feet there is disseminated pyrite and chalcopyrite which have been more or less oxidized on the exposed surfaces. The adit was subsequently drained and surveyed; disseminated sulphides are present throughout most of the workings with the greatest concentration being along the hanging wall.

About 500 feet west of the main zone there is a band or vein of massive pyrite conformable with the schistosity and 5 to 15 feet thick, containing variable but perhaps significant quantities of copper. The gossan has been traced for 200 feet up the hill and two short adits, both

caved, have been driven just above the creek level. A grab sample of massive pyrite taken from the dump and containing only minor visible chalcopyrite assayed 0.33% Cu, 0.02 oz/ton Au and 0.62 oz/ton Ag.

During June of this year the access road was rebuilt and a drill grid established to evaluate the main zone. To-date eight angle holes have been completed totalling 2066 feet and a ninth is in progress 200 feet south of #7. The holes were drilled in pairs on four sections at intervals of 200 to 300 feet.

The drilling has shown that the country rocks are typical greenstones, probably derived from andesite flows, containing a band of grey quartz-sericite schist. This is the rock that contains most of the mineralization in the surface showings. The greenstone along the hanging wall side of the grey schist has been changed to a dark green talc-chlorite schist either by shearing or hydrothermal alteration. In most of the holes this chlorite schist is well mineralized in addition to part or all of the grey schist. The results of the eight holes are tabulated below with gold and silver values omitted as the maximum assays were only 0.02 oz. Au and 0.30 oz. Ag.

<u>Hole No.</u>	<u>Depth</u>	<u>From</u>	<u>To</u>	<u>Thickness</u>	<u>% Cu</u>
R-S-1	240	29.7	70.0	40.3	0.81
		29.7	60.0	30.3	1.04
R-S-2	243	80.0	135.0	55.0	0.43
		85.0	105.0	20.0	0.52
R-S-3	231	119.0	129.0	10.0	0.25



<u>Hole No.</u>	<u>Depth</u>	<u>From</u>	<u>To</u>	<u>Thickness</u>	<u>% Cu</u>
R-S-4	277	213.0	227.0	14.0	0.15
R-S-5	197	40.0	132.1	92.1	1.36
		40.0	115.9	75.9	1.42
R-S-6	263	125.0	209.0	84.0	0.84
		128.6	174.0	45.4	1.22
R-S-7	292	115.0	180.0	65.0	0.90
		150.0	180.0	30.0	1.69
R-S-8	323	253.0	288.0	35.0	0.65
		258.0	278.0	20.0	0.71

These results indicate a mineralized zone containing approximately 900,000 tons of 0.89% Cu, including 500,000 tons grading 1.20% Cu, with only minor values in gold and silver, to a depth of 200 feet. A considerably larger tonnage, or a higher grade, would be required before this occurrence could be of economic interest by itself. However, it might be of interest if other deposits were developed nearby.

During August a grid of east-west lines at 400 foot intervals was established and an Induced Polarization survey is now in progress. The prime purpose of this survey is to trace out the main zone to the south. Preliminary results show a definite anomaly over the main zone and a second anomaly over the massive sulphide zone to the west. In addition there is a third anomaly about 2000 feet east of the main zone correlating with a gossan. No further work is planned pending completion of the IP survey with the possible exception of a fill-in hole between drill holes #1 and #5.